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# Population growth, the settlement process and economic progress : Adam Smith's theory of demo-economic development

Jérôme Lange

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**École d'Économie de la Sorbonne /  
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**THÈSE**

**pour l'obtention du titre de Docteur en Économie  
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le 13 décembre 2017 par**

Jérôme Lange

Population Growth, the Settlement  
Process and Economic Progress

**Adam Smith's Theory of  
Demo-Economic Development**

Sous la direction de

**Monsieur le Professeur André Lapidus,  
Université Paris 1 - Panthéon-Sorbonne**

Membres du Jury

**Monsieur le Professeur Daniel Diatkine,  
Université d'Évry-Val-d'Essonne**

**Monsieur le Professeur Spencer Pack,  
Connecticut College, États-Unis**

**Madame la Professeure Nathalie Sigot,  
Université Paris 1 - Panthéon Sorbonne**

**Madame Christine Théré, Directrice de recherche à  
l'Institut National d'Études Démographiques**

**Monsieur le Professeur Richard Van den Berg,  
Kingston University, Royaume-Uni**

L'Université Paris I Panthéon-Sorbonne n'entend donner aucune approbation ni improbation aux opinions émises dans cette thèse ; ces opinions doivent être considérées comme propres à leur auteur.



Ce travail est dédié à ma maman Denise, avec amour.

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# Abbreviations

The customary abbreviations of Smith's works of *The Glasgow edition of the works and correspondence of Adam Smith* have been adopted in the present work. These are, for the Glasgow edition volumes (first column) and the works contained therein (indented), respectively:

TMS	<i>The Theory of Moral Sentiments</i>
WN	<i>An Inquiry into the Nature and Causes of the Wealth of Nations</i>
EPS	<i>Essays on Philosophical Subjects</i>
Astronomy	'The Principles which lead and direct Philosophical Enquiries; illustrated by the History of Astronomy'
External Senses	'Of the External Senses'
Stewart	'Account of the Life and Writings of Adam Smith'
LRBL	<i>Lectures on Rhetoric and Belles Lettres</i>
LJ	<i>Lectures on Jurisprudence</i>
LJ(A)	Lectures on Jurisprudence, Report of 1762-3
LJ(B)	Lectures on Jurisprudence, Report dated 1766
ED	'Early Draft' of Part of the <i>Wealth of Nations</i>
FA	First fragment on the division of labour
FB	Second fragment on the division of labour
Corr.	<i>Correspondence of Adam Smith</i>

In footnotes and in-text references these are followed by the chapter, section and paragraph numbers as referenced in the Glasgow edition as well as the page numbers in the same edition. For further details see the 'Note on Notation' at the end of the General Introduction.

Once upon a time, throughout the heyday of classical economics, demography belonged to political economy. The supply of labour was one of the important endogenous variables in the systems of Smith, Malthus, Mill and Marx ... One feature of neoclassical economics that distinguishes it from the classical version, is the removal of population as a variable (Samuelson 1985, p. 166-7)

the connection between population growth and economic development ... is not a matter which appears very frequently in the modern discussions of the theory of development ... But it figures large in earlier thought on our subject. In the classical outlook, to discuss development without considering the tendencies of population growth would have been to omit the most essential ingredient; and in this respect I am inclined to think that, with all its obvious imperfection, classical thought was of considerably more practical significance than most of the theoretical models of our own day. (Robbins 1968, p. 22)

The present separation between demography and economic analysis can scarcely lead to a tenable theory of economic growth. (Kuznets 1954, p. 167)

theories of population ... have received comparatively little attention from historians of economic thought in the last 25 years or so ... the criteria of modern economic analysis are not perhaps the appropriate ones to use in appraising these writings. (Black 1985, p. 5)

one should not accept without question the common assumption that the continuities between Smith's enterprise and that of his nineteenth-century successors — those with whom he is normally lumped together as a 'classical' economist — are more impressive than the discontinuities. (Winch 1997, p. 385)



# Introduction

With time, classic works grow. This can be taken both literally and metaphorically. It is literally true, in the sense that classic works, in unabridged modern editions, often are adduced with lengthy introductions and, in scholarly editions, a large corpus of footnotes and references, which together considerably increase the volume of the work, these annotations sometimes taking up as much or more space as the original work itself. In a more metaphorical sense, classic works grow, with time, through the increasing volume of their interpretations, distortions, appropriations, and reinterpretations. Adam Smith's work is such a work par excellence. The volume of secondary literature on his oeuvre has taken indigestible proportions today, akin to fill an average municipal library, or, as Margaret Schabas (2003, p. 262) expressed it more picturesquely fifteen years ago: "The secondary literature on Smith is enough to sink a small boat". It would certainly take Adam Smith himself, were he alive today, longer than it took him to write the *Wealth of Nations* just to read through the entirety of secondary literature and commentary on his work.<sup>1</sup>

In other words, it appears rather challenging to say anything relevant or meaningful about this monumental author today that has not already been written or said, someplace, sometime, by somebody else.<sup>2</sup> Yet, Adam Smith remains one of the most commented authors of the social sciences. To this day there are dozens of articles, entire books and doctoral dissertations on Smith written every year around the world, which both shows the vitality of the field and, perhaps, how much remains to be said about this major figure of world intellectual history.<sup>3</sup> But, even presuming only a very moderate contribution by each new study, it seems particularly important, in such a field, to point out what exactly the aimed for value-added of yet another work on Adam Smith consists in, against the backdrop of this huge secondary literature.

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<sup>1</sup> More than 600 articles and 60 books (both authored and edited) on Smith squarely, and more than 4000 articles, and 300 books, that mention him in some connection at some length, have been consulted in the course of writing the present work (a number of them are listed in the extended bibliography at the end of the work), and this represents still only a fraction of the entirety of the secondary literature. It took Smith about eight years to write the *Wealth of Nations* (Ross 2010, p. xxvii-viii).

<sup>2</sup> "To say anything new on Adam Smith is not easy; but to say anything of importance or profit, which has not been said before, is well nigh impossible" declared L. L. Price (1893, p. 239) already more than a century ago.

<sup>3</sup> "We still pose questions to Adam Smith. And he still answers, even if both the questions and the answers change with time." (Paganelli 2015, p. 363)

Economists are without doubt the group of scholars who have been the most interested, during the past two centuries, in the figure of Adam Smith. For most of the 19<sup>th</sup> and 20<sup>th</sup> centuries, the great majority of literature on Smith was thus the work of economists. And economists, today still, are considered by the wider public to quite naturally be the foremost experts on Smith. Economists, too, have long been, and still are in certain niche groups, interested in population questions. Robert Malthus, the writer probably the most closely associated, in public opinion, with the topic of population, and considered by many demographers to be the founding father of their discipline (much as Smith is regarded by many economists as the founding father of theirs), notably was, too, the first person to hold a chair of political economy in a university. When formulating his famous population principle, Malthus named Smith as one of his major inspirations. Yet, while the literature on Adam Smith is huge, and spans today the most varied of topics, very few works exist that deal squarely with Smith's contributions to ideas on population. There are countless articles, chapters and entire books on Robert Malthus' theory of population, but very few academic works that deal specifically with the ideas of Adam Smith on this subject. Reference to population in the context of Smith's theory of development is literally absent from more recent writings on Smith.<sup>4</sup>

It took humanity several hundreds of thousands of years to reach a population of one billion individuals. It took just over one century for that number to double. This century was the 19<sup>th</sup> century. It is estimated that world population grew from one billion to close to two billion between 1804 and 1927. This extraordinary growth of the world population during the 19<sup>th</sup> century was still surpassed, by far, during the 20<sup>th</sup> century. World population more than tripled, growing from 1.65 to six billion people between 1900 and 2000 (United Nations Secretariat 1999). In parallel, the world has experienced, over the course of these two centuries, a surge in urbanisation and industrialisation and an unprecedented growth in life expectancy and material living standards, accompanied — first in the wealthiest countries, but followed by all others in recent years — by an acute and equally unprecedented drop in birth rates. How is it that in this period of intense demo-economic change, so little of the immense body of commentary on Adam Smith has focused on his ideas on population and development?

The general absence of the topic of population from recent Smith scholarship may only be explained, perhaps, by the combination of two factors: the deepening divorce of economics from demography over the last century (to some degree

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<sup>4</sup> Exceptions are Smith (2006b) and Kennedy (2008), who refer to population in relation to Smith's stage theory of progress in the *Lectures on Jurisprudence*.

surely a normal effect of the ongoing division of labour between academic disciplines), and the fact that Smith was mostly studied, during this period, by economists. The role of population in the work of Adam Smith is a subject largely neglected to this day, accordingly, by both demographers and economists. By demographers, Adam Smith is seen mostly as an economist and as a proponent of liberalism. Most economists, I dare venture, although they may see Smith as founding father of their discipline and principally as an important contributor to economic thought, are aware that he was first a moral philosopher who wrote a treatise on moral philosophy — for which he became famous — before dedicating himself to the subject of political economy. But hardly anyone in both fields, I surmise, would concede that Smith was also a demographer, or that anything substantive and consequential on the topic of population forms an integral part of his work. Yet the topic of population was an integral part of both moral philosophy and political economy in the 18<sup>th</sup> century (Tomaselli 1988, 1995). It would be rather odd if Adam Smith, one of the century's most prominent moral philosophers and political economists, did not have anything to say on the topic.

For illustration of the neglect of Adam Smith in contemporary considerations of population in economics, out of the close to 1200 articles published in the *Journal of Population Economics* since its inception in 1988, around thirty articles mention Malthus, while only ten mention Smith. That both figures are extremely low, in relation to the whole number of articles published in this journal, can be explained by the publication in question being committed first and foremost to perpetuating the “New Home Economics” of Gary Becker, a research program not renowned for its particular interest in the history of thought (although Becker himself did express such interest early in his career). Out of the few articles that do show such an interest (even if most of them mention these authors only in passing), it seems fair, too, that Malthus be referred to three times as frequently as Smith in a journal devoted to “population economics”, given Malthus' greater fame in this department. What is remarkable is that out of the ten articles that mention Smith, not a single one, in fact, does so in connection with his ideas on population; so that out of all articles ever published in the *Journal of Population Economics* to this day, while thirty articles mention Malthus' ideas on population (about twice as many if we add those which refer to “Malthusian” ideas or theories without directly mentioning Malthus), *not a single* article even alludes to the ideas on population of Adam Smith.

In the flagship interdisciplinary *Population and Development Review* (a large, if not the larger part of contributors to the journal are demographers and economists), only one article on Smith's ideas on population has ever been

published (Spengler 1976), while this journal has in fact published quite a few articles entirely or largely concerned with the history of thought (compared with the *Journal of Population Economics*, in which this interest is extremely marginal). There is even a special series in the *Population and Development Review* called “Archives”, in which short extracts from the work of major past thinkers dealing with the topic of population are published and commented. One such extract of Smith’s work was published, too, in 1978. But, even here, in a journal devoted to questions of population and development, it is not Smith’s ideas on this larger theme that were selected, but an extract that deals with Smith’s advocacy of the free mobility of labour, feeding a common misconception that all Smith had to say on issues pertaining to population was confined to his treatment of the labour market.

In the last forty years, there has been a renewed and increased interest in Adam Smith from the part of intellectual historians, among which not only historians of economics, but also of philosophy and all social and human sciences (and even of the natural sciences<sup>5</sup>). The publication of the collected works and correspondence of Adam Smith, starting in 1976, for the bicentennial of the publication of the *Wealth of Nations*, in particular, has spurred a renewed interest in Adam Smith, and has initiated a great wave of new Smith scholarship which has not yet ebbed out. Notably, this has led to a rehabilitation of his moral philosophy, which by then had taken a far second rank to his ‘economics’ in the general depiction of his legacy. The old “Adam Smith Problem” of the 19<sup>th</sup> century, which described a purported contradiction between Smith’s *Theory of Moral Sentiments* and his *Wealth of Nations*, the first being allegedly based on sympathy as a central principal of society’s functioning, while in the second this principal was held to be self-interest, was revised. The new consensus in Smith scholarship is that no such contradiction exists in actual facts, as neither sympathy is the sole governing principal of Smith’s moral philosophy nor self-interest the only one at work in his economic and political theory.<sup>6</sup> Rather, both these human propensities play a role in Smith’s general view of society, an overarching theme of his works being the unintended social consequences of individual actions, and the ‘emergent order’ of the sum of individuals’ behaviour. In other words, in this more recent wave of Smith scholarship, a coherence was sought between his various works, the new Glasgow Edition of his works and correspondence presenting for the first time a

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<sup>5</sup> Adam Smith is mentioned in more than two dozen articles in the *Journal of the History of Biology*.

<sup>6</sup> Of course, precise positions around this general consensus vary. The Adam Smith Problem will be analysed in more detail in Chapter 1.

complete collection of all his published and unpublished books, essays, correspondence, and, importantly, the totality of the rediscovered notes of his lectures on jurisprudence and rhetoric. The different elements of Smith's grand narrative, therefore, which had for the most part been forgotten by social scientists, Smith having come to be invoked for the most part by economists (and seldom read, at any rate in his entirety, by the majority of the latter), were thus reevaluated each individually, and the articulation between them became one overarching theme of the new Smith scholarship. The present work squarely falls within this tradition.

That population does not play an important role in Smith's system of thought seems to be, however, a largely held opinion even among historians of (economic) thought. Among the large volume of commentaries on Smith that were taken notice of for the present study,<sup>7</sup> only a handful of published contributions deal principally with the subject of population. One short article from the 1950s is, as typical in this connection, essentially limited to Smith's views on the labour market (Nilson 1952). Two articles (both by the same author) and one book chapter (Spengler 1970 ; Bowen 1976 ; Spengler 1976), which examine the issue in more detail, are from around the time of the bicentenary celebrations of the *Wealth of Nations*.<sup>8</sup> Two further contributions that deal squarely with Smith on population are very recent, and in fact yet unpublished (Brennan 2013 ; Sunna forthcoming). I shall point out further on how the present work variously differs and/or adheres to the works just cited. Schumpeter (1986 [1954]) and Robbins (1968) also mentioned Smith in some detail in their respective chapters on population theories. But overall, the topic of population seems to have been left out in the secondary literature on Smith over the course of the 20<sup>th</sup> century, just as Smith was generally left out of treatments of the topic of population in the history of thought (or mentioned only in passing, in connection with his labour market theories held to point to Malthus).

There seems to be an increased interest in recent years in Smith's "geographical economics" or "economic geography" (see notably the World Bank's

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<sup>7</sup> See n. 1 above.

<sup>8</sup> None of these were, however, squarely contributions to the bicentenary conferences, as it appears. It speaks for the little general concern for Smith's ideas on population that while Joseph Spengler was centrally interested in the topic of population in the history of economic thought and had already published one of his two articles on Smith and population, the editors of the volume of essays accompanying the bicentenary Glasgow edition of Smith's works (Skinner & Wilson 1975), of which several of the chapters had in fact previously been published, chose to include a contribution by Spengler on "Adam Smith and Society's Decision-makers" instead.

*World Development Report of 2009*). Smith's contribution in this field is recognised. But even here it is not explicitly connected to his ideas on population. Such topics as population distribution are dealt with mostly in a static way and as 'givens'. All in all, an integral treatment of Smith's ideas on population and development is sorely lacking. This work aims to contribute to bridge this gap.

The subject of the role of population in Adam Smith's work is of particular relevance because of two confluent reasons. First, the discipline of demography (or, in the United States, population science), being one of the most recent of the human sciences to become a separate discipline, is usually traced by its practitioners to the early 19<sup>th</sup> century work of Malthus, more rarely to earlier authors (especially John Graunt and/or William Petty) (Demeny & McNicoll 2003, p. vii), but who are typically considered in isolation, i.e. independently from the wider intellectual movement of their respective period. By contrast, 18<sup>th</sup> century population theory, in the works of Hume, Montesquieu and Adam Smith notably, is comparatively little known by demographers.<sup>9</sup> Rather, much as Adam Smith and other classical economists are generally considered by present-day economists only as forerunners to the more elaborate ideas of later economic theorists — as exemplified by Schumpeter's influential claim that "by far the best piece of economic theory turned out by A. Smith" was the "rudimentary equilibrium theory of Chapter 7" that "points toward Say and, through the latter's work, to Walras" (1986 [1954], p. 183) — earlier writers on matters of population are considered by most demographers only as forerunners and more rudimentary versions of the more complete ideas of Malthus and the neo-Malthusians. The 18<sup>th</sup> century controversy over the comparative populousness of ancient and modern Europe, involving notably Montesquieu, Hume and Wallace, for example, is usually treated merely as somewhat of a curiosum, and lumped together with everything that was written about population before Malthus as "pre-scientific" ideas on the subject leading up to Malthus, a view implicit in the titles of studies of these ideas containing the words "pre-Malthusian" (Stangeland 1904) or "before Malthus" (Gonnard 1929a, 1929b ; Black 1985 ; Hecht 1986) — much as 'pre-Smithian' economic theories are often so labelled and treated —, neglecting both how much Malthus himself was feeding on and taking up previously rehearsed themes (notably the population and inequality issue treated in much the same way as in

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<sup>9</sup> Researchers at the French Institut national d'études démographiques have however, within their effort to reedit the works of the physiocrats and the French literature on economics and society of the 18<sup>th</sup> century more generally, re-examined the ideas of the French-speaking and other European 17<sup>th</sup> and 18<sup>th</sup> century thinkers on population. See notably Théré (1999); Quesnay (2005 [1747-67]); Théré and Charles (2009); Théré, Charles, and Lefebvre (2011).

Malthus' *Essay* by Wallace in his *Various Prospects of Mankind, Nature, and Providence* written four decades earlier) and how, conversely, these earlier debates developed themes *not* included in Malthus' approach.<sup>10</sup>

Yet this teleological way of conceiving intellectual history (and history generally) — as a linear progression or chain of events that by constant improvement produced the present situation or paradigm, rather than as an ongoing debate or confrontation of differing and often conflicting viewpoints, which can see many reiterations in different forms in successive periods —, while still being the largely dominant view of the history of their respective disciplines by most researchers in the natural as well as the human sciences, is today largely rejected by (intellectual) historians themselves. Herbert Butterfield famously named the teleological view of history “Whig History”, in his *The Whig Interpretation of History* in 1931, and the term has been largely adopted, as a pejorative denomination of the practice, by intellectual historians.<sup>11</sup> This is relevant, with regard to population theory, particularly insofar as much of Malthus' theory itself largely runs counter to the currently predominant neo-Malthusian paradigm. And this is true all the more of Smith's, Hume's and Montesquieu's works that form the immediate context in which Malthus wrote.

The first reason for the relevance of a study of Smith's ideas on population is hence the importance of these ideas in their own right, i.e. *qua* population theory, as distinct from the ones of Malthus and other writers. This reason is, in other words, to uncover the demographic dimension of Smith's thought, in order to unearth Smith's contribution to the history of thought on population, his contribution — which may still be relevant today — to the discipline of demography, not yet a separate discipline in his own day, as is true for economics.

The second reason for the importance of a study on Smith's ideas on population is that in Smith's work, concepts today subsumed under the notion of population are closely intertwined with all aspects of “the progress of society”. This subject, “the progress of society”, undoubtedly must be recognised as the overarching theme of Smith's political and economic thought. This theme includes political, economic, sociological, cultural as well as demographic and geographic factors, namely the development of: government and governing institutions (including laws), the market, the division of labour, inequality (social classes),

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<sup>10</sup> For a differentiated treatment of the population theories and controversies of the second half of the 18<sup>th</sup> century in their own right see notably Whelan (1991). (Discussion of Smith here too is cursory, but which may be justified insofar as Smith did not squarely contribute to the controversies in question.)

<sup>11</sup> For a comprehensive study of Butterfield's position see Sewell (2005).

manners and customs, capital and technology, all of which are connected in Smith's account to the overarching theme of what I shall henceforth refer to as "the peopling process", i.e. population, in its original meaning not of a quantity of people to be found on a particular territory but of the process through which a certain territory gets *peopled*, including the growth, spread and concentration of population in its contemporary sense.

Foucault (2004 [1977-78], p. 69) noted that the word population, which he saw as a great 18th century conceptual innovation, originally referred, in both French and English, to the "process of populating a territory" (McNicoll 2007, p. 829), deriving (rather than, as would be expected, the other way around) from the word "depopulation", which still denotes exclusively the idea of process.<sup>12</sup> According to Théré and Rohrbasser (2011, p. 141-2), although the word "depopulation" appears in dictionaries before the word "population", there are no grounds to affirm that the latter derives from the former. In the French-speaking literature, the word "population" seems to have found widespread use and acceptance during a relatively short time in the 1750s, notably under the impulse of Forbonnais, and the word seems to have been imported mainly from Spanish, where it was already longer in use. Also, both the meaning of quantity and of process have a long history. But the one of process seems to be more prevalent in the 18th century.<sup>13</sup> Note that this meaning of process is also present in Malthus's "principle of population". To convey the meaning of the later "over-population" (understood as static quantity), Malthus himself used the word "over-populousness" in the first edition of the *Essay*.

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<sup>12</sup> For a more recent and more detailed account than Foucault's, see notably Le Bras (2000) and Tamba (2002), who also call out etymological dictionaries for attributing the first known use of the term "population" to Bacon. According to them, the word "population" was only substituted by later editors of Bacon for his own words ("number of inhabitants" and similar locutions), a phenomenon which also affects other 18th and 19th century editions of earlier authors. (Théré and Rohrbasser (2011, p. 141-2) dispute this: the word "population" can be found in Bacon, Le Bras was apparently relying on translations.) The first use of the word is attributed by Le Bras to Hume, with the meaning of process above described. (The notion of "quantity of people" was rendered by Hume, as in the title of his work, by the word "populousness".) "Depopulation" is attested in Montesquieu (who never used the word "population"), but, according to Tamba, with the original latin meaning of "depopulatio", denoting calamity and destruction. Hence "population" derives, he claims, from "depopulation" through a complex (and uncertain) history, whereby the prefix "de-", in the original Latin, carried the meaning not of negative but of amplifier (as in "demultiply"), and only later, by resemblance with the prefix "dis-", has "depopulation" been construed as a negative of something which remained to be coined, i.e. "population", understood as the process of peopling.

<sup>13</sup> An interesting parallel of the dual meaning of process and of state of concepts used in the 18th century can be found in Hume, who affirmed about a passion that it is "an original existence, or, if you will, modification of existence" (Hume 1888 [1739], p. 415).



Both the late coming-into-use of the term “population”, and its change of meaning from process to quantity, can be attested in Smith’s writings. Thus, in the *Theory of Moral Sentiments*, the term “population” cannot be found (and neither the term “populousness”). While the topic of population is of lesser relevance for the subject matter of the *Theory of Moral Sentiments*, Smith still mentions on a few occasions the number of people, which he renders by the expression “number of-” (twice), “myriad of-” or “multitude of inhabitants” (each once). In the *Lectures of Jurisprudence* (the Glasgow Edition volume in its entirety), both the terms “populousness” (five times) and “population” (eight times) appear. Along “populousness”, Smith is still reported to have used “number of inhabitants” (thrice) and “number of people” (nine times) to denote a quantity of people. The term “population” is here always used, quite clearly, with the meaning of the process of peopling. All these instances are in the set of notes discovered in the 20<sup>th</sup> century by John Lothian. The earlier discovered Cannan notes and the ‘Early Draft of the *Wealth of Nations*’ do not contain the term,<sup>14</sup> but both carry an instance of the word “depopulation” (in the sense of dispeopling). It is only in the *Wealth of Nations* that the use of the term “population” becomes much more frequent, appearing thirty-seven times in the text. Here, it is not always clear whether Smith denotes the process of peopling or the quantity of people by it. But even in the *Wealth of Nations* Smith still uses “number of people” more frequently (forty-two times; the term “populousness”, moreover, appears six times and “number of inhabitants” four times).

The very second sentence of the *Wealth of Nations* reads: “According therefore, as this produce, or what is purchased with it, bears a greater or smaller proportion to *the number of those who are to consume it*, the nation will be better or worse supplied with all the necessaries and conveniences for which it has occasion”. This focus on per capita income as a measure of wealth by Smith has often been noted. But the link with population is seldom discerned. Foucault by contrast saw Smith’s engagement with population in this connection as instrumental in the established meaning the concept of population acquired (2004 [1977-78], p. 70-81), Smith representing, according to him, a defining moment in the development of modern social science (1966).

That there is such a thing as a peopling process, meaning the growth and settlement process of a population over a territory, which is inherent to and inseparable from the process of economic development as a whole, is a notion

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<sup>14</sup> For a detailed account of the different documents composing the *Lectures on Jurisprudence* Glasgow Edition volume and how they will be referred to in the present work, see the ‘Note on Notation’ at the end of this Introduction.

entirely foreign to most modern economists, more accustomed to see the growth of population in terms of “population pressure”, an obstacle to overcome rather than a positive force in the way of economic development. Yet in 18<sup>th</sup> century thought on progress, and certainly in Adam Smith’s work, this notion is not only present, but plays an important part in the overall theory, even if modern accounts almost unanimously fail to account for it. Smith’s “four stages” theory of economic development, notably, is essentially structured around and embedded in a narrative of a nation’s peopling process.

Adam Smith is thus wrongly regarded as being a minor figure in the history of thought on population. Commentators on Smith and population moreover have laid undue stress on his chapter on wages and the labour market in the *Wealth of Nations*, where Smith describes demand for labour and its supply, i.e. population, being adjusted through the wage rate. In fact, Smith’s theory gives a much larger role to population dynamics. Population plays a large role, indeed, in the very definition of perhaps the single most fundamental concept of the *Wealth of Nations*: the market. The extent of the market is thus described by Smith as determined in large part by the physical proximity of individual economic agents one from the other, i.e. population density. In the course of the “natural progress of opulence” from a rural-agricultural society to an urban-industrial trading nation, the progressive state of (economic) affairs is maintained by ongoing population growth and the ensuing division of labour between town and countryside, making for the growth of cities. Thus, Smith does not only formulate a theory of population growth in *Wealth of Nations*, but Smith’s works also comprise fundamental elements of a theory of population movements and urbanisation.

Smith’s work not only accords a larger role to population than a disconnected view of these scattered elements each by themselves could suggest, but these elements are in fact connected with one another in such a way as to make it possible to affirm that Smith developed a complete theory of population, which, moreover, is particular to him — even though this theory is only incidental to his larger concern with the material progress of nations and the means to favour it. It is not claimed that this theory was either very original, given the work of Smith’s predecessors, or is very remarkable in itself. Rather, population, like trade, plays an important role in his theory of economic development — his trade theory being another element for which Smith has long been criticised as not being original or

remarkable, and trade being equally closely intertwined with development in Smith's thought.<sup>15</sup>

Nor is it claimed that population is an *independent* variable, or is by itself the driving force or the prime mover to Smith's theory (although there is in fact a case to be made for this position, in particular, with regard to the primitive state). Instead Smith's theory of progress involves a series of factors, which are so imbricately related and dependent on one another that they cannot augment, or hardly so, but on a par. Thus the division of labour, capital accumulation, population, and the development of laws and government are all dependent on one another. As an element of the systemic view that Smith develops in the *Wealth of Nations* (as well as in the *Theory of Moral Sentiments* and the *Lectures on Jurisprudence*), Smith's treatment of population thus deserves the full attention of Smith scholars and anyone interested in the Smithian perspective on economic development.

The subject of population is thus of great relevance to the study of Smith's work and, conversely, Smith's work may be of great relevance to the study of the subject of population. As will hopefully emerge from the ensuing chapters, what may be termed the "Smithian perspective" is, indeed, in many ways a more helpful heuristic to understand the interrelationship of different variables affecting and being affected by matters pertaining to population than the predominant neo-Malthusian paradigm. It is therefore important to uncover the critical role of population in Smith's work, both for a better understanding of Smith, and for the recovery of an important alternative view of population-economy interrelationships.

Yet, the importance of the element of population in Smith's thought has long been downplayed. A characteristic statement is made in the introduction to the Glasgow edition of the *Wealth of Nations*:

Increasing population, whether a cause of economic growth, or as something to fear, was not highlighted. That may seem surprising. Others, among them Sir James Steuart, feared over-population, but it was possible to be as optimistic about the future in the mid-eighteenth century as at any time. The spectre of famine and of some diseases had been removed; the sharp rise in population and the problems of its concentration were yet to be. Hence it was easy to conceive the problem of economic growth as one of utilizing the labour force in ways which would most effectively meet the

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<sup>15</sup> This point, noted in the early 20<sup>th</sup> century by Williams (1929), was especially developed by Hla Mynt in a series of articles (1946, 1954-55, 1958, 1977). See further on this Elmslie (1994b) and Schumacher (2012,2013).

opportunities offered by the expansion of the market, either by improvements in the division of labour or by mechanization. (Campbell & Skinner 1976, p. 48)

This statement presents a partial view of the role of population in Smith's theory only, and it is strange that the Glasgow editors, familiar with the *Lectures on Jurisprudence* (referenced by them throughout the *Wealth of Nations*), in which population is articulated with Smith's arguments concerning growth and development much more explicitly than in his published work, would present such an incomplete view of the subject. It is very hard, of course, even for a historian, to escape one's own time, and the way the subject is here introduced and presented by the Glasgow editors is very characteristic of the neo-Malthusian perspective that was predominant all throughout the 20<sup>th</sup> century, but especially so in the 1970s — when the rate of world population growth, higher than ever before or since,<sup>16</sup> was a particular factor of concern. Thus the “spectre of famine” here evoked can be taken to quite clearly allude to the works of Ehrlich and the Meadows published a few years before the Glasgow Edition.<sup>17</sup>

Famines as “positive checks” to population were of course made famous by Malthus (in whose work, it should be remarked, the “*spectre* of famine” had an actual *positive* — in the sense of “beneficial” — function, as we shall see in Chapter 1). Smith, however, had framed the issue quite differently. It would be an exaggeration to state that the association of famines and population was entirely foreign to him. In his chapter on wages, when describing the “declining state”, characterising “a country where the funds destined for the maintenance of labour were sensibly decaying” (WN I.viii.26, p. 90), Smith wrote that “Want, famine, and mortality would immediately prevail in that class [the lowest], and from thence extend themselves to all the superior classes, till the number of inhabitants in the country was reduced to what could easily be maintained by the revenue and stock which remained in it” (ibid., p. 91), a sentence that may indeed have influenced Malthus' treatment of the subject. But it is of significance that this sentence ends with the specification that if there was so little revenue and stock left in the country, it is because what was left had “escaped either the tyranny or calamity

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<sup>16</sup> The highest global population growth rates in history — above 1.8% per year — were registered in the two decades between 1955 and 1975, peaking at 2.06% between 1965 and 1970 (United Nations Department of Economic and Social Affairs 2015).

<sup>17</sup> The year 1968 saw the publication of three influential works (of unequal length) representative of the dominant neo-Malthusian perspective: Paul Ehrlich's *Population Bomb*, Garrett Hardin's ‘Tragedy of the Commons’ and Gunnar Myrdal's *Asian Drama*. Four years later the Club of Rome published its authoritative *Limits to Growth* (Meadows, Meadows, Randers, & Behrens 1972).

which had destroyed the rest” (ibid.). This theme of tyranny and calamity in connection with famines is taken up again by Smith in Book IV. Here he held first that “a dearth never has arisen from any combination among the inland dealers in corn, nor from any other cause but a real scarcity, occasioned sometimes perhaps, and in some particular places, by the waste of war, but in by far the greatest number of cases by the fault of the seasons” (WN IV.v.b.5, p. 526), i.e. that shortages of agricultural produce were mainly natural not man-made events. Yet “a famine”, Smith continued, “has never arisen from any other cause but the violence of government attempting, by improper means, to remedy the inconveniences of a dearth” (ibid.). By thus explaining famines by institutional deficiencies, as would Sen and Drèze (1989) two centuries later, Smith was therefore *not* committing the sin that Malthus and Ricardo have, more fairly so than Smith, often been accused of: the one of biological determinism. This perspective, as we shall see, was foreign to Smith in general, who notably believed that nurture was far more important than nature in forming individual talents, as expressed in his famous porter and philosopher passage of the second chapter of the *Wealth of Nations* (WN I.ii.4, p. 28-9).

Because “The spectre of famine and of some diseases had been removed”, Campbell and Skinner believed, and “the sharp rise in population and the problems of its concentration were yet to be”, “it was easy to conceive the problem of economic growth as one of utilizing the *labour force* in ways which would most effectively meet the opportunities offered by the *expansion of the market*”. This handling by Smith of the “problem of economic growth” is presented by the Glasgow editors as disconnected from the issue of population. Both elements invoked, the labour force and the extent of the market, are, however, in Smith’s account, connected to population. Population growth, indeed, augments both the labour force and the extent of the market, so that what lies at the origin of the expansion of market opportunities also serves to meet these opportunities. Rather than ignoring the question of whether “Increasing population” was seen as “cause of economic growth or as something to fear”, Smith in fact quite directly answers this question in his theorisation of economic development. As Smith expressed it in the four sentences concluding his chapter on wages:

What takes place among the labourers in a particular workhouse takes place, for the same reason, among those of a great society. The greater their number, the more they naturally divide themselves into different classes and subdivisions of employment. More heads are occupied in inventing the most proper machinery for executing the work of each, and it is, therefore, more likely to be invented. There are many commodities,

therefore, which, in consequence of these improvements, come to be produced by so much less labour than before that the increase of its price<sup>18</sup> is more than compensated by the diminution of its quantity. (WN I.viii.57, p. 104)

Counter to what Campbell and Skinner held, Smith here quite clearly presented population as a positive force in economic development, through the furthering of both technological development (invention) and the division of labour (the two being intimately linked in Smith's account more generally) that it allows.

In line with the way the topic was treated by the Glasgow editors, population is commonly viewed as being merely a passive by-product in Smith's theory. Alvin Hansen, by contrast, recognised the central place of population and the reciprocal nature of causation in the interaction of population and economic development for Smith:

Adam Smith regarded growth of population as at once a consequence and a cause of economic progress. Increasing division of labor would, he argued, bring about greater productivity, and this would furnish an enlarged revenue and stock, from which would flow an enlarged wages fund, an increased demand for labor, higher wages, and so economic conditions favorable for population growth. Now a growing population, by widening the market and by fostering inventiveness, in turn facilitated, he thought, division of labor and so the production of wealth. Thus he arrived at an optimistic conclusion. Population growth, he held, stimulated progress and this in turn stimulated further growth and expansion. In contrast, the pessimistic analyses of Malthus and Ricardo stressed the limitation of natural resources and the danger of an increasing population's pressing down the margin of cultivation to a point at which real income would be reduced to a bare subsistence level. In this static analysis the more dynamic approach of Adam Smith was quite forgotten. If we wish to get a clear insight into the economic consequences of the current decline in population growth, it is necessary to return to the suggestion of Adam Smith and to explore more fully the causal interconnection between economic progress, capital formation and population growth. (1939, p. 2-3)

Hansen's remarks remain pertinent today, and in the ensuing chapters shall be illustrated and developed. When presenting like ideas about Smith — to the effect that population is an important element in his system, and that it played a

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<sup>18</sup> Wages (the price of labour) augment because of the increase of stock (which heightens the demand for labour, as capitalists seek to employ their stock to employ labourers), as Smith had recalled at the beginning of the paragraph this sentence concludes.

definite positive role in the cumulative circle or 'spiral' of progress that characterises Smith's theory of growth, at least in what he termed the "progressive state" — I often heard the objection 'if for Smith population was such an important element, and played a positive role for growth, he would have unequivocally stated so'; or, alternatively, 'if Smith stated the positive role of population less equivocally in the lectures of jurisprudence and other early work than in the *Wealth of Nations*, he must have changed his mind about it in the meantime'. But these are too simple objections. Not only did this not prevent earlier scholars from recognising this role of population in Smith, as was the case of Hansen, but one of the important roles of historians of thought, indeed, is precisely to examine the work of earlier authors in such a way as to bring out that which, though implicit, must have been obvious for a contemporary audience, but ceased to be so as time went by, because the often covert references to contemporary authors, works, debates, controversies and current events have become incomprehensible to later readers. The recuperation of such contextual clues can be carried out only by resituating the work in the context of its time: within the debates it contributed to, and by looking at what kind of audience was targeted and what position was argued as part of these debates, by deciphering the vocabulary characteristic of the times and the meaning contemporary to the author of words that are still used today but whose meaning might have evolved. While every author may have the intimate hope that she may still be read two centuries after her death, indeed, no author, unless clairvoyant, can knowingly contribute to controversies taking shape in the remote future. As a general rule, authors, whether of literature, science or philosophy, address a contemporary audience, making references to current ideas and events in such a way that they may be understood by their readers at the time of publication. Making implicit rather than explicit references can be as much stylistic choice, sparing the audience tedious and dispensable specification, as it can be a deliberate strategy to build complicity with the readers by flattering their intelligence. It may also simply be the usual way, at the time of writing, to refer to certain known ideas and connections that were then not yet in any way polemical, but only became so at a later point. Despite some explicit statements to this effect, the positive role of population in Smith's major published work is indeed largely implicit, which warrants that it be disinterred.

Indeed, when it comes to population as both effect and cause of economic development, Smith did not have a very contentious case to argue. Despite worries of the threat of overpopulation — through an implicit expression of the view of diminishing returns from population — conveyed notably in the works of Wallace, Quesnay, Cantillon and Steuart, the view of population as both cause and effect of

economic development was widely shared in the 18<sup>th</sup> century. As Schumpeter (1986 [1954], p. 240-1) put it:

during the seventeenth and eighteenth centuries . . . Economists . . . With rare exceptions . . . were enthusiastic about ‘populousness’ and rapid increase in numbers. In fact, until the middle of the eighteenth century, they were as nearly unanimous in this ‘populationist’ attitude as they have ever been in anything. A numerous and increasing population was the most important symptom of wealth; it was the chief cause of wealth; it was wealth itself — the greatest asset for any nation to have. Utterances of this kind were so numerous as to render quotation superfluous.

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In the development of political economy as a discipline, later called “economics”, Adam Smith was often called the founding father. But very selective use was made of him, in actual facts, by most later economists. The larger part of his narrative was ignored by the majority of the profession for the larger part of the 19<sup>th</sup> and 20<sup>th</sup> centuries.<sup>19</sup> Beginning with Ricardo, the greater part of economics came to deal with issues of distribution and the functioning of markets rather than with the historical development of society. Ricardo did devote attention to the long-term development of society, epitomised by his theory of diminishing returns to land, leading inevitably to a stationary state where economic development would cease. But, while the interpretation of the actual history of Europe and the world at large — with, at its centre, the question of the differential development of different people and societies — was the main object of the analysis of Smith and his Scottish contemporaries, this interest got significantly watered down with Ricardo and his predilection for the theme of distribution. As Ricardo signalled to Malthus in a passage of a letter of October 1820 (made famous through being quoted by Keynes in a footnote attached to the second paragraph of the *General Theory*):

Political Economy you think is an enquiry into the nature and causes of wealth — I think it should be called an enquiry into the laws which

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<sup>19</sup> “successors cannot continue on the level of genius. One aspect of the great man, probably that which suits later conditions, is chosen, much of the rest probably rejected. The section of Smith’s work which was so chosen and developed till it became supreme was the first two books of the *Wealth of Nations*. . . . It is a paradox of history that the analytics of Book I . . . should have eclipsed the philosophic and historical methods in which [Smith] so revelled . . . . But even so we cannot speak for the future. . . . the past certainly shows that each phase of social development produces its own philosophy and method in all the social disciplines.” (Macfie 1955, p. 82-83)



determine the division of the produce of industry amongst the classes who concur in its formation. No law can be laid down respecting quantity, but a tolerably correct one can be laid down respecting proportions. Every day I am more satisfied that the former enquiry is vain and delusive, and the latter only the true objects of the science. (Sraffa 2004a [1951], p. 278-9) <sup>20</sup>

Marginalist economic theory (or what has become known in the 20<sup>th</sup> century as neoclassical economics; see on the history of this term Aspromourgos (1986)), which became the mainstream of economic analysis from the late 19<sup>th</sup> century onwards (with a brief interlude during which this place was occupied by the historical school in Germany and institutional economics in the United States), took this development to the extreme. Smith's grand narrative of the development of society was all but forgotten. Illustrative of this is the afterlife of Smith's ideas on the division of labour.

In Adam Smith's view, productivity gains (i.e., the increase in per capita production and hence income, or simply: economic growth) are the outcome mainly of the development of the division of labour. One of the main if not *the* main factor in economic development is thus the division of labour. This idea is clearly stated in one of the first sentences of the *Wealth of Nations*. It forms a kind of leitmotiv of this work and is developed throughout. The idea that division of labour makes for impressive productivity gains has never been seriously disputed. Yet, quite oddly, while it can (as most of Smith's ideas) be traced back much further in time (notably to Plato), it has, with some notable exceptions, never been seriously developed after Smith. Surreptitiously, the idea has been circumvented, even turned on its head by later scholars, among which there were Ricardo and Malthus, and later John Stuart Mill. The way these scholars analysed the market mechanism and economic development — diminishing returns (from land) now taking centre stage — has largely been retained until today (mostly Ricardo's and Mill's version, but through Keynes, arguably, also anew parts of Malthus'), and with it a somewhat schizophrenic treatment of Smith's legacy has taken hold. On the one hand, the validity of Smith's idea of the productivity-enhancing effects of the division of labour continues to be upheld. Smith's most famous example thereof, the division of labour between ten workmen in a pin factory, is frequently taught to this day in inaugural lessons of introductory economics classes and figures in the early pages

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<sup>20</sup> Four years and a half earlier, Ricardo had still stated in another letter to Malthus: "I wish much to see a regular and connected statement of your opinions on what I deem the most difficult, and perhaps the most important topic of Political Economy, namely the progress of a country in wealth *and* the laws by which the increasing produce is distributed" (Sraffa 2004b [1951], p. 24). See further on this Hollander (1997, p. 1000).

of introductory economics textbooks. On the other hand, this is where the examination of this topic usually ends, as if there was nothing more to say about it. Smith himself, by contrast, organised his whole theory of trade and development around this idea and applied the concept both to the level of the firm (as in the pin factory), the city, the region, the country, and the world. There is thus in Smith's work alone already a breadth of examples of fruitful use of the concept that would present the material for several research programs.

The topic of the division of labour is intimately connected, in Smith's theory, to what would later be called increasing returns; not in the narrow sense of factor proportions in particular production processes, in which this idea was usually discussed at the beginning of (and to a large degree throughout) the 20<sup>th</sup> century — i.e. "relating", as Alyn Young (1928, p. 528) expressed it, "to the precise way in which some sort of equilibrium of supply and demand is achieved in the market for the products of industries which can increase their output without increasing their costs" —, but in the "simpler and more inclusive" (ibid.) sense of the progress of the whole society by means of the productivity gains obtained from the subdivision of tasks, professions, and industries, and the creation of new such tasks, professions and industries that this process entails.<sup>21</sup> This idea was superseded, first, by Malthus' and Ricardo's insistence on the role of diminishing returns from land. In neoclassical economics, moreover, it got supplanted by the concentration on the realisation of market equilibria, whereby increasing returns (internal to the firm) were considered — largely because of the neoclassical habit, notably established by Marshall, of holding all else equal, whereas in Smith's theory the different elements of the economic system are usually considered in their mutual interaction and co-evolution — to lead to monopoly and thereby to violate the hypothesis of perfect competition, necessary for the functioning of the theory (Sraffa 1926).

The idea of an "international division of labour" has also survived into modern parlance (not that Smith ever used the phrase, but there was, too, an international dimension to the division of labour in his work — which did not include, it should be noted, complete specialisation of particular countries in

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<sup>21</sup> Schumpeter entitled this latter conception of increasing returns, implying change of technology, "Historical Increasing Returns" to distinguish it from the increasing returns that "occur within the given pattern of technological practice" (1986 [1954], p. 251). Both Young (in the appendix to his article) and Schumpeter (at the place just cited) illustrated the "inclusive"/"historical" type of increasing returns by a shift of a curve as opposed to movements along a curve, which could be used to depict increasing returns in a given production process. (It is likely that Schumpeter was inspired by Young for this analogy, though he did not refer to him at this point).

particular industries). But in the way it is used today, the phrase is usually nothing more than a synonym for international trade. It is true that in the theory of international trade, the idea of increasing returns has over the course of the 20<sup>th</sup> century known somewhat of a theoretical revival, and Smith is explicitly recognised by Krugman (1990b, p. 4) in this connection as being at the root of the “New Trade Theory”. But while elements of Smith’s insights can be discerned in this more recent research program, it deviates from Smith’s vision in important respect, notably by the erroneous association of increasing returns with large-scale production by single firms and the monopolistic type of competition that is assumed to ensue, an error which Young (1928, p. 527), building on Smith, had already drawn attention to.<sup>22</sup> More significantly, however, the division of labour as a *means* of conceptualising the process of economy-wide increasing returns (or world-wide in the case of international trade) is conspicuously absent from the “New Trade” literature. Lip service is occasionally paid to the division of labour or the extent of the market, but without clearly defining what is meant by these concepts. (Krugman’s Walrasian obsession with necessarily being able to put anything meaningful he has to say in an academic context in mathematical model form — a necessity never felt by Smith, who was always concerned with expressing things in his writings in such a way that they might be understood by most anyone, and was rather circumspect of what was then called “political arithmetic” — also likely constrains the amount of Smith’s insights that Krugman and the New Trade theorists following in his footsteps could possibly incorporate.)

Thus, while the idea of the division of labour and the productivity gains it can procure was never seriously disputed, and is upheld in modern economics to this day, its full implication is nowhere near to being taken into account. The division of labour is too often conceived today, when it is at all mentioned, in the very narrow sense only of the division of tasks within the firm (what Marx would term the “technical division of labour”), conveying the impression that Smith himself conceived it only in this narrow sense, an idea as pervasive as it is wrong, which one occasionally encounters even in the history of thought literature.<sup>23</sup>

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<sup>22</sup> Young did not, however, refer to the article by Sraffa cited above in this connection, which was published two years earlier in the same journal.

<sup>23</sup> Notably, Blitch (1983, p. 19); Chandra (2003, p. 46) and Chandra and Sandilands (2005, p. 465) inopportunely make this claim in an effort to commend Allyn Young’s contribution, which did not in fact require downplaying the import he made from Smith. What Chandra (ibid.) notably singles out as the element to which Young is described to have “extended” Smith’s views — “firm and industry level specialisation” — is explicitly described by Smith himself almost verbatim in the very chapter that carries the title which Young (1928, p. 529) singled out as “one of the most illuminating and fruitful generalisations which can be found anywhere in the whole literature of economics”, in which Smith wrote: “it is upon

The concept of increasing returns is intrinsically linked with the emergence of economics as a field of study, if Adam Smith's pin-factory parable can indeed be considered the founding myth of the discipline — as it is often presented in economics textbooks. That this phenomenon was progressively relegated to second order consideration and finally became totally ignored by economists owes much to the enduring imprint that Ricardo (and, in a different way, Malthus) left on the discipline. Increasing returns have been the subject of a renewed surge of interest in recent years, after their momentary reappearance in the single celebrated article by Allyn Young in 1928 and treatments in different guises throughout the 20<sup>th</sup> century. But while economists have now and then tried to rehabilitate the concept since, they have never liberated themselves of the persistent influence of the idea that decreasing returns are the more important and pervasive phenomenon at the economy-wide level and over the long run. Thus, for example, what was originally formulated as a criticism of mainstream economics, Herman Daly's concept of a "steady-state economy", had in fact no difficulty being absorbed by the mainstream (as decried by some ecological economists (Pirgmaier 2017)), while "Despite its recent re-emergence to analytical importance, the phenomenon of increasing returns remains outside the central core of neoclassical economics" (Buchanan & Yoon 2000, p. 43).

"My subject may appear alarmingly formidable, but I did not intend it to be so." Thus commences Allyn Young's Presidential Address before section F (Economics and Statistics) of the British Association for the Advancement of Science, held in Glasgow on September 10<sup>th</sup>, 1928, and published the same year (Young 1928). The same year too were published the proceedings of the conference commemorating the sesquicentennial of the *Wealth of Nations*, held in Chicago two years prior (Hollander et al. 1928). That the next major anniversary of this work (the bicentennial of the *Wealth of Nations*, in 1976) would be held where he was speaking, Allyn Young could not know, of course. But that he chose to make

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the sea-coast, and along the banks of navigable rivers, that *industry* of every kind naturally begins to *subdivide and improve* itself" (WN I.iii.3, p. 32). Consider also Currie's (1981, p. 52, 55, 57) false claim, on the same subject, that, while Young made the market a dynamic force in the growth process, Smith considered it merely as a fixed limit (which makes one wonder why Young would have looked for inspiration in Smith's theorem in the first place); or his equally false claim (Currie 1981, p. 54) that for Smith economic progress was not linked to the division of labour but to international trade (this is quite an absurd claim in itself, considering how much stress Smith laid on the role of the division of labour in economic progress from the very first lines of the *Wealth of Nations*, but even more puzzling when one considers that for Smith, in any case, the development of trade — whether national or international — was, in any case, inextricably linked to the division of labour).

“Adam Smith’s famous theorem that the division of labour depends upon the extent of the market” the Leitmotiv of his address, “in much the way that some minor composer borrows a theme from one of the masters and adds certain developments or variations of his own”, was likely related to him holding his address in the city where Smith studied and taught. “That theorem, I have always thought,” wrote Young, “is one of the most illuminating and fruitful generalisations which can be found anywhere in the whole literature of economics” (Young 1928, p. 529).

Smith’s “theorem” that the division of labour is limited by the extent of the market was thus brought to the attention of economists in Young’s justly famous article, amidst a controversy then raging in British (and American) economics on the question of increasing versus decreasing costs and returns and the question of external economies, often referred to as the 1920s cost-controversy. While Young wrote in the course of this controversy (one that he had himself helped to spark, with a noted review of Pigou’s 1912 *Wealth and Welfare* in 1913), he actually started his 1928 address and paper by declaring that it was not meant to contribute to this debate, one that Young felt was excessively constrained in outlook, but rather to show that the debate itself had to be resituated within a much vaster question, that of growth and development, the central theme of Smith’s *Wealth of Nations* (and possibly of classical economics as a whole). This theme had by then largely been relegated to the sidelines, if not abandoned altogether, by an economics profession that — as Nicholas Kaldor, a student of Young’s when he held his address, remarked fifty years later — had become used to “focusing attention on the allocative functions of markets to the exclusion of their creative functions” (Kaldor 1972, p. 1240).

Young died in 1929. He was unable to react himself to the uses and readings that were made of his contribution — or indeed to contribute himself to the “formidable” research program that he had contributed to spark by the resuscitation of Smith’s ideas on division of labour and extent of the market. “On re-reading this paper after a lapse of many years,” wrote Kaldor (1972, p. 1243), “I feel convinced that it was so many years ahead of its time that the progress of economic thought has passed it by despite the attention it received at the time of its original publication. Economists ceased to take any notice of it long before they were able to grasp its full revolutionary implications.” Robbins (1968, p. 40) similarly stated: “it has always been an amazing thing to me that this path-breaking development should have attracted so comparatively little notice.” This is not fully accurate. Joseph Schumpeter, too, had warned, in his posthumous treatise on the history of economics, that “This great economist and brilliant theorist is in

danger of being forgotten” (1986 [1954], p. 842). But what he wrote about Young in a piece published only a few years after Young’s death is maybe more relevant, namely that Young’s work “lives on in the work of others to an extent which it is impossible to estimate”; and: “Rarely, if ever, has fame comparable to his been acquired on the basis of so little published work” (Schumpeter 1935, p. 514-5). It is not an exaggeration to declare, indeed, that Young’s 1928 paper alone deeply shaped the thinking of an entire generation of development economists (the first such generation, in fact). Lauchlin Currie (another one of Young’s students) later observed that “Those economists who, like myself, have stressed the importance of an initially high and a sustained rate of growth (Rosenstein-Rodan’s Big Push, Leibenstein’s Critical Minimum Effort, my Breakthrough or Leading Sector Strategy, and others who advocated export and other policies without giving them special names) doubtless at some time or other have read Young on Smith” (1981, p. 59). Thus, while Young’s article did not find much resonance in general economic theory during the 20<sup>th</sup> century, it did heavily influence those economists of that century who were concerned with questions of growth and development, taking on more institutional presence after the foundation of the United Nations after World War II and the inscription of the development of the “Third world”<sup>24</sup> as a major objective of international diplomacy during (and as part of) the Cold War. Young deeply influenced, notably, the two major post-war development economists Paul Rosenstein-Rodan and Ragnar Nurkse. Another noted development economist, Hla Myint, was also influenced by Young’s 1928 contribution (an influence he only obliquely acknowledged<sup>25</sup>) to reconnect the Smithian theme of division of labour and extent of the market with the question of trade and development, then the subject of international debate.<sup>26</sup> Nor did Young’s paper fall into oblivion after the wave of development economics of the 1940-60s ebbed out. In more recent decades, those economists associated with what has become known as the “New Growth” and “New Trade” theories (and the “New

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<sup>24</sup> The term was coined in a newspaper article by French demographer Alfred Sauvy (1952).

<sup>25</sup> Myint (1943, p. 20, n. 1); but also Myint (1946, p. 121); and Myint (1958, p. 319, n. 1).

<sup>26</sup> In 1949 Singer and Prebisch formulated their thesis on the terms of trade commonly viewed as having founded the “dependency” school of trade theory (Prebisch 1949 ; Singer 1949). Wide-ranging debates on trade and development were held by economists over the following decades largely within the bodies of the United Nations. (Singer worked at the UN Department of Economic Affairs while Prebisch was employed by the Economic Commission for Latin America and the Caribbean [ECLA/CEPAL] (see further Toye & Toye 2003). The United Nations Conference on Trade and Development [UNCTAD] was established in 1964 as a permanent intergovernmental body.)

Economic Geography”) have again connected their research project to Young’s name — and, sometimes, through Young to Smith.<sup>27</sup>

The deeper implications of Young’s restatement of Smith’s observations on the division of labour and the extent of the market, however, were indeed rarely grasped, or in any case not meaningfully incorporated in their theories by those authors who referred to Young, both in the mid-20<sup>th</sup> century (as noted by Currie 1981, p. 59; and Perälä 2006) and at the century’s end (see on this Lavezzi 2003a ; Chandra & Sandilands 2005 ; Sandilands 2009). It may well be that the historical, sociological, demographic, geographic, legal and political as well as economic — in short the comprehensive — theory of the progress of society of Adam Smith, which Allyn Young alluded to, was largely impossible to be done justice to by a discipline that had come to see economic development almost exclusively through the lens of the growth of such statistical entities as the national rates of savings, investment or GDP. More specifically, between the preoccupation of Smith and his contemporary Enlightenment philosophers with the progress of society and the dominant paradigm of post-Marginal-Revolution economics, centred around the static allocation of resources with given factors of production (and factor proportions!) and constant returns to scale, there may have been too large a gap for Young’s eloquent but often obscure prose to bridge. In many regards, Young himself was maybe too deeply shaped by this paradigm. As Douglas North expressed it in his 1993 Nobel memorial lecture:

There is no mystery why the field of development has failed to develop during the five decades since the end of World War II. Neoclassical theory is simply an inappropriate tool to analyze and prescribe policies that will induce development. It is concerned with the operation of markets, not with how markets develop. . . . The very methods employed by neoclassical economists have dictated the subject matter and militated

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<sup>27</sup> Young is the starting point of Nurkse’s considerations on the “International Aspects of the Problem of Economic Development”, cited, with Smith, in the opening paragraph of the article (Nurkse 1952, p. 571). Young is cited by Rosenstein-Rodan in his “Notes on the Theory of the ‘Big Push’” (1961, p. 60). Paul Romer cited Young in the article often considered the inauguration of the “New/Endogenous Growth” literature (Romer 1986a), and elaborated on the connection to Young in a working paper subtitled “Growth as Described by Allyn Young” (1986b). Paul Krugman (1993, p. 27) describes Young as the starting point for the theme of “circular causation” that he sees as one of the building blocks of the tradition (which he would like to resuscitate through a “Counter-Counterrevolution in Development Theory”) that he names the “high development theory” of the 1940s-60s, amalgamating under this label the theories of Rosenstein-Rodan and Nurkse with the ones of Arthur Lewis, Gunnar Myrdal and Albert Hirschman (thus garnering the protest of the latter, who objected: “When I wrote *The Strategy of Economic Development*, my ‘enemies’ were exactly those people with whom my name is now being associated” (Hirschman 1998, p. 109); see further note 29 below).

against such a development. That theory in the pristine form that gave it mathematical precision and elegance modelled a frictionless and static world. . . . In the analysis of economic performance through time it contained [the] erroneous assumptions . . . that time does not matter (North 1994, p. 359).<sup>28</sup>

This criticism of the disregard by 20<sup>th</sup> century development economists of the importance of time is quite to the point when one considers that although Young, in 1928, warned his readers that “An industrial dictator, with foresight and knowledge, could hasten the pace somewhat, but he could not achieve an Aladdin-like transformation of a country’s industry, so as to reap the fruits of a half-century’s ordinary progress in a few years”, this “Aladdin-like transformation of a country’s industry . . . to reap the fruits of a half-century’s ordinary progress in a few years” is precisely what the mid-20<sup>th</sup> century development economists seem to have wanted to achieve with such programmes as the “Big Push”, “Balanced Growth” or the “Critical Minimum Effort”, which Smith himself quite certainly would have decried as “folly and presumption” from the part of “m[e]n of system”. As Albert Hirschman poignantly observed in 1958, “the balanced growth theory reaches the conclusion that an entirely new, self-contained modern industrial economy must be superimposed on the stagnant and equally self-contained traditional sector” (Hirschman 1958, p. 52).<sup>29</sup>

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<sup>28</sup> It is not certain that North’s own “new institutional economics” very radically departed from this “Neoclassical theory” that he so vehemently attacked in his Nobel lecture. (There seems to be a trend, indeed, for Nobel laureates in economics to attack the very theories, paradigm and methodology that they themselves were so instrumental in setting up and consolidating and that they often fervently defended all throughout their career up to this point. John Hicks and Paul Krugman are an early and late case in point.)

<sup>29</sup> While Hirschman (rightly) criticised this particular ahistorical aspect of the theory, he was not in fact very far removed from the general outlook that most of his contemporary economists, which he criticised, had on the economy and the growth process. He very much shared both their conceptualisations and the idea that economic growth must be forcefully brought about through state action, as the market alone could not be trusted to produce growth. (He was also himself involved in economic planning, as financial advisor to the National Planning Board, and later private economic counsellor, of Colombia (Adelman 2013, p. 295-324).) As Nath perceptively notes in his critique of “unbalanced growth”: “Hirschman would like to have it both ways, as far as state action is concerned. On the one hand, he makes a bitter attack on balanced growth because this concept recommends extended action, and, on the other hand, in his concluding chapter he says: “ . . . purely permissive sequences may be ineffective in inducing growth . . . the government may well have to take the first step in the more compulsive sequences.” . . . in spite of Hirschman’s loud and bitter denunciations of balanced growth, it is difficult to see if he has any real quarrel with the concept” (1962, p. 146-8). Amartya Sen, similarly, stated that “Controversies on “balanced” versus “unbalanced” growth tend to leave the readers — at least, one reader — a little puzzled” (Sen 1960). (But then Sen went on to explain very clearly the difference between the two.) For a recent take on the issue see Alacevich



Kenneth Boulding (1971, p. 229) observed that “in the theory of economic development, one sometimes doubts whether all the modern refinements and mathematical models are much more than talmudic exercises on the fundamental insight of Adam Smith regarding the division of labor, the extent of the market, the impact of accumulation, and the effects of rising knowledge”. Indeed, as Santayana (1905, p. 284) famously wrote, “Those who cannot remember the past are condemned to repeat it”,<sup>30</sup> and this is no different in the history of thought. It is no surprise, then, that 20<sup>th</sup> century economists, insufficiently read in the history of their discipline, kept on reinventing the wheel — a process that did not stop at the century’s turn. But reinventing the wheel without also reinventing the axle and the bearing will leave a vehicle unwieldy.

The question of returns — diminishing or increasing — was from the beginning connected to population.<sup>31</sup> It is from an increasing population and the ensuing need to farm lands of a lesser and lesser quality that the diminishing returns in Ricardo’s theory of rent (and before him, in the identical ones of Anderson [1777] and West [1815] (Schumpeter 1986 [1954], p. 252-4)) arise. And in Smith’s conception of increasing returns, it is, too, from an increasing population that the opposite result is derived: by augmenting the possibilities of division of labour, population growth occasions larger per capita production and income. A larger supply of labour (i.e. a larger population), according to Smith, allows for more division of labour, which augments the general level of productivity.<sup>32</sup>

Without this incorporation within the peopling process, Smith’s theory of increasing returns by division of labour remains incomplete. Young alluded to this connection between division of labour and population. He remarked that “Senior’s positive doctrine is well known, and there were others who made note of the

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(2011). Despite these resemblances, however, it is perhaps not surprising that the very Smithian criticism of mid-20<sup>th</sup> century development theory that Hirschman formulated came from him, who had deeply engaged with Smith’s work since his arrival in America (Adelman 2013, p. 190, 212–13, 346, 400), and who would return more meaningfully to Smith in his work of intellectual history (Hirschman 1977) published at about the same time as the bicentennial edition of the *Wealth of Nations*.

<sup>30</sup> Much less known (and likely much less agreeable to those who tend to misattribute the sentence to Marx) are the lines immediately preceding, with clear undertones of Santayana’s conservative philosophy: “Progress, far from consisting in change, depends on retentiveness. When change is absolute there remains no being to improve and no direction is set for possible improvement: and when experience is not retained, as among savages, infancy is perpetual”.

<sup>31</sup> Both Schumpeter and Robbins treat of the subject within their respective chapter on population (Robbins 1968, p. 22-43; Schumpeter 1986 [1954], p. 247-52).

<sup>32</sup> See the concluding sentences of Smith’s chapter on wages cited on p. 24 above.

circumstance that with the growth of population and of markets new opportunities for the division of labour appear and new advantages attach to it” and that “They added nothing to Adam Smith’s famous theorem” (Young 1928, p. 529). But by writing of “population *and* of markets” (a distinction repeated several times in the paper), and by the very peripheral reference to the subject of population throughout his famous article, Young did in fact more to divert the issue of division of labour and extent of the market away from the intimate connection with geographic and demographic factors that it had in Smith’s theory than to draw attention to this connection.

Those development economists like Rosenstein-Rodan and Nurkse who built on Young’s reconsideration of Smith’s thoughts on the division of labour and the extent of the market further neglected the connection between industrialisation and the peopling process, which is one of the reasons why they were led to regard the dependence of the division of labour on the extent of the market as constraint rather than opportunity. The other reason, already alluded to, was their belief — characteristic of mid-20<sup>th</sup> century development economics and diametrically opposed to Smith’s (and Young’s) thinking — that economic development was a process that needed to be launched and sustained by governments rather than proceeding gradually and autonomously from forces within society. From a Smithian perspective, Rosenstein-Rodan (1943) thus presented a false dilemma of heavy industry not being able to be launched *ex nihilo* in a largely agrarian and rural economy.<sup>33</sup> Let alone the question of whether people would remain working on the land who did not produce anything — which was notably disputed by Schultz (1932), so that the consensus of agrarian economists mentioned by Rosenstein-Rodan (1944, p. 160) that there was a large untapped labour-force of disguisedly unemployed in rural areas did not in fact exist —, Rosenstein-Rodan’s view seems to amount to the proposition that, since, as Young, drawing on Smith, had brought forward, everything in the development process depends on

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<sup>33</sup> Rosenstein-Rodan (1943, p. 205) exposed the problem thus: “Let us assume that 20,000 unemployed workers in Eastern and South-Eastern Europe are taken from the land and put into a large shoe factory. . . . If these workers spent all their wages on shoes, a market for the products of their enterprise would arise . . . The trouble is that the workers will not spend all their wages on shoes.” Less famous but equally telling is the way he put it in an article published the following year: “all the agrarian economists of the world agree that if those people were removed from the land agricultural output, far from falling, would increase. But these people cannot move away from the land, because there are no machines, tools or plants to give them employment elsewhere, and bare labour without equipment can produce nothing. Again, even if there existed tools and machines for them to use, there would be neither food nor shelter for them during the interval between leaving the land and finding work” (1944, p. 160).

everything else, for there to be any transformation at all, everything needs to change at once, and this could be brought about by outside influence only. There is no room in this view for an autonomous, gradual, organic type of change. Young, by contrast, had remarked, in line with Smith, that the conclusion “that no real economic progress could come through the operation of forces engendered within the economic system” was “repugnant to common sense” (1928, p. 535).<sup>34</sup> For Smith, urbanisation and industrialisation depended on each other and urbanisation was the natural outcome of the progress of society — a process that could be hampered by the wrong policies, but did not need to be aided or brought about by government in order to proceed, as he developed notably in Book III of the *Wealth of Nations*. The peopling process (of which urbanisation is but one aspect) was seen by Smith as an integral part of the progress of society, as emerges clearly from a consideration of the conjectural history of humanity developed in the *Lectures on Jurisprudence*. For Smith, then, industrialisation and urbanisation were faces of the same coin: one does not build a shoe factory in disconnected space, and for good reasons. Industry (the 18<sup>th</sup> century equivalent of which Smith called manufactures) needs the backbone of urban agglomeration of workforce and infrastructure, which, once present, naturally leads to the development of industry. The peopling process is thus a central feature of the transition from a “backward” (in 20<sup>th</sup> century parlance) to a modern economy, and cities can naturally grow-up in a symbiotic interrelationship with their hinterland only (or with more far-away lands by foreign trade) and are not created ex-nihilo.

The same cecity toward the role of the peopling process in economic development is evident even in those late 20<sup>th</sup> century writings specifically aimed at reconsidering the role of population in the development process — and building on the more recent revival of the theme of increasing returns in economics —, such as Becker, Murphy, and Tamura (1990a) and Becker, Glaeser, and Murphy (1999), in which population growth is held to be a positive force for economic development in countries already largely urbanised and industrialised, while being an obstacle to development in societies still largely rural and agrarian, without any consideration of how the latter category of countries are to evolve to the former, thus largely defeating the purpose of studies aimed at a better understanding of economic development.

In an article published in 2007 in *Afrique Contemporaine* (a journal edited by the French Development Agency and mostly read by international aid and development practitioners), Jean-Marie Cour comments on a report by the agency

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<sup>34</sup> See also on this Young’s piece “Big Business: How the economic system grows and evolves like a living organism” (Young 1999 [1929]).

on the “Challenge of African agriculture” (Devèze 2008). This report expressed the (common) fear that the productivity of African small scale farming could not keep pace with the fast growing population, leading to an increased dependency on food imports and foreign food aid on the continent. Several factors are identified as contributing to this dire situation of African agriculture, among which dwindling natural resources, the stagnation of agricultural yields and limited possibilities for farmers to expand or reconvert. Cour expresses a contrarian view. The analysis the report provides of the situation, he remarks, “does not tell us why African farmers are poor and little productive. To invoke climatic hazards, land insecurity, weaknesses and inconsistencies of agricultural policies and lack of professionalism and training of farmers and to try to remedy these is certainly useful,” he goes on, “but the first thing to do is to return to the source of the problem.” Cour’s analysis, indeed is another:

If the Burkinabé farmer is poorer and less productive than his European counterpart, it is first of all because he has at his disposal a number of consumers, that is to say an internal market, several hundreds of times smaller. Tomorrow, this farmer will be able to produce a larger surplus, adopt more intensive production techniques, buy more inputs and increase the specialisation of his production only insofar as the market that he will have at his disposal will allow him to. Without this growth of the market, policy and agricultural projects can have in this regard only a limited influence.

The first challenge is therefore to ensure that each African farmer has at his disposal a steadily growing market. If consumers — for the most part city dwellers — are able to purchase foodstuff from the rural areas at a reasonable price, and if cities are able to receive migrants decently, then the conditions for a progressive resolution of the problem are in place.

To meet the challenge of African agriculture, therefore, we must first understand how the division of labour between producers and consumers operates. We have to address why and how cities attract migrants, and inquire what happens to the new urbanites. And we must understand how rural and urban areas interact.

In one word, we must start by taking an interest in the settlement process [*processus de peuplement*], in the sense of the growth and redistribution of the population. This approach through the peopling process is the best way to become aware of the kind of restructuring that macro-economic and sectoral policies and donors’ interventions ought to strive to support and not to hinder. (Cour 2007, p. 363-4, my translation)

The very Smithian language of markets and division of labour that the author employs to make his point about the fruitful prospect that urbanisation potentially opens for African agriculture will have eluded few (except possibly Cour himself<sup>35</sup>). The last paragraph of the long quoted passage is thereby of particular importance for the perspective adopted in the present work. Cour's remark that an understanding of the natural progression of the settlement process is crucial in order to recognise what dynamics policy makers and their advisers ought to support rather than hinder to favour economic development is indeed the main point Adam Smith makes, forcefully, in Book III of the *Wealth of Nations*. Like Cour, Adam Smith conceptualised the settlement process together with the process of economic development — the two being inherently linked, if not largely synonymous — through the lens of the division of labour, urbanisation being the spatial expression of the division of labour between food-producers and non-food-producers. Rural and urban development were thus closely intertwined and mutually beneficial for Smith, and for local economic development to proceed, Smith stressed, it was crucial that this symbiotic process be encouraged and not disturbed at the regional level.<sup>36</sup>

Cour's complaint about the way the various specialists at present approach the question of economic development — namely that, even when population is

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<sup>35</sup> Cour declared in 2008, at a public conference at the AFD on African urbanisation, in response to a question from the audience, that he had little interest in and no knowledge of the history of economic thought. By contrast, Tiffen (2003), who a few years earlier formulated a very similar perspective on African development to Cour's, expressly referred to and cited Smith (2003, p. 1345-47).

<sup>36</sup> One may also compare the citation from Cour to the following passage in the *Lectures on Jurisprudence*, in which the importance of both opportunities for the exportation of agricultural produce and of the internal demand for it is stressed: "There are many errors in the police of almost every country, which have contributed greatly to stop the progress of agriculture. Our fathers, finding themselves once in every two or three years subject to the most grievous dearths, to escape that calamity prohibited the exportation of corn. This is still the police of the greater part of Europe, and it is the cause of all that dearth it is intended to prevent. In a plentiful year the corn of Spain, tho' the most fertile country in the world, is not worth the cutting down. They suffer it to lye rotting on the ground, because they would get nothing for it. The cause of this is not the indolence of the people, as is commonly imagined. The fact is, the farmer, finding he cannot dispose of his corn this year, will not risk a crop next year, but turns his grounds to grass. Next year a famine ensues, and he sows more than can be disposed of for the following season. It is to be observed that this was one great cause of the depopulation of ancient Italy. Exportation of corn was prohibited by severe penalties, and the importation of it encouraged by high premiums. So that the Italian farmers had no encouragement to industry, not being sure of a market. In the latter times of the republic the emperors tried several methods of promoting the cultivation of the country, but being ignorant that the real cause of their want was the immense quantity of corn daily imported from Egypt and other parts of Africa, all their endeavours were ineffectuall" (LJ(B) 296-7, p. 525).

written about as a subject matter in this connection, any systematic view of the phenomenon in its dynamic dimension is absent — applies with equal force to contemporary readings of Adam Smith’s theory of economic development. The role of population is usually left out altogether, or mentioned only in passing. And when population *is* addressed, it is generally treated in an anachronistic way, in the sense that population, both as concept and field of study, is understood in its 20<sup>th</sup> century sense of a certain quantity of people inhabiting a certain territory. But, as already mentioned, the word population, having come into use in both English and French only in the second half of the 18<sup>th</sup> century, was describing, in its original meaning, the *process* of the growth and distribution of a people over a territory. The meaning of the term, therefore, was inherently dynamic. It corresponded, precisely, to what Cour refers to as “peuplement”, which can be rendered in modern English as either “peopling” or “settlement” (understood too as process) — a meaning still present in the contrary notion of “depopulation”, as famously noted by Foucault (2004 [1977-78], p. 69).

While not dedicating any part of his work specifically to the subject of population, nor, by the same token, to the subject of “improvement”, *both* these phenomena are absolutely central to Smith’s conception of the progress of society, with the advance in wealth, improvement and population being inherently linked and largely inseparable. As Brennan (2013, p. 5) remarks, “the connection between economic parameters and population” can well be thought, indeed, “to underlie . . . Smith’s grand intellectual scheme”. Without awareness of the historical meaning of the term “population”, however, the 21<sup>st</sup> century reader of the *Wealth of Nation* is likely to miss the important relationship Smith saw between these processes, manifest in expressions such as “restraining the population and industry of the country” (IV.v.a.8, p. 509), “The high wages of labour encourage population” (IV.vii.b.3, p. 566), or, most markedly, in the phrase “the progress . . . in wealth, population and improvement” (IV.vii.b.6, p. 567; IV.vii.c.23, p. 598; IV.vii.c.79, p. 625), appearing, with slight variations, fifteen times throughout the work.<sup>37</sup>

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<sup>37</sup> The exact phrase appears three times, at the places given above. With the term “wealth” omitted, and in slightly varying order of the terms, the phrase appears a further three times (at I.xi.m.7, p. 247; IV.vii.b.3, p. 566; and IV.vii.b.7, p. 568). In nine other places, the phrase “population and improvement” (or the inverse) is adduced with adjectives such as “increasing” or “advanced”. In these instances, “population” *can* be read as denoting a quantity (which increases). Sticking with the meaning of process, on the other hand, “increasing population” would be read as an acceleration of the process of peopling. Given the changing meaning of the term at precisely that time, it is difficult if not impossible to know which one of these meanings Smith precisely intended in each instance (or whether

When Smith wrote, in the second half of the 18<sup>th</sup> century, the relation between population (in the sense described), the location of economic activity, and economic progress was a common theme in political economy. Sir James Steuart wrote on the division of labour between town and country (Beckmann 1981); so had William Petty a century prior.<sup>38</sup> Richard Cantillon also wrote on spatial issues in relation to prices (Hébert 1981). The shift away from spatial aspects (and with them population, at least in this connection) came with Ricardo and his new approach to explain trade, based on comparative advantage as opposed to the division of labour.

It is only natural, then, that these issues mattered also greatly in Smith's work. Yet, despite the importance of spatial and population aspects for Smith, notably for the very definition of the concept of the market, central to Smith's analysis (as examined in Chapter 2), geographic considerations — as are demographic ones — are largely neglected in the huge secondary literature there is on Smith. There has been very little written, notably, specifically on Smith's theory of urbanisation (and more largely location), in the 20<sup>th</sup> and the 21<sup>st</sup> century thus far, which is surprising given the regained interest in spatial aspects in economics in recent decades, spearheaded by Krugman's (1994) writings, and the fact that Krugman himself specifically credited Smith as an influence in this regard (1990a, p. 4).<sup>39</sup>

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he always knew for sure). But in any case, the meaning (whether of an increasing quantity or an accelerating growth) is always inherently dynamic.

<sup>38</sup> A passage in Petty on the production of watches bears striking resemblance to Smith's famous passage on the production of pins in the first chapter of the *Wealth of Nations*, and Petty there also explicitly ties this type of production to its dependence on an urban setting, as would Smith in the third chapter of the *Wealth of Nations*. On Petty's spatial considerations, see Dimou and Pecqueur (2011). (And one could always go back even further for a similar treatment of the subject, of course, notably to the mid-14<sup>th</sup> century Arab philosopher Ibn Khaldun; on Khaldun, in this connection, see Von Sivers (1980); Weiss (1995) and Al-Hamdi (2006)).

<sup>39</sup> Among the few works that can be found which deal squarely with Smith's approach to "regional science" or "economic geography" (the anachronism is duly noted), tribute has to be paid to the excellent excavation of Smith's urban theory carried out by William Stull (1986), without much doubt the most complete of its kind, of which the unwarranted neglect even by those historians of thought explicitly interested in Book III and geographical aspects of Smith's thought may only be explained, perhaps, by its publication in the *Journal of Urban Economics*, not greatly known for its contributions to the history of economic thought. Though it is essentially a critique of Smith's approach in the spirit of Karl Polanyi (to whom is referred), Gene Mumy's (1978/1979) account of the relationship between town and country in the *Wealth of Nations* also warrants mention for its completeness. Dow (1974) recounts the similarity of Smith's theory of urban origin to the one of the French mid-20<sup>th</sup> century historian Henri Pirenne. None of these works, however, considers the urban theme in Smith within the larger perspective of the

Book III was often omitted from many reduced editions of the *Wealth of Nations*. A very small proportion only of the secondary literature on the *Wealth of Nations* (of the past half-century at least), moreover, is concerned with Book III. While we could explain this fact by reason of Book III being the shortest of all five books,<sup>40</sup> this is not an entirely satisfactory explanation. Indeed, taking a stand here against Hollander, who thinks Book III is of little importance for Smith's general argument (1998 [1976], p. 94), notwithstanding the lesser volume Smith devoted to this part of the *Wealth of Nations*, for him to have deemed these chapters worthy of being organised into a separate book, he must have considered them to be of particular importance to the overall argument, especially when we know how long Smith took to write what came to be his magnum opus, and how concerned he was with organising and presenting arguments in a logical and rhetorically effective way.<sup>41</sup>

The theory of increasing returns by division of labour through an extension of the market, at the centre of Smith's theory of progress in the *Wealth of Nations*, thus has to be considered within the 18<sup>th</sup> century vision of progress that incorporated the peopling process, without which the theory remains incomplete, as shall be analysed centrally in Chapter 2. In this view, population is a causal force in the progress of society through the increasing returns that society reaps from an extension of the market. This does not mean, however, that a view of the resource-limiting effect of population growth — that can be associated with diminishing returns to population — does not also play a role in Smith's theory. In fact, as Schumpeter (1986 [1954], p. 242, 247-52) — but not Robbins (1968) — recognised, these positions “are not the mutually exclusive opposites they seemed to be to so many people” (1986 [1954], p. 247).

A sophisticated population theory, with some air of comprehensiveness, will necessarily incorporate elements of both positions. 18<sup>th</sup> century conjectural history, analysed under this angle in Chapter 1, notably, is such a comprehensive theory, incorporating both the negative feedback population growth can bring about in the short run, through the pressure it puts on a system of food procurement adapted to a smaller population, and the positive feedback it

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settlement process, of which it is, yet, one of the central features. With the exception of Stull, the role of population is eluded altogether.

<sup>40</sup> Books I, IV and V are almost exactly equal in length (260 pages, +/- 3, in the Glasgow Edition). Book II, with 100 pages, is less than half the size of these three. Book III, in turn, is, with only 52 pages, only half the size of Book II, and less than a fifth of the size of the three other books.

<sup>41</sup> Smith elaborates at length on the most effective ways to construct arguments in his *Lectures on Rhetoric and Belles Lettres*.



occasions in the long run through increased division of labour and technological progress. The latter effect was indeed largely conceived, in this theory, as being a consequence of the first. Schumpeter (1986 [1954], p. 251) remarked that “*there is no law of decreasing returns to technological progress*” (italics in original), and technological progress can be understood, indeed, within the “historical increasing returns” that take place over the long run as an effect of population growth. Yet, any *given* technology is itself subject to diminishing returns, and in the theory of progress of 18<sup>th</sup> century (and earlier) conjectural historians, it is in fact the decreasing returns to a given technology of food procurement that push human societies to adopt superior means of subsistence. The diminishing returns that population provokes in the short run thus themselves are instrumental in the increasing returns that are its effect in the long run. Even Malthus, as we shall see in Chapter 1, usually credited exclusively with the resource-limiting view of population growth (to which his name has indeed been given), incorporated this logic into his argument.

The integration of both the resource-limiting (diminishing returns) and resource-augmenting (increasing returns) view of population growth is very visible in Smith’s conjectural history developed in the *Lectures on Jurisprudence* (and more precisely the later discovered, more complete, set of student notes). This two-edged effect of population growth is present also in the *Wealth of Nations*. Yet, as the latter was read over the past century without a view to the integration between population and development in Smith’s thinking, the relation between these two interrelated effects of population on economic returns has been overlooked by most readers of Smith. The covert presence in the *Wealth of Nations* of these themes can be brought more fully to light notably by exploring how the four stages theory of the *Lectures on Jurisprudence* blends into the development theory presented by Smith in the *Wealth of Nations*, which is the approach taken in this work.

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In French demographic writing the term “populationist” is generally used and understood to mean a position in favour of population growth. In English, the term is more rare, and more ambiguous. Schumpeter, in his monumental (posthumous) treatise on the history of economic thought (published in English), used the term in this sense. But the term “anti-Malthusian” is more generally preferred for this idea in the English literature. This latter term, however, is in fact extremely ambiguous. What does it mean precisely to be anti-Malthusian? Was Jean-Baptiste Say, for example, an anti-Malthusian because he was opposed to Malthus’ population

theory, or because he was opposed to his theory of general gluts? Or are these two inseparable? If so, was Ricardo both pro- and anti-Malthusian? More fundamentally, the position that is generally associated with the term “anti-Malthusian”, when it is used, is one highlighting the negative consequences of population growth over its positive ones, and more generally one opposed to population growth and in favour of population-limitation. The problem is that Malthus himself — in any case in the first edition of his *Essay on the Principle of Population*, but also, surely, when the entirety of his work is considered — neither laid more stress on the negative consequences of population growth than on its positive ones (both of these play an important role in his theory in fact), nor was he opposed to population growth in general, but he was in fact *very much opposed* to the limitation of population by artificial means, so that all the positions generally associated with the term anti-Malthusian are in fact perfectly compatible, for the most part, with Malthus’ actual position, while such ideas generally called “Malthusian” are, more often than not, very much at odds with Malthus’ original thought. This general anachronistic and highly ambiguous use of the terms “Malthusian” and “anti-Malthusian” leads me to eschew both these terms in the present work. It also warrants the inclusion of a lengthy section on Malthus’ actual position, in relation to Smith’s, in the first chapter.

A lot of confusion exists in the secondary literature as to the meaning of progress, and the role population is thought to play in it. The conclusion on whether an author has an “optimistic” or a “pessimistic” outlook with regard to population cannot be derived from his thoughts on the effects of population on industry, urbanisation and government alone, for example, without inquiring at the same time into whether these effects, independently from what brought them about, are deemed good or bad in themselves. Two authors may write the same thing about a particular issue, may derive the same effects from a particular cause, yet one approves of these effects and the other one doesn’t. Who of the two is an optimist and who a pessimist? The difficulty indetermining this becomes immediately apparent in this example — much more information is needed to judge than the one that is supplied. Yet it is in these limited ways, with little context provided, that the differences between writers are usually presented in the secondary literature and that the labels “optimist” or “pessimist” (with regard to the effects of population — and sometimes in an even larger sense, further diluting any meaning the word could have) are often used. And the same difficulty too besieges, for the same reason, the labels “populationist”, “natalist”, or indeed “Malthusian” (in the very large sense it is used today — including meanings that are not only not representative of, but directly opposite to Malthus’ own position).

It may be best to avoid these labels altogether, then, and examine what writers wrote about the effects of population in a more limited ambition and perspective, which may ultimately be able to throw more light on the larger issues.

The two fundamental insights concerning population and development that are contained in Adam Smith's work are today, both of them, largely unknown, by economists as well as by demographers. To uncover these two fundamental insights, and restore to them their proper place in Smith scholarship, by reconnecting them to the rest of his oeuvre, is the primary aim of the present work. It is hoped, further, that this will contribute to revive interest for these ideas more generally, and specifically in the field of studies today commonly referred to as "population and development". Both of these insights are in line with what has been referred to above as the "populationist" position. The first, however, could be assimilated with the "anti-populationist" (wrongly referred to as "Malthusian") position if it is read in an incomplete manner (and has indeed been read in this manner and inspired such perspectives).

The first of these two fundamental insights is the one today associated most commonly with the name of Ester Boserup (although, as we shall see in the first chapter, it was a common idea for millennia before she wrote): namely that technological innovation depends in large part (at the macro- i.e. the societal level) on pressure of population. Population growth, according to this idea, lays a stress on the relationship between man and nature. Man, at the outset — variously defined, either (in Abrahamic religious terms) as the time before "the fall", or (before the advent of the Abrahamic religions and in secular accounts of human existence since) as a "state of nature", or "savage state" — lives in small groups, from hunting and gathering, from hand to mouth, from nature directly, much as those animals he hunts. There is no surplus of food in this state of things, or only a small one, although not necessarily scarcity either.<sup>42</sup> As population grows,

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<sup>42</sup> Whether the "state of nature" was (like the time before "the fall") a state of plenty or at the contrary one of want was a question in debate in the second half of the 18<sup>th</sup> century. But even when regarded as a state of plenty, this is still compatible with no surplus being produced in the economic sense, as surplus (i.e. the storage of goods — as indeed production itself) necessitates that there be a reason for producing and storing, which is not the case if man can easily subsist from hand to mouth. Rousseau is generally associated with the position that the state of nature was one preferable to civilisation, in which man was, as in the biblical Eden, intrinsically good (but Rousseau clearly stated this to be a hypothetical, not a historical depiction; the aborigines of North America were thus regarded by him as already being subject to a form of civilisation, whereas for Smith and other conjectural historians they were taken as representative of the savage state, being the hypothesised first stage of society). Smith made pronounced statements in the opening passages of the *Wealth of Nations* on the stark contrast between the poverty of savages and the greater wealth even of mean workers in civilised society. We do not know,

however, much as in other species of animals, the balance between man and his ecosystem is disrupted. Those animals and plants the group lives from will become increasingly scarce, and there will be shortage of food. This shortage of food, in turn, spurs man on (who, at the difference of the other animals can move beyond his natural state) to introduce superior technologies of food-production, notably, and thus evolve to a more advanced state of society.

This idea, which can be considered a “population-push” idea of technological development,<sup>43</sup> forms the main causal mechanism of the progression of socio-economic stages in Adam Smith’s “four stages theory” of economic development, referred to throughout the *Wealth of Nations*, but most completely laid out in his lectures on jurisprudence, only recently recovered in more complete form through the discovery of a second set of student notes. This idea can be found in many other authors’ work of the time, and even in Malthus’ work in fact (inspired as he was by Smith and his contemporaries), although, partly by Malthus’ own doing (as this idea did not square too well, in the eyes of contemporary and later readers, with the conclusions he wanted to draw from his work), partly by the appropriation of Malthus’ work by the neo-Malthusians, with their stress on the resource-consuming and scarcity-creating effect of population growth and their total neglect of the aspect in question, namely the technology-furthering effect of population (which is itself an effect of the first aspect), this idea fell largely into oblivion — so much so that the work of Ester Boserup in the 20<sup>th</sup> century, in which this idea played the central role, could be regarded as both novel and as ‘turning Malthus on his head’.

The second fundamental idea on population and development to be found in Smith’s work is one that, by analogy with the term “population-push” could be referred to as “population-pull”.<sup>44</sup> It consists in the idea that what Adam Smith recognised (after many others) to be the main engine of economic development, being the division of labour, depends on the size of population. While it forms its

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however, in which words he described the time before the “fall of man”, his theological teachings that Millar alluded to (as cited by Stewart, in his biographical essay of Smith; see *Stewart* I.18, p. 274), having left no known written trace. Whether the original state was conceived in religious or secular terms, and whether it was considered preferable or inferior to ulterior states, the idea that civilisation is a state posterior to it was, however, shared by all commentators.

<sup>43</sup> It was referred to thus by Simon (1978), and the term was generally adopted, notably in reference to Boserup, more recently for example by Strulik (1997) and Mortimore (2003).

<sup>44</sup> Simon (1978) contrasted Boserup’s “population-push” theory of technological development with the “invention-pull” theory, associated (wrongly — or in any case with insufficient justification) with Malthus. This opposition has become customary in writings on population and technology. See notably Mortimore (2003).

basis, as we shall closely examine in Chapter 2, this idea is also partly obscured by Smith's famous rendering of this idea by the phrase "the division of labour is limited by the extent of the market". The extent of the market, indeed, while it depends at the outset, and most fundamentally, on the size of population, comes to integrate many other elements as society progresses: physical infrastructure, technology, wealth, capital. These elements, however, are largely intertwined, and their definitions overlap to an important extent, and they are inseparably bound up, in any case, with the fundamental relationship described by Smith: that to divide labour, more than one individual is needed, and the more individuals there are, the more labour can be divided. The extent of the market, which holds such a pivotal role in Smith's explanation both of trade and of economic development, is defined at the basic level by the size and concentration of population. In a way, of course, the principle that the division of labour is limited by the extent of the market is simply a different way of expressing the proposition that 'necessity is the mother of invention'. When necessity and opportunity are held to be equivalents (or different ways of considering the same reality) the two propositions express essentially the same idea — i.e. the two alternative views of population exerting either a push- or a pull-agency on economic development are describing merely two facets of the same process, similarly to a glass filled to half its capacity described as either half-empty or half-full being two ways of depicting the same state.

## **Outline of the work**

Within the four stages theory of socio-cultural development characteristic of the Enlightenment and used by Smith is contained a "population-push" theory of technological development (**Chapter 1**). This framework functions through the "necessity is the mother of invention" mechanism. But not only is necessity the mother of invention for Smith, opportunity also is. The division of labour is limited by the extent of the market, and the market is largely determined by population. Both by the growth in numbers and by the concentration of population and therefore shortening of distance are the opportunities for division of labour and thus technological advance augmented (**Chapter 2**). Population is thus both what creates hardship through a diminishing returns framework and what relieves this hardship through an increasing returns framework. While this can appear contradictory to economists trained in the negative feedback framework, Smith's theory of economic development, and his way of conceiving causation more generally, is mainly structured along the opposite mechanism of positive feedback,

in which various elements reinforce each other in a circular cumulative fashion (**Chapter 3**).

Further, the 18<sup>th</sup> century saw a large debate on the role of luxury on society, and notably on population: as by Rousseau and Price, luxury was thought by Smith to “weaken the powers of procreation”. This may seem far removed from 20<sup>th</sup> century conceptions of the demographic transition, but the way the interaction of wealth, fertility and “modernisation” was theorised in the 20<sup>th</sup> century is in fact in the direct lineage of 18<sup>th</sup> century conceptions of progress. While Smith’s ideas on population have never (to my knowledge) been studied from the point of view of demographic transition theory, his ideas on the subject, supplemented by Marx’s developments, can yield a theory more compatible with the historical record, it is argued, than the prevalent neo-Malthusian theory (**Chapter 4**).

## **Chapter 1**

### ***What’s been done?***

Dugald Stewart, Smith’s first biographer, highlighted the role in Smith’s oeuvre of what Stewart termed “conjectural history”: a theory of development derived, much like modern economics, from a particular behavioural theory universally applicable to humans. As this theory, used by many thinkers before and contemporary to Smith, featured (mostly) four stages of progress, Ronald Meek (1976b) termed it the “four stages theory” in the 1970s. Neither Stewart nor Meek remarked emphatically on the role of population within this theory. More recently, Craig Smith (2006b) and Gavin Kennedy (2008) have taken notice of it. Neither described it as a central feature of the theory, however. Yet the four stages theory is as much a theory of population as it is a theory of economic development. Malthus’ use of the categories of the four stages theory has also recently been remarked on, but here too the connection with population was not drawn.

### ***What I do***

By establishing a link between Smith’s treatment of the subject and the one of many of his contemporaries and predecessors who used the four stages framework, with a specific focus on the element of population, more light can be shed on the function of this theory, including in the *Wealth of Nations*. While totally ignored during the 19<sup>th</sup> century, for the simple reason that the lectures in which it has such a prominent place only became available to scholars, partly, through the student notes recovered by Cannan at the end of the 19<sup>th</sup> century, the presence and importance of the four stages for Smith’s development theory in the *Wealth of Nations* has been disputed in the 20<sup>th</sup> century, notably by Hollander (1998 [1976]).

Stewart and other contemporaries such as Millar had stressed the connectedness of Smith's lectures and published works by an insistence, notably, on the importance of conjectural history as a connecting element. By analysing the four stages theory through the prism of population theory, which it ceased to be regarded as during the 19<sup>th</sup> and 20<sup>th</sup> centuries, further connections can be recovered between this theoretical tradition and arguments made in the *Wealth of Nations*.

The thought of Malthus, through its reinterpretation by neo-Malthusianism, has become associated principally with the idea of a negative influence of population growth on society and the need to curtail population growth. This, however, was never Malthus' own position. The threat of over-population was invoked by Malthus primarily to refute the prospect of an abolition of social classes raised by Godwin and Condorcet, which explains the wrath he drew from Marx. He never advocated for an end to population growth, which in his 18<sup>th</sup> century perspective signalled an end of progress itself. In past decades some attention was paid to Malthus' ideas in favour of population growth formulated in the form of theodicy in the last two chapters of the first edition of his *Essay on the Principle of Population*. While Malthus's use of the categories of the four stages theory has been noted, the role of population in the four stages theory was however not linked to his thought. By a comparison of Malthus' arguments with the ones made by earlier authors along four stages theory lines, it can be shown that Malthus substantially drew on this tradition, which throws further light on the theoretical configuration of his argument. The entire argument of the essay, including its anti-egalitarian element, can be shown to derive from four stages theory thinking indeed, with slight deviations in particular (though significant) junctions only.

## **Chapter 2**

### ***What's been done?***

Young (1928) uncovered the importance of Smith's 'theorem' that the division of labour is limited by the extent of the market. He mentioned population in this regard, but through his distanced and furtive engagement with this theme (in the 1928 article at least) he drew attention more away from the demographic connection than toward it. He entirely ignored the geographical element. Later development economists who drew on Young, such as Rosenstein-Rodan (1943) and Nurkse (1952), as well as more recently Krugman, paid more attention to geographical elements, but entirely ignored the demographical element. Outside the literature concerned specifically with economic development, Smith's thoughts on the division of labour and the extent of the market, interpreted through Young

and later through the prism of Keynesian theories, were given entirely different meanings. As the market is a concept that over the past centuries has evolved from a mostly geographical and material conception of the exchange process — the physical channels through which trade is effected — to a symbolic designation of the exchange process itself and a synecdoche for the institutions of a capitalist economic system, Smith's phrase was reinterpreted, anachronistically, to fit the new conception of markets. While this may have better fitted the needs of modern macroeconomics, concerned with economic growth in advanced capitalist economies, it became largely irrelevant to the question of economic development, and as such became, too, largely disconnected from Smith's original ideas, concerned as he was, principally, with the issue of the progress of society (in pre-Industrial Revolution Scotland).

### ***What I do***

To recover the meaning of “the market” for Smith, and of his idea that “the division of labour is limited by the extent of the market”, **Chapter 2** resituates the issue within the framework of Smith's development theory, by reconnecting the market to *both* its geographic and its demographic dimensions. By disconnecting the concept from the modern acceptations of both ‘capitalist institution’ and ‘aggregate demand’ and reconnecting it to what the market described for Smith — a vehicle for exchange, essentially of a physical nature —, the idea of a limitation of the division of labour by the extent of the market can more aptly be reconnected to the entirety of Smith's development theory, as contained in his four stages theory, describing both the process of economic growth and of population. It is through population growth, indeed, that the market is (and can only be) originally augmented in the setting of the early stages of society, where technology, capital and large-scale political intervention are not yet accessible. Seen in this light, reconnected to its demographic and geographic dimension, the Smithian theory of a natural progress of opulence — itself a part of the four stages theory — fits in seamlessly with his ideas on the division of labour and the extent of the market, without invoking the need for a “big push” (Rosenstein-Rodan 1961) or “critical minimum effort” (Leibenstein 1957) that are entirely foreign to Smith's conceptualisation of the development process.

### **Chapter 3**

#### ***What's been done?***

Schumpeter (1986 [1954]) and Hollander (1973) have most praised Smith for his theory of equilibrium price, relying on the mechanism of negative feedback. This



mechanism was to underlie, to a large extent, the way economic theories and models were constructed in the 19<sup>th</sup> and 20<sup>th</sup> century, of which Smith can thus be construed as a herald.

Much of the debate on Smith in the 19<sup>th</sup> century has concerned the factors responsible for effectuating change in the relationships between theoretical elements of the system drawn out by Smith. This concerns notably the relationship between division of labour and capital accumulation. Capital accumulation (Brewer 1989) and division of labour (Loasby 1997) were variously held as the prime mover, or as the most important element responsible for economic growth for Smith. Smith's thoughts on primitive accumulation were famously, too, the starting point of Marx's consideration of the subject. Marx spoke of a "defective circle", a formulation taken up by Nurkse in his thoughts on the matter inspired by Young. The division of labour – extent of the market relationship was here essentially conceived as a deadlock to break out of, and this is how it entered 20<sup>th</sup> century development economics.

Similarly, in the theory of town-country interaction at play in Smith's view of the "natural progress of society" and the "unnatural and retrograde order", recent contributions have focused on the sense of causality and the direction of the cumulative causation of urban and rural development, and whether Smith can be taken to have been consistent with how his objective in Book III of the *Wealth of Nations* is interpreted (Bowles 1986 ; Bell 1992 ; Pack 1995 ; Blecker 1997 ; Paganelli 2013 ; Schumacher 2013).

Finally, much has been said and written on the possibility of continuous progress in Smith's theory of development, with interpretations differing sharply between those who see the main weight on the limits to growth (Heilbroner 1975 ; Wrigley 1988 ; Alvey 2004) and those who emphasise the continuous prospects for growth in Smith's theory (Himmelfarb 1984 ; Winch 1992a, 1996).

### ***What I do***

Chapter 1 and Chapter 2 describe, respectively, a push- and a pull-action of population on economic and technological progress. These two, while two faces of the same coin, are also integrated by Smith through a positive feedback mechanism, or what Gunnar Myrdal termed "the principle of cumulation".

This circular way of conceiving of causation (with population notably seen as effect and cause of economic development) is not limited to population but concerns all elements connected in Smith's theory of economic development.

Thus, between division of labour and capital accumulation as prime causal elements, we do not need to choose. Much as population, and most any element of

Smith's system, they are interconnected and depend, mutually, on each other. This can be shown by connecting the issue of the dependence of the division of labour, capital accumulation and the extent of the market on each other to the theme of the "slow progress of opulence" as conceptualised by Smith, more clearly than in the *Wealth of Nations*, in the Glasgow lectures and the 'Early Draft' of the *Wealth of Nations*. Here too, then, Smith's early work is an important piece of the puzzle. Modern economics obscure the issue through their principal reliance on negative feedback mechanism. The "slow progress of opulence" as conceptualised by Smith can be better understood by conceiving of it as a positive feedback loop: in the early stages of society, the development process is a very slow and gradual one, because all the elements necessary for development (division of labour, capital accumulation, trade, population, etc.) are present only in small quantity and thereby limit each other's progression. As any and all of these elements increase (on a par), the process gathers momentum and 'takes off'. Mid-20<sup>th</sup> century development economists (and economists to this day) have wrongly interpreted the early stages of development as ones of stagnation (as in Nelson's (1956) "low level equilibrium trap"), instead of incremental steps toward an accelerated progression.

## **Chapter 4**

### ***What's been done?***

Neither Smith nor Malthus nor Marx theorised on the demographic transition, which could only be discerned after their deaths (it was first conceptualised in the 1920s) although the fall in death rates had in fact set off while they were still alive. All three thinkers, however, theorised on the interplay between wages, wealth, mortality and fertility. Smith's thoughts on this issue have never been analysed from the angle of the demographic transition.

There has been an increased interest from the part of economists, in the past few decades, in the question of the interplay of the demographic transition and the industrial revolution (Lucas 1996 ; Galor & Weil 2000 ; Galor 2005 ; Bar & Leukhina 2010). A particular theme has been the one of the "demographic dividend" (Mason 1988 ; Kelley & Schmidt 1995 ; Higgins & Williamson 1997 ; Bloom & Williamson 1998 ; Bloom, Canning, & Sevilla 2001): as the number of "dependents" (children and the elderly) diminishes in a society, which happens when the population growth rate has been high for a while, due to decreased death rates, but is beginning to decline due to falling birth rates, this is believed to open a particular window of opportunity for a society, as a particularly large proportion of the population is in working age and can thus contribute to national wealth

formation. Conversely, having a large number of dependents due to either high birth over deaths (many children to care for compared to working adults) or low birth and death rates having been observed for a while (many old people as compared to working adults) is believed to make for lower economic growth. This model is then used to explain the industrial revolution in Europe and the more recent take-off of developing countries. The argument had previously been stated negatively by Coale and Hoover (1958).

The way the issue is framed by the literature around the “demographic dividend” and the connected literature on the question of the relationship between demographic transition and industrial revolution relies on Becker’s (1960, 1962) “economic analysis” of fertility and human capital, the former of which he professed to have derived from Malthus. In that theory, children are considered as “consumption goods” for parents, but they can be made “production goods” through investments by parents in “child quality” (human capital) which they would substitute for “child quantity”, thus reducing costs and augmenting revenue of families. Becker did not divulge why families would engage (or fail to engage) in such substitution. In the recent literature on the interplay of demographic transition and industrial revolution, Becker’s theory is connected to the “new growth theory” of Lucas (1988) and Romer (1989): parents start investing in their children because of “external economies” making this worthwhile. This is conjectured to have set off the demographic transition, where and when it has occurred. The major problem with this theory is that the demographic transition was set off not by a fall in the birth rate, but by an earlier fall in the death rate, which remains unexplained and plays no role in the theory.

### ***What I do***

While Smith’s thoughts on the interplay of wages, wealth, fertility and mortality have never been analysed from the angle of the demographic transition, it would appear that, especially if he is read through Marx’s rather than through Malthus’ interpretation (both of which is possible), an alternative theory of the demographic transition to the one suggested by the “new home economics” in recent years can be derived from his thoughts on the matter. In this theory, rather than the fall in fertility being occasioned by investments in human capital, which then occasion a rise in living standards, it is the rise in living standards, made possible by the deeper division of labour in more populous modern nations, that occasion both a fall in fertility and possible investments in human capital, on a society-wide rather than family-specific scale. At the difference of the micro-economic theory that has been derived from the “new home” and “new growth”

theories, this theory takes into account the evolution of the institutional environment that both derives from and occasions the changes associated with economic development.

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A topic I was always interested in, and which indeed formed one of my main motivations for pursuing my subject (as noted in the “preliminary notes” at the beginning of this work), but which I only got to properly integrate into my research at an advanced stage, is the universalist dimension of Smith’s theory and its strongly anti-racist flavour. Considerations of this nature are thus (with the exception of a full section in Chapter 1, the last Chapter I composed, in which a wider angle is taken on this issue), largely confined to the footnotes.

## A Note on Notation

A few particular notation practices have been adopted in the present work that need to be clarified, concerning the references to Smith’s works and the way quotations have been handled.

Orthographically, the work is following British (and more specifically South African) English. I have, however, used different types of quotation marks in specific ways, according to the following rules.<sup>45</sup>

Emphasis (italics) in quotations are usually commented on in modern practice, pointing out (usually in parentheses) whether the emphasis is by the author quoted from or was added by the author quoting. In the present work, to avoid tedious repetition, *all emphases are mine unless otherwise indicated*.

In order not to overburden the text with punctuation marks, I have decided to leave capitalisation or non-capitalisation intact in quotations, both when using a quotation that starts with a capital letter inside a sentence and when starting a sentence with a quotation that begins in the middle of an original sentence (with a word hence not capitalised), instead of changing the capitalisation and put square brackets around single letters.

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<sup>45</sup> It seems necessary to clarify the use of these different types of quotation marks, not only because their use and its meaning differs between different English-speaking countries, but also because their use has always varied according to particular authors (many of them not conforming to ‘official’ rules laid out in manuals of styles), and seems to be undergoing important change particularly in the last few years under the influence of the internet. Their current meaning is therefore in flux. For a discussion of these issues see notably Heisel (2014).

Omitted passages of quotations are indicated by three dots with a single space between them and two spaces around them (looking thus: . . . ). Other modifications of quotations (insertions of individual words or letters or of clarifications, where this improves readability), avoided as far as possible, are noted, as is customary, by square brackets.

Quotations within quotations (i.e. an author quoted quoting someone else within the quotation) are distinguished by the quotation marks used. I have used curly double-quotation marks (“ ”) for my own quotations, and straight (double) ones (" ") for quotations within quotations. Single curly quotation marks (‘ ’), in addition to their use for the documents within the Glasgow edition (as explained below), I have used not for quotation, but to signal a familiar or modern expression or concept used for the purpose of making a point more straightforwardly, but without claiming that the expression in question is literally the same or adequately explains the point under consideration. For quotations within quotations, where authors quoted used single quotation marks when quoting verbatim, I have changed these to (straight) double quotation marks (" "); I have left them as single quotation marks (changed to straight — ' ' — ones if within quotations) only where the authors quoted themselves used them in the way just indicated (i.e. not to quote someone else).

Especially in Chapter 1, dealing with 18<sup>th</sup> century theories of socio-cultural evolution, I have, insofar as “savages” and “civilisation”, “rude” and “refined” people are concerned, followed Sebastiani’s (2013, p. xi) method of omitting quotation marks around these words at every instance (except where I am directly quoting), for not overburdening the text. This should not be read as an endorsement by me of these categories — although I believe that some kind of categorisation of societies at different levels of economic (political, social...) development is useful for the study of such differences and their causes (unless we want to reject the very idea of development), and the new euphemisms of “underdeveloped”, “undeveloped” or “developing” countries (or the longer French — this might be a tautology — “en voie de développement”: “in the course of development”) are not fundamentally better, more precise, or less insulting than the older ones.<sup>46</sup> As Douglas Stone, Bruce Patton, and Sheila Heen of the Harvard

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<sup>46</sup> Of course, the latter terms usually refer to countries, to none of which, in the 21<sup>st</sup> century, the 18<sup>th</sup> century categories of “savages” or “barbarians” could be applied, which were even at the time, indeed, applied only to societies whose political organisation, by definition, did not yet resemble modern states. There are, however, even today still, such societies to be found around the globe, living *within* the territory of modern states — often stretching over the territory of more than one state at a time, being nomadic people not living within a clearly delimited territory — to which these categories, as understood by

Law School's Negotiation Program note, "There Is No Such Thing as a Diplomatic Hand Grenade" (1999, p. xvii).<sup>47</sup>

In the present work, all references to Smith's oeuvre in the wider sense (including his published works, student notes on his lectures, the few fragments of his manuscripts that were spared from the flames,<sup>48</sup> and what has been recovered from his correspondence) are to the six volumes of the "Glasgow Edition of the Works and Correspondence of Adam Smith, Commissioned by the University of Glasgow to celebrate the bicentenary of the *Wealth of Nations*".<sup>49</sup> For readability's sake, I have adopted the following practise when referring to the volumes comprising the Glasgow edition as well as the works contained in them:

When referring to the Glasgow volumes within the text, I have written out their titles in full (except for the *Wealth of Nations*, for which I have omitted, as has long been customary, the "Inquiry into the Nature and Causes" part). I have also, as for books named in the text in general, italicised the Glasgow volumes' titles. This also allows the reader to differentiate, in the text, between references to Smith's lectures and references to the Glasgow volumes containing student notes of these lectures. Thus, when I write of the lectures on jurisprudence or the lectures on rhetoric, I am referring to the actual lectures held by Smith, whereas when I write of the *Lectures on Jurisprudence* or the *Lectures on Rhetoric and Belles Lettres* I am referring to the Glasgow volumes.<sup>50</sup>

When referring, in the text, to particular works included *in* the various Glasgow volumes (such as the essays in the *Essays on Philosophical Subjects*), I have

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Adam Smith (as will be examined in detail in Chapter 1), still apply, insofar that they are hunter-gatherer or pastoral people.

<sup>47</sup> "Desperate for a way out of the dilemma, we wonder if it is possible to be so tactful, so overwhelmingly pleasant that everything ends up fine. Tact is good, but it's not the answer to difficult conversations. . . . Coated with sugar, thrown hard or soft, a hand grenade is still going to do damage." (ibid.)

<sup>48</sup> Smith, from his deathbed, famously ordered the near entirety of his manuscripts to be destroyed by fire (Ross 2010, p. xxxi, 435-8). The execution of his wish has long been a source of both regret and conjecture for intellectual historians.

<sup>49</sup> One exception are the 'Anderson Notes' referred to in Chapter 1, which were not included in the Glasgow edition. See below p. 108 *et seq.* The Glasgow edition was first published (in hardcover by Oxford University Press) between 1976 and 1983 and quickly became the standard scholarly edition thereafter (facsimile reproductions of the six volumes were published in softcover by LibertyFund between 1981 and 1987).

<sup>50</sup> In the case of the *Theory of Moral Sentiments* and the *Wealth of Nations* (and the *Essays on Philosophical Subjects*), as these Glasgow volumes quite logically retained the titles of the published works they essentially contain, I may occasionally refer to another edition than the Glasgow edition when mentioning them (with italicised title) in the text, but this will be clear from the context.

used either full or abbreviated titles, non-italicised and put in single inverted commas. I am thus referring, for example, to ‘History of Astronomy’, the ‘Early Draft of the Wealth of Nations’ (or just ‘Early Draft’) and ‘Considerations concerning the First Formation of Languages’.

When referring to Smith’s works in the footnotes as well as in parentheses after quotations (to indicate the passage the quotation appears in) or after descriptions, summaries or paraphrases of what Smith wrote or is reported to have said in his lectures (to indicate where such statements are made), I have adopted the now customary abbreviations of the Glasgow editions. For the Glasgow volumes, these are:

TMS	<i>Theory of Moral Sentiments</i>
WN	<i>Wealth of Nations</i>
EPS	<i>Essays on Philosophical Subjects</i> <sup>51</sup>
LRBL	<i>Lectures on Rhetoric and Belles Lettres</i>
LJ	<i>Lectures on Jurisprudence</i>
Corr.	<i>Correspondence of Adam Smith</i>

For the following works, contained in *Essays on Philosophical Subjects* and *Lectures on Jurisprudence*, I have also used the Glasgow edition abbreviations, being:

- in EPS:

Astronomy	‘The Pinciples which lead and direct Philosophical Enquiries; illustrated by the History of Astronomy’
Stewart	‘Account of the Life and Writings of Adam Smith’ <sup>52</sup>

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<sup>51</sup> The book with the full title *Essays on Philosophical Subjects. By the late Adam Smith, LL. D. Fellow of the Royal Societies of London and Edinburgh, &c. &c. To which is prefixed, An Account of the Life and Writings of the Author; by Dugald Stewart, F. R. S. E.* was first published in 1795 by Smith’s friends and literary executors Joseph Black and James Hutton, containing the essays Smith left them to be published after his death, as well as Stewart’s *Account*, commissioned for this volume (see next note). The Glasgow volume also contains Smith’s earliest published texts (his contributions to the *Edinburgh Review* and the Preface and Dedication to William Hamilton’s *Poems on Several Occasions*).

<sup>52</sup> The *Account* was first read by Stewart before the Royal Society of Edinburgh in 1793 and published in 1794 in the society’s transactions, before appearing in the *Essays on Philosophical Subjects* the following year. The version included in the Glasgow edition is the one revised and published by Stewart himself in the 1811 book *Biographical Memoirs*

External Senses      ‘Of the External Senses’

- in LJ:

LJ(A)	Lectures on Jurisprudence, Report of 1762-3
LJ(B)	Lectures on Jurisprudence, Report dated 1766
ED	‘Early Draft’ of Part of the <i>Wealth of Nations</i>
FA	First fragment on the division of labour
FB	Second fragment on the division of labour

While the Glasgow edition abbreviations of the Glasgow edition volumes has been almost universally adopted in the secondary literature, the Glasgow edition abbreviations of the works within the volumes are somewhat less commonly used. Also, while the abbreviations of the Glasgow volumes are generally used by Smith scholars, the manner of referring to particular passages within these volumes that the editors of the Glasgow edition implemented is less widely used, which is probably due at least in part to the somewhat confusing nature of this referencing style. Indeed, while in the case of Smith’s published works, references are made to the chapter, section and paragraph numbers, in the case of the lecture notes the same references are to the section and the page numbers of the original manuscript, which also figure in the margin of the lecture note volumes. And in the case of the ‘Early Draft’, a still different and rather obscure referencing style was adopted within the Glasgow edition.

For Smith’s published works, the editors of the Glasgow edition adopted the practice of referring to number of Part, Section, Chapter, Section, Paragraph (in *Theory of Moral Sentiments*), Book, Chapter, Section, Paragraph (in *Wealth of Nations*), or just Section and Paragraph (for all other published works) by a combination of letters and numbers, so that the passages in question could be more easily located in other editions of these works (thus, as explained in the ‘Key to Abbreviations and References’ in the Glasgow edition volumes, TMS I.i.5.5 denotes *The Theory of Moral Sentiments* Part I, Section i, Chapter 5, § 5 and WN V.i.f.26 *The Wealth of Nations*, Book V, Chapter I, sixth division, § 26). In the secondary literature, while this style is sometimes used, authors often use the

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of Adam Smith, William Robertson, and Thomas Reid, with some further additions made by Stewart in later years.



Glasgow edition page numbers instead, which makes for shorter references. Also, as the Glasgow edition is the one today used generally in Smith scholarship, the reference to paragraph numbers in order to consult other editions is not anymore very useful.

In the case of the lecture notes, by contrast, references within the Glasgow edition to particular passages use the page numbers of the original manuscripts, also listed in the margins of the volumes in which the notes appear. This was justified by the fact that paragraphs are very few in the original manuscripts, especially the ones recovered by Lothian, and some paragraph breaks were inserted for readability by the editors only. But, at the difference of the paragraph numbers in the *Wealth of Nations* and *Theory of Moral Sentiments* Glasgow volumes, the manuscript page numbers are not useful to consult other editions of the notes. The edition of the set of notes from Smith's jurisprudence lectures published by Cannan, indeed, does not reference the original manuscript's pages, and there is no other edition of the Lothian notes of the jurisprudence lectures at all as yet. And with the availability of the notes in edited format, few scholars will consult the original manuscripts. Hence, also, most references in the secondary literature actually use the Glasgow edition page numbers.

To make it particularly easy to locate particular passages, I have in this work opted to quote the passages in Smith's works using both the Glasgow edition nomenclature of chapter, section, and paragraph/manuscript page numbers *and* the Glasgow volume page numbers (with a note to be made shortly on the manner of quoting from the 'Early Draft'). Passages are thus referred to in this way:

**WN IV.vii.b.10, p. 570** refers to: *Wealth of Nations*, Book IV, Chapter VII, Section 2, paragraph 10, on page 570 of the Glasgow edition volume.

When paragraphs stretch over two and sometimes several pages, as they often do, as when pages contain several paragraphs, this allows the passages in question all the more easily to be located.

The fourth and fifth volume of the Glasgow edition contain student notes of Smith's lectures on rhetoric and jurisprudence of 1762-64, recovered by Edwin Cannan and John Lothian, respectively, at the end of the 19<sup>th</sup> and in the mid-20<sup>th</sup> century. *Lectures on Jurisprudence* contains both sets of student notes of Smith's jurisprudence lectures that the academic world has so far come into possession of: the ones first discovered and published by Cannan at the end of the 19<sup>th</sup> century, and the ones discovered in the mid-20<sup>th</sup> century by Lothian (together with the

notes on the rhetoric lecture, and believed to have been written by the same person) and published for the first time in the Glasgow edition. These two sets of notes are referred to, in the Glasgow edition volume they are both published in and throughout the Glasgow edition, as well as in Smith scholarship (generally) since, as LJ(B) and LJ(A), respectively (sometimes written LJ.B and LJ.A to avoid parentheses within parentheses). In the Glasgow edition volume, they appear in the opposite order of their discovery and first publication, i.e. the notes first published by Cannan in 1896 as *Lectures on Justice, Police, Revenue and Arms. Delivered in the University of Glasgow By Adam Smith. Reported by a Student in 1763 and edited with an Introduction and Notes by Edwin Cannan*, denoted LJ(B), appear second in the volume, and the notes recovered in the mid-20<sup>th</sup> century by Lothian, as LJ(A), first. This order was not explicitly justified by the Glasgow editors, but it follows the chronological order of the academic years the respective lectures were believed by them to have been delivered in (the Cannan notes in 1763-4 and the ones more recently discovered by Lothian in the preceding year 1762-3; see the introduction to *Lectures on Jurisprudence*, p. 7-9). This makes the use of “first” and “second” set that one often encounters in the secondary literature ambiguous, as this could refer either to the order of their discovery, their first publication, their appearance in the Glasgow edition volume, or the delivery of the lectures they are believed to respectively pertain to. And while of these four elements, the order of the first two (time of discovery and of publication) and the order of the last two (appearance in the Glasgow edition volume and years the lectures that the notes pertain to were held in) are identical, respectively, the order of their discovery and publication is the opposite of the order of their believed original generation and appearance in the Glasgow volume. It will be clear, where quotations are provided, which notes are referred to (the Glasgow notation — in this case LJ(A) and LJ(B) — having been used in parentheses after quotations, as indicated above). But as far as references in the text are concerned, it is important to point out that when mentioning the “second set”, the “new set”, or the “more recent set” of notes, I always indicate thereby the order of discovery and first publication of the two sets, not the opposite order of the respective academic session they were apparently taken in and of their appearance in the Glasgow volume. Thus “first set” signifies the notes that Cannan discovered in 1895 and published the following year, appearing second in the Glasgow volume (LJ(B)); “second set” the notes discovered by Lothian in 1958, appearing first in the Glasgow volume (LJ(A)). In order to avoid ambiguity, I have generally opted to indicate the two sets of notes by the professor who recovered the respective set for the academic world. Hence the first

recovered set (LJ(B)) is referred to as the Cannan notes, the second (LJ(A)) as the Lothian notes.

With regard to quotations from the *Lectures of Jurisprudence*, it must be remarked that the basis (the original manuscripts) was written by students without great concern for standard and unified orthography. This is true especially of the Lothian notes, which, although clearly much more complete with regard to the subjects treated than the Cannan notes, were much more poorly written in terms of grammar and punctuation (and sometimes syntax, which generally signals an omission of words by the student). Therefore, much editorial effort was necessary to render the published text readable, but much care was taken thereby to give an accurate idea of the original manuscript, which necessitated a large amount of notes and symbols within the text (especially for the Lothian notes, but the Cannan notes were also reedited on the basis of the original manuscripts with greater concern for exact representation of the original than Cannan had). This faces the scholar quoting from the Glasgow volume with the question of how much of these signalisations to include in quotations. After some thought, I have decided to do away with all such signalisation when quoting from *Lectures of Jurisprudence*, signifying crossed out or unreadable words (which I have simply omitted), page breaks in the manuscript and minor alterations by the editors (omission of repeated words, as well as words added by the editors to render the text more readable where words were obviously missing from the manuscript and could be easily guessed, which I have adopted as is without signalisation). Passages from the verso pages of the manuscript, which the editors believe to be notes added later by comparison with other student notes or after attendance of Smith's complementary class, and which are specially signalled in the text of the Glasgow edition by particular brackets, I have also included without particular mention. The reader is directed to the *Lectures of Jurisprudence* for the full particulars of the quotations.

Mention should also be made at this point of the way quotations from the 'Early Draft of the Wealth of Nations' have been referenced in the present work. The 'Early Draft' is contained at the end of the *Lectures of Jurisprudence* Glasgow volume. As for the lecture notes in this volume (and the ones in *Lectures on Rhetoric and Belles Lettres*, also discovered by Lothian together with the second set of jurisprudence lecture notes), numbers in the margins of the 'Early Draft' do not denote the number of the paragraph of the chapter or section, as they do in the *Wealth of Nations* and *Theory of Moral Sentiments* Glasgow volumes, but denote instead the page number of the original manuscript. Yet, without justifying this or pointing this out anywhere (to the best of my knowledge), the editors of the

Glasgow edition decided to refer to the 'Early Draft', within the Glasgow edition, not using the manuscript pages (provided in the margins of the 'Early Draft' in the Glasgow volume) but by chapter and section of the 'Early Draft'. The 'Early Draft' is indeed divided into chapters and sections, ones that were meant originally by Smith, it can be supposed, to become complete chapters in the final version of the *Wealth of Nations* (but the final chapters and sections in the *Wealth of Nations* are in fact very differently numbered from the ones in the 'Early Draft', which indeed was but an early draft). The great problem with this way of referring to the 'Early Draft' is that in the Glasgow edition it is in fact, as already mentioned, the page numbers of the original manuscript of the 'Early Draft' that appear in the margins, but which are not used in references to the 'Early Draft' within the Glasgow edition, while the same Glasgow edition of the 'Early Draft' does not contain in any clearly readable way the paragraph number of chapters and sections, which are used in references within the Glasgow edition. The reader thus has to count the paragraphs and section in the 'Early Draft' in order to follow a reference, while the page numbers of the original manuscript in the margins serve no useful purpose. This confusing way of referring to passages in the 'Early Draft' within the Glasgow Edition is most likely the reason that this notation has not been adopted in the secondary literature. As with the lectures of jurisprudence notes, references in the secondary literature are generally to the page number in the *Lectures of Jurisprudence* volume. In the present work, I have adopted the same notation as for the rest of Smith's work: referring *both* to the number in the margin in the Glasgow edition (denoting, in the case of the 'Early Draft', as of the lecture notes, the page number of the original manuscript) and to the page number in the Glasgow edition volume, instead of the confusing reference to chapter, section and paragraph number of the 'Early Draft' within the Glasgow edition.



Everything of importance has been said before by somebody who did not discover it. (Whitehead 1917, p. 362)

# Chapter 1

## Population and Conjectural History

Then, I said, let us begin and create in idea a State; and yet the true creator is necessity, who is the mother of our invention.

Plato, *Republic*, Book II  
(transl. Benjamin Jowett)

### 1. Introduction

Writings on theories of socio-cultural evolution, and in particular on the type common in 18<sup>th</sup> century Scotland, usually cite some part or other from a section of Dugald Stewart's 'Account of the life and Writings of Adam Smith'. In this segment of his biographical essay, Stewart first remarks how the 'Considerations concerning the First Formation of Languages', one of Smith's earliest writings, "deserves our attention", chiefly, "as a specimen of a particular sort of inquiry, which . . . seems, in a peculiar degree, to have interested Mr Smith's curiosity." Indeed, Stewart continues, "Something very similar to it may be traced in all his different works, whether moral, political, or literary" (Stewart II. 44, in EPS, p. 292). Stewart then describes the method in question. He first remarks that:

When, in such a period of society as that in which we live, we compare our intellectual acquirements, our opinions, manners, and institutions, with those which prevail among rude tribes, it cannot fail to occur to us as an interesting question, by what gradual steps the transition has been made from the first simple efforts of uncultivated nature, to a state of things so wonderfully artificial and complicated. (Stewart, II.45, p. 292)

Yet, Stewart notes, since most of what we are interested in, in this connection, happened before there were any written records, history proper gives us only little information (ibid.). "In this want of direct evidence," then, "we are under a necessity of supplying the place of fact by conjecture". And thus men's

actions in previous ages must be traced “from the known principles of human nature” and “the circumstances of their external situation”, using “the detached facts which travels and voyages afford us . . . as land-marks to our speculations”. And Stewart proceeds to christen this “species of philosophical investigation”, accordingly, “*Theoretical or Conjectural History*” (II.46-8, p. 293; italics in original).

This method of tracing events “from the known principles of human nature” had been used, too, by Machiavelli, one of the authors most admired by Smith,<sup>1</sup> who wrote in 1516 that “passions and dispositions remaining in all ages the same, naturally give rise to the same effects” (Machiavelli 1883 [1537], p. 475).<sup>2</sup> And the use of “circumstance” to explain the differences between societies found a prominent place in Montesquieu’s work.<sup>3</sup> As John Millar remarked: “The great Montesquieu pointed out the road. He was the Lord Bacon in this branch of philosophy. Dr. Smith is the Newton” (Millar 1803 [1787], p. 429-30; EPS p. 275, Meek 1971, p. 12).

Stewart’s expression “conjectural history” (but not “theoretical history”, interestingly) has been universally adopted to denote this type of theorising about the development of human societies. The terms “philosophical history” or “philosophy of history” have also been in use (see for example Flint 1894). Duncan Forbes (1954), linking the issue to political debates, wrote of “‘Scientific’ Whiggism”. The particular theoretical framework adopted by Adam Smith and his contemporaries was dubbed the “four stages theory” by Ronald Meek (1971, 1976b).<sup>4</sup> This label has stuck and shall be used here throughout to refer to the

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<sup>1</sup> He was one of the few thinkers cited repeatedly in the *Wealth of Nations* (at III.iii.19, p. 407, V.i.g.2, p. 790, and V.ii.a.6, p. 819), and in the *Lectures on Rethoric and Belles Lettres* (ii.70, p. 115) is reportedly praised by Smith as “of all modern Historians the only one who has contented himself with that which is the chief purpose of History, to relate events and connect them with their causes, without becoming a party on either side.”

<sup>2</sup> In *Discourses on the First Decade of Titus Livius*, Book III, Chapter 43, §1. See further Skinner (1975, p. 170) and Winch (1992a, p. 92, fn. 10). Note the use, by Machiavelli (in this translation), of the word “naturally”, frequently used too by Smith: Smith’s “natural progress of opulence” was one proceeding “naturally” from human propensities, without conscious direction by a central authority.

<sup>3</sup> In the Anderson notes, to which will be further referred later, Smith is reported to have had this to say about Montesquieu: “Monsieur de Montesquieu is one of the most singular Men that has ever been in the World for he possesses four Things which are never almost united. An excellent Judgment, a fine Imagination, great Wit, and vast Erudition”. For Montesquieu’s influence on Smith in general, and particularly on his historical method, see Clark (2008).

<sup>4</sup> Initially (in Meek 1971) with quotation marks around “four stages” (as “the “four stages” theory”), which were later (in Meek 1976b) dropped. In the secondary literature since, one finds various orthographies (“Four Stages Theory”, “Four Stages theory”, “four-stages theory”, etc., with or without quotation marks variously placed, but generally without).



common theory of the authors considered: principally Franklin, Smith, Kames, Dalrymple, Helvétius and Blackstone in the 18<sup>th</sup> century, and Pufendorf and other natural law theorists in the 17<sup>th</sup>.

This particular narrative of human progress showed a remarkable degree of uniformity between the different authors who elaborated it and made use of it. Several elements can be found repeatedly throughout and are defining of the theory: the emergence of social classes, property rights, government, laws, division of labour and arts and sciences, being all interrelated, are explained, starting from a state of society (the savage state) in which all these were as yet missing; and four particular stages, defined by the prevailing mode of subsistence, are thereby distinguished.<sup>5</sup> The central driving force of this process of evolution of society is the growth of population and the necessity it induces to innovate and introduce new technologies, institutions and rules of conduct. It is with this role of population and necessity in the theoretical framework of the four stages theory, and the importance of this theoretical framework in both Smith's and later Malthus' work, that the present chapter is centrally concerned.

In this connection, it is interesting to compare Stewart's exposition of conjectural history related above to a statement made 200 years later by Ester Boserup:

Little is known about the prehistoric change from food gathering to food production, and although new information on prehistoric populations and the technology they used is steadily being obtained by archeological research, we still have to rely on speculation more than on facts. (Boserup 1981, p. 31)

As will have been noted by those familiar with the subject of population and development from the short exposition of the four stages theory and the role of population therein given above, indeed, this is not the only resemblance between Boserup's writing and the present subject. Boserup developed a theory of development in which population played a crucial positive role for the development of more advanced subsistence technologies. And population was playing precisely the same role in the conjectural history of the Enlightenment philosophers and earlier natural law theorists. Boserup's famous contribution to

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Meek's own (1976b) spelling (without capital letters nor quotation marks nor hyphen) has been adopted here.

<sup>5</sup> Sometimes the stages were only three, and sometimes more than four, in different expositions of the theory, but the essential features of the progression were sensibly the same despite such differences, and the label *four* stages theory is generally used invariably for all (as it was originally by Meek).

the debate on population and development in the mid-20<sup>th</sup> century (Boserup 1965, 1981) in fact bears a striking resemblance to the way Adam Smith conceptualised the same subject in his Glasgow lectures. That this position is today known among social scientists as the “Boserupian” position only shows the value of not neglecting the history of thought in current theorising. The idea that population pressure leads to technological development was fully developed in the theories of Enlightenment scholars two full centuries before Boserup’s work on the issue, and this rather straightforward idea is in fact very much older, the natural law theorists having been mainly influenced in this regard by writings of Antiquity and the Bible.

Although seldom treated as such, the four stages theory undoubtedly is a product of and contribution to the general debate about population questions in the second half of the 18<sup>th</sup> century,<sup>6</sup> which is likely why Malthus also felt inclined to use it as frame of reference in his *Essay on the Principle of Population*. The classification of human societies that can be found in the four stages theory, moreover, itself inherited from classical sources and the natural law tradition, further found use, with ever so slight variations, in all subsequent sociological, anthropological and ethnological research in the 19<sup>th</sup> and 20<sup>th</sup> centuries, so much so that the theory can be considered in many respects as foundational in the creation of modern human sciences as a whole.

The one central element used as a causal variable in the explanation of the succession of stages in 18<sup>th</sup> century theories of socio-cultural evolution, including the version formulated by Adam Smith, is thus the growth of population. By a precise sequence of steps, involving population growth disrupting the balance between human societies and the ecosystem which provides them food, and the shortage of food thus created offering an opportunity for the accidental discoveries of naturally curious and creative human beings to find wider application, ushering in technological revolutions, population growth ultimately takes human societies to higher stages of development. This view of population growth being the original source of economic development (or in any case a crucial link in the causal chain leading to it) appears to be in stark contrast with the Malthusian view of population growth as an explanation for the impossibility of the progress of society as considered by Condorcet and Godwin. Yet, Malthus himself adopted the classification of human societies into the different types contained in the four stages theory and in fact used this framework to demonstrate the eternal and overarching validity of his population principle. The Malthusian population

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<sup>6</sup> For an overview of these see notably Whelan (1991).

principle itself, indeed, is intimately linked to (if not identical with) the way the interaction between population growth and the environment was conceived in the four stages theory. And Malthus himself also did, through what he called the “goad of necessity”, recognise the stimulating role of population growth to human industry that was a central element of four stages theory.

As we shall see, however, Malthus deviated from this theory, or from the way it had generally been used until then, by the change of some assumptions, and, more significantly, by an important change of focus, which set the “population principle” (already contained, in substance, in the four stages theory) on a different track. Having been used until then principally to explain the progress of laws and government and justify the existence of private property, it became a tool for those arguing against the “perfectibility of society” (its appropriateness and its very possibility) understood as leading to perfect economic and political equality of all members of society. Yet, the “population principle” was in fact for Malthus, in line with the four stages theory, still a theory of progress. Misunderstandings about this until this day can be attributed in no small part to the ambiguity of the word progress, which was never well defined to begin with, but which also underwent an important change of meaning at the end of the 18<sup>th</sup> century.

For these reasons the four stages theory is not only an important subject for the study of Smith’s theory of progress, it is also an important subject for the broader study of population theories in the 18<sup>th</sup> century. Yet, the authors studied in this paper — including Smith, with regard to the content of his lectures on jurisprudence, and especially the content of the later discovered set of notes on these lectures — are all but absent from common studies of “pre-Malthusian” population theories, from early 20<sup>th</sup> century works like Stangeland (1904) and Bonar (1931) to more recent ones like Spengler (1972) or Caselli, Vallin, and Wunsch (2006). This is less surprising for Smith, with regard to the subject of the present chapter, the more detailed (and in this regard more relevant) set of lecture notes on jurisprudence having re-emerged only in 1958 and first been published in 1978, this set being the one containing the more explicit mentions of the role of population in the four stages theory. The absence from studies of population theories of the other authors considered in this chapter, and of the four stages theory as a common way of conceiving the role of population for economic progress more generally, is more striking. Even Ronald Meek, although he mentioned it, did not pay great attention to population and its causal role in the four stages theory, including in Smith’s version, in his foundational study of this intellectual tradition (Meek 1976b). This is all the more surprising as Meek was interested in both population questions and Marxist theory — he edited a book

(Meek 1954b)<sup>7</sup> with selected texts of Marx's and Engels's response to Malthus population theory, more than twenty years prior to *Ignoble Savage* — and he saw the four stages theory as a precursor to Marx's historical materialism (Meek 1954a), following Pascal (1938). Tying in these two themes — the opposition between Marx and Malthus and the positive causal role of population in four stages theory, itself conceived as precursor to historical materialism — would have presented itself, but Meek did not follow this route.<sup>8</sup>

“Pre-Malthusian” is put in inverted commas above, for the significant break represented by Malthus' theory which this term implies is hard to observe in actual facts. The debate that Malthus' *Essay* stirred (and has continued to stir — if later expressions on the subject of population that have been associated with his name can be deemed at least in some respects to have rightly been so) is indeed very considerable. But neither the arguments presented in the *Essay* nor the way they were presented were very novel. Schumpeter noted that “the ‘Malthusian’ Principle of Population sprang fully developed from the brain of Botero in 1589” and that “the ‘law of geometric progression,’ though not in Botero's work, was suggested by Petty in his *Essay concerning the Multiplication of Mankind* (1686), by Süßmilch (1740), by R. Wallace (1753), and by Ortes (1774), so that, within this range of ideas, there was nothing left for Malthus to say that had not been said before”. Schumpeter further lists “Franklin (1751), Mirabeau (1756), Steuart (1767), Chastellux (1772), and Townsend (1786)” as among “the eighteenth-century authors who, without committing themselves to this particular mathematical form, stated that population will always increase to the limit set by the supply of means of subsistence” (Schumpeter 1986 [1954], p. 244-5). Among these, Chastellux's *De la Félicité publique, ou Considérations sur le sort des hommes, dans les différentes époques de l'histoire* is an especially clear example of the widespread use of conjectural history in the period by which, according to Meek (1976b), this method had become an orthodoxy.

Smith too had noted the tendency of population to conform to the means of subsistence, not only in the *Wealth of Nations*, where he remarked in his chapter on wages that “Every species of animals naturally multiplies in proportion to the means of their subsistence, and no species can ever multiply beyond it” (WN i.viii.39, p. 97), but also in his earlier major work, in which he noted, in the passage where the second reference (of three in total) is made to an “invisible hand” in all

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<sup>7</sup> In a later edition the book was called *Marx and Engels on the Population Bomb*, most probably for marketing reasons; the original less sensational title is *Marx and Engels on Malthus*.

<sup>8</sup> This shall be attempted, to some extent, in the last chapter of the present work.

of Smith's works, that "The produce of the soil maintains at all times nearly that number of inhabitants which it is capable of maintaining" (TMS IV.1.10, p. 184).<sup>9</sup>

This theme of population conforming to the means of subsistence (and hence of population growth pressing on the means of subsistence) plays a central role, also, in the four stages theory. Indeed, as Jacob Hollander — visibly more informed on the subject than Stangeland and Bonar cited above (p. 73) — noted at the Sesquicentennial of the *Wealth of Nations*:

The eventual pressure of mankind upon subsistence had been noted by writers of the seventeenth and eighteenth centuries, *to the extent of becoming a commonplace in conjectural history*. . . . Malthus entered the lists with a weapon sharpened and furbished, but not new in the sense of one theretofore unknown or even unused. (Hollander 1927, p. 190)

In what follows I shall attempt to elucidate the seemingly paradoxical relationship between the "positive" role of population growth in four stages theory and the "negative" role it plays in Malthus' work — paradoxical only to those, indeed, who read 18<sup>th</sup> century views on population through the prism of such later categories as Malthusianism or "Populationism". Winch (1993) presents a convincing case for considering the common conception of the "break" represented by Malthus' theory as being one away from moral and ethical concerns as just as much of a dead-end.<sup>10</sup> As shall be developed below, however, with regard to the particular *use* Malthus made of the population mechanism outlined in the four stages theory, Malthus' work did represent a break, or at least a shift.

The central theme of this chapter is the role of population in the four stages theory as laid out by Smith. To establish a link between this role given to population in Smith's lectures and the more hidden nature of the role of population growth in the *Wealth of Nations* — hidden to those, that is, who read Smith without the intimate connection between population and progress in 18<sup>th</sup> century thought in mind — will be the aim of later chapters. To lay the groundwork for the examination of the role of population in Smith's four stages theory, we shall first consider the role of conjectural history in Smith's work overall, uncovering possible reasons for its neglect until now in relation to the general evolution of Smith scholarship.

On this note, it will be apposite to return briefly to the term used by Duncan Forbes to speak of conjectural history: "Scientific Whiggism". This term has to be

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<sup>9</sup> At LJ(A) iii.47 (p. 159), Smith is also reported as stating that "the number of men is proportion'd to the quantity of subsistence."

<sup>10</sup> Winch's particular targets in this respect are Himmelfarb and Dean, and in a different regard Samuel Hollander.

related, of course, to the teleological view of history designated “Whig history” by Butterfield (1931). That a direct reference to Butterfield’s work is absent from Forbes’ (1954) article — Butterfield is cited once, but no reference is provided nor the connection with the title of Forbes’ article explicitly drawn — underlines an argument made in the present chapter, with regard to the theory of socio-cultural evolution prevalent at the end of the 18<sup>th</sup> century: that references to a well-known theory can be highly implicit and yet be perfectly understood (indeed, in a more general sense, the very way language functions relies on these types of automatic associations by people); but that these types of references may become largely undecipherable at a later date, when the idea, occurrence or theory in question, which is referred to, has lost its prominent and well-known character. L. P. Hartley’s phrase “the past is a foreign country” is overused, but to the point. The point here is that not only do “they do things differently there” (as Hartley added), but that a foreign language is also spoken in the past — not only literally so, but also in the sense that one and the same language becomes foreign over time, not merely through the evolution in grammar, syntax and vocabulary, but, too, through the loss of automatic associations with things no longer in the public debate or otherwise familiar to us, and the difficulty therefore of understanding what is implicit in past author’s texts. As was noted in the General Introduction, one of the principal aims of intellectual history may well be to unearth and explain such opaque references in old works for a contemporary audience.

In the following section, we shall first take somewhat of a detour, but only to better ground the subject, considering the four stages theory in its wider temporal and spatial context. This section aims both to put the 18<sup>th</sup> century four stages theory into historical and geographical perspective, and to examine its contentious relation with the theme of universalism, particularism and cultural imperialism in the description of humanity and human nature. It will be argued that the four stages theory overall, and Smith’s work as a whole, are of a universalist nature, by not giving a causal role to inborn characteristics in the explanation both of individuals’ and of societies’ socio-economic development. The third section considers the role of the four stages theory in Smith’s overall work, including its disputed role in the *Wealth of Nations*, while the fourth section will examine for what reasons this role has long been overlooked. It will be argued that the universalist dimension of Smith’s work was the main factor in the hostility that 19<sup>th</sup> century German scholars garnered against Smith — an hostility out of which the famous Adam Smith Problem grew, which postulated a dichotomy within Smith’s oeuvre — in the midst of an intellectual climate in German-speaking lands which highlighted the particularism of German culture, language and nation in an

effort to bring about a German nation-state. Through the high repute and major influence of German universities in the late 19<sup>th</sup> and early 20<sup>th</sup> century the dichotomy view of Smith got imported into the United States, the epicentre of economics in the later 20<sup>th</sup> century, surviving notably, in different shape, in the Chicago School's reading of Smith. Section 5 looks at how precisely the interaction of population and progress is conceptualised by Smith through this theory. Section 6 provides the necessary immediate historical and theoretical context, showing how the causal role of population in the progression of stages had a central position in the four stages theory not just in Smith's work, but in the work of a number of authors in Britain and France who wrote at about the same time and made use of this theoretical device. By showing that this conceptualisation of population was quite commonplace at the time, it will be easier to concede to the sparing passages from Smith's transcribed lectures we have to content ourselves with on this question their proper bearing. These passages may thus be all the more readily linked to themes by Smith in the *Wealth of Nations*, which will be developed in the following chapters. Section 7 looks at Malthus' idiosyncratic use of the four stages theory, showing both the continuity of Malthus' work with this theoretical tradition and his deviation from it, especially as regards the purpose of the use he made of its theoretical elements. Section 8 concludes.

The following three sections (2-4) thus deal with the nature and history of the four stages theory, occasionally alluding to several aspects of the theory in the course of the investigation, but not examining the theory itself in detail. These sections are written largely in the style of intellectual history and sometimes meta-analysis, tracing the reception of the theory and the history of its history, i.e. of secondary literature on the topic. The population aspect of conjectural history is not the prime focus of these sections. The subsequent three sections (5-7) examine the theory itself, on the basis of primary texts, respectively by Smith, several other 18<sup>th</sup> century writers contemporary of Smith, and Malthus. These sections are written more largely in the style of doctrinal history, except for the section on Malthus which combines both approaches. Some readers may hence prefer to read sections 5 to 7, or in any case section 5 and 6, dealing with the theory itself, before reading sections 2 to 4 that deal with its universalist nature, its importance in Smith's work as a whole, and what is argued to be the reasons this importance has long been overlooked and remains disputed to this day.

## 2. Social evolution as universalist theory of progress: historical and cross-cultural context

“Improvement”, “modernisation”, “economic development” and “socio-cultural evolution” are terms that have been used successively, and at times interchangeably, since the 18<sup>th</sup> century. These terms may contain subtle differences, depending on who uses them, and in which decade or century, but essentially they all refer to the idea of progress, conceived as a general movement of societies from a less to a more “refined” state. This way of conceiving of all human societies as being situated on some sort of continuum from a low or simple (“primitive”, “savage”, “under-developed”, “developing”, “poor”, “indolent”, “backward”, etc.) to a high or complex (“civilised”, “developed”, “rich”, “industrious”, “industrialised”, “advanced”, etc.) stage still runs through all the social sciences. This methodology is indeed so intricately bound up with the emergence of these fields, and has so much shaped their categories of interpretations, that it seems difficult to properly separate it from the various disciplines that compose the social sciences themselves.<sup>11</sup> Having great implications for what precisely it means to be human, what distinguishes man from other animals, and one human group from another, it goes well beyond the human sciences, indeed, being of fundamental interest also to clerics, philosophers and biologists.

There was notably vigorous interest in the first half of the 18<sup>th</sup> century in the great apes described by European travellers at the end of the 17<sup>th</sup>, just as the American Indians (and to a lesser degree the “savage” tribes of Africa and Australasia) made for intense debate about the origin of humanity and the boundaries (and respective advantages or moral superiority) between “savages” and civilised society. The “Orang-Utans” (a name used throughout the 18<sup>th</sup> century for all great apes) also fostered debate about the boundaries between (savage) man and animals. Rousseau notably considered the Orang-Utan to be equivalent to savage humans (he made reference to people raised by animals). Linaeus classified the Orang-Utan in the same genus *Homo* as man. Buffon (although not entirely consistently) drew a clear boundary between apes and humans, making human language and sociability a defining feature of humanity. This view was generally

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<sup>11</sup> Wallerstein (1984, p. 102) holds that “the concept of development is not merely one of the central components of the ideology both of western civilization and of world social science but is in fact the central organizing concept around which all else is hinged.”



adopted by the thinkers of the Scottish Enlightenment (with the notable exception of Mondobbo).<sup>12</sup>

The central challenge of these debates was to find an explanation for the diversity, not only linguistic and cultural, but also social, political and economic, between the different human groups that inhabited the earth. To explain the different levels of ‘sophistication’ of different human groups, at least two fundamental options offered themselves: explaining these differences as being essential and atemporal, which implies seeing human groups as being naturally different (and generally some as being naturally superior and inferior); or positing a common human nature, and seeing present differences as the outcome of some temporal process. Both these options have been chosen at times to varying degrees, and the tension between the two still runs through political and social thought today. While these two different ways of conceiving of human differences were also found in the 18<sup>th</sup> century (notably embodied in the different perspectives of monogenism and polygenism), the dominant idea in Enlightenment philosophy was the one of a unitary human race, further linked to the perspective of the fundamental equality, at birth, of the individuals composing the different societies, which found its way into the American declaration of independence (1776) and the *Déclaration des droits de l’homme et du citoyen* (1789) – both written at a time, it should be noted, when slavery was still legal in both North America and the French colonies (as it was in Greece when the word democracy was coined), and people of African, Native-American and Asian origin were far from enjoying equal rights to people of European descent, not to mention women to men. Major enlightenment thinkers were divided on the question of equality between what came to be regarded as the world’s principal ethnic groups, with some explaining human differences by external circumstances like climate and geography, as epitomised in Montesquieu’s *Esprit des Lois*, while Voltaire, Hume and Kant, notably, were noted for more ethnically essentialist views.<sup>13</sup>

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<sup>12</sup> See on these various debates Sebastiani (2013), particularly pp. 46, 66-70, 83-5, 106.

<sup>13</sup> This is not to deny the intricacy of the interplay between physical and moral causes, notably in the determination of “national characters”, in the works of major Enlightenment thinkers. On Montesquieu and Hume’s respective views on this and their influence on Smith see Chamley (1975). Nor are the categories of monogenism and polygenism sufficient to describe 18<sup>th</sup> century attitudes on race: they do not strictly overlap with universalist and particularist views on human society respectively, and views that would today be considered “racist” have been expressed by people in both camps. Voltaire’s and Hume’s racist views (both are generally considered polygenist; in Hume’s case this is hard to attest) have notably been widely discussed. On Voltaire see for example Poliakov (1982, p. 55-6). Hume’s reputation in this department rests on a single, infamous, footnote, but which has allowed him, according to Richard Popkin (1978, p. 211, which sparked a long debate on this issue), to become (deservedly or not) “the favorite authority for the

The idea of the predominance of nurture over nature and the basic equality of all men at birth is very present in Smith's work, embodied in his famous view that:

The difference of natural talents in different men is, in reality, much less than we are aware of; and the very different genius which appears to distinguish men of different professions, when grown up to maturity, is not upon many occasions so much the cause as the effect of the division of labour. The difference between the most dissimilar characters, between a philosopher and a common street porter, for example, seems to arise not so much from nature, as from habit, custom, and education. (WN I.ii.4, p. 28-9)

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And the same unity of human nature he saw between the different individuals of "commercial society", Smith also saw between people of different nations. Remarkably, there is not one disparaging comment to be found about the members of any other nation or people that is not explained by another circumstance than the mere belonging of their members to this particular ethnic, linguistic or religious group throughout the entirety of Smith's work — to be contrasted with the racist commentary to be found notably in the work of (among other Enlightenment thinkers) Hume, Voltaire, or Kant.

At one point in the *Wealth of Nations*, Smith makes a comment that, taken out of context, could be read as a 'racist' one: "for we must acknowledge, I apprehend,

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extreme racists, and the central figure to be combatted by the humanitarians." Hume revised this footnote, which originally described "all other species of men (for there are four or five different kinds)" as "naturally inferior to the whites", substituting "negroes" for "all other species of men", thus making his racism more targeted, as well as removing a possible reference to polygenism; see on this Immerwahr (1992). This aspect of Kant's thought has only fairly recently been given detailed attention. For a review of the literature see the introduction to Mikkelsen (2013). Blumenbach, Buffon, and Linnaeus had classified humans into four or five different species, which can be regarded as ancestors of the 19<sup>th</sup> century racial categories. The Enlightenment category of "whites" Hume refers to was not yet definite; Franklin had still spoken, in an essay referred to later in this chapter, of "the Spaniards, Italians, French, Russians and Swedes" as being "generally of what we call a swarthy complexion; as are the Germans also, the Saxons only excepted, who with the English make the principal body of white people on the face of the earth" (Franklin 1755, last §). Two fairly recent books discuss ideas on racial, sexual and cultural differences in the Enlightenment, particularly in the British context, in great detail and offer a good summary of the various debates on the often overlapping topics of human differences and human progress: Roxanne Wheeler's (2000) *The Complexion of Race* and Silvia Sebastiani's (2013) *Race, Gender, and the Limits of Progress*. For an earlier resource see the volume edited by Pagliaro (1973).

<sup>14</sup> The porter-philosopher contrast to illustrate the equality of talents of humans at birth is already exposed in the Cannan notes (LJ(B) 220-1, p. 493), the 'Early Draft of the Wealth of Nations' (ED 26-9, p. 572-7) and the 'First Fragment on the Division of Labour' (FA 1, p. 583).

that the Spanish creoles are in many respects superior to the ancient Indians” (IV.vii.b.7, p. 568-9). Read in context, however, it becomes clear that by “superior”, Smith does not denote the ‘value’ of the ancient Indians as human beings, nor their capacity to comprehend or undertake anything a “creole” (or a European) could, in the same circumstances, but simply that the present creoles are more advanced, on the spectrum from savagery to civilisation. The passage is directly preceded, indeed, by this one: “the populousness of every country must be in proportion to the degree of its improvement and cultivation. In spite of the cruel destruction of the natives which followed the conquest, these two great empires are, probably, more populous now than they ever were before: and the people are surely very different”. This passage appears, indeed, in a section entitled “Causes of Prosperity of New Colonies”, and Smith had stated five paragraphs earlier that “The colonists carry out with them a knowledge of agriculture and of other useful arts superior to what can grow up of its own accord in the course of many centuries among savage and barbarous nations” (IV.vii.b.2, p. 564). The ancient Indians did not possess this knowledge (yet), hence were (from the point of view of the progress of society) inferior to the present creoles. Smith’s use of the vocabulary of “savage” and “barbarian” (and superior and inferior) in general must be read in this way, as will become clear from the textual examination in the remainder of this chapter.

The idea of progress, and the theories based on it, referred to by Margaret Hodgen (1964, p. 380, 483) as “progressivism”, allow for universalist theories of human progress. What I mean by a universalist theory of progress is one where a unitary conception of human nature is used, and all differences between people are not explained by reference to the peculiar characteristics of their race, culture, or language, but rather these aspects themselves are explained by other, external circumstances.<sup>15</sup> But explaining the differences between communities and peoples by situating them on a temporal scale of progress common in its essential features to all human societies requires first that such a universal theory of societies’ progress be devised. Montesquieu had differentiated between savages and barbarians, and thus introduced a certain gradualism in the distinction between different levels of “sophistication” of human groups, but he did not himself elaborate a theory of the passage from one of these stages to another (which was not necessary for his essentially geographic and climatic explanation of why one

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<sup>15</sup> The characteristics of different languages, indeed, were also explained by Smith by the circumstances of particular people (in particular the stage attained between savagery and civilisation, defining the material needs including for different features of language, but also the history of a people’s contact with other people) in his ‘Considerations Concerning the First Formation of Languages, and the Different Genius of Original and Compounded Languages’.

group was in one state or another). Other Enlightenment thinkers, notably Adam Smith, conceived a theory of the progress of human groups through these stages.

Yet, establishing such a theory through historical enquiry is difficult, insofar as for already civilised societies what we are interested in lies hidden from us in the remote past, as Dugald Stewart observed.<sup>16</sup> Stewart had also remarked, as reported above, that “In such inquiries, the detached facts which travels and voyages afford us, may frequently serve as land-marks to our speculations” (II.46, p. 293). It is indeed much simpler to observe *different* societies in the *present* than to accurately reconstruct the *past* of a *single* society through all of its history (a history which cannot properly be observed at all, but only gotten at indirectly, through written records as far as these are available, and other sources even more difficult to obtain and interpret). Thus scholars have often substituted the first exercise for the second. It is not entirely unproblematic that by so proceeding the theory largely presupposes what it sets out to explain: that there is a gradual progress of human societies and that the “savage” societies we can still observe today must thus be a reflection of what the now “civilised” ones looked like in the past. That is, different societies co-existing at the same time have been compared to each other, in their current state, in order to derive from that comparison a general understanding of how societies *evolve* (which in turn was used to explain the very differences between human societies from the observation of which the theory was derived). An analysis of the discrepancies between different societies in space has thus been used to establish theories of the evolution of one and the same society through time. Arland Thornton (2001), in a work critical of the practice, ingeniously refers to it as “reading history sideways”. It may be noted that this, of course, is precisely what evolutionary biologists do by observing fossils and other remains of past times and inferring from them how present species have evolved. It has often been remarked that Darwin was inspired by the thinkers of the Scottish Enlightenment.<sup>17</sup>

The practise of “reading history sideways” has ancient roots. It can be discerned in Greek and Latin writers of Antiquity and in those medieval historians and philosophers in- and outside Europe who translated and elaborated on the

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<sup>16</sup> “On most of these subjects very little information is to be expected from history; for long before that stage of society when men begin to think of recording their transactions, many of the most important steps of their progress have been made.” (Stewart II. 44, in EPS, p. 292)

<sup>17</sup> See notably Schweber (1980); Gordon (1989) and Marciano and Pelissier (2000) ; see further on this the annex to Chapter 3.

former.<sup>18</sup> A form of conjectural history resembling the 18<sup>th</sup> century four stages theory can thus already be found in Lucretius (99-55 B.C.), who indeed inspired the Scottish Enlightenment philosophers (Harris 1968, p. 26-27; Meek 1976b, p. 8; Emerson 1984, p. 69-70).<sup>19</sup>

As to define is to delimit, human groups have always quite naturally defined themselves by contrast with others; and as the very delimiting of societies and nations is generally tied to histories of conquest and domination, other groups were generally depicted as inferior or lacking in some respect, thereby elevating the group itself and fostering pride in belonging to it.<sup>20</sup> In the same vein, the term and concept of civilisation can be properly defined only by contrast with that which it is not: savage, unrefined, uncultivated. The word “barbarian” has from its origin had the pejorative undertone it still carries today: the one of a foreign people, of the *other*, and of a low level of sophistication (Hall 1989, p. 3-13; Pocock 2005, especially chapters 1, 8, 9, 11 and 15). It was defined by contrast to the ancient Greek “polis”, the citizen of the civilised world (Equivalents of the term can be found in many languages). One can thus note the circularity in the definition of both barbarians and civilisation, depending on each other.<sup>21</sup>

Yet, while highly subjective and generally ethnocentric criteria are often used to define on what side of the savage-civilised divide a particular people or class of people is to be situated, there can be (and have been), at least in theory, objective criteria of what it means for a society to be civilised. Thus, while considering other people as inferior in some respect seems to be intimately tied to the very process of self-identification and self-definition of human groups, the contrast between civilisation and savagery is not, in itself, necessarily derogatory or ethnocentric. The positive connotations attached to civilisation and the negative ones attached to savagery have indeed been at times entirely inverted, such as in the 18<sup>th</sup> century

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<sup>18</sup> For a detailed analysis of the historical roots of what came to be known as the “comparative method” in the 19<sup>th</sup> century, especially in ancient Greek thought, see Nisbet (1969, p. 189-96).

<sup>19</sup> According to Harris (idid.), “in the matter of sociocultural evolution, the Enlightenment merely restored an existing ancient doctrine to a position of intellectual respectability. Thus, all evolutionary thought during the Enlightenment betrays the influence of the great first-century-B.C. Roman materialist-poet-philosopher, Lucretius.”

<sup>20</sup> Thus people’s endonyms (names people use to refer to their own group, in their own language) are usually flattering, while exonyms (other peoples’ names for a people, in the other peoples’ languages) are usually belittling if not insulting in their respective original meaning (Matisoff 1986).

<sup>21</sup> The term and concept of civilisation is said to have come about only in the 17<sup>th</sup> century and taken on its contemporary meaning in the 18<sup>th</sup>, but it was itself only a transposition of the ancient term *polis* (Pagden 1988a).

debate about the 'noble savage' and the 19<sup>th</sup> century romantic movement with its 'return to nature' allegory, both having survived into the present and being integrated in varying degrees in different strands of the environmentalist movement.<sup>22</sup> Refined manners were usually seen as a sign (seldom a cause) of civilisation, but even here the fronts were not marked clearly. Rousseau indeed saw savage man as having *superior* moral virtue to civilised one, and one can find a similar idea in Smith.<sup>23</sup> In the same vein, the dichotomy described by Robert Wokler (1995, p. 34) between the passions that animate savages and barbarians versus the reason of civilised man as being instrumental in the elaboration of four stages theory is a simplification, insofar as Hume and Smith, notably, did not believe that the passions had been supplemented by reason in the civilised state. It was the *natural moral sentiments* (i.e. passions, just like the "natural desire to better our condition" is one) which still determined man's behaviour and consequently his condition, in the civilised state as ever before.<sup>24</sup> This is an element which Malthus, significantly, took over from Smith, and used against Condorcet and Godwin — although, as we shall see, in some respects he actually resembled the latter two more than the first.<sup>25</sup>

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<sup>22</sup> As such, Roxanne Wheeler's argument that the role of the four stages theory was neglected as ancestor of present day racism seems misguided (see Wheeler 2000, p. 197, 188, 190). It was rather the *reaction* to the "natural history" contained in the four stages theory, with its unitary view of humanity and human nature, that ushered in the first formulations of "scientific racist" arguments prior to the nineteenth century, notably by Edward Long (on this see Sebastiani 2013, p. 103-31).

<sup>23</sup> Notably his description, admiring in tone, of the courage, combative spirit and bravery of pain and torture of savages at TMS V.2.9, p. 206, followed by his remark that: "There is not a negro from the coast of Africa who does not, in this respect, possess a degree of magnanimity which the soul of his sordid master is too often scarce capable of conceiving"; as compared with the rather negatively presented "unwarlike" character of the inhabitants of the "improved parts of this country [Scotland]" at LJ(B) 331, p. 541-2, which one also finds in Book V of *Wealth of Nations* in the discussion of the negative effects of the division of labour (and hence civilisation). Fleischacker (2011, p. 26) takes the first passage somewhat out of context, however, when he comments that Smith lauds the magnanimity of Africans and Native Americans over Europeans and omits that this "magnanimity" concerns specifically the bravery of savages of torture, which Smith explains, precisely, by the peculiar characteristic of the savage state as distinct from civilisation, and not in cultural or ethnic terms at all. Also, although Smith was not absolutist about it, as these discussions attest, it is very clear from the entirety of his work, and the great stress he laid on the idea of progress, that he thought that civilisation was an "improvement" over savagery.

<sup>24</sup> As remarked before, this had antecedents in Machiavelli, who indeed had himself been an avid reader of the classics, just as the Enlightenment philosophers were.

<sup>25</sup> See below p. 145.

Interpreting conjectural history, or theories of social evolution (more generally referred to by Hodgen (1964) as “progressivism”) as eurocentric (as Hodgen does), ironically, may actually itself be tainted by eurocentrism. Proclaiming the application of theories of progress and social evolution onto non-European societies to be eurocentric supposes, indeed, that progress and evolution are ideas (and phenomena) somehow inherently European in nature, thereby elevating European society to a level above all others, thus arriving precisely at the result that is criticised as being the starting point of “eurocentric” theories of social evolution. In fact, theories of progress much like the ones of Renaissance and Enlightenment European thinkers can be found in non-European works of the Middle Ages. The Persian Alberuni and the Arab Ibn Khaldun are cases in point (both shall be considered in more detail in section 5 below).<sup>26</sup>

“That “the human and the social sciences, or at least a certain number of them, were born during the 18<sup>th</sup> century” is a largely accepted view” writes Christopher Fox (1995, p. 1), citing Sergio Moravia (1980, p. 247), himself referring to GUSDORF’s work.<sup>27</sup> This view, linking the birth of the human sciences notably to Hume’s “science of man”, stands in opposition to Michel Foucault, who famously saw the human sciences (the contemporary disciplines composing them, in their modern form) as having been able to develop only after 1800, with the period around 1775 representing a clear epistemic break in intellectual history (Foucault 1966).<sup>28</sup> Both views share the idea that the Enlightenment carried with it concepts and theories, allowing for fields of enquiries, which were all entirely new, and, by the same token, see the human sciences as based on ideas that were all European in origin. As was touched upon in this section, this view may not be warranted. Hodgen notably concludes from her elaborate reconstruction of 16<sup>th</sup> and 17<sup>th</sup> century anthropological thought, with reference to ancient sources, that in this

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<sup>26</sup> The fact that both of these writers were themselves inspired by ancient Greek philosophers does not weaken the point. Indeed, it is largely through scholars in the ‘Arab world’ that ancient Greek thought was carried over (via Constantinople/Istanbul, Andalusia and the Italian trade ports) into Renaissance and Enlightenment Europe, and in the process scholars of various origins necessarily influenced each other. As far as economic theory is concerned, see on this the volume edited by Gazhanfar (2003).

<sup>27</sup> Georges Gusdorf devoted four volumes (IV, V, VI and VIII, all published in the 1970s) of his monumental study of encyclopaedic proportion (spanning fourteen books in total), *Les sciences humaines et la pensée occidentale*, to the human sciences in the Enlightenment. Particularly relevant is volume VI (Gusdorf 1973).

<sup>28</sup> For a useful summary of both Foucault’s position and its critics see Christie (1993, p. 6-8). While rejecting Foucault’s position in the absolute, Christie offers a useful discussion of the problems in delimiting the human sciences, both conceptually and historically (1993, p. 1-5). On Foucault’s critics see further Fox (1995, p. 3-4 and corresponding notes).

field “recent centuries have witnessed little that warrants the title of theoretical innovation” (Hodgen 1964, p. 484).<sup>29</sup>

The significant “epistemic break” that Foucault postulates to have occurred around 1775 is related in no small measure to the view of the emergence of political economy as an independent field of study, linked itself to the publication of the *Wealth of Nations* at precisely this moment in time. But, as shall be elaborated in the following two sections, the significant break-away from wider moral- and political-philosophical — and, of particular importance for the purpose of the present study, jurisprudential — concerns of Smith’s “economic” work, which was postulated in the 19<sup>th</sup> century and continued to be a largely accepted idea in the mid-20<sup>th</sup> century, surviving in the social sciences until today, is hard to reconcile with the entirety of Smith’s oeuvre, including, significantly, the content of his Glasgow lectures on jurisprudence recovered at the end of the 19<sup>th</sup> and in the 20<sup>th</sup> century. Jurisprudence, indeed, took a central place in the study of man in the 18<sup>th</sup> century, with political, moral and economic questions being largely subsumed under it.<sup>30</sup> As the next section intends to establish, following Stewart’s famous remarks considered above, the historical method is of central importance throughout Smith’s work. That method, as materialised in the four stages theory, comprised population growth as a central explanatory element of the progression of socio-economic stages. This must also be seen in the context of the late 18<sup>th</sup> century, when what would today be called “demographic” concerns were inseparably linked to political and economic doctrines, as Foucault himself

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<sup>29</sup> Her position is worth quoting in full: “The study of man in the Western world is not young. It is one of the oldest subjects of serious thought. Neither sociology nor anthropology sprang *de novo* and fully formed from the reflections of their presumptive “fathers,” Auguste Comte and Sir Edward Burnett Tylor; and even those bold spirits who have recently traced the antecedents of the two disciplines as far back as the eighteenth century — to the Encyclopedists and the Scottish moral philosophers — have reached back only part of the way. To fix casually upon any handful of recent scholars as “founders” or “originators” is always a disservice to intellectual history.” (Hodgen 1964, p. 7)

<sup>30</sup> As J. G. A. Pocock (1981, p. 366) put it: “We are now [in the mid-18<sup>th</sup> century] in the era of a revived and modernized natural jurisprudence, based on the notion that an intensive study of the variations of social behaviour throughout space and time would reveal the underlying principles of human nature on which the diversities of conduct were based and from which *lois* took their *esprit*. Jurisprudence, whatever it was like as the formal study of law, was the social science of the eighteenth century, the matrix of both the study and the ideology of manners.” Similarly, Kelley (1980, p. 136) argues that “What has been regarded as the birth of social science, in fact, can also be seen as the fulfillment in certain ways of legal tradition.” (See further n. 107 on p. 127 below.)



demonstrated through his inquiry into the concept of population and its central place in the emergence of modern social sciences and statecraft.<sup>31</sup>

Thus, the four stages theory, and at any rate conjectural history more widely conceived, have a long history. The many references to classical sources where it was used (some of which we will encounter below) sufficiently attest that Dugald Stewart did not know enough when he declared it to be a “sort of inquiry, which, so far as I know, is entirely of modern origin” (Stewart II.44, EPS 292).<sup>32</sup> Islamic and Hindu scholars of the middle ages had taken up this line of enquiry, found in ancient Greek and Roman literature, long before it caught the interest of the French and the Scots (and before them the Dutch Grotius, Hobbes and Locke in England and the German Pufendorf, to varying degrees). Beyond this wide circulation, the four stages theory makes for (and seems to have always been used as) a universalist theory of progress, whereby human differences are explained by geographic and climatic circumstances mostly. We shall consider at present the centrality of this theory in Adam Smith’s work.

### 3. Conjectural History throughout Smith’s Œuvre

Some modern authors have written about a theory of growth by Smith as distinct from his theory of development and his theory of history. In the first category is often put something derived from Books I and II of *Wealth of Nations*, with emphasis on demand and supply, prices, and division of labour and capital accumulation, viewed as a relatively short term analysis (Thweatt 1957 ; Spengler 1959a, 1959b ; Anspach 1976 ; Kim 2001). Under his “development theory” some authors have treated Smith's rural-urban historical theory developed in Book III, depicted as a more long-term view of development (Khan 1954 ; Singh 1959 ; Bell

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<sup>31</sup> On the inseparable nature of demography and economics in the late 18<sup>th</sup> century, see notably Tomaselli (1995).

<sup>32</sup> Equally misguided are modern repetitions of this idea, such as by Reid (1989, p. 59), who writes that “We are now all so familiar with the stadial analysis of societal evolution, perhaps through the writings of Hicks or Rostow, that this great intellectual innovation of Adam Smith is frequently taken for granted. It is so useful to regard progress as having taken place by a sequence of stages that it is now hard to imagine that this view had no coherent form before the Scottish Enlightenment.” Reid cites Meek in this connection, but although Meek, in his zeal to want to make Adam Smith the *discoverer of something*, may have implicitly conveyed this idea, he was far too careful a scholar and dedicated a historian to have ever put it in such categorical terms. Meek (1976b) recognised that what he called the four stages theory was present in some form or other in many earlier — and some much earlier — “strands of thought”, but was unwilling to see these earlier versions as entirely the ‘real thing’ yet. Possible reasons for this will be touched upon in the following section.

1992 ; Blecker 1997); while his four stages theory of Book V, but especially as formulated in *Lectures on Jurisprudence*, is referred to as his theory of (economic) history (Brewer 2008). But of course these categorisations are entirely arbitrary as well as being anachronistic. Smith himself was interested in the historical development of man in society, which he considered from different angles, but as a unified subject. The overarching theme was what Smith himself called the “progress of society”. There was no need for him to divide this subject into different modern categories (growth theory, development theory, economic history) which obviously were entirely foreign to 18<sup>th</sup> century thinking in general and Smith’s thinking in particular. The four stages theory, moreover, and more generally the comparative analysis of savage and civilised societies, was not merely a particular aspect of Smith’s consideration of the progress of society. It was, rather, the overarching theme that underlay all his thinking on the matter and stretched to considerations of most every other subject.

This particular frame of reference, as Meek points out (1976, p. 115) with reference to Dugald Stewart, was one that occupied Smith till the end of his life, and to the degree of ‘obsession’ (use of the term is Meek’s).<sup>33</sup> We are told by John Millar, as reported by Stewart, that Smith’s course on moral philosophy at Glasgow University, where he was appointed in 1751, “was divided into four parts”, of which:

In the third part, he treated at more length of that branch of morality which relates to justice. . . . Upon this subject he followed the plan that seems to be suggested by Montesquieu; endeavouring to trace the gradual progress of jurisprudence, both public and private, from the rudest to the most refined ages, and to point out the effects of those arts which contribute to subsistence, and to the accumulation of property, in producing correspondent improvements or alterations in law and government. This important branch of his labours he also intended to give to the public; but this intention, which is mentioned in the conclusion of the *Theory of Moral Sentiments*, he did not live to fulfil. (Stewart I.18-9, p. 274-5)

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<sup>33</sup> The exact phrase Meek uses is that Smith “came near to being obsessed with” the four stages theory. Meek refers to Stewart but these were not Stewart’s words. The relevant passages in Stewart are the ones cited on page 65 above, and one where Stewart relates Millar’s memories, according to which: “The same turn of thinking was frequently, in his social hours, applied to more familiar subjects; and the fanciful theories which, without the least affectation of ingenuity, he was continually starting upon all the common topics of discourse, gave to his conversation a novelty and variety that were quite inexhaustible . . . and of which his lively and circumstantial descriptions amused his friends the more, that he seemed to be habitually inattentive, in so remarkable a degree, to what was passing around him” (Stewart II.54, p. 295)

Fortunately, we can today form a very good idea of what such a treatise as Millar alludes to would have looked like from the detailed student notes of Smith's jurisprudence lectures that are published in *Lectures of Jurisprudence*. It is true that Smith never got to publish that "account of the general principles of law and government, and of the different revolutions they have undergone in the different ages and periods of society", which he had announced to "endeavour to give" in "another discourse" in the last paragraph of the *Theory of Moral Sentiments*. Smith "partly executed this promise", he himself announced in the 'Advertisement' to the 6<sup>th</sup> edition of *Moral Sentiments*, "In the *Enquiry concerning the Nature and Causes of the Wealth of Nations* [sic] . . . at least so far as concerns police, revenue, and arms" (TMS, p. 3). But, over and above this partial treatment of the subject in *Wealth of Nations*, the comparative analysis of the political, economic, moral, cultural, and individual and social conditions of societies of the "savage" and the "civilised" type is one that runs through Smith's entire oeuvre.

Smith takes up this theme, in 1756, when discussing Rousseau's *Discours* in his *Letter to the Authors of the Edinburgh Review* (EPS, p. 242-56), his second ever published piece (appearing only six months after and in the same journal as his very first). Further, it is in connection with the wonder of "savages" about natural phenomena that the first mention of an "invisible hand" occurs in Smith's works (of three in total), in section III of the 'Principles which lead and direct Philosophical Enquiries; Illustrated by the History of Astronomy', described by Smith himself in a letter to Hume as a "juvenile work" (Corr. 137, p. 168). That section, significantly, opens with the phrase "Mankind, in the first ages of society, before the establishment of law, order, and security" (Astronomy III.1, EPS p. 48).

In the *Theory of Moral Sentiments*, many comparisons are drawn between individuals in "rude" and "civilised" societies, especially in part V,<sup>34</sup> but also in parts II, VI (written after *Wealth of Nations*) and VII.<sup>35</sup>

Smith's 'Considerations concerning the First Formation of Languages', first published in 1761, two years after the first edition of the *Theory of Moral Sentiments*, is the essay that was described by Dugald Stewart, in the terms already cited at the beginning of this chapter, "as a specimen of a particular sort of inquiry, which . . . seems, in a peculiar degree, to have interested Mr Smith's curiosity",

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<sup>34</sup> See V.1.9, p. 199 and V.2.7-15, p. 204-10. The first of these passages in particular is quite remarkable for its cultural relativism (two centuries before that term was coined). See Fleischacker (2011) for a detailed treatment of Smith's cultural relativism (containing some imprecision, however; see footnote 23 above).

<sup>35</sup> See II.iii.2.4, p. 100-1; VI.ii.1.12-13, p. 222-3; VII.ii.1.28, p. 282; VII.ii.1.34, p. 288; and VII.iv.36, p. 341.

which Stewart termed "*Conjectural History*" and that according to him "may be traced", in some form, "in all [Smith's] different works, whether moral, political, or literary". Smith, in the essay on the origin of language, considers the formation of languages in a hypothetical setting among savages. An actual comparison between the situation of "Savage nations on the coast of Africa" and "Wherever the Inhabitants of a city are rich and opulent" appears in lecture 23 of Smith's lectures on rhetoric (LRBL, p. 137), amidst a discussion of the effects of commerce and opulence on the refinement of arts and manners (and more specifically "the improvement of Prose"), with mention, too, of "the first ages of Society". (Lecture 3 covers the material corresponding to Smith's essay on the formation of language, of which the notes resemble the essay in every respect.)<sup>36</sup>

Mentions of savage, rude, and civilised nations, and of the different ages of society in the *Lectures on Jurisprudence* (both sets of notes reporting lectures held by Smith in the early 1760s as well) are too numerous to be reported here, but some will be considered in the following sections.

In the *Wealth of Nations*, finally, it is in the fourth paragraph of the opening section (WN 4, p. 10) that Smith first compares "savage nations of hunters and fishers" and "civilised and thriving nations", announcing a theme that runs through the entire work. In the same "Introduction and Plan of the Work", Smith tells us about the object of the first four books of the *Wealth of Nations* being "To explain in what has consisted the revenue of the great body of the people, or what has been the nature of those funds which, in *different ages and nations*, have supplied their annual consumption" (WN 9, p. 11). Every book of *Wealth of Nations* begins with a comparison of rude and civilised societies.<sup>37</sup> And savage, rude or barbarous nations are mentioned, and compared with civilised or commercial ones, or the rude, barbarous or civilised state or age of society are discussed, at regular intervals from the first to the last pages of Smith's opus.<sup>38</sup>

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<sup>36</sup> The student notes on these lectures on rhetoric published in the corresponding Glasgow edition volume (first published by John M. Lothian, who discovered the notes, in 1963) pertain to the session of 1762-3. But Smith had already been teaching rhetoric since 1748.

<sup>37</sup> In Books II and V, the comparison appears in the first two paragraphs, respectively. Book III mentions "civilised society" in its first sentence. In Book I, the comparison is reintroduced mid-way through Chapter 1, after the pin factory passage, having been announced in the 'Introduction and Plan of the Work' just before the beginning of Book I. In Book VI the comparison appears towards the end of the first chapter (IV.i.33, p. 448).

<sup>38</sup> Use is made of the categories of analysis of the four stages theory in the *Wealth of Nations* in the form of: "ages and nations" (8-9, p. 11; I.viii.41, p. 99; III.i.2, p. 377; III.ii.9, p. 387; IV 2, p. 428; IV.vii.a.19, p. 563; IV.vii.b.55, p. 587; V.i.f.38, p. 774), "rude(st)", "advanced", "civilized", "commercial", (and "every") "state of society" (I.i.4, p. 15; I.vi.1-3, p. 65; I.x.b.3, p. 117-8; I.xi.e.28, p. 206; I.xi.m.7, p. 247; II.1, p. 276; V.i.a.2-3, p. 689-90; V.i.a.6,

It is significant to note, in this respect, that the *Wealth of Nations*, according to Millar, as reported by Stewart, actually grew out of the same lectures on moral philosophy as the *Theory of Moral Sentiments* and the *Lectures on Jurisprudence*. The first of the four parts of those lectures was, Millar reports, devoted to theology, the second contained the material of *Theory of Moral Sentiments*, the third, as cited above, was made up of the contents of *Lectures on Jurisprudence*, and the fourth comprised the germs of the *Wealth of Nations* (Stewart II.18-20, p. 274-5). And for anyone who would doubt whether Smith may not have given up this line of enquiry (i.e. the four stages theory as frame of analysis) at some point in his career, one of the last of Smith's works, which he had been working on late in life and left to be published after his death (Ross 2010, p. xxx, 91; introduction to EPS), the essay *On the Imitative Arts*, contains, too, a comparison of savage and civilised nations (in part II, starting EPS p. 187) as does indeed part VI of *Theory of Moral Sentiments*, written after *Wealth of Nations*. This theme, and its corresponding language of barbarism and civilisation, is so ubiquitous in Smith's entire work, including the *Wealth of Nations*, in fact, that the question must be, not so much why this theme was in recent decades given renewed attention, but why it was so utterly neglected for so long by the large majority of Smith scholars. It is with this question that the following section is principally concerned. Before turning to this theme, however, some further observations must be made on the four stages theory and the *Wealth of Nations*.

According to Samuel Hollander, as far as *Wealth of Nations* is concerned, the statements by Stewart and by Smith himself on the importance of the (conjectural) historical investigation in Smith's work, discussed in the introduction of the present chapter and at the beginning of this section, only apply to "particular sections of Books III and V".<sup>39</sup> Thus, Hollander held, "Smith's main object in the

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p. 692; V.i.a.8-11, p. 694-5; V.iii.1, p. 907; V.iii.5-9, p. 910-1), "barbarous (and uncivilized) state" / "nation(s)" / "countr-y/ies" (I.iii.3, p. 34; I.iii.8, p. 36; I.ix.16, p. 112; I.xi.c.4, p. 178; I.xi.c.6, p. 180; I.xi.m.7, p. 247; I.xi.m.11, p. 250; I.xi.n.3, p. 257; III.iv.24, p. 427; IV.vii.2, p. 556; IV.vii.b.2, p. 564-5; IV.vii.b.4, p. 567; IV.vii.c.100, p. 634; V.i.a.35-44, p. 703-8; V.i.b.5, p. 711; V.i.b.15, p. 717; V.i.e.2, p. 731; V.i.e.29-30, p. 754; V.i.f.20, p. 765; V.i.f.40, p. 776; V.i.f.51, p. 782-3; V.ii.k.20, p. 878), "civilized (and thriving) nation(s)" / "societ-y/ies" / "countr-y/ies" (4, p. 10; I.i.11, p. 22-3; I.ii.2, p. 26; I.iii.5, p. 34; I.iii.8, p. 36; I.iv.11, p. 44; I.vi.24, p. 71; I.viii.39, p. 97; I.xi.d.3, p. 194; I.xi.g.26, p. 221; I.xi.n.3, p. 257; I.xi.p.7, p. 265; III.i.1, p. 376; III.iii.15, p. 407; IV.i.33, p. 448; IV.v.b.4, p. 525; IV.vii.b.1, p. 564; IV.ix.38, p. 679; V.i.a.5, p. 691; V.i.a.11, p. 695-6; V.i.a.36-40, p. 704-6; V.i.a.44, p. 708; V.i.b.5-7, p. 711-2; V.i.b.19, p. 719; V.i.e.2, p. 731; V.i.f.50-4, p. 782-5; V.i.f.61, p. 788; V.i.g.10, p. 794; V.ii.a.16-21, p. 822-4; V.ii.e.8, p. 843), "ages of society" (I.iv.3, p. 38; V.i.a.10, p. 695), "stages of improvement" (I.xi.e.27-28, p. 206).

<sup>39</sup> Clark (2008, p. 144) holds, by contrast, that "The fourth Book, likewise, is conceived as a further broadening of the historical analysis of Book three".

*Wealth of Nations* was the formulation of a reform programme on the basis of an analytical model of the operation of a capitalist exchange economy” and “The historical analysis is best viewed as a digression” (1998 [1976], p. 87-8). Let alone the anachronism of claiming Smith’s 18<sup>th</sup> century writings to be primarily concerned with “a competitive capitalist exchange economy”, this refusal to concede to Smith’s comparative historical analysis an actual relevance in the *Wealth of Nations* led Hollander notably to espouse the view — reminiscent of proponents of the Umschwungstheorie, but equally typical of some late 20<sup>th</sup> century readings of Smith, both of which we shall look at in the next section — according to which, in the *Wealth of Nations*, “the proposition that self-interest is the governing motive throughout time and space as far as concerns man in his economic affairs is Smith’s fundamental *axiom*” (ibid., italics in original). In fact, even in the *Wealth of Nations* alone (i.e. disregarding the *Theory of Moral Sentiments*, where many other motives of human behaviour are discussed, including in economic affairs), the self-interested motive as main organisational basis of economic matters is not independent of time and space, but is a specific feature of commercial society, while in hunter and pastor societies, and even in feudalism, economic affairs still rely mainly on personal relationships and ties of submission and dependency. Thus, immediately preceding the most famous statement of the importance of self-interest by Smith (“It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest”), Smith had stated that “In civilised society [man] stands at all times in need of the cooperation and assistance of great multitudes, while his whole life is scarce sufficient to gain the friendship of a few persons. . . . But man has almost constant occasion for the help of his brethren, and it is in vain for him to expect it from their benevolence only” (WN I.ii.2, p. 26). The key phrase here is “in civilised society”. In savage society, indeed, man is not in need of the assistance of great multitudes, but only of the relatively few members of his tribe, whom he is closely related to and has other ways to deal with, including in ‘economic affairs’, than through self-interest alone.<sup>40</sup> The contrast Smith here draws between savage societies and civilised nations, far from being a digression, is precisely the means by which he illustrates how advanced countries, despite greater inequality in wealth, can achieve greater material well-being even for the poorest members of society than savage nations.<sup>41</sup>

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<sup>40</sup> See further on this p. 176-178 in the next chapter.

<sup>41</sup> See on this notably Hont and Ignatieff (1983). The characteristic statement is made by Smith in the last paragraph of the first chapter of the *Wealth of Nations* (p. 23-4).

It is true that references in *Wealth of Nations* to the four stages theory proper are for the most part of a rather implicit nature. Although Smith opens nearly every book of *Wealth of Nations* with a consideration of the “early” or “rude” stage of society (see above p. 90), which sufficiently shows the importance of this general frame of analysis for the *Wealth of Nations*, Smith here always only *refers* to the four stages framework.<sup>42</sup> He never *explains* it or even *presents* it in full. The closest we come to a full exposition by Smith of this theory is in Book V, but even here it lacks the detailed description that it was given in Smith’s lectures. And while the four stages theory is never laid out in full in the *Wealth of Nations*, neither is the passage of stages explained by the mechanism characteristic of the theory.<sup>43</sup> In fact, neither is this mechanism outlined in the set of lecture notes published by Cannan in 1896, which were hence available to the academic and wider public for the whole of the 20<sup>th</sup> century. It is only in the set of lecture notes on jurisprudence first published in 1978 that the causal mechanism behind the passage of stages as we can find it in typical accounts of the four stages theory, some of which we shall examine in Section 6 below, is clearly explained. Smith’s explanation of how nations pass from one to the next of the four institutional and economic stages, i.e. by population growth pressing on the means of subsistence and thus prompting technological revolutions, was thus not available to the public in its fully formulated form before the publication of the second set of notes on Smith’s jurisprudence lectures in the Glasgow edition.

The explanation of the development of society from savagery to civilisation through the joint progression of population, division of labour and capital accumulation, on the other hand, already fully present in the lectures,<sup>44</sup> was in fact laid out in great detail in the *Wealth of Nations*.<sup>45</sup> Hollander (1998 [1976], p. 87-9) held that the “analytical model” explaining the growth and development of society in the *Wealth of Nations* was clearly distinct from the approach of the “Scottish Historical School”. But Smith’s explanation of development in the four stages theory (by population growth pushing on subsistence and inducing technological development) and the explanation of development in the *Wealth of Nations*

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<sup>42</sup> An extensive list of such references is given in n. 38, p. 86 above.

<sup>43</sup> As noted by Hollander (1998 [1976], p. 89).

<sup>44</sup> The contentious question of the presence and role of capital accumulation in the *Lectures of Jurisprudence* is addressed in fn. 46 below, and more largely in Chapter 3.

<sup>45</sup> For a famous exposition of the assessment that the central question of the *Wealth of Nations*, to which the theory of productivity growth through division of labour is the answer, is the differential material well-being of savages and the poor in commercial society, see Hont and Ignatieff (1983).

(through expanding markets, capital accumulation and division of labour) are complementary features of the same theory, which to a large extent is already present in the *Lectures of Jurisprudence*. Where the *Wealth of Nations* and the *Lectures* overlap in their explanation of the development process, there is no clash, as Hollander (1998 [1976], p. 88) himself observes. Where elements are missing in one or the other instance, they can easily be integrated in the general framework.<sup>46</sup> As we shall see, population growth as a moving force is one notable connecting element of the explanation of development in the *Lectures of Jurisprudence* and the *Wealth of Nations* (and, insofar as that work deals with this theme, the *Theory of Moral Sentiments*).

It is very clear in the second set of lecture notes on jurisprudence, not only how the passage from stage to stage unfolds, but also what is the underlying causal element. It is the growth of population which progressively creates shortages, by exerting pressure on the local ecosystem, hence forcing society to adopt a new technology of subsistence. Hence population pressure creates problems, but it is these problems which, by calling for solutions, lead society to higher stages of evolution. This also involves the progress of division of labour and exchange, the accumulation of stock, the introduction of laws and government, the introduction of private property and economic (and social and political) inequality (social classes). All these elements are present and important in the *Wealth of Nations* too. Smith there also links them to the different stages, in the same way as in the lectures.<sup>47</sup>

We could take the fact that Smith does not clearly outline the four stages theory in the *Wealth of Nations* as a sign for a distancing by him from this theme in

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<sup>46</sup> The most notable absence in the lectures when compared with the *Wealth of Nations* (the only true innovation in the *Wealth of Nations* in this respect, but which is not essential to the theory of development as already present in the *Lectures of Jurisprudence*) is the notion of productive and unproductive labour, which was very likely an inspiration from the Physiocrats upon Smith's visit to France. Smith tied this to his theory of the differential productivity of different employments of capital, and through that to his theory of the natural progress of opulence — but the latter may also be derived, in fact, and perhaps more naturally so, from the sequence of development outlined by the four stages theory. The importance of the accumulation of capital (or stock) for the development of the division of labour is also often today still ascribed to Smith's contact with French thinking (an enduring influence of the "Umschwungstheorie", which we shall look at in the following section). This feature of Smith's thinking was, however, already fully present in the lectures on jurisprudence as well as in the 'Early Draft'. See especially LJ(B) 286, p. 521; and further LJ(A) vi.35, p. 344; vi.38, p. 345; vi.93-4, p. 365; vi.127-30, p. 377-8; vi.138-57, p. 382-9; LJ(B) 140, p. 454; 233, p. 498; 244-70, p. 504-15; 282-326, p. 519-38; ED 35-37, p. 576-7; 41-3, p. 577-9; 45-6, p. 580.

<sup>47</sup> Details of presentation of course sometimes vary, as do the purposes for which Smith invokes elements of the four stages theory at different instances. See on this Okan (2016).



his second major published work.<sup>48</sup> But his constant references to it throughout, in connection with a wide variety of subjects, makes this an unlikely possibility. It is more likely that Smith considered the theory so well known, at the moment of the book's writing, that explicit references to it were not necessary. With this supposition, I am not formulating some esoteric claim about what Smith *really* meant, as opposed to what he actually wrote in the *Wealth of Nations*. Rather, I am following, first, what Smith himself stated to have been his intention, and what he considered at least the partial fulfilment of it by the publication of the *Wealth of Nations*, in the last paragraph of the *Theory of Moral Sentiments* and the Advertisement to the sixth edition of the latter work, respectively, both referred to above, as well as in his correspondence (see a letter to Rochefoucauld, 1<sup>st</sup> November 1785, in Corr., p. 287); second, I am relying on the accounts of Stewart and Millar of the origin of the *Wealth of Nations* in Smith's teachings on jurisprudence, and of the central place of conjectural history therein, also referred to above; finally, I am drawing on the historical investigation by Meek, showing a very widespread use and knowledge of the four stages theory in the second half of the 18<sup>th</sup> century (Meek 1976b, p. 177-230). The accounts by Smith himself and by Stewart and Millar show that Smith's jurisprudential theories (in which the four stages theory clearly has a central position) always formed, and were always conceived by Smith, as an important part of an integrated whole. And Meek's work allows one to conclude that references to the four stages theory, at the time of the publication of the *Wealth of Nations*, did not need to be very explicit to be understood. Yet, only a few decades later (after Smith's death), this was no longer the case, and the indefinite references Smith makes to this theory in the *Wealth of Nations* were for the most part indecipherable for 19<sup>th</sup> and still more so for 20<sup>th</sup> century readers. Thus the explanation of development in the *Wealth of Nations*, to the effect that the progress of society is spurred by the division of labour, which depends on the extension of the market and the accumulation of capital, ceased to be read as a theory of socio-cultural evolution along four-stages-theory lines. We shall at present explore possible reasons for this.

#### **4. The dichotomy view of Smith and the neglect of the historical dimension of the *Wealth of Nations***

The informed contemporary scholar (familiar with the *Lectures of Jurisprudence*) can easily discern the four stages at the different instances of their mention in

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<sup>48</sup> This is the position taken by Hollander (1998 [1976]).

*Wealth of Nations*: the savage and barbarian, i.e. hunting and pastoral stages, frequently compared with civilised, i.e. commercial, society, and the agricultural stage, considered centrally in Book III, with regard to historical Europe, and with regard to contemporary North America throughout. The unsuspecting reader of the 19<sup>th</sup> and 20<sup>th</sup> centuries, not familiar with the wider context of comparative considerations of savagery and civilisation in Enlightenment Europe and the degree to which Smith participated in and was inspired by this debate, would not, however, have been able to properly interpret them.

A particularly striking example of this is Marx, who, in his introduction to *Grundrisse* (a manuscript not meant by Marx to be published, but which eventually was, first in part in 1903) accused both Smith and Ricardo of projecting the modern, individualistic and commercial men of civil society back into the tribal societies of the past through their use of the “isolated hunter” in their theories of value and distribution — the famous “Robinsonades” (Marx 1983 [1903], p. 19).<sup>49</sup> This criticism may be justified for Ricardo, who adopted Smith’s categories without regard for their historical dimension nor awareness of their connection to Smith’s wider theory (and thus he likely contributed to this connection being neglected in subsequent economic thought). In Smith’s case this criticism was entirely unjustified, however, for the image of the hunter is used by Smith precisely within the framework of his (conjectural) historical model, and he explicitly recognised that nations of hunters entertained more communal life-styles (notably the absence of a distinction of ranks and private property), which is indeed why Pascal (1938) and Meek (1954a) saw him as precursor (ironically given Marx’s criticism) to Marx’s historical materialism.<sup>50</sup> The same can be said for Karl Polanyi and others in the 19<sup>th</sup> and 20<sup>th</sup> centuries who repeated Marx’s charge of Smith.<sup>51</sup>

Thus the four stages theory as forming an important part of Adam Smith’s work was largely forgotten in the 19<sup>th</sup> century. A characteristic statement of this oblivion can be found in an 1887 biography of Smith. Speaking of Book V of the *Wealth of Nations*, the biographer remarks how “The portions of this book which deal with the expenses of defence, and of the administration of justice, do not require notice here. They are of a nature largely historical, and there is not much

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<sup>49</sup> Smith may indeed have been inspired by Defoe’s novel, especially in his use of the metaphor of a shipwreck in his exposition of the four stages theory, but see Hont’s remark on this (below p. 102).

<sup>50</sup> For textual examination of this see below p. 148.

<sup>51</sup> Concerning Polanyi, see in this regard n. 39 on p. 194 in the next chapter.

that is specially characteristic of their author in them.” (Haldane 1887, p. 134).<sup>52</sup> The part relegated to insignificance and described as uncharacteristic of Smith in this statement is precisely the part of the *Wealth of Nations* where we come closest to a full exposition by Smith of the four stages theory, and where most prolonged use is made of it. As Duncan Forbes remarked, and as we have seen in the previous section, Haldane was wrong in seeing this part of Smith’s work as uncharacteristic of him. Not only did this line of enquiry occupy Smith throughout his life, as Stewart noted, but it can properly be regarded as “the historical frame of reference of the *Wealth of Nations*” (Forbes 1954, p. 648). But it is only in the late 20<sup>th</sup> century that the central place of the four stages theory and conjectural history in general in Smith’s work as a whole was rediscovered (Hont 2010, p. 101-2). Apart from the non-availability of a large part of the material from Smith’s lectures throughout the 19<sup>th</sup> century, this relative oblivion can only properly be understood in connection with the history of Smith’s reception and Smith-scholarship and the development of economics in relation to the other social sciences (these two being linked, insofar as Smith scholarship has been for the greater part of the 19<sup>th</sup> and 20<sup>th</sup> centuries the work of historians of economic thought, who themselves were generally economists).

In the late 19<sup>th</sup> century an influential view in Smith scholarship was the one of “das Adam Smith Problem”, first suggested by Knies (1853) and formulated in its full version by Skarziński (1878), that saw the *Theory of Moral Sentiments* and the *Wealth of Nations* as contradictory and as such the whole of Smith’s work as being disjointed and not being a coherent whole.<sup>53</sup> It was claimed that Smith had abandoned his earlier views of human nature and human conduct based on sympathy, as formulated in the *Theory of Moral Sentiments*, and espoused instead a view based on self-interest in the *Wealth of Nations*, which was attributed to his exposure to the views of Helvétius and Holbach during his sojourn in France (what came to be known as the “Umschwungstheorie”). The Adam Smith Problem had itself grown out of earlier charges against Smith — and the “Smithianismus” of the “Smith’sche Schule” — formulated by authors in Germany. Müller (1809, 1983 [1809]), List (1910 [1841]), and Hildebrand (1848) had attacked, from different angles, Smith’s “cosmopolitanism”, excessive rationalism (while Smith was in fact,

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<sup>52</sup> The biography in question is not one that has become a reference. It received a scathing review in the *Spectator* the same year (“Haldane’s Life of Adam Smith” 1887). But, maybe precisely by virtue of being a rather mediocre sample of writings on Smith of the period, it is reflective of economists’ views of the philosopher at that moment in time.

<sup>53</sup> For a summary of the nature and genesis of Das Adam Smith Problem, see D. D. Raphael and A. L. Macfie’s introduction to *Theory of Moral Sentiments* (p. 22-5). For a more thorough treatment see Montes (2003a, p. 64-78).

with Hume, a critic of rationalist thought), his individualism, and his purported universal laws without regard to historical and geographical particularities.<sup>54</sup>

These accusations have to be seen in historical context. While Müller, at the beginning of the 19<sup>th</sup> century, was writing in a German-speaking milieu still largely favourable to Smith, this had changed considerably two decades later. There was an economic basis for the attack on Smith's "cosmopolitanism", lying in the belief that, counter to Smith's views, underdeveloped countries needed to protect their nascent national industries — i.e. the infant industry argument, for which List remains famous to this day, and to which Smith was hostile, although not without nuance.<sup>55</sup> The more general context, however, was the one of a growing German national sentiment in an era when Germans were as yet only a collection of people sharing a common language and culture (abstracting from the large variability of local dialects and customs) without a unitary state. The Napoleonic wars had displayed to the rest of Europe the might of the French nation-state, to which neighbouring Germans, politically divided, felt vulnerable, and Britain, which also was a nation-state (of sorts) with considerable power, was viewed with a mix of envy and suspicion.<sup>56</sup> The consolidation of a German national identity relied at least in part on the singling-out of what was particular to Germany and Germans (culturally and linguistically, as no political union existed) as distinct from other countries and people (an exclusionary attitude which would escalate in a very ugly manner in the second quarter of the twentieth century), which can explain part of the attack of what was viewed as Smith's cosmopolitanism. The universalist Enlightenment rhetoric from Britain and especially from France (the *Wealth of Nations* was — not coincidentally — linked to French thought by the theoreticians of "das Adam Smith Problem") was viewed with cynicism outside France, as

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<sup>54</sup> Ironically, as in Marx's case, List's own stadial theory of development (which he necessarily developed without knowing Smith's lectures) in fact resembled the one of Smith closely.

<sup>55</sup> Smith pondered and rejected the logic of the infant industry argument in the absolute (WN IV.ii.13-4, p. 458; IV.ix.26, p. 672). He did recognise that poor countries may never have been able to build ships and trade without some temporary monopoly (IV.vii.c.95, p. 632). But this, Smith thought, would in fact have been better for them at this stage of development. He also considered that traders should be granted a temporary monopoly for beginning particularly hazardous trades. But this concerned traders in civilised countries for enterprises in barbarous ones, which can only by a large stretch be made out to be an argument for industry protection (V.i.e.30, p. 754-5).

<sup>56</sup> Social conditions of the English working classes in the first decades of sustained industrialisation in England were watched with wariness in the still largely agrarian German countries.

universalism in Napoleonic times meant universalism under French rule.<sup>57</sup> Equally importantly, Smith's advocacy of the non-interference of the state in economic affairs was viewed as a call for the retreat of the state from political affairs in general, which did not square well with the preoccupations of German intellectuals at the time, concerned first and foremost with *bringing about* the German nation-state in the first place. In the midst of this desire to create an as yet non-existent German nation-state, strong and pro-active institutions related to statehood, able to take on national affairs, including of an economic nature, were called for and idealised.

It is in this context that the accusation of Smith as representing a British viewpoint and British interests must be viewed (while the simultaneous charge of his cosmopolitanism may seem contradictory): whereas the British, who already possessed a strong nation-state could afford to be cosmopolitan and to reduce the involvement of the state in economic matters, it was argued, this attitude was unsuitable for the Germans, who were yet to create their strong state, and thus the advocacy of a universal cosmopolitanism (or free trade) would work for Britain but against the Germans. This attitude to the national question and hostility to "cosmopolitan views" in mid-19<sup>th</sup> century Germany spanned the entire political spectrum.<sup>58</sup> Müller, List, and Hildebrand differed in the degree of their nationalist fervour, but all espoused this outlook (List aimed for an eventual cosmopolitanism, but with stronger individual nations<sup>59</sup>).

The Adam Smith Problem was effectively challenged at the end of the 19<sup>th</sup> century, especially with Edwin Cannan's publication of the first set of lecture notes on jurisprudence, which corroborated the view of the unity of Smith's work as presented by Millar and Stewart, notably by showing that the views contained in the *Wealth of Nations* were all present in Smith's thought in rather well-developed form before his departure to France. The "Problem" still continued to be an influential view, though one more seldom discussed. The rediscovery of a second set of lecture notes on jurisprudence in the mid-20<sup>th</sup> century gave still more support to the coherence view. The second set of notes also brought out more clearly the central place of what Stewart had termed conjectural history in Smith's

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<sup>57</sup> The intellectual mood in 19<sup>th</sup> century German, between the rejection of modernity, associated with French imperialism, and exultation of *Kultur* and *Volk*, is well captured in a just published book by Pankaj Mishra (2017; see especially p. 18 and 45).

<sup>58</sup> For a good account of the reception of Smith in this German context of the time, see Gottfried (1977).

<sup>59</sup> Celebrated by the Nazis as an original theoretician of "Germanhood", List was invoked too as inspiration for the European Union, for his advocacy of the German Zollverein (Tribe 1995, p. 32-7).

works as a whole, some passages in the *Lectures on Jurisprudence* (both sets of notes) resembling so much certain passages in the *Wealth of Nations* that it is very difficult to maintain that these two are works which deal with totally different subjects and should be seen as distinct, both in the theory they lay out and the theoretical framework they rely on. As Hont (2010, p. 101-2) put it: “Once the student notes revealed the precise shape of Smith’s four-stages theory and its surprisingly central use in his Glasgow lectures, its submerged presence in the *Wealth of Nations* also became clear.” With the late-20<sup>th</sup> century publication of the Glasgow edition, in which a never before available breadth of Smith’s work was presented in a coherent way, the “Problem” view was thus finally widely discarded among historians of thought, although it continued to live on in non-specialists’ views of Smith (and continued to spark new debates among specialists too; see Montes (2003a, p. 78-82) for a review).

The remembrance of the importance of the four stages theory for Smith’s work as a whole since the 1970s we owe in no small part to Ronald Meek. Meek’s *Social Science and the Ignoble Savage* (Meek 1976) is a foundational study of the emergence, shape and scope as well as the overall importance of this theory in the Scottish Enlightenment debate about progress and human nature. This study was published the same year as the bicentenary edition of *Wealth of Nations*, of which Meek was also initially one of the editors, together with Andrew Skinner and Roy Campbell (although Meek later resigned from this position to concentrate on editing the *Lectures of Jurisprudence* (Skinner & Brown 2008, p. 212)). Thus, besides remaining an advisory member of the editorial board of *Wealth of Nations*, Ronald Meek, appropriately, became the main editor<sup>60</sup> of the volume of the Glasgow edition of Smith’s works entitled *Lectures of Jurisprudence* (the name by which these lectures are since universally referred to), in which the four stages theory takes centre stage — and especially so in the more extensive lecture notes that form the first and larger part of the volume, discovered only in the mid-twentieth century, and published (and extensively formatted and annotated to render them in readable print form) for the first (and still only) time in this edition. In the Glasgow edition of *Wealth of Nations*, the link between the ideas expressed by Smith therein and the ones contained in his earlier writings (as well as in works of other authors contemporary and anterior to Smith) is continuously drawn by the editors through cross-references in the footnotes. It thus becomes much more apparent when reading Smith’s work as a whole in the Glasgow edition that there is coherence and that there is a commonly shared structure and a paradigmatic

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<sup>60</sup> As the two other editors, D. D. Raphael and P. G. Stein “wish[ed] it to be known”, the “main part of the editorial burden” of the volume was carried by Meek (LJ, p. 43).

framework that runs through all of Smith's work. This concerns the moral and economic dimensions of Smith work as much as the 'conjectural-historical' one.<sup>61</sup>

However, there was also in the 20<sup>th</sup> century an important movement in economics, epitomised by the "Chicago school", taking on more and more influence on the discipline towards the end of the century, which came to represent Smith solely in a narrowly economic way, and once again separated his economic ideas from his moral ideas (Winch 1997 ; Evensky 2005).<sup>62</sup> In the late 19<sup>th</sup> and early 20<sup>th</sup> century, German universities were seen in America as a model to emulate and German was widely spoken by American scholars, many of whom were educated in Germany. Many "anti-cosmopolitan" ideas (nationalistic and protectionist) were earlier developed in conjunction in Germany and the US, in similar economic and political contexts (the common goal being to build a strong national economy in the shadow of Britain) notably by Hamilton and List. By the same channels, the charges by the German scholars against Smith were likely imported into the US. The dominant (in the 1920s) American institutionalist school of economics (Rutherford 2000) was inspired by the German Historical School. Richard T. Ely — under whom both Commons and Veblen, generally considered the two central figures of American Institutionalism, had studied — had himself studied under Karl Knies,

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<sup>61</sup> It is generally considered that the Glasgow edition put the nail in the coffin of the Adam Smith Problem, at least as far as Smith scholarship proper is concerned (the "problem" has survived in economics and the social sciences more generally as Dixon and Wilson (2014) elaborate on). In the introduction to the Glasgow edition of the *Theory of Moral Sentiments*, the editors Raphael and Macfie note: "the so called 'Adam Smith problem' was a pseudo-problem based on ignorance and misunderstanding. Anybody who reads *The Theory of Moral Sentiments*, first in one of the earlier editions and then in edition six, will not have the slightest inclination to be puzzled that the same man wrote this book and *The Wealth of Nations*, nor to suppose that he underwent any radical change of view about human conduct." (TMS, p. 20). Hont describes the two works as parts of the same intellectual project: "Smith had a consuming interest in both the domestic and external, moral, and economic patterns of competition, and his analysis of all these aspects contributed equally to his theory of commercial society. Economic competition was the subject matter of the *Wealth of Nations*, whereas the artificial morality of commercial man was the central theme of the *Theory of Moral Sentiments*. The two books together provide a complete analysis of market behavior. In these works, Smith merged and reworked insights that were first adumbrated by Pufendorf, Nicole, and other French moralists." (Hont 2010, p. 50-1)

<sup>62</sup> On the Chicago School, see the volume edited by Emmett (2010). In a contribution to the volume dealing specifically with the reading of Smith, Steven Medema (2010) observes some differences between the earlier (Viner, Knight) and later (Becker, Stigler) members of the Chicago School with regard to the narrowly economic reading of Smith, though not with regard to the purported divorce of the *Wealth of Nations* from Smith's earlier work.

who first suggested the Umschwungstheorie.<sup>63</sup> In line with the dichotomy view developed in Germany, Commons (1931, p. 650) would claim that Smith isolated economics from jurisprudence and ethics (while Smith in fact taught both of the latter, and what is today considered his economic work originated in his jurisprudence lectures), and described Institutional economics as breaking with the *Wealth of Nations* by reintegrating these dimensions.

Jacob Viner, one of the initiators of the Chicago School, in his famous article on “Smith and Laissez-Faire” fully embraced the “Adam Smith Problem”, holding that Smith was unaware of the fundamental contradiction in his philosophy and claiming furthermore that the extensive additions to the *Theory of Moral Sentiments* Smith engaged in towards the end of his life were made at a time Smith was “elderly and unwell” and “had lost the capacity to make drastic changes in his philosophy” (1927, p. 217).<sup>64</sup> But Viner went further than the original Adam Smith Problem — at the same time inverting the value-judgment — by not only holding that “there are divergences between them [the *Wealth of Nations* and the *Theory of Moral Sentiments*] which are impossible of reconciliation”, but that “the *Wealth of Nations* was a better book because of its partial breach with the *Theory of Moral Sentiments*” (Viner 1927, p. 201).<sup>65</sup> Viner is echoed by Stigler, writing that “Smith’s professional work on psychology (in the *Theory of Moral Sentiments*) bears scarcely any relationship to his economics” (1960, p. 44) but that (as far as his economic work is concerned) “the correct way to read Adam Smith is the correct way to read the forthcoming issues of a professional [economics] journal” (1969, p. 221).<sup>66</sup> The new restrictive self-conception by economists of what their discipline is and should be about was thus applied to the way the 18<sup>th</sup> century moral philosopher Adam Smith should be read. In this representation of Smith as 20<sup>th</sup> century economist it was claimed that Smith’s economic ideas *could* legitimately be

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<sup>63</sup> The link between American Institutionalism and the German Historical School (and in particular Knies) was underlined by both Ely and John Maurice Clark, the latter also having studied under Knies (Kiekhofner et al. 1932).

<sup>64</sup> It is not clear why Oslington (2012, p. 289) believes that Viner suggested “that while there are differences between the two books, they are part of a larger and consistent system”, especially as Oslington’s ensuing explanations seem to rather suggest the opposite. His documentation of Viner’s distancing himself from his earlier dichotomy view later in life is more convincing.

<sup>65</sup> It may be worth mentioning that Viner wrote his dissertation under Frank Taussig in Harvard, and Taussig, himself of German origin, had studied political economy in Berlin for a semester in 1879 (Schumpeter, Cole, & Mason 1941, p. 340), just after the publication of Skarżyński’s (1878) book in which the Umschwungstheorie was developed at length.

<sup>66</sup> For more examples reflective of this view from Stigler and others see Montes (2003a, p. 66).



divorced from the rest of his work, with its many non-economic dimensions, which, according to this representation, in any case played only a subsidiary and non-essential role in his 'economic work': the *Wealth of Nations*.

The disjointed (and flawed) 19<sup>th</sup> century reading of Smith, developed mostly in Germany, thus got imported into the United States, which in the 20<sup>th</sup> century gradually became the new centre of gravity of the economics discipline. But while the 19<sup>th</sup> century German scholars, in formulating "das Adam Smith Problem", saw the claimed divorce of Smith's economic ideas from his moral theory as a problem and a contradiction in Smith, which they criticised, a large part of the economics profession of the late 20<sup>th</sup> century on the contrary took pride in this divorce, taking it as a ground on which to entirely discard the moral and other dimensions of Smith's work (doing the same for economics in general). Smith was hence now praised, very much in spite of himself, just as he had before been criticised, for conceiving of economic mechanisms without regard to moral and other aspects and for apparently discovering economic truth independently of moral philosophy. Thus late 20<sup>th</sup> century economists, while implicitly accepting the content of "das Adam Smith Problem", no longer considered it as a problem. Smith's moral ideas, and as a corollary also his historical ideas, in fact much everything in Smith that could not be conceived of in a narrowly economic way (whereby "economic" itself here denotes the narrow way of conceiving of economics that had become the norm in modern mainstream economics), was disregarded, and the absence of moral considerations in this narrowly economic reading of Smith (entirely an effect of this reading, and thereby of the disregard by modern economists of the moral, historical, etc. dimensions of Smith's thought, and in no way a real absence of these considerations on the part of Smith himself) was now praised rather than criticised.<sup>67</sup>

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<sup>67</sup> For a detailed examination of the pervasiveness of the "dichotomy view" of Smith represented by the Adam Smith Problem in the 20<sup>th</sup> century, see Dixon and Wilson (2014). It may be remarked that, while the meaning of political economy, now having become 'economics', itself had been very much narrowed down (as compared to the 'classical' period when it reached out to all domains of what are today called the social sciences), notably by Lionel Robbins's definition, restraining the discipline of economics to considerations of the allocation of limited means to unlimited wants, and later by Gary Becker's and Theodore Schultz's "economic perspective", denoting a rational way of decision making aimed at maximising individual well-being, these latter authors, and especially Becker, in turn started applying this "economic perspective" to domains that were not anymore regarded as "economic" in this narrow perspective: e.g. Becker's "Economics of discrimination" and his "Economics of the Family", launching the "New Home Economics", in concert with Schultz's considerations on "Human Capital", and Coase's offshoot into contract and legal theory, founding the "Law and Economics" school among others. Yet this movement, generally described by critics within and without economics as "Economics Imperialism" was in fact only reclaiming territory that had been

That the view that Smith's "economics" can without difficulty be separated from other parts of his work garnered widespread acceptance in the 20<sup>th</sup> century, at least until the publication of the Glasgow edition, can also be traced through the shortened editions of the *Wealth of Nations* being published throughout the 20<sup>th</sup> century, with the parts seen as non-economic often being omitted, and thus becoming less and less known by economists, at the time the primary readers of the work. This is true also of the crucial historical (or 'conjectural-historical') dimension of Smith's work, as exemplified by the remarks on Smith's conjectural history, a century apart, of Haldane (cited above p. 96) and Hollander, according to whom Smith's historical theory, in the *Wealth of Nations*, was a mere "scaffolding" adduced to his economic theory, and non-essential for the interpretation of the latter (Hollander 1998 [1976], p. 94). In this narrowly economic perspective, then, which was the predominant one in the latter part of the 20<sup>th</sup> century, at least among economists, the historical development theory of Smith was recognised as being of central importance neither by economists nor by a significant part of historians of economic thought.

In the preceding section, the various references that Smith makes to societies in the four different stages of development throughout the entirety of his oeuvre were laid out, leaving little doubt that this was an essential theme in Smith's work as a whole. The accounts of Stewart and Millar both establish that the theme of conjectural history was a crucial part of Smith's teaching and research, and that it was inseparably bound up with the rest of his work, which was always conceived as a coherent whole. We next looked at the possible reasons for the oblivion of this important theme in Smith's work. It was suggested that the Adam Smith Problem — started in Germany in a particular cultural and political context, but which implanted the idea of a dichotomy between the two of Smith's major works, and by that token of an incoherence in his work more generally, on a wider scale — was complemented in the late 20<sup>th</sup> century by the reading of Smith by an economics discipline which, inverting the argument of the German scholars of the 19<sup>th</sup> century, took pride in the severance of economics from moral and historical elements. The idea that Smith was either contradicting himself, or that his earlier ideas did not matter for his later ones (the difference is a mere change of emphasis) thus lived on. Since the publication of the Glasgow edition, the various not strictly economic aspects of Smith's work have received more attention from

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abandoned by the new restrictive definition of the discipline, but by applying a particular methodology (and, quite ironically, a particular, and particularly reductive, *psychological* theory of human behaviour) to which the discipline had been reduced by this restrictive definition.

the part of historians of thought, although most economists continue (maybe not surprisingly) to view Smith's work mainly in economic terms. The four stages theory, although it is certainly not an exclusively economic theory, having emerged from considerations of law and governance, includes economic aspects which are of crucial importance for Smith's economic theory.

We shall now look more closely at the four stages theory as presented by Smith, first in its complete version in the lectures, then in partial form in several of Smith's works (these parts being more easily recognisable as elements of the theory when the theory as a whole is familiar), with the particular objective of outlining the role of population therein. We will examine in Section 6 how the same structure and causal system is at work in several other authors' work, illustrating the commonly established causal role of population in conjectural history, before looking at the adoption but diversion of the theory by Malthus in the last section.

## **5. Smith's conjectural history of population and development**

The most complete account of the four stages theory given by Smith that we have a written trace of is in the set of notes on Smith's jurisprudence lectures discovered in the mid-20<sup>th</sup> century by John Lothian and first published in the Glasgow edition of Smith's works.<sup>68</sup> It will be apposite, therefore, to start with a consideration of this account, before looking at elements of the four stages theory throughout the rest of (the known part of) Smith's oeuvre. In the Lothian notes, the passages where Smith presents the four stages (as most corresponding passages in that set of notes) are indeed much longer and more elaborate than the corresponding passage in the Cannan notes, and this is of particular importance for the subject under consideration, namely the role of population in the four stages theory. Smith starts his exposition of the four stages in the Lothian notes by listing the distinct stages that "mankind" passes through:

There are four distinct states which mankind pass thro :— 1<sup>st</sup>, the Age of Hunters ; 2<sup>dly</sup>, the Age of Shepherds ; 3<sup>dly</sup>, the Age of Agriculture ; and 4<sup>thly</sup>, the Age of Commerce.

If we should suppose 10 or 12 persons of different sexes settled in an uninhabited island, the first method they would fall upon for their

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<sup>68</sup> See p. 60 above for a description of the various documents contained in the *Lectures on Jurisprudence* Glasgow volume and the way they are referred to in the text and in the footnotes in the present work.

sustenance would be to support themselves by the wild fruits and wild animals which the country afforded. Their sole business would be hunting the wild beasts or catching the fishes. . . . This is the age of hunters. (LJ(A) i.27, p. 14)

Istvan Hont (2010, p. 172) noted that the image of “castaways on an uninhabited island” (in the Cannan notes, as we shall see shortly, Smith is reported to have specifically spoken of “shipwrecked”) was commonly used as metaphors for the fictional “state of nature”, as they were by Samuel Pufendorf. Smith was here describing a fictional original state of mankind, used as theoretical device (he begins his account with the words “If we should suppose”).<sup>69</sup> It is after this description of the initial stage that population growth as causal element in the progression of stages is introduced:

In process of time, *as their numbers multiplied*, they would find the chase too precarious for their support. They would be *necessitated* to contrive some other method whereby to support themselves. . . . The contrivance they would most naturally think of, would be to tame some of those wild animals they caught, and by affording them better food than what they could get elsewhere they would induce them to continue about their land themselves and multiply their kind. Hence would arise the age of shepherds. (LJ(A) i.28, p. 14)

The italicised parts in this quotation are of central importance for the way the passage of stages was explained, not only in Adam Smith’s account, but also in the corresponding descriptions by other authors making use of this theory, whom we shall look at in the next section: that “necessity is the mother of invention”; and that this necessity is created by a shortage occasioned by the growth of population. The growth of population is described as the prime mover, with the necessity or want it creates being the element that will set into motion a technological revolution. Thus, growth of population creates a shortage. Up to a certain size of population a people can hunt wild animals without having too much of an incidence on the local ecosystem. But once people become more numerous, continuous hunting on the same territory will start to decimate the wild animals, which will gradually decline in numbers. And it will thus be harder and harder for the society, once its members increase, to subsist by this method.

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<sup>69</sup> See Hont for an analysis of Pufendorf’s view that the “state of nature” as conceived by Hobbes was necessarily fictitious, though still useful as a theoretical device when this fictional nature was recognised. This view was echoed by Hume in his *Treatise of Human Nature* (Hume 1888 [1739], p. 493), as we shall examine in more detail in Chapter 3 (p. 224 below).

In the passage from the second to the third stage of society (from the shepherd stage to the agricultural stage), the same mechanism is at work:

They [the shepherds from the end of the previous quote] would more probably begin first by multiplying animals than vegetables, as less skill and observation would be required. . . . But *when a society becomes numerous they would find a difficulty in supporting themselves* by herds and flocks. Then they would *naturally* turn themselves to the cultivation of land and the raising of such plants and trees as produced nourishment fit for them. . . . And by this means they would *gradually* advance in to the age of agriculture. (LJ(A) i.28-31, p. 15)

Here again, it is the growth of population that creates a shortage (“difficulty”). And the discovery and implementation of the new technology of subsistence is introduced. One can see, too, from this quote that, although Smith classified the different ages of society into four definite categories, this was only a simplification, while his full-blown theory was more complex.<sup>70</sup> In fact, society moves “gradually” through these stages, which implies that at any time there may be features of earlier stages still present (or of future ones already present). It seems clear that the four stages are used by Smith as a rough model of the process of societal development, not as a precise account of how human societies have developed. This gradualism plays an important role, too, in the explanation of the move from feudalism to the modern European monarchies (coinciding, from a mode-of-subsistence perspective, with the move from predominantly agricultural to proper commercial societies) described by Smith in Book III of the *Wealth of Nations*.<sup>71</sup> It is important to stress this intentionally reductive nature of the theory, for it is prone to be taken as a classification into which Smith believed all nations, in all ages, to neatly fit or have fitted. But it was above all a model by which to analyse and compare different societies at different levels of development, and with the help of which to understand that development itself, much like Montesquieu’s model of different forms of political regimes was such a tool, while actual political regimes could incorporate elements of different types.<sup>72</sup>

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<sup>70</sup> The same approach can be observed in the treatment of the division of labour in *Wealth of Nations*: Smith first introduces this subject by the intentionally spectacular example of the pin factory, inside a single workhouse, before he widens the subject to the social division of labour at the end of the same chapter, and to regional and international trade in later considerations and throughout the work.

<sup>71</sup> See on this Section 3 in Chapter 3, below p. 236.

<sup>72</sup> In this sense Richter (2006, p. 169) notes that when “Herder convicted Montesquieu of empty abstraction . . . He mistook an ideal-type analysis of political regimes for reductive crudity.”

In Smith's explanation of the passage to the next stage, namely commercial society, we encounter another characteristic element of the four stages theory, and one which to this day remains particularly associated with Smith's name: the introduction of different trades, or, in other words, the division of labour. The division of labour in time evolves to international trade, bringing about the age of commerce:

As society was farther improved, the severall arts, which at first would be exercised by each individual as far as was necessary for his welfare, would be seperated; some persons would cultivate one and others others, as they severally inclined. They would exchange with one an other what they produced more than was necessary for their support, and get in exchange for them the commodities they stood in need of and did not produce themselves. This exchange of commodities extends in time not only betwixt the individualls of the same society but betwixt those of different nations. Thus we send to France our cloths, iron work, and other trinkets and get in exchange their wines. To Spain and Portugall we send our superfluous corn and bring from thence the Spanish and Portuguese wines. Thus at last the age of commerce arises. (LJ(A) i.31-2, p. 15-6)

Population growth is not mentioned here, in the transition to the commercial stage, as a causal element. Smith did not believe that population growth would cease in the course of the agricultural stage. Indications to the contrary abound.<sup>73</sup> Yet it *could* point to the fact that Smith does not see the growth of population as just as much of a necessary condition for the progress of an advanced society as he does see it as the condition for the progress of an as yet primitive one.<sup>74</sup> Indeed, as other elements come to play an increasing role in the development of society, such as division of labour and the accumulation of capital, not present at the outset,

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<sup>73</sup> Numerous associations between population and progress by Smith were observed in the General Introduction (p. 41 and n. 37 above). See also the clear association of these in Smith's famous statement at WN I.viii.23, p.87-8: "But though North America is not yet so rich as England, it is much more thriving, and advancing with much greater rapidity to the further acquisition of riches. The most decisive mark of the prosperity of any country is the increase of the number of its inhabitants. In Great Britain, and most other European countries, they are not supposed to double in less than five hundred years. In the British colonies in North America, it has been found that they double in twenty or five-and-twenty years. Nor in the present times is this increase principally owing to the continual importation of new inhabitants, but to the great multiplication of the species." See further about this quotation p. 118 below.

<sup>74</sup> An explanation of the demographic transition from a 'Smithian' perspective compatible with this interpretation, starting with Smith's observations about the interrelationship between wages, mortality, fertility and wealth, will be attempted in the last chapter.

population becomes just one of many causal factors feeding into the complex interrelationship of components at work in the development process.<sup>75</sup>

The exposition of the four stages theory at the beginning of the Lothian notes that we have hitherto examined is only a relatively brief introduction by Smith to his considerations of law and government, and more particularly of the theme of property, or occupation. After having described all four stages, Smith thus concludes that “It is easy to see that in these severall ages of society, the laws and regulations with regard to property must be very different” (LJ(A) i.32, p. 16). Smith next tells his students that property is introduced in the shepherd state with the ownership of flocks, and theft is there consequently severely punished, whereas it is hardly a misdemeanour in the hunting stage, where no property of any significance exists (i.33)). In the agricultural stage, although theft is no longer so acute a problem, as property progressively diversifies and spreads to a larger part of society, laws must accordingly complexify (i.34). In general, Smith concludes, “The more improved any society is and the greater length the severall means of supporting the inhabitants are carried, the greater will be the number of their laws and regulations necessary to maintain justice, and prevent infringements of the right of property” (i.35). In what follows (i.35-63, p. 16-27), Smith notably discusses the moral and psychological foundations of property, in a language and with allusions in part reminiscent both of *Wealth of Nations* and *Theory of Moral Sentiments* (use is repeatedly made of the impartial spectator (i.36-8, i.42-4)); Smith discusses the doctrines of ancient roman legal theorists (i.39), and cites Tacitus, Homer and Aristotle (i.51-2). And he mentions the “tyranny of the feudal government” (i.54) familiar from Book III of *Wealth of Nations*. In both sets of student notes on Smith’s jurisprudence lectures, in fact, although the order of subjects treated differs considerably,<sup>76</sup> the four stages are presented right at the beginning of his lectures and used as frame of reference continuously throughout.

Although the sequence of subjects treated differs in both sets of notes, the four stages theory is introduced in each case in the context of the laws of occupation. Yet the Cannan notes, which in general treat subjects in a much more summary fashion than the Lothian notes, do not mention the mechanism behind

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<sup>75</sup> This proposition will be developed in the next two chapters and particularly in Chapter 3.

<sup>76</sup> This was the main reason for the editors of *Lectures of Jurisprudence* to attribute the two sets of notes to Smith’s classes of two different academic years. See on this the introduction to LJ, p. 7-8.

the passage of the stages. In the Cannan notes, Smith's account of the four stages is reported thus:

The four stages of society are hunting, pasturage, farming, and commerce. If a number of persons were shipwrecked on a desert island their first sustenance would be from the fruits which the soil naturally produced, and the wild beasts which they could kill. As these could not at all times be sufficient, they come at last to tame some of the wild-beasts that they might always have them at hand. In process of time even these would not be sufficient, and as they saw the earth naturally produce considerable quantities of vegetables of its<sup>77</sup> own accord they would think of cultivating it so that it might produce more of them. Hence agriculture, which requires a good deal of refinement before it could become the prevailing employment of a country. . . . The age of commerce naturally succeeds that of agriculture. As men could now confine themselves to one species of labour, they would naturally exchange the surplus of their own commodity for that of another of which they stood in need. According to these stages occupation must vary. (LJ(B)150, p. 459)

All the elements of the succession of stages are here presented, but no causal explanation is provided. It seems unlikely that Smith's account would have substantially differed in the same class he gave in two successive years. It is of course possible that he did not mention population in this context in his class of the following year (possible reasons are various and familiar to teachers and professors: it may be that he was pressed for time in this particular session, or that he simply forgot — Smith's absentmindedness has indeed often been described as a characteristic trait of his (Stewart II.54, p. 295; Ross 2010, p. 444-5)). But given that a shorter and less detailed account of the various parts of Smith's lectures characterise the Cannan notes as a whole as compared with the Lothian notes, and are not a feature of this particular part of the lectures only, it seems more likely that this element was omitted by the person who took down the notes or later edited them.<sup>78</sup> As a comparison with the corresponding passages in the Lothian

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<sup>77</sup> The editors of *Lectures on Jurisprudence* left this spelled wrongly as "it's".

<sup>78</sup> Meek, Raphael and Stein (the editors of *Lectures on Jurisprudence*) believed the Lothian notes to be a retranscription of shorthand notes from the original lectures (which allows for greater accuracy and a more important capture of what was actually said in the lectures), while the Cannan notes appear to first have been taken down in longhand and to have been quite heavily edited afterwards, as they seem to have been intended for sale, maybe as a summary of Smith's lectures, as was commonly done at the time with lectures of prominent professors. The number of subjects treated, on the other hand, is larger in the Cannan notes, which seem to give an account of all lectures of the corresponding term, while the Lothian notes stop abruptly in the middle of a lecture well before the end of term, as is clearly visible in this case, since the lectures in the Lothian notes are listed and



notes examined above shows, the passage in the Cannan notes is indeed only a short summary of Smith's four stages theory as presented in the Lothian notes. Maybe the student did not deem the element of population growth to be sufficiently important for a summary when he was taking down his notes (or the choice of what to include in his longhand notes — which by the nature of this type of notes cannot be taken down as fast as a professor speaks and hence cannot capture his spoken words in their entirety — was entirely random), or this element was not retained when the notes were rewritten in clear fashion. Whichever the reason, the passage of stages is not explained in the Cannan notes. As a result, Smith scholarship has only been able to address this feature of Smith's theory since 1978 (or a few years earlier for those who had access to the unpublished notes, notably Meek), and comparatively little has been written on the subject yet as a result.<sup>79</sup>

There is a hint to the causal role of population in an earlier passage of the Cannan notes, where Smith had already mentioned nations of hunters, but had not talked about the four stages as a whole yet. But it is only a mention in passing among a discussion of the differences of governments in the different types (or ages) of society. Smith states here that in a nation of hunters, only few people can live together:

We shall now make some observations on nations in the two first periods of society. These viz. of hunters and shepherds.

In a nation of hunters and fishers few people can live together, for in a short time any considerable number would destroy all the game in the country, and consequently would want a means of subsistence. Twenty or thirty families are the most that can live together, and these make up a village (LJ(B)27, p. 407)

This is the clearest indication to a possible causal role of population of the four stages type (i.e. of the “necessity is the mother of invention” kind) that one can

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dated (which is not the case in the Cannan notes). The Lothian notes seem to have been made by a student for his own private use (as the text contains many spelling errors and poor formatting). The notes taken in each lecture are of considerable length and were complemented by additional notes (written on the verso pages of the manuscript), which probably stem from comparison with another student's notes, or could be additions made in Smith's complementary class in which specific points were explained at the students' request, and apparently many illustrations provided. See Introduction to LJ, p. 6-7, 11-13, 23.

<sup>79</sup> Craig Smith (2006b) and Kennedy (2008) stand out for having given the causal role of population in Smith's rendering of the four stages special mention (even though Craig Smith calls it a “prompt” rather than a “cause”, on which I shall comment at the close of this chapter).

find in the Cannan notes — and it is not very clear. There is thus a hint here, but only a hint, which is hard to read independently of any knowledge of the passage in the Lothian notes where this causal role is clearly laid out. The corresponding passage to the one just cited in the Lothian notes is also more informative:

In the age of hunters it is impossible for a very great number to live together. As game is their only support they would soon exhaust all that was within their reach. Thirty or forty families would be the most that could live together, that is, about 140 or 150 persons. These might live by the chase in the country about them. (LJ(A) iv.36, p. 213) <sup>80</sup>

To substantiate the account of the causal role of population in the succession of stages presented by Smith in the Lothian notes, we may look at an even earlier source in which Smith's conjectures on population and technology were outlined. The "Anderson Notes", as they are generally referred to today, are a set of handwritten notes discovered in 1970 by Professor Archie Brown in a notebook having belonged to John Anderson, a colleague of Smith's at Glasgow. They were made accessible to the reading public by Meek in 1976. Meek (1976a, p. 440) believed this document to consist in "selective extracts from a student's notes of a relatively early version of Smith's Jurisprudence lectures". Pauchant (2016) recently argued, based on his own investigation, that these notes correspond to lectures given in 1749. They were not included in the Glasgow edition of Smith's Works and Correspondence, but Meek made a convincing case, by comparison with the then not yet published set of lecture notes of Smith's jurisprudence lectures, for

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<sup>80</sup> Smith observes in the 'First Fragment on the Division of Labour' that "In a savage tribe of North Americans, who are generally hunters, the greatest number who can subsist easily together seldom exceeds one hundred or one hundred and fifty persons." (FA.3, LJ p. 583) These figures of groups of hunters being limited to about hundred-fifty individuals are very interesting with regard to recent research on the size of ancient hunter-gatherer societies. Dunbar (1992), using findings by primatologists linking mean group size of primate species to the average size of their neocortex, established, in concord with the anthropological and ethnographic literature on early human group sizes, that early humans probably lived in groups of about a hundred-fifty individuals (a finding popularised in the business and popular science literature of the past two decades — inferring lessons for the ideal size of the workforce of firms among other things — under the name "Dunbar's number"). It must be remarked that Dunbar reported to have extensively consulted classical sources as well, thus some of his sources may have been the same as Smith's.

The variation between the number of families Smith is reported to have mentioned in the two corresponding quotes of LJ(A) and LJ(B) reproduced above — "Twenty or thirty families" in LJ(B), "Thirty or forty families" in LJ(A) — reflects a frequent difference in illustrative numbers and figures (and other insignificant details, but no substantial points) between the two sets of notes. (In the *Fragment on the Division of Labour*, Smith, or his amanuensis, apparently crossed out the words "one hundred and fifty men two hundred" next to the quote at the beginning of this note.)

the Anderson notes being in fact notes from Smith's lectures, and he reproduced them in part in the 1976 article cited above.<sup>81</sup> As in the *Lectures on Jurisprudence*, Smith here introduces the four stages (as did most of his contemporaries, as we shall see in the next section) from a jurisprudential perspective, and in particular within a discussion of the origin of the laws of property:

Hunting and fishing are all the arts that prevail in the first states of society. . . . when a clan or nation hunt and fish long (i.e., have lived long) in one tract of country they acquire an exclusive property and it is considered as theirs, i.e., they acquire property in common (vide the histories of America and Caesar and Tacitus), which is the second state of perfection in society. . . . When their numbers encrease, when instruments of husbandry are invented (vide Hesiod), and when they have built huts and towns, they will begin to labour little spots about their houses and the publick fields will be neglected, and hence will arise private property in lands . . . which is the third state of society advancing towards perfection. . . . Where there are no manufactures and where agriculture is little minded, the country must soon be overstocked with inhabitants; hence the Teutones, etc. made their invasions (Meek 1976a, p. 467-8)<sup>82</sup>

This quotation contains only scattered elements of Smith's more detailed and coherent account of the four stages in the *Lectures of Jurisprudence* (and especially the Lothian notes). But the role of the pressure of population ("When their numbers increase", "soon be overstocked with inhabitants") in the progression of stages is here laid out, although not quite as clearly as in the Lothian notes. A few elements are noteworthy as well: first, as already noted, the treatment of this theme within a presentation of the laws of nations (as in Smith's lectures on jurisprudence);<sup>83</sup> second, the absence of division of labour ("Hunting and fishing

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<sup>81</sup> The article containing the notes was republished the following year in a collection of essays (Meek 1977) with no apparent modifications. The original of the Anderson notes are kept and can be viewed at the library of Glasgow University. For a recent detailed examination of the Anderson notes see Pauchant (2016).

<sup>82</sup> It is further remarked, at this point, that "Feu, the German word, signifies pay (as fee in English). As the conquests were made by armies and by generals who were not able to maintain them, they were put in possession of the lands, instead of receiving pay, and were obliged to military service, etc.", which points to themes developed by Smith in the *Lectures on Jurisprudence* and more famously in Book III of the *Wealth of Nations*.

<sup>83</sup> Note also, in this connection, that the "second state of perfection in society" is here defined by Smith (if indeed these are authentic representations of Smith's words only, as Meek seems to have believed, not altered and/or complemented by Anderson) by the fact not that the people have become shepherds (i.e. the mode of subsistence), but by the fact that "they acquire property in common". Meek (1976a, p. 466) believed that "at the time of the Anderson notes Smith was still using his stadial theory more or less exclusively in

are all the arts that prevail”) and private property (common property implying no private property) in the first stage; third, Smith’s reference to ancient sources (not made explicitly in the *Lectures of Jurisprudence* in this context).

Let us then return to the four stages theory and look at elements of this theory in the *Theory of Moral Sentiments* and *Wealth of Nations*. In the famous passage from the *Theory of Moral Sentiments* in which Smith mentions the “invisible hand”, it is observed that “The produce of the soil maintains at all times nearly that number of inhabitants which it is capable of maintaining” (TMS IV.1.10, p. 184). If this is so, then growth of population must in time create a shortage. This is a critical element of four stages theory. Smith tells us in the *Wealth of Nations* that “Every species of animals naturally multiplies in proportion to the means of their subsistence, and no species can ever multiply beyond it” (WN i.viii.39, p. 97) and that “Countries are populous not in proportion to the number of people whom their produce can clothe and lodge, but in proportion to that of those whom it can feed” (WN I.xi.c.6, p. 180). The availability of the means of subsistence, depending on such natural characteristics of the area as the fertility of the soil, seems to be the main determinant of the size of population on a given territory. But Smith also tells us in the *Wealth of Nations* that “the difference is very great between the number of shepherds and that of hunters whom the same extent of equally fertile territory can maintain” (IV.vii.c.100, p. 634). This too is a crucial element of four stages theory. How much means of subsistence are obtained on a given extent of territory depends on the period or stage of society, characterised by a particular mode of subsistence and degree of division of labour distinctive of the latter.

In this sense, in the quotation from the *Theory of Moral Sentiments* above, it is stated, not that it is the soil which maintains a given number of people directly, but that that this number depends on the “produce of the soil”. This says itself nothing

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connection with the problem of changes in the state of property, and had not yet fully succeeded in separating the mode-of-subsistence 'basis' from the state-of-property 'superstructure'". But as has been stated before (see above notes ... and ...) it is doubtful, in fact, whether Smith ever felt the need to make such a separation. In the lecture notes of *Lectures on Jurisprudence* the four stages are (quite naturally, as these are notes on lectures on jurisprudence) presented in a jurisprudential setting, within a discussion of the laws of property, as indeed they were generally by the authors we will consider in the next section; and, insofar as Smith used elements of the four stages theory in the *Wealth of Nations*, he did not feel the need to spell out the theory as a whole. This does not preclude that the theory may have been an implicit reference at many instances in the *Wealth of Nations* of course, as I have argued in the preceding sections, and that one aspect or another may have here been more important depending on the particular context, but this does not require a formal separation of the mode-of-subsistence aspects from the laws-of-property aspect by Smith as Meek seems to have supposed.

about the fixity or variability of this produce.<sup>84</sup> Further, the produce of the soil is said to determine the number of people, precisely, “at all times”. In different times (in different “periods of society”), the produce of the soil varies. Of course, for there to be a “produce” of the soil properly speaking, a society needs to have entered at least the agricultural stage. But in a wider sense, the quantity of means of subsistence depends first and foremost on the particular stage (mode of subsistence) attained. It also varies, however, within a given stage. The passage from the agricultural to the commercial stage is particularly fluid, insofar as no change of mode of subsistence properly speaking takes place. Still, the quantity of available means of subsistence (on a given territory) increases substantially, more substantially, it appears, than ever before. Indeed, “the populousness of every country must be in proportion to the degree of its improvement and cultivation” (WN IV.vii.b.7, p. 568); and the improvement and cultivation of land (indeed the very beginning of agriculture) depends itself on the particular stage on the continuum between savagery and civilisation a nation has attained, and particularly on the degree of division of labour.

Smith specifies at the very beginning of the *Wealth of Nations* that “Whatever be the soil, climate, or extent of territory of any particular nation, the abundance or scantiness of its annual supply” depends chiefly on the degree of “skill, dexterity, and judgment with which its labour is generally applied” (WN 3-4, p. 10), “and the greater part of the skill, dexterity, and judgment with which it is anywhere directed, or applied, seem to have been the effects of the division of labour” (WN I.i.1, p. 13). The degree of division of labour is, as we have seen, one of the main characteristics of the different stages of society. It is, in fact, the defining characteristic of the fourth stage. It is “When the division of labour has been once thoroughly established” and “Every man thus lives by exchanging, or becomes in some measure a merchant” that “the society itself grows to be what is properly a commercial society” (WN I.iv.1, p. 37). It is thus that

Among savage and barbarous nations, a hundredth or little more than a hundredth part of the labour of the whole year will be sufficient to provide them with such clothing and lodging as satisfy the greater part of the people. All the other ninety-nine parts are frequently no more than enough to provide them with food. But when by the improvement and cultivation of land the labour of one family can provide food for two, the labour of half the society becomes sufficient to provide food for the whole. The other half, therefore, or at least the greater part of them, can be employed in providing

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<sup>84</sup> For some thoughts on the importance of this distinction, see Rutherford (2007, p. 220-1).

other things, or in satisfying the other wants and fancies of mankind. (WN I.xi.c.6-7, p. 180)

This “satisfying [of] the other wants and fancies of mankind”, in turn, contributes substantially to the “improvement and cultivation of land”:

Without the assistance of some artificers, indeed, the cultivation of land cannot be carried on but with great inconveniency and continual interruption. Smiths, carpenters, wheelwrights, and ploughwrights, masons, and bricklayers, tanners, shoemakers, and tailors are people whose service the farmer has frequent occasion for. Such artificers, too, stand occasionally in need of the assistance of one another; and as their residence is not, like that of the farmer, necessarily tied down to a precise spot, they naturally settle in the neighbourhood of one another, and thus form a small town or village. The butcher, the brewer, and the baker soon join them, together with many other artificers and retailers, necessary or useful for supplying their occasional wants, and who contribute still further to augment the town. The inhabitants of the town and those of the country are mutually the servants of one another. The town is a continual fair or market, to which the inhabitants of the country resort in order to exchange their rude for manufactured produce. It is this commerce which supplies the inhabitants of the town both with the materials of their work, and the means of their subsistence. The quantity of the finished work which they sell to the inhabitants of the country necessarily regulates the quantity of the materials and provisions which they buy. Neither their employment nor subsistence, therefore, can augment but in proportion to the augmentation of the demand from the country for finished work; and this demand can augment only in proportion to the extension of improvement and cultivation. (WN III.i.4, p. 378)

In other words, the improvement of land and the progress of the division of labour depend on one another. Insofar that it is in commercial society that the division of labour “has been once thoroughly established”, it is in commercial society only that land is properly improved. The agricultural stage describes one of subsistence agriculture, in which the whole population are farmers. Only the commercial stage, in which labour is thoroughly divided (notably between food-producing and non-food-producing activities), allows for the improvement of land, which is but one aspect (but a crucial one) of the famous efficiency gains from the division of labour pointed out by Smith in the opening pages of the *Wealth of Nations*.<sup>85</sup>

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<sup>85</sup> *Within* agriculture, Smith tells us in the first chapter of the *Wealth of Nations*, the division of labour is more limited than in manufactures, but the division of labour *between*

We may at this point briefly review the different elements and steps that make up Smith's four stages theory as laid out most clearly in the *Lectures of Jurisprudence* (and in particular the Lothian notes), but to which references are made, and of which elements are used, throughout Smith's entire oeuvre. Society in the savage state is composed of few individuals, who live together in groups of about a hundred-fifty. Population is in balance with the environment ("The produce of the soil maintains at all times nearly that number of inhabitants which it is capable of maintaining"). There are thus nearly as many people as the produce of the soil can maintain, but these will gradually increase as long as the environment they inhabit furnishes them with some surplus food, which is assumed to generally be the case (for otherwise no society could ever have progressed).<sup>86</sup> This in turn exerts a pressure on the means of subsistence that forces the nation to innovate in terms of food procurement and production. Hunters become shepherds as animals (which they already dealt with) are easier to tend to than the more complicated cultivating of plants (which would require more extensive learning).<sup>87</sup> This also introduces inequality, as some individuals will appropriate more animals, whereas before everyone lived directly from nature, considered common property, and hence no private property needed to exist. In the shepherd state laws are thus introduced (under the authority of chiefs, being the great proprietors of livestock). Eventually the shepherd mode of subsistence, in turn, does not provide sustenance anymore for a growing population, as grazing lands become scarcer and eventually overused, and the nation thus turns to agriculture (the possibility of which would have been discovered already by man observing nature, but it is only introduced as mode of subsistence when there is need for it). In this state, too, towns develop. And as a corollary, the division of labour develops in society, laws, government and the various arts and trades complexify and subdivide their activities, with each becoming more productive in the process. Eventually, as the members of the society in question exchange all their surplus products with each other and "Every man thus lives by exchanging, or becomes in some measure a merchant", which

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agriculture and manufactures itself carries with it enormous productivity gains, including in agriculture, as he elaborates on in Book III of the same work.

<sup>86</sup> Note that Smith also explained the non-progression of certain nations by this not being the case. Thus he invoked the infertility of the soil (as well as, importantly, the absence of natural means of transportation, which ties in with the account of the extent of the market in Chapter III of the *Wealth of Nations*) to explain why the Arabs and Tartars had remained stuck (and would continue to be so) in the Shepherd stage; at LJ(A) iv.53, p. 220; iv.56, p. 221; iv.60-3, p. 223 and LJ(B) 30-1, p. 408.

<sup>87</sup> Smith also lists an exception to this order, the Native Americans cultivating some maize plants albeit still being essentially hunters (LJ(A) i.29-30, p. 15).

extends in time to foreign trade (the possibility of which is both effect and cause of this progress), the stage of commerce is attained, which has some air of finality.<sup>88</sup>

All these elements can be found in one way or another in a number of other authors who used the theoretical framework of the four stages theory at around the same time as Smith. We shall principally, in the following section, concentrate on some authors who made the causal role of population in the passage of stages very explicit, to see the prevalence of this feature in the four stages theory as it stood at that time.

## **6. Population and development in the wider four stages theory**

The central role of population as a causal variable in the four stages theory can be ascertained by examining the use made of this theory by several authors writing around the same time Smith held his lectures on jurisprudence. By bringing out this central causal role of population in the use of the four stages theory, as well as the remarkably uniform character of this account of the development of society across the works of different authors, the causal role population plays in Smith's own version of the theory will be more easily recognised. In what follows, we shall hence consider the four stages theory as exposed by a number of Smith's contemporaries, as well as make some brief references to earlier accounts of the development of society which resemble the four stages theory, to uncover the central role population played in this theory overall.

The origin of the precise shape the four stages theory took among the scholars referred to by Roy Pascal (1938) as the "Scottish Historical School" is disputed. Meek, on the basis notably of the Anderson notes, speculated that Smith himself could be the true 'inventor' of the theory in his early Glasgow lectures of the 1750s (Meek 1976b, p. 107-16). Pauchant (2016) endorses this view. If an 18<sup>th</sup> century originator of the theory needs to be found, Kames is another likely candidate. Even though his *Sketches on the History of Man* were published only in 1774, he claimed himself they had been thirty years in the making (Lehmann 1971, p. 59, 181). Istvan Hont (2010, p. 160), by contrast, held that the "intimate continuity" between earlier natural law theories of property and Smith's four-stages theory "does not need elaborate demonstration." It should be noted that Meek's position is largely conditioned by his very narrow definition. Only those

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<sup>88</sup> The question whether the "commercial stage" was thought to be the last will be examined in Section 4 of Chapter 3 (p. 244 below).



views of the succession of stages firmly based on the mode of subsistence can be counted as constitutive of four stages theorising proper according to Meek.<sup>89</sup> This was related to his personal interest in seeing the Scottish perspective on social evolution as a precursor to Marx's historical materialism, which he had outlined twenty years prior to writing his *Ignoble Savage* (Meek 1954a). Although, by virtue of Meek being the inventor of the term "four stages theory", retaining his restrictive definition may be dictated by the rules of intellectual property, it is more apposite for historical accuracy, and with regard to the present examination — concerning primarily the role of population in the four stages theory, and the role of the four stages in population theory — to use the term in a wider acceptance.<sup>90</sup>

As acknowledged by Meek himself, a type of four stages theory (although without the clear focus on modes of subsistence) was already to be found in Lucretius (and more particularly, and more observant of modes of subsistence, in Dicaearchus, Meek 1976b, p. 10-11). As was seen in the quotes from the Anderson notes, references to classical writers abound in Smith's early outline of the four stages.<sup>91</sup> With regard to the causal role of population in the succession of the

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<sup>89</sup> "unless the postulated stages are fairly firmly based on the mode of subsistence, such contributions should not in my opinion be regarded as anticipations of the eighteenth-century four stages theory. To take the contrary view would be virtually equivalent to claiming not only that there was nothing new in the Enlightenment, but also that there was nothing new under the sun." (Meek 1976b, p. 6-7)

<sup>90</sup> For a clarification of Meek's perspective on the four stages theory and a friendly critique of his former supervisor's position, see Skinner (1982). The problematic nature of Meek's position becomes apparent, notably, when he considers the contribution to the four stages theory of Dalrymple (Meek 1976b, p. 102), noting that: "Only rarely, however, does he expressly (or even impliedly) relate these 'stages' to different modes of subsistence. The impression one is left with is that Dalrymple regarded the four stages theory as something whose use lay mainly, if not exclusively, in illuminating the problem of changes in the state of property." This, however, seems to indeed have been the original use and origin of this theory, as outlined by Hont, who traces it to the natural law tradition (as Meek himself does, but without giving this association much importance). As we have seen, Smith too introduces the four stages theory in both sets of lecture notes on jurisprudence in the context of the explanation of the laws of property. And as we shall see shortly, so do Kames and Blackstone, the latter, being a jurist, using the four stages theory exclusively for this purpose; and Helvétius, too, writes of magistrates and laws in this connection.

<sup>91</sup> As Harris (1968, p. 26) notes, a type of cultural-evolutionary theory is also present in the Bible. Reference to this — as to scripture in general, as Campbell and Skinner note in the introduction to *Wealth of Nations* — is conspicuously absent in Smith. This, in addition to his association with Hume, as Rothschild (1992) observes, made him be regarded very suspiciously by the church. Harris further observes that Lucretius, whom he sees as the main influence on Enlightenment thinkers in this connection, was himself inspired by Epicurus (1968, p. 26). (The latter, incidentally, is a potent contender for an influence on Marx's historical materialism, insofar as he was the subject of Marx's doctoral dissertation.) Harris also notes how, for Lucretius, language, too, "must . . . have been the

evolutionary stages of society, Plato, too, is a more important source for 18<sup>th</sup> century conjectural history than Meek (with his focus on a clear distinction of modes of subsistence) acknowledged. At various places in Book 3 of the *Laws*, indeed, Plato mentions that his group of shepherds and hunters, to which he refers in order to conjecture about the origin of government, just as the theoretical historians of the 17<sup>th</sup> and 18<sup>th</sup> century would, is increasing in numbers, which leads to the adoption of laws, the development of arts, and urbanisation (Plato 1988, p. 58-88). Hont (1987) traced the 18<sup>th</sup> century four stages theory more centrally to the 17<sup>th</sup> century writer Samuel Pufendorf. In the latter's theory, population plays the same causal role, as Hont (2010, p. 180) notes.<sup>92</sup>

Very little of what Smith wrote was in fact either new or original. Counter Rashid (1998), and the many others before who sought to downplay Smith's importance for not having come up himself with most of his ideas, this does not diminish his genius or importance. As Dugald Stewart early on remarked, Smith's importance as a scholar came from having woven together different strands of thought and presented them in a coherent and comprehensive way (Stewart IV.26-27, p. 322). He has ever since been called a great synthesiser.<sup>93</sup> As will be visible from a comparison of the material in this section with the account of Smith's conjectural history in the former, this is true for the four stages theory as well.

The categories of barbarians and savages, as was noted in section 2 above, are as old as their antonym — the polis, the ancient equivalent to the 18<sup>th</sup> century concept of the civil, and eventually of “civilisation” (and the 19<sup>th</sup> century

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result of a long evolutionary process”, which reinforces the connection with Smith's conjectural history. As Stewart remarked when he coined the term, Smith's earliest use of this methodology was in his dissertation on language. Smith, in the latter, adopted an evolutionary position on language. See on this Berry (1974, especially pp. 132-5)).

<sup>92</sup> Pufendorf, in Book IV, Chapter IV, Section IV of *Of the Law of Nature and Nations* (Pufendorf 1729, p. 367) notes how with the growth of population must arise competition and conflict over the access to those things that God has handed over to man, and that the development of private property is a response to this. This idea indeed can be found (usually without reference to God) in many versions of the four stages theory.

<sup>93</sup> Notably by Schumpeter (1986 [1954], p. 180). See also n. 61, p. 97 above, for the application of this idea, by Hont, to Smith's project as a whole, concerning both the *Theory of Moral Sentiments* and the *Wealth of Nations*. Earlier, Feilbogen (1889, p. 219) had noted that “Smith himself is supposed to have said almost nothing that was not to be found in his predecessors. There's no denying that every great man is a 'child of his time.' Accordingly, the historians of political economy have employed much diligence and ingenuity, on the one hand to gather up all the individual doctrines of Adam Smith among his predecessors, on the other hand to explain Adam Smith's world-historical achievement by everything, just not by his almost unprecedented combination of observation skills and deductive keenness, of erudition and originality, of caution and boldness in criticism and dogma, in short: by his genius” (my translation).

“bourgeois” that Marx — or his English translators — made of it<sup>94</sup>). The word “polis” (Greek for city, city-state) has given, as Pagden (1988b, p. 33) notes, the word “polished” much used by the 18<sup>th</sup> century Scots. Use of these categories, generally coupled with a unified view of human nature, can be found in ancient Greek and Roman literature and philosophy (Thucydides, Plato, Lucretius, Tacitus), the work of medieval Islamic scholars (Alberuni, Khaldun), Renaissance European scholars like Machiavelli and natural law theorists of the 16<sup>th</sup> and 17<sup>th</sup> centuries like Hugo Grotius, Thomas Hobbes, Samuel Pufendorf, and John Locke. Stadial theories of development of human society derived from (or used as explanation for) these categorisations can be discerned to varying degrees in all these thinkers. The 18<sup>th</sup> century four stages theory can be traced directly and indirectly to all these “streams of thought” (as they are referred to by Meek 1976b, p. 14, 23, 26, 127).<sup>95</sup> Many of these thinkers had also laid out the causal mechanism we are here concerned with, whereby population, by pressing on the means of subsistence, induces technological development.

Smith’s ancient Greek and Latin sources have been noted, and references to primary and secondary literature were given, in the preceding sections. For ideas about savages and civilised society in Alberuni see Wilczynski (1959, p. 461-2), and for the connection with population the somewhat distorted account by

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<sup>94</sup> The transition from “civil society” to “bourgeois society” in English may actually be an instance of something being lost in (re)translation. When speaking of what was translated from *Das Kapital* into English as “bourgeois society”, Marx always used “bürgerliche Gesellschaft”, which was his translation of the 18<sup>th</sup> century “civil society”. Both “bourgeois” and “bürgerlich”, as “civil” too, derive from “b(o)urg” (“civis”), i.e. a citadel or town or townsmen (German “Burg”, French “bourgh”, English “borough”, latin “civis”, “civitas”, “ci(vi)tatem”). The urban connotation is thus present in all three terms. The class connotation in general is, however, in fact contained mostly in the words of Germanic origin (*bourgeois*, *bürgerlich* — whence Marx’s “bourgeois economics”, which in the original German also reads “bürgerliche Ökonomie”; the original Germanic root refers indeed to fortresses, generally inhabited by the nobility; the latin root “civis” of “civil society”, on the other hand, refers simply to town-people, and later, by extension, to citizens, i.e. people under the jurisdiction of a state from which they derive certain rights). The mistranslation and two connotations of “bourgeois society” were observed by Roy Pascal, a professor of German at the University of Birmingham, who translated the *German Ideology* and wrote the (1938) article tying the “Scottish Historical School” to Marx’s Historical Materialism, and in this was attacking (in a politically charged time, when the Nazis had just remilitarised the Rhineland) the reactionary interpretation of Smith of the German Historical School discussed above p. 93-95. For citation of Pascal’s observations and an extended discussion of this context and the (mis)translation, see Mizuta (2006, p. 109-12). (The linguistic observations in this note are mine.)

<sup>95</sup> Whether we want to regard the writings of these thinkers, and especially the earlier ones, as forming the “*history*” or the “*prehistory*” of the four stages theory (Meek 1976b, p. 6) seems to me a question more rhetorical than substantial.

Spengler (1971).<sup>96</sup> Ibn Khaldun deserves particular mention in the present context, for not only does he present an evolutionary theory of human society, but population growth is, as in the versions of the four stages theory by other 18<sup>th</sup> century authors we are about to consider (and in the one of Smith considered in the previous section), and in much the same way, a causal element in the development of society.<sup>97</sup>

The first contemporary of Smith who deserves attention as a writer on stadial theory and population may be Benjamin Franklin. His *Observations Concerning the Increase of Mankind, Peopling of Countries, etc.* is a short essay which he wrote in 1751 and which was first published in 1755. It was often reprinted and much cited and read. In it, Franklin made the two observations that “Marriages in America are more general, and more generally early, than in Europe . . . and if in Europe they have but four Births to a marriage (many of their marriages being late) we may here reckon eight, of which if one half grow up, and our marriages are made, reckoning one with another at twenty years of age our people must at least be doubled every twenty years.” (§7); and (§22) that “there are suppos'd to be now upwards of One Million English Souls in North America, (tho' 'tis thought scarce 80,000 have been brought over sea)” and “This million doubling, suppose but once in twenty-five years, will in another century be more than the people of England”. Smith integrated these observations in his theory of the adjustment of population to labour demand developed in Chapter VIII of Book I of *Wealth of Nations*, in the form of the statement that “In Great Britain, and most other European countries, they are not supposed to double in less than five hundred years. In the British colonies in North America, it has been found, that

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<sup>96</sup> Spengler (1971) considered Alberuni a “Malthusian”. This, however, not only rests on the surmised compatibility of Alberuni’s writings with the approbation of birth control, which is a position Malthus himself explicitly rejected; but, further, the passage into which Spengler reads this position actually states no such thing, as he himself acknowledges, noting that: “This passage does not, of course, relate to demographic issues. Yet its *spirit* is compatible with the *spirit* underlying endorsement of population controls” (*ibid.* p. 98). In other words, Spengler makes the connection between Alberuni and Malthus by attributing to the first a position the second actually disapproved; a rather curious way of establishing intellectual lineage. And that position itself, in the case of Alberuni, is inferred not from actual content but from the surmised “spirit” of a passage. It is hard to see how such a “spirit” could be so clearly read, while eight centuries separate us from the time of writing and it would take a great amount of contextualising simply to establish what the author was writing about precisely (let alone recovering elements likely lost in translation), which Spengler did not engage in.

<sup>97</sup> See Spengler (1964), Boulakia (1971); Von Sivers (1980) and Mouhammed (2004). For the relationship between the four stages theory and 17<sup>th</sup> century natural law theory see Meek (1976b, p. 12-25) and, particularly in relation to Smith, Hont (1987) and Hont (2010, p. 38-51).

they double in twenty or five-and-twenty years” (WN I.viii.23, p. 88).<sup>98</sup> The same figures were later also used, famously, by Malthus, who may have taken them either from Smith or Franklin.<sup>99</sup>

As regards the four stages theory, the relevant quote from Franklin appears at the beginning of the essay (§ 5):

Europe is generally full settled with husbandmen, manufacturers, &c. and therefore cannot now much increase in People: America is chiefly occupied by Indians, who subsist mostly by hunting. But as the hunter, of all men, requires the greatest quantity of land from whence to draw his subsistence, (the husbandman subsisting on much less, the gardener on still less, and the manufacturer requiring least of all), the Europeans found America as fully settled as it well could be by hunters; yet these having large Tracts, were easily prevail'd on to part with portions of territory to the new comers, who did not much interfere with the natives in hunting, and furnish'd them with many things they wanted.

Although the outline of the four stages is rather thin in this quote, it is clearly stated, at least, that the amount of food a people can produce or retrieve from a given amount of land varies with the stage of society, as was discussed with reference to Smith at the beginning of the previous section.<sup>100</sup>

Alan Houston (2008, p. 125) considers Franklin's essay a fully fledged contribution to the four stages theory. Indeed, the relationship not only between the method of subsistence and the stages of development that Meek was so

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<sup>98</sup> The editors of the Glasgow edition of *Wealth of Nations* cite in footnote to this passage Richard Price's 1772 *Observations on Reversionary Payments* which uses the same figures for North America, but do not note that Price himself got them from Franklin, his work incorporating comments on Franklin's essay that he had made in letter form first in 1769 (Houston 2008, p. 140). There is no reason why Smith, who was well acquainted and had developed a friendship with Franklin by the time he was writing the *Wealth of Nations*, should not also have gotten the inspiration directly from Franklin (especially considering the very low opinion he held of Richard Price; see Smith's letter to George Chalmers, 22 Dec. 1785, Corr. 251, p. 290).

<sup>99</sup> Franklin clearly also directly influenced Malthus, especially with the statement, appearing immediately before the last cited, that: "There is in short, no bound to the prolific nature of plants or animals, but what is made by their crowding and interfering with each others' means of subsistence. Was the face of the earth vacant of other plants, it might be gradually sowed and overspread with one kind only; as, for instance, with Fennel; and were it empty of other inhabitants, it might in a few Ages be replenish'd from one nation only; as for Instance, with Englishmen." (Franklin 1755, §22)

<sup>100</sup> This quote from Franklin's essay, along with the ones reproduced in the previous footnote and earlier in the text, illustrate how closely the four stages theory and the "population principle" (generally associated with Malthus, but the phrase was first used by Godwin and Arthur Young (see Hollander 1927, p. 190 for references)) were associated in 18<sup>th</sup> century writings. We shall consider this connection in detail in the following section.

adamant about, but also the relationship between the stages of development and the relation of population to the means of subsistence (and thus to land), which we are in this chapter more centrally concerned with, clearly come out from the cited passage, although it may be too much to claim that the passage lays out the four stages *theory*. Franklin became friends with both Kames and Smith, but only several years after writing this essay. His use of the four stages framework thus unlikely derives from them, but Houston (2008, p. 125) notes that he used the same sources.

Next in line for a consideration of his use of the four stages theory is Helvétius. Smith met Helvétius in France, and this contact, along with the one with Holbach, was given much importance in the history of economic thought.<sup>101</sup>

Helvétius' account of the four stages theory appears in his *De l'esprit*, a controversial book (notably for its atheism, for which Helvétius was forced to publicly apologise) published in 1758, a few years before Smith's lectures of jurisprudence (to which the recovered notes pertain). The four stages theory is invoked in chapter IX of *De l'esprit*, entitled "De l'origine des passions". Helvétius starts his account of the four stages by positing "several men" brought about by the heavens, and, interestingly, starts the passage in which the four stages appears with a consideration of the formation of language:

En effet, supposons que le ciel anime tout-à-coup plusieurs hommes, leur première occupation sera de satisfaire leurs besoins; bientôt après ils essaieront, par des cris, d'exprimer les impressions de plaisir et de douleur qu'ils reçoivent. Ces premiers cris formeront leur première langue, qui, à en juger par la pauvreté de quelques langues sauvages, a dû d'abord être très courte, et se réduire à ces premiers sons. (Helvétius 2009 [1758], p. 261)

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<sup>101</sup> Ross (2010, p. 231) considered Smith's contact with the French intellectuals as "the most exciting passage in Smith's intellectual development, second in importance only to his early contacts with Hume". But the first to give much importance to Smith's contact with Helvétius (and Holbach) were the instigators of the "Adam Smith Problem" (Knies, and above all Skarziński, see *Theory of Moral Sentiments* p. 22-5), who believed that Smith adopted his "individualism" and insistence on the importance of self-interest from them — a position easily proven wrong by a reading of the *Lectures of Jurisprudence*, reporting classes held by Smith before his departure to France and in which these features of his 'economic' theories clearly figure. On Helvétius' relationship to the four stages theory see (Meek 1976b, p. 91-4, 132-6). For Helvétius's relationship with Smith specifically, see Ross (ibid.) and further Plechanov (1896, p. 103-6); and Cumming (1955, p. 129-30, and 164-66).

<sup>102</sup> Interesting, too, is that Helvétius, for all the atheism he was accused of, did not start his story with a few shipwrecked stranded on an island, as Smith (in LJ(B)), but with this tale of men who "heaven suddenly animates" much closer to the story of Genesis.

One resemblance with Smith's use of conjectural history thus appears immediately. Helvétius, just as Smith in his essay on the formation of language, observes how language must have come about in savage society. Smith treated of these questions in different works, the connection having been established by Steward, while Helvétius' considers language formation in the very same passage in which he introduces the four stages theory. He introduces, immediately following, the crucial element of population growth:

Lorsque les hommes, *plus multipliés*, commenceront à se répandre sur la surface du monde ; . . . lorsque les familles seront plus voisines les unes des autres ; alors le désir commun de posséder les mêmes choses, telles que les fruits d'un certain arbre ou les faveurs d'une certaine femme, exciteront en eux des querelles et des combats : . . . alors ils feront entre eux des . . . premières lois. (ibid.)

Another central element of the four stages theory here appears. As already established, the four stages theory was immediately emerging from a tradition of natural law theorising, and one of its central aims was to explain the origin of government and laws, offering an alternative but related explanation to Hobbes' *Leviathan*. In Helvétius' account, laws are a response to the process of competition created by scarcity, itself created by population density. Smith constructs this in a different yet very similar way. In Smith's account, the age of shepherds creates inequality and this makes laws necessary. Helvétius expressed it more directly: increased competition due to higher shortage makes laws necessary to settle disputes, as Pufendorf had written. It is laws, in Helvétius' account, which by necessity bring about the order of judges in society (the first division of labour and creation of social classes):

Les lois faites, il faudra charger quelques hommes de leur exécution : et voilà les premiers magistrats. (ibid.)

Helvétius now introduces the critical element of scarcity prompting technological development:

Ces magistrats grossiers de peuples sauvages habiteront d'abord les forêts. Après en avoir, en partie, détruit les animaux, lorsque les peuples ne vivront plus de leur chasse, *la disette des vivres leur enseignera l'art* d'élever des troupeaux. (ibid.)

As in Smith's account, savage people first live directly from nature, but eventually animals to hunt become scarce, and it is then "la disette" (shortage of subsistence) that "teaches" men the art of tending to animals ("élever les

troupeaux”). This is directly brought about by population pressure, which brings about new technological stages:

Ces troupeaux fourniront à leurs besoins, et les peuples chasseurs seront changés en peuples pasteurs. Après un certain nombre de siècles, *lorsque ces derniers se seront extrêmement multipliés, et que la terre ne pourra, dans le même espace, subvenir à la nourriture d'un plus grand nombre d'habitants, sans être fécondée par le travail humain*, alors les peuples pasteurs disparaîtront, et feront place aux peuples cultivateurs. (ibid., p. 262)

The same territory cannot furnish enough subsistence for a multitude of people without recourse to improvements (“sans être fécondée par le travail humain”) which cannot be conceived of independently of technological innovation. And hunger (necessity), just as it has taught them pasturage, also teaches men agriculture; and by the same token it teaches them to divide land, which renders necessary the introduction of property, which in turn brings about new laws and new “sciences”:

Le besoin de la faim, en leur découvrant l'art de l'agriculture, leur enseignera bientôt après l'art de mesurer et de partager les terres. Ce partage fait, il faut assurer à chacun ses propriétés : et de-là une foule de sciences et de lois. (ibid.)

Property laws multiply in the age of agriculture, exactly as in Smith's account. And Helvétius also explains, like Smith, the introduction of money by the need created by the introduction of exchange. Note, however, that division of labour arises for Helvétius from the *differences* of the produce of land (as for Ricardo), not from the productivity advantages that a larger market makes possible, as for Smith:

Les terres, par la différence de leur nature et de leur culture, portant des fruits différents, les hommes feront entre eux des échanges, sentiront l'avantage qu'il y aurait à convenir d'un échange général qui représentât toutes les denrées ; et ils feront choix, pour cet effet, de quelques coquillages ou de quelques métaux. (ibid.)<sup>103</sup>

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<sup>103</sup> This passage cannot fail to remind us of the way money is introduced and explained in chapter VI of the *Wealth of Nations*. This furnishes us with another connection of a part of the *Wealth of Nations* with the four stages theory. The reference to it by Smith in that chapter is rather oblique, being made merely through reference to “when the division of labour first began to take place” (WN I.iv.2). Once we connect the division of labour itself to Smith's account of the four stages theory, as was done in the previous section, this reference becomes clearer.



Finally, Helvétius mentions another characteristic element of the four stages theory equally central to Smith's work: that with the progression to higher stages inequality and social classes appear:

Lorsque les sociétés en seront à ce point de perfection, alors toute égalité entre les hommes sera rompue : on distinguera des supérieurs et des inférieurs. (*ibid.*)

Let us then move on to another one of Smith's contemporaries and acquaintances who made use of the four stages theory in much the same vein. The earliest written statement of the theory that satisfied Meek to have been a manifestation of the latter is contained in John Dalrymple's *Essay Towards a General History of Feudal Property in Great Britain* (1757), closely followed by Kames' *Historical Law-Tracts* (Meek 1976b, p. 100, 102). The former, Lehman (1971, p. 218) notes, was "a work directly inspired by Kames, both in its substance and in its method". Dalrymple in fact dedicated his book to Kames, "as to the person, who not only led me into the general train of enquiry contained in them, but to whom any merit that may be found in the conduct of the particulars of that enquiry, justly belongs" (Dalrymple 1758, p. iii).<sup>104</sup> At the beginning of his book, Dalrymple explains what he sets out to do:

The following chapters contain an attempt, to trace from the earliest feudal times, the great out-lines of the laws which relate to land property, in England and in Scotland, so far as they are derived from a feudal origin; to mark their variations in different ages, and to assign the causes of those variations. (*ibid.* p. v)

Dalrymple tells his readers about the four stages of society, as had Pufendorf, in the context of the explanation of property rights, and at first concentrates strictly on these in his account. The four stages thus appear in Chapter III, entitled "History of the Alienation of Landproperty", at the beginning of Section I on "Voluntary alienation". "This subject", Dalrymple tells us, "is curious and interesting; in order to trace the progress of it, the progress of society must be traced":

The first state of society is that of hunters and fishers; among such a people the idea of property will be confined to a few, and but a very few moveables; and subjects which are immoveable, will be esteemed to be common. . . .

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<sup>104</sup> The title page also contains a citation of Montesquieu, who, as noted in the introduction to this chapter, was seen, notably by Stewart and Millar, as having laid out the plan that Smith followed with the four stages theory.

The next state of society begins, when the inconveniences and dangers of such a life, lead men to the discovery of pasturage. During this period, as soon as a flock have brouzed upon one spot of ground, their proprietors will remove them to another; and the place they have quitted will fall to the next who pleases to take possession of it: For this reason such shepherds will have no notion of property in immoveables, nor of right of possession longer than the act of possession lasts. (ibid. p. 90-1)

It is at this point (after recounting the story of Abraham and Lot) that Dalrymple introduces the element of the pressure of population on land and the means of subsistence (first mentioning cattle and soon after population):

The words of Abraham to Lot are : "Is not the whole land before thee? separate thyself, I pray thee, from me. If thou wilt take the left hand, then will I go to the right; or if thou depart to the right hand, then will I go to the left". And we are told that the reason of this separation, was, the quantity of flocks, and herds, and tents, which each of them had, and which the land was unable to support.<sup>105</sup>

A third state of society is produced, when men become so numerous, that the flesh and milk of their cattle is insufficient for their subsistence, and when their more extended intercourse with each other, has made them strike out new arts of life, and particularly the art of agriculture. This art leading men to bestow thought and labour upon land, increases their connection with a single portion of it; this connection long continued, produces an affection; and this affection long continued, together with the other, produces the notion of property in land. (ibid. p. 91-2)

Meek (1976b, p. 99) held that it "should be noted" that both Dalrymple and Kames "were members of Smith's circle". But it may be more accurate to consider Dalrymple and Smith to have been members of Kames' circle, who was twenty-seven years Smith's senior, and thirty years Dalrymple's, as well as fifteen years Hume's, to whom, as well as to Smith, he served as patron (Ross 2010, p. 80). Smith himself affirmed: "We must every one of us acknowledge Kames for our master" (ibid.).<sup>106</sup>

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<sup>105</sup> We shall reencounter Abraham and lot in the following section of this chapter. The fact that shepherds tend to migrate (and can become formidable armies) was given some prominence by Smith in Book V of the *Wealth of Nations*.

<sup>106</sup> See also Dalrymple's dedication cited on p. 123 above. Ross (2010, p. 80) writes of a version of the four stages theory being contained already in Kames' *Essays on Several Subjects concerning British Antiquities* (1747) and cites to this effect Meek (1976b) (but without page number). Meek, however, clearly wrote that the first version of the theory which appeared in writing that he identified was the one of Dalrymple of 1758.

Kames' account of the four stages is contained in Book 1, Sketch 1 – significantly entitled “Progress Respecting Food and Population” – of his *Sketches on the History of Man* (1774). As mentioned above, at the moment of its publication, he had apparently been working on this opus for the past three decades. Kames starts off his account of the four stages with reference to population and subsistence:

Plenty of food procured by hunting and fishing, promotes population  
(Kames 2007 [1778], p. 55)

Population grows because in the beginning of the hunting stage, there are still a lot of animals to be found, and they provide for surpluses of food. Yet the very growth of population eventually creates scarcity (the idea so central to Malthus' work, that population progresses faster than the means of subsistence, is clearly contained here). But, importantly, it is this very scarcity (through necessity being the mother of invention), that prompts technological progress and results in a new age characterised by a new mode of subsistence:

but as consumption of food increases with population, wild animals, sorely persecuted, become not only more rare, but more shy. Men, thus pinched for food, are excited to try other means for supplying their wants. A fawn, a kid, or a lamb, taken alive and tamed for amusement, suggested probably flocks and herds, and introduced the shepherd-state. (ibid.)

Precisely the same mechanism for the passage to a superior subsistence technology as the one outlined by Smith and Helvétius is described here by Kames. More or less by coincidence, people discover that they can tame wild animals. And it is when necessity arises that it becomes economical to do so. Necessity, in itself, presents new opportunity. The same mechanism repeats in the next stage:

The shepherd state is friendly to population. Men by plenty of food multiply apace; and, in process of time, neighbouring tribes, straitened in their pasture, go to war for extension of territory, or migrate to land not yet occupied. *Necessity, the mother of invention*, suggested agriculture (ibid., p. 56)

It is through necessity being the mother of invention, indeed, that population moves society through successively higher stages, because humans are naturally inventive:

When corn growing spontaneously was rendered scarce by consumption, it was an *obvious thought* to propagate it by art. (ibid.)

There is a clear resemblance to Smith's “naturally” in Kames “obvious thought” (see the quote from LJ(A)i.28 on page 106 above). Kames then explains

how this will again first create a surplus of food which makes population rise, through the division of labour (everyone earns his living, now, through “skill and labour”):

A lasting division of the land among the members of the state, securing to each man the product of his own skill and labour, was a great spur to industry, and multiplied food exceedingly. (ibid.)

There is a further element of importance involved here: the introduction of private property, which, as in Smith’s version, is an effect of the passage to a higher stage, and at the same time a cause of the passage to a further one. Through the introduction of property, because people have more interest to tend to land that is their own, food production is increased. How the causality chain is precisely laid out varies ever so slightly, but the result is the same as in Smith’s and Helvétius’s version.

Population made a rapid progress, and government became an art; for agriculture and commerce cannot flourish without salutary laws. (ibid., p. 57)

Government and laws are also introduced as in Smith, and in Helvétius, within the passage through the stages, as a result of population pressure. (Notice also the resemblance to Smith’s insistence on just laws for his system of natural liberty.) Kames proceeds:

That the progress above traced must have proceeded from some vigorous impulse, will be admitted, considering the prevailing influence of custom: once hunters, men will always be hunters, till they be forced out of that state by some overpowering cause. (ibid., p. 59)

Kames makes here the important observation that we cannot simply suppose that society will develop. The laying bare of the causal mechanism is of prime importance. Of course, there might be a drive by man to better his condition, as Smith observed, but the element here emphasised (as in Smith’s account) is “necessity”. There has to be a strong impulse, Kames remarks, to change the mode of subsistence because, as Smith also noted, people have a tendency to proceed as they are accustomed, and laws and institutions can thus stay in place even long after they have finished to serve their purpose. This strong impulse to change the status quo, according to Kames, is created by necessity:

Hunger, the cause here assigned, is of all the most overpowering; and the same cause, overcoming indolence and idleness, has introduced manufactures, commerce, and variety of arts. (ibid.)

As we shall see in the next section, this same idea was to play a prominent (and too often ignored) role in Malthus' theory.

We shall next consider the work of Sir William Blackstone (1723–1780), an English judge and Tory politician. More notably, he was the first lecturer of English law in Britain. After a couple of works on English law, he published in 1766 his magnum opus, *Commentaries on the Laws of England*. The book was the first systematic treatise of English common law, was extensively cited not just in Britain but also until much later in the United States, and went through many editions. Smith too had read it, and cites from it twice in the *Wealth of Nations*.<sup>107</sup> It is in this work that Blackstone makes use of the four stages theory. As in his natural law predecessors', and in Smith's, Helvétius' and Kames' accounts, it is used to explain the introduction of laws in society. And in Blackstone's version too, population is the original causal element driving the progress of the succession of stages.

In Blackstone's account (as in Pufendorf's), scripture is invoked in a reverential manner, at the difference of Smith and most other authors considered in this section (but recall Helvétius' oblique reference to Genesis and Dalrymple's mention of Abraham and Lot). This does not in any meaningful way alter the content of the theory, however. Blackstone's exposition of the four stages appears in Chapter 1 of Book 2, entitled "Of Property, in General". Blackstone here introduces the four stages as had Smith, with regard to the laws of occupation:

In the beginning of the world, we are informed by holy writ, the all-bountiful creator gave to man "dominion over all the earth; and over the fish of the sea, and over the fowl of the air, and over every living thing that moves upon the earth." . . .

The earth, therefore, and all things therein, are the general property of all mankind, exclusive of other beings, from the immediate gift of the Creator. And, while the earth continued bare of inhabitants, it is reasonable to suppose, that all was in common among them, and that every one took from the public stock to his own use such things as his immediate necessities required. . . .

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<sup>107</sup> At I.v.13, p. 52 and III.ii.13, 391, Smith mentions the opinions of "Doctor Blackstone". Campbell and Skinner (*ibid.*) give references to the corresponding passages in the *Commentaries on the Laws of England*. I have found no indication of Smith and Blackstone ever having met, either in biographies of Smith or of Blackstone, but it is quite possible that they would have, for both Smith and Blackstone studied in Oxford in the period 1740-46. For an examination of Blackstone's position in the jurisprudential tradition of the 18<sup>th</sup> century, with some interesting remarks on its bearing on the development of wider social science in that period (with regard to the argument made in section 1, p. 82 and n. 30 above), see Lieberman (1988).

These general notions of property were then sufficient to answer all the purposes of human life; and might perhaps still have answered them, had it been possible for mankind to have remained in a state of primeval simplicity (Blackstone 1859 [1766], p. 393-4)

In the savage state, Blackstone writes (as Smith explained in his Glasgow lectures, as Helvétius put it in *De l'esprit* and as Kames exposed it in his *Sketches*), society is egalitarian. There are no differences of wealth as there is no private property. Exactly as Kames had argued, there is a force of habit and custom which makes men like to remain the same, but they are eventually bound to innovate by some overwhelming force, and in Blackstone also that causal element is the increase of population creating shortage and necessity:

*But when mankind increased in number, craft, and ambition, it became necessary to entertain conceptions of more permanent dominion. . . . Such, as were not contented with the spontaneous product of the earth, sought for a more solid refreshment in the flesh of beasts, which they obtained by hunting. But the frequent disappointments, incident to that method of provision, induced them to gather together such animals as were of a more tame and sequacious nature; and to establish a permanent property in their flocks and herds, in order to sustain themselves in a less precarious manner . . .*

As the world by degrees grew more populous, it daily became more difficult to find out new spots to inhabit, without encroaching upon former occupants; and, by constantly occupying the same individual spot, the fruits of the earth were consumed, and its spontaneous produce destroyed, without any provision for a future supply or succession. (ibid. p. 394-6)

Here also it is population that creates necessity because there are more people on the same territory and stress is put on the local eco-system. If people do not introduce a superior technology of food production, they cannot subsist:

It therefore became necessary to pursue some regular method of providing a constant subsistence; and this necessity produced, or at least promoted and encouraged, the art of agriculture. And the art of agriculture, by a regular connection and consequence, introduced and established the idea of a more permanent property in the soil, than had hitherto been received and adopted. (ibid., p. 396)

Naturally, as property is what Blackstone is centrally dealing with, he always comes back to the idea of property. As in Smith, property takes on more importance with the passage of stages. And laws and government are themselves a result of the introduction of private property, which they serve to protect:

Necessity beget property; and, in order to insure that property, recourse was had to civil society, which brought along with it a long train of inseparable concomitants; states, government, laws, punishments, and the public exercise of religious duties. (ibid.)

The appearance of government and of legal and political institutions (with the particularity that Blackstone also includes religious institutions in these) is thus explained by the same familiar mechanism of population creating necessity. Finally, another element characteristic of the four stages theory, and more widely associated with Smith's theory in general, division of labour and specialisation, is introduced by Blackstone (using almost the same formulation as Smith's "the labour of half the society becomes sufficient to provide food for the whole" and "The other half, therefore, . . . can be employed . . . in satisfying the other wants and fancies of mankind"<sup>108</sup>):

Thus connected together, it was found that a part only of society was sufficient to provide, by their manual labor, for the necessary subsistence of all; and leisure was given to others to cultivate the human mind, to invent useful arts, and to lay the foundations of science. (ibid.)

The last work we shall consider in this section is the long "Didactic Poem" of 1793, entitled *The Progress of Civil Society*, by Richard Payne Knight. Like Helvétius, Knight was watched rather circumspectly by religious authority — though not precisely for the same reason.<sup>109</sup> His poem is divided in six books, of which the first four are significantly titled "Of Hunting", "Of Pasturage", "Of Agriculture" and "Of Arts, Manufactures, and Commerce" (the two last books deal with "Climate and Soil" and "Government and Conquest" respectively). The most interesting part of the poem for our purpose is the beginning of Book II:

In every species of each living kind, . . .  
Progressive numbers without end increase,  
While nature gives them safety, food, and ease:  
Whence, through the whole the balance to sustain,  
And in porportion'd bounds each race restrain,  
Each stands opposed to some destructive power,  
By nature form'd to slaughter and devour;

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<sup>108</sup> See p. 111 above for the full quote (which at this point may perhaps be read more beneficially with the full four stages theory in mind).

<sup>109</sup> Knight was known foremost for his 1786 book *A Discourse on the Worship of Priapus, and its Connection with the Mystic Theology of the Ancients*, a book about ancient phallic cults, vividly illustrated, regarded as somewhat subversive by the established Church. He further wrote about the aesthetics of art and collected ancient coins.

And still, as each in greater numbers breeds,  
More foes it finds, and more devourers feeds. . . .  
Promiscuous death, through all the finny brood,  
Destroys the less to give the greater food:  
Their countless hosts no social right protects;  
No mutual instinct in fond pairs connects;—  
Unfelt the sweet delights of love, they breed;  
And, undisgusted, on their offspring feed.

As growing numbers claim'd increase of food,  
In smaller herds the cattle browsed the wood:  
The hunter's labours less productive grew,  
And pale-faced famine slowly rose to view;  
Hence want inventive, and prospective thought,  
More certain sources of nutrition sought;  
Directed man his genius to employ  
To guard and save, as well as to destroy; . . .  
As more the bounds of social rights expand,  
And peaceful herds submit to man's command;  
Still as a faithful minister, he shares  
The shepherd's labours, and divides his cares;  
(Knight 1796, p. 28-30)

The mechanism from population growth via the creation of want to technological development is here concisely laid out. Meek (1976b, p. 209-13) considered Knight's poem as part of the "revisionist" literature on the four stages theory, and remarked, pointedly, that revisionist tendencies "presuppose the existence of something 'orthodox' to revise", seeing Knight's poem in this connection as "Striking evidence of the rise of the four stages theory to the status of orthodoxy". What Meek does not note is that Knight himself saw his poem mainly as a commentary on Lucretius.<sup>110</sup>

As the elements of the four stages theory as used by the various authors considered in this section were sensibly the same as in Smith's version, it will not be necessary to sum up anew the various steps of this theory (see the last

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<sup>110</sup> Knight thus wrote in his preface: "The learned reader will perceive, that the general design of the following work is taken from the latter part of the fifth book of Lucretius, beginning with verse 923; and that I have also borrowed many particular passages, which I should have given at the bottom of the page, did I not rather wish that the whole should be read in its proper order, as a text, upon which I have written a commentary, as nearly in the same style and manner, as my poor abilities, and the inferior language which I employ, will allow; for that style and manner I consider as perfect. Lucretius is, in my opinion, the great poet of the Latin language". See n. 19 on p. 79 above for a view of the importance of Lucretius for 18<sup>th</sup> century theories of socio-cultural evolution.



paragraph of the previous section on p. 117 above). This section was mainly intended, indeed, to show the great resemblance in almost every detail of the four stages theory as used by various authors at the time, and, by highlighting the centrality of the population mechanism therein, to throw additional light on Smith's use of this feature of the theory.

The 'Malthusian' flavour of the beginning of the quote from Knight above will have escaped few, which brings us to our next subject. Only two years after the work considered last (Knight's poem of 1796), the first edition of Malthus' *Essay on the Principle of Population* was published (anonymously). Malthus was naturally deeply influenced by the categories of analysis of the four stages theory. He adopted from this theory the three critical elements of: population being at any one time nearly proportional to what food can be obtained from nature with the given state of subsistence technology; population having the tendency to increase, and to do so faster than the means of subsistence, so as to produce scarcity;<sup>111</sup> and this very scarcity spurring people on to industry and invention. As we shall see, however, Malthus also introduced elements of his own which made his use of the four stages theory only partial, and may have had the effect, deplored by Meek (1976b, p. 223), of contributing to the coming into disuse of the original four stages theory rather than to its wider circulation. The four stages theory in its original outline was made use of, in turn, by some authors to criticise Malthus' population theory (sometimes not recognising, however, to what extent what they were advancing to counter Malthus was in fact close to what he had written himself — as is so often the case in scholarly controversies<sup>112</sup>).

## 7. Malthus and his critics

As Rutherford (2007, p. 222) remarks, too little attention has been paid by commentators on Malthus' work to his use of 18<sup>th</sup> century conjectural history. It may be added that those who have recently paid some attention to this feature of Malthus' work (including Rutherford himself)<sup>113</sup> have in turn paid insufficient attention to the intimate connection between the four stages *theory* (and not

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<sup>111</sup> In the savage state, indeed, the means of subsistence do not increase at all once the balance between society and the food to obtain from nature is broken by ongoing population growth, but rather decrease by the progressive decimation of the wild animals.

<sup>112</sup> For an example of this from 20<sup>th</sup> century development theory, see Alacevich (2011).

<sup>113</sup> Others include Dzelzainis (2006) and Bashford and Chaplin (2016).

merely the stadial model as categorisation of human societies) and Malthus' own theory of population and the theoretical content of his *Essay* more widely.

Meek (1976b, p. 223) accused Malthus of having used the four stages theory merely to show the eternal and overarching validity of his own propositions about population. On the one hand, the charge is justified and largely true: Malthus not only used the four stages theory in an instrumental manner, but, for this purpose, he also deviated from it in important respects. On the other hand, Meek's quick dismissal of Malthus in his detailed investigation into conjectural history does not do justice to the considerable use Malthus in fact made of the four stages theory. Meek was interested mainly in Malthus' role (or absence thereof) in the continuation of this theoretical tradition in the same form. The more interesting questions for the history of thought may be, conversely, what role the four stages theory played in shaping Malthus' hugely influential propositions about population and society; and to what degree this theory thus lived on in Malthus' work while taking on a different shape and a somewhat new purpose.

The four stage theory had been used from the start (that is in ancient Greek thought, and in the natural law tradition that took it up) to justify the existence of private property. Thereby, the theory also served, indirectly, to justify economic inequality (for the defence of private property is of most use to those who own more than their own labour). Yet the four stages theory could also be used to argue for an improvement in economic equality in a "fifth stage" to come (as it was by Godwin and Condorcet, Malthus' primary targets, and later by Marx). Malthus' argument for the inevitability of inequality based on the population principle was partially derived from four stages theory. But it also diverged from this theory in important respects, as we shall see.

The popular historical simplification consisting in the view that, up to Malthus' *Essay*, everyone believed population was a great force for good, and suddenly, Malthus having enlightened the whole world to the real effect of population, everyone realised that it was the actual cause of impending doom, is of course as implausible as it is wrong. The development of ideas about population at the end of the 18<sup>th</sup> century was, as always, one of many contradictory positions being held, and the same, sometimes widely accepted argument being used for various purposes. It is true that the major *controversy* on population in the 18<sup>th</sup> century concerned not the beneficial or harmful character of population growth for society, but rather the relative population of the ancient and modern world (i.e. the question whether Europe had been populated or depopulated since Roman times), which was itself taken but as a means to discuss the superior or inferior character of institutions of classical versus modern European states (a continuation of the

'querelle des anciens et des modernes'). On the question of the beneficial or harmful character of population for society (surely an ambiguous question to begin with), which would frame the major controversies about population of the 19<sup>th</sup> and 20<sup>th</sup> centuries, there was a relative consensus in the 18<sup>th</sup> century: population was seen as an integral part of progress, thus usually as a sign of progress, and by many thinkers (including Smith) jointly as a cause of it.<sup>114</sup> Yet the idea that population curtailed the means of subsistence and laid stress on society was equally widespread, as we have seen. Indeed, these two ideas were in general neither presented as, nor seen as contradictory, and, in the four stages theory, they in fact complement each other, the stress brought about by population pressure being itself seen as the cause of progress. The caricature of the state of population theory before and after Malthus presented above (reinforced by such adjectives as "pre-Malthusian" to qualify theories of population before Malthus) totally obscures the direct continuation of many theoretical elements and themes of former works in the one of Malthus. Nor was Malthus in fact predicting impending doom. Instead, his theory included a view of the progress of society, which, importantly, incorporated population growth, very much along four stages theory lines.

Malthus himself recognised that he was not a pioneer of the principle of population — and with more detail and emphasis so in the second edition of his *Essay*. In the first edition he declared that "It is an obvious truth, *which has been taken notice of by many writers*, that population must always be kept down to the level of the means of subsistence" (1998 [1798], p. vii). And in the second and subsequent editions, he affirmed to have "deduced the principle, which formed the main argument of the *Essay*, [from] Hume, Wallace, Adam Smith, and Dr. Price" (1826a, p. v). Wallace had famously laid out the Malthusian population theory in full detail in 1761 already (Wallace 1809 [1753]), almost forty years before the publication of Malthus' first *Essay*.<sup>115</sup> And part of Malthus' theory was derived

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<sup>114</sup> For useful summaries and analyses of debates and positions on population in the 18<sup>th</sup> century, see notably Whelan (1991), Tomaselli (1988) and Kreager (1991). See Black (1985) for a somewhat narrower focus on economic questions in this regard.

<sup>115</sup> On Wallace's ideas on population, see Luehrs (1987). (There is a curious parallelism in the history of ideas between two famous Wallaces. Robert Wallace (1697–1771), here considered, was minister of the Church of Scotland, and a precursor to the cleric Malthus on population; Alfred Russel Wallace (1823–1913), British naturalist and geographer, preceded — or coincided with — the naturalist and geologist Charles Darwin in the formulation of the theory of evolution by natural selection; and Darwin, of course, was famously inspired by Malthus in his elaboration of the theory of natural selection, the "struggle for existence" (title of chapter three of *Origin of Species*) being, in Darwin's words, "the doctrine of Malthus applied with manifold force to the whole animal and vegetable kingdoms" (Darwin 1859 p. 63, 1872 p. 50).)

directly from the *Theory of Moral Sentiments* and the *Wealth of Nations*, notably the chapter on wages in the latter (WN I.viii). Malthus only gave these ideas more polemic focus by tying them more clearly to contemporary political concerns.<sup>116</sup>

To uncover the lesser known connection between the four stages theory and Malthus' population theory, one needs to be prepared to further look for population theories in works that do not expressly deal with population issues. Thus it is at least possible that the connection between Malthus' work and conjectural history was obscured for later scholars by the fact that this theoretical tradition was not dealing principally with population questions. The word "population" was indeed only beginning to find widespread use at the end of the 18<sup>th</sup> century.<sup>117</sup> Kames, as we have seen, presented the four stages theory in a section of his *Sketches on the History of Man* entitled "Progress Respecting Food and Population"; and Franklin had earlier written a four-stages-theory-like segment in his essay entitled *Observations Concerning the Increase of Mankind, Peopling of Countries, &c* (both of which Malthus had likely read — Franklin was indeed specifically named by him as one of his sources). The connection between the four stages and population theory thus appears very clearly in these two sources at least. But neither Smith in his lectures, nor Helvétius in *De l'esprit*, nor Dalrymple in *History of Feudal Property in Great Britain* or Blackstone in *Commentaries on the Laws of England* presented the four stages theory in any way as connected to population theory, nor were they likely by this means to have wanted to contribute to population theory or debates about population. Malthus himself, indeed, did not mainly intend to do so. His *Essay*, in any case the first edition, notwithstanding the population theory presented therein, was primarily intended to refute the theories of Godwin and Condorcet about the "perfectibility of society". Both of them had themselves considered what would be Malthus' objection (the disturbing force of population), but ultimately dismissed it, for reasons which Malthus attacked. The connection between Malthus' work and the four stages theory as used in jurisprudential theories and theories of societies of the 18<sup>th</sup> century is thus not likely to appear when too much focus is put on the population aspect alone. It is from a more comprehensive consideration and comparison of these theories with the one of Malthus that the connection will become visible. Notwithstanding, it is precisely in the population aspect of their theories, and the connection to hardship and the development of society, that the resemblance can be found.

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<sup>116</sup> For the evolution of the intellectual context between Smith's and Malthus' time, see Winch (1998, p. 5-10).

<sup>117</sup> See General Introduction, p. 19.

Just as Smith, with the *Wealth of Nations*, presented a great synthesis of economic theories that had been formulated hitherto, so Malthus did something similar with regard to population theories in his *Essay*. But while they are commonly hailed today, respectively, as the founding father of economics and of demography — justly or wrongly —, it is quite obvious that neither of them had the intention of founding such a science; not only because they did not ever profess such an intention, but also because their work was in direct keeping with contemporary debates and quite clearly intended as a contribution to the fields of knowledge existing at the time: theology, moral philosophy, political economy; and jurisprudence in Smith's case at least. (Smith taught all four of these subjects, as we have seen, although not in classes exclusively dedicated to them; Malthus, as a scholar, a cleric, and later as the first professor of political economy, was clearly concerned with the three first at least). Their sources were, in their majority, not explicitly “economic” and “demographic”, respectively. Just as Smith found much of his inspiration (“economic” and other) in the legal (or jurisprudential) tradition (Pufendorf's *Law of Nature and Nations*, Montesquieu's *Esprit des Lois* and the works by Smith's contemporaries and acquaintances considered in the previous section), so Malthus, too, found therein (whether directly or indirectly) some of the sources of his population theory (or rather of his theory as a whole, of which his population theory was a part).<sup>118</sup>

If the four stages theory was in fact as widely known and used at the end of the 18<sup>th</sup> century as Meek (1976b) established, it would have been surprising, to be sure, had Malthus entirely ignored it. And indeed, he did not. Both the idea that the growth of population exerts a pressure on subsistence and thus creates hardship (itself related to the idea — if not deriving from it — that population always naturally conforms to what the environment, with the given state of technology, is capable of producing) and the idea that the hardship the pressure of population produces is both good and necessary for the progress of society were contained in the four stages theory. Malthus adopted both these ideas and they both played a crucial role in his theory. But he also utilised them in a new context and for different motives. Indeed, the idea of the constant pressure of population on subsistence and the social, political and economic changes this brought about, having been used by the natural law theorists (including Smith) as a means to explain the introduction of property, laws and government, became in Malthus' theory an argument against the prospect of an egalitarian society. Malthus thus held — which was a deviation from the four stages theory as formulated hitherto

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<sup>118</sup> See n. 30 on p. 82 above for the centrality of jurisprudence in 18<sup>th</sup> century social science.

— that the pressure of population always exerted itself exclusively on the lower ranks of society, and would recreate these lower ranks if they ever were made to disappear.

The idea that the pressure of population, despite the hardship it creates, is ultimately a good thing, as it spurs society on to higher stages of development, also took on a new purpose in Malthus' *Essay*. While the four stages theory had before been presented by reference to God or scripture (notably in Pufendorf's early version, or later in Blackstone's), these were invoked merely as a way to introduce the idea of early humanity from whence the development of society could then be traced. Other authors had used different devices for the same purpose, such as Smith's island metaphor. Under Malthus' pen, however, the idea became theodicy.<sup>119</sup>

It is ironic, as I signified in the introduction to this chapter, that the idea of population pressing on the means of subsistence and thereby bringing about technological change as a response to the want it creates is today known as the "Boserupian" position, while Ester Boserup formulated her theory two centuries after Helvétius, Smith and Kames, and the idea in fact can already be found, as we have seen, in classical authors, as well as natural law theorists of the 17<sup>th</sup> century (who indeed all inspired the former). On the other hand, the connection of this set of ideas with Boserup's name in contemporary social science is not all that surprising in face of the fact that the conjectural historians did not have a 'Malthusian' theory of population to confront, and their integration of the positive role of population growth was thus not polemical, and has not been remembered in that connection. It was, however, as we shall see shortly, used by some authors in the first decades of the 19<sup>th</sup> century already specifically to attack Malthus.

Ironic too is that Boserup is often depicted as 'standing Malthus on his head' (Elliott 1965, p. 655; Clark 1984, p. 177; Robinson & Schutjer 1984, p. 356; Schultz 1990, p. 2) even though this very theme of population pressing on the means of subsistence, and thereby inducing positive change in society was in fact recognised by Malthus himself and played a crucial role in his theory. Boserup can thus hardly be said to have 'stood him on his head' with her use of this theory.<sup>120</sup>

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<sup>119</sup> For a consideration of Malthus' theodicy see notably Pullen (1981), Santurri (1982) and Harvey-Phillips (1984). For a more recent take see Denis (2006).

<sup>120</sup> Boserup herself reportedly had this to say about this allegation: "In my first book on agricultural growth, there was a flap noting that I turned Malthus on his head. I did not say that; it was the publisher. A great advertisement, of course. In reality, I wrote very, very little about Malthus. Malthus said many things on many issues, and you always find a counter-example. I am not interested in old economists but in how things relate to each

As we are concerned here with the use of conjectural history, it will be apposite to start our textual examination of the link between Malthus' work and the four stages theory by looking at Malthus' position on the use of conjecture. This he disclosed in the opening pages of the first edition of his *Essay on the Principle of Population*:

In entering upon the argument I must premise that I put out of the question, at present, all mere conjectures, that is, all suppositions, the probable realization of which cannot be inferred upon any just philosophical grounds. (Malthus 1998 [1798], p. 3)

Malthus, observes, a few paragraphs later:

I have thus sketched the general outline of the argument, but I will examine it more particularly, and I think it will be found that experience, the true source and foundation of all knowledge, invariably confirms its truth. (ibid., p. 5)

And a few pages later he declared, resonating with four stages theory:

That population does invariably increase where there are the means of subsistence, the history of every people that have ever existed will abundantly prove.

And that the superior power of population cannot be checked without producing misery or vice, the ample portion of these too bitter ingredients in the cup of human life and the continuance of the physical causes that seem to have produced them bear too convincing a testimony. (ibid., p. 11)

Malthus had thus turned the "conjectural history" of Adam Smith and his peers into an 'historical truth'. It is upon having been amply criticised for this (stipulating a population theory without showing that it was relevant in the real world, while professing to base himself on experience) that he undertook a serious scholarly effort in comparative analysis of population mechanisms in various countries and epochs that form the bulk of the second edition of his *Essay*, which, as has often been noted, was in many respects a new book. It must be remarked, of course, that the term "conjectural history" was Stewart's, not Smith's, and in stressing the importance of experience over conjecture Malthus was in fact following in the empiricist (and anti-rationalist) tradition of Smith and Hume.

It should be remarked too, however, that Malthus' declaration of avoidance of conjecture and espousal of proof from experience, which he repeats numerous

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other today. . . . It is incorrect to say that I turned Malthus on his head." (Mathieu 2014, p. 14-15; the quoted conversation was held, according to the author, in 1981.)

times throughout the book,<sup>121</sup> is mostly rhetorical. A few paragraphs before the first of the two passages quoted above, indeed, Malthus first exposes what is still one of the most famous conjectures in the history of economic thought, political theory and the human sciences as a whole, i.e. the particular formulation he gave the principle of population, with its arithmetical progression of food pitted against a geometrical progression of population:

Population, when unchecked, increases in a geometrical ratio. Subsistence increases only in an arithmetical ratio. A slight acquaintance with numbers will shew the immensity of the first power in comparison of the second.

By that law of our nature which makes food necessary to the life of man, the effects of these two unequal powers must be kept equal.

This implies a strong and constantly operating check on population from the difficulty of subsistence. This difficulty must fall somewhere and must necessarily be severely felt by a large portion of mankind. (ibid., p. 4-5)<sup>122</sup>

All the elements listed by Malthus in the preceding two quotes (save for the “arithmetical” and “geometrical” nature of the relative increase of food and population) are fully congruent with the population mechanism we have hitherto observed to be the main ingredients of some of the typical versions of the four stages theory. While declaring to eschew conjecture, Malthus thus still endorses the framework of “conjectural history” (the phrase having been coined by Stewart five years before the publication of Malthus’ first *Essay*), “the history of every people that have ever existed” resounding with Smith’s “ages and nations”. Friedrich Engels notably remarked 40 years later how Malthus’ computation was purely conjectural:

Malthus established a calculation, on which his whole system is based. Population increases in geometrical progression: 1 +2 +4 + 8 +16 + 32 etc., the productive power of the soil in an arithmetical one: 1+ 2 + 3 +4 + 5 + 6. The difference is manifest, is terrifying, but is it correct? Where has it been

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<sup>121</sup> Malthus’ assurance that what he is stating is derived from experience is repeated no less than thirty-six times in the short work (125 pages in the edition used) that the *Essay* still was in its first edition (Malthus 1998 [1798], p. 5, 7, 10, 13, 17, 40, 41, 46, 52: five times, 65, 66, 70, 72, 73: three times, 75, 80: twice, 82: twice, 85, 88, 105, 112: twice, 113, 115, 116, 120, 121, 122).

<sup>122</sup> Although he was much less blunt and more elaborate when exposing the principle of population in subsequent editions, Malthus always maintained the contrast between the “geometrical” and “arithmetical” progressions. Malthus also explained, in later editions, that the progression of population in geometrical proportion was a *tendency*, not an actual rate (he insisted on the difference between the two in his correspondence with Senior; see Senior (1829, p. 60-6)). In the first edition this was not yet clearly spelled out.



proven that the productivity of the soil increases in arithmetical progression? (Engels 1844, p. 110 my translation)

Engels' counter-argument is worth considering:

The extension of soil is limited, all right. The labour power to apply to this surface increases with population; let us even suppose that the increase of returns is not always in proportion to the increase of labour; there still remains a third element, which the economist admittedly never deems important, science, and its progress is as infinite and at least as rapid as the one of population. What progress does agriculture in this century owe to chemistry alone, indeed to two men alone — Sir Humphrey Davy and Justus Liebig? But science increases at least like the population; the latter increases in proportion to the numbers of the last generation; science progresses in proportion to the sum of knowledge, which it has inherited from the previous generation, hence in the most normal of situations in geometrical progression too, and what is impossible for science? (ibid.)

The accumulation of knowledge, which Engels here invokes, was also a feature of the four stages theory, as we have seen (consider the many instances of necessity 'teaching' society various 'arts' in the quotes of the previous sections).<sup>123</sup> With the division of labour that is introduced especially in the agricultural and commercial stages, arts and sciences multiply, and, as Smith so poignantly pointed out in the opening passages of *Wealth of Nations*, with the division of labour the skill of the workmen increased, and hence the level of skill in society overall.<sup>124</sup>

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<sup>123</sup> For an examination of the theme of the accumulation of knowledge in four stages theory, see especially Craig Smith (2006b). (But see my comment in the penultimate paragraph of this chapter.)

<sup>124</sup> The idea of the acceleration of science forms an integral part of Smith's theory of the division of labour. It is the division of labour which creates a special class of "philosophers" in society that can dedicate themselves entirely to scientific research, and with the progress of the division of labour this class of philosophers further subdivides and scientific research consequently becomes, like all other branches of activity, more productive (WN I.i.9, p. 21-2), whence the idea of an acceleration of science with increasing population and (thus) division of labour in Smith's theory. The link between population and division of labour in Smith's thought shall be more centrally examined in the following chapter.

A related theory (which Engels also alludes to with his mention of the "two men alone" that 19<sup>th</sup> century agriculture was so deeply indebted to) is sometimes called the "geniuses" theory. It was used by Turgot to explain that with increasing population, there would be an increasing amount of geniuses, and hence progress in knowledge would accelerate (Whelan 1991, p. 63-5). William Petty exposed the same theory a century before, and Julian Simon used it a century after Turgot (Simon 1998 [1981]). In the four stages theory, however, as it was examined in the prior two sections, such a theory was not spelled out. The progress of society was explained in purely materialistic terms, necessity inducing people, not so much to be inventive, as to make use of the discoveries

Other authors who criticised Malthus in the first decades of the 19<sup>th</sup> century made more specific use of the four stages theory. John Weyland did so in 1816; Michael Sadler in 1830 and George Poulet Scrope in 1833.<sup>125</sup> Interestingly, in reaction to Malthus' work — which the writings of these three authors explicitly constituted — the role of population now took centre stage in considerations of the evolution of society. In Malthus' work, indeed, population got charged with such a prominent negative role that it naturally was the most obvious feature of his theory to attack, and the one that consequently became the most attacked.

The role of population in the four stages theory had been an unambiguously positive one for the progress of society (in the long run at least, while in the short run it created some hardship, which, however, was the very cause of the long-run progress). But this role was not emphatically stated or made the central aspect of the theory. Indeed, as has been remarked already, the four stages theory was never principally formulated as a contribution to population controversies, nor did it need to be, the positive role of population for progress being largely taken for granted by the majority of scholars at the time the theory emerged. In Malthus' work, population continued, in fact, to carry this positive role for progress (alongside its more prominent negative role) in the form of the "goad of necessity".<sup>126</sup> But as this was overshadowed by the more dazzling "geometrical" progression of population contrasted with the "arithmetical" progression of the productive power of the soil, it was often overlooked by friends and foes alike — the neo-Malthusians, indeed, wanting to do away with population growth altogether, entirely ignored it. The use Weyland, Sadler and Scrope made of the four stages theory was thus to bring the positive causal role of population for the

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and observations they were, in fact, most naturally inclined to have made anyway (without having as yet a use for them), by virtue of humans being by nature observant and creative. Genius, it may be recalled, in Smith's theory, is not seen as the cause of progress in technology, but rather both the progress of genius and the progress of technology are the effect of a common cause, namely the division of labour. Smith's egalitarian stance indeed made him shun theoretical elements based on the natural inequality of individuals. In Smith's theory, it is the division of labour which creates the essential part of the inequality of talents in society. At birth and in early childhood, the future porter and the future philosopher are essentially identical in genius (WN I.ii.4, p. 28-9 and references given in n. 14 on p. 76 above).

<sup>125</sup> Weyland is noted in this connection by Meek (1976b, p. 224), who sees in him (and List) one of the few "exceptions of the type that proves the rule" to the decline of the use of four stages theory in the 19<sup>th</sup> century. Sadler's and Scrope's anti-Malthusianism are considered in Coontz (1957, p. 22-45) and Kern (2009) respectively.

<sup>126</sup> The "goad of necessity" is mentioned by Malthus in the first and later editions of the *Essay* (1826b, p. 5; 1826a, p. 50, 92; 1998 [1798], p. 47). Alternative expressions, such as "goadings of want", "goaded by constant distress", "want was the goad" also appear in both (1826b, p. 29, 302; 1998 [1798], p. 13, 61).

progress of society to the fore. The latter of these three might be used here for illustration.

In Scrope we find, again, the same familiar elements of the four stages theory, and the same mechanism of population creating necessity and thereby opportunity for a superior subsistence technology:

Many savage tribes still existing offer an example of the mode in which our ancestors must have subsisted . . . Their sustenance must have been confined to the fruits and berries of the plain or forest, the flesh of wild animals and fish, and the water of the spring. . . . and as the numbers of a society increased, there must have been felt a very inconvenient scarcity of food . . . . When, however, a people had attained a knowledge of the art of domesticating animals, whose milk or flesh supplies a wholesome and pleasant diet, a great addition was made to their power of providing themselves with food from a limited territory. A tract of land employed as pasturage for herds of cattle and flocks of sheep might be made to support, probably, not less than a hundred times the population which could subsist on its spontaneous supply of wild fruits and animals. . . . But as the numbers of such a society increased, they might not impossibly find themselves pinched for want of a sufficient range of pasture land. We have an example of this recorded in the sacred history of the Jews.

Under these circumstances two resources, as before, are open to such a people, — viz. either to spread themselves over other distant lands yet unoccupied, (which was the proposal of Abraham to Lot . . . ) or by the exercise of their ingenuity to contrive means for making the district they inhabit afford them more copious supplies of food (Scrope 1833, p. 263).

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“To these”, Scrope remarks at this point, in barely covert reference to Malthus:

modern political economists have added a third, namely, the keeping their numbers sedulously within the limits of their existing means of subsistence by ‘a prudential abstinence from marriage’. Fortunately our ancestors in the earlier ages of the world did not adopt this sage plan; or the probability is, that we, and the other civilized nations of the globe, would never have existed at all; and mankind would have been confined, in local occupation, to some one or two snug corners, — a rich island, or a fertile valley, — and in numbers, to the few thousands whom the pasture of this limited territory could supply with milk, cheese, and cattle! (ibid.)

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<sup>127</sup> Recall that Dalrymple also referred to Abraham and Lot in this connection (see above p. 124).

Scrope's criticism potently illustrates the absurdity of the view that population always and everywhere constitutes an obstacle to the progress of society. But this was not in fact Malthus' view. The idea of the necessity of population for the progress of society in Scrope's remark was in fact one with which Malthus wholeheartedly agreed. Thus he stated:

That an increase of population, when it follows in its natural order, is both a positive good in itself, and absolutely necessary to a further increase in the annual produce of the land and labour of any country, I should be the last to deny. (Malthus 1826b, p. 241)

The "natural order" bit of this quote is of course in direct lineage of Smith: what "nature" (Smith) or "God" (Malthus) produced was good. What man contrived — whether to force capital into channels it would not have gone into "of its own accord" (Smith) or bring about more (or less!) population growth than would naturally occur, by the artificial stimulus of the poor laws, or the artificial restraint of birth control (Malthus) — was pernicious.

Malthus was thus less worried about the effect of a growing population (as long as it had grown by "natural" means) in the long run (which he recognised would, much like in the four stages theory, contribute to society's progress) and more with how to bring that growing population about — or rather how to allow it to naturally occur. Indeed, his view that population everywhere and always pressed *immediately* on the means of subsistence made the actual growth of population (other than its tendency to great growth) not an obvious and straightforward affair. He believed, indeed, much like Smith,<sup>128</sup> that some nations did not attain higher stages precisely because their population had not increased:

There is a principle in human society, by which population is perpetually kept down to the level of the means of subsistence. Thus among the wandering tribes of America and Asia, we never find through the lapse of ages that population has so increased as to render necessary the cultivation of the earth. (Malthus 1998 [1798], p. 56)

It was not population growth alone, however, which would move society to higher stages of development, in Malthus' view. Indeed:

Had population and food increased in the same ratio, it is probable that man might never have emerged from the savage state. (ibid. p. 115)

Instead, what was needed was precisely the fact that population produced privation, and this privation motivated people to work harder and become more

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<sup>128</sup> See n. 86 on p. 113 above.

productive. It was only by *this* means that society could *both* grow in population *and* move to higher stages of development:

if we return to the principle of population and consider man as he really is, inert, sluggish, and averse from labour, unless compelled by necessity . . . we may pronounce with certainty that the world would not have been peopled, but for the superiority of the power of population to the means of subsistence. Strong and constantly operative as this stimulus is on man to urge him to the cultivation of the earth, if we still see that cultivation proceeds very slowly, we may fairly conclude that a less stimulus would have been insufficient. Even under the operation of this constant excitement, savages will inhabit countries of the greatest natural fertility for a long period before they betake themselves to pasturage or agriculture. . . . The principle, according to which population increases . . . keeps the inhabitants of the earth always *fully* up to the level of the means of subsistence; and is constantly acting upon man as a powerful stimulus, urging him to the further cultivation of the earth, and to enable it, *consequently*, to support a more extended population. (ibid. 114-5) <sup>129</sup>

In later editions, Malthus similarly stated:

A history of the early migrations and settlements of mankind, with the motives which prompted them, would illustrate in a striking manner the constant tendency in the human race to increase beyond the means of subsistence. Without some general law of this nature, it would seem as if the world could never have been peopled. A state of sloth, and not of restlessness and activity, seems evidently to be the natural state of man; and this latter disposition could not have been generated but by the strong goad of necessity (Malthus 1826a, p. 92) <sup>130</sup>

The context in which Malthus defends the importance of the “goad of necessity” is the process by which “mind” arises from “matter”:

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<sup>129</sup> Note that Malthus’ contention that the inhabitants of the earth are always kept “*fully* up to the level of the means of subsistence” contrasts with Smith’s view according to which “The produce of the soil maintains at all times *nearly* that number of inhabitants which it is capable of maintaining” (see above p. 71). Smith’s view makes more room, indeed, for a natural and comfortable growth of population before any obstacle is encountered.

<sup>130</sup> Even the increase of population *and* the necessity it brought about was not, according to Malthus, a sufficient cause of the increase of wealth, as he stated in his *Principles* (Malthus 1836, p. 311). Yet, as clearly emanates from the previous quotes, the pressure of population was seen by Malthus as a *necessary* cause of society’s progress. (The passage in the *Principles* just referred to appears in Chapter I of Book II, entitled “On the Progress of Wealth”, in which Malthus notably exposes his theory of “universal glut”.)

The first great awakers of the mind seem to be the wants of the body. . . . They are the first stimulants that rouse the brain of infant man into sentient activity . . . . The savage would slumber for ever under his tree unless he were roused from his torpor by the cravings of hunger or the pinchings of cold . . . . if those stimulants to exertion which arise from the wants of the body were removed from the mass of mankind, we have much more reason to think that they would be sunk to the level of brutes, from a deficiency of excitements, than that they would be raised to the rank of philosophers by the possession of leisure. In those countries where nature is the most redundant in spontaneous produce the inhabitants will not be found the most remarkable for acuteness of intellect. *Necessity has been with great truth called the mother of invention.* Some of the noblest exertions of the human mind have been set in motion by the necessity of satisfying the wants of the body. . . . Locke, if I recollect, says that the endeavour to avoid pain rather than the pursuit of pleasure is the great stimulus to action in life . . . . it is by this exertion, by these stimulants, that mind is formed. (Malthus 1998 [1798], p. 112-3) <sup>131</sup>

Malthus' explanation of the importance of necessity to rouse man to action very much resembles Kames' explanation of the same examined in the previous section (see especially the quotes on p. 129-130 above). Both authors spell out Plato's maxim that necessity is the mother of invention; and although Kames' first speaks of *custom* as the force that needs to be overcome by "some vigorous impulse" and "some overpowering cause", he next states, like Malthus, that "Hunger, the cause here assigned, is of all the most overpowering; and the same cause, *overcoming indolence and idleness*, has introduced manufactures, commerce, and variety of arts".

Malthus takes this idea, and derives from it a theory of mind (which he links to Locke's). More importantly, it becomes for Malthus an argument to tackle the problem of evil, and vindicate the ways of God. Indeed, the growth of population, by the shortage it creates, induces hardship, but God allowing this evil to prevail is justified by the powers of the mind it stimulates and the higher stages mankind is thus moved to:

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<sup>131</sup> David Hume had written in 'Of Commerce' (first published 1752): "What is the reason, why no people, living between the tropics, could ever yet attain to any art or civility, or reach even any police in their government, and any military discipline; while few nations in the temperate climates have been altogether deprived of these advantages? It is probable that one cause of this phaenomenon is the warmth and equality of weather in the torrid zone, which render clothes and houses less requisite for the inhabitants, and thereby remove, in part, that necessity, which is the great spur to industry and invention." (Hume 1987 [1777], p. 267)

As we shall all be disposed to agree that God is the creator of mind as well as of body, and as they both seem to be forming and unfolding themselves at the same time, it cannot appear inconsistent either with reason or revelation, if it appear to be consistent with phenomena of nature, to suppose that God is constantly occupied in forming mind out of matter and that the various impressions that man receives through life is the process for that purpose. The employment is surely worthy of the highest attributes of the Deity. . . . If Locke's idea be just, and there is great reason to think that it is, evil seems to be necessary to create exertion, and exertion seems evidently necessary to create mind. . . . The necessity of food for the support of life gives rise, probably, to a greater quantity of exertion than any other want, bodily or mental. . . . To furnish the most unremitted excitements of this kind, and to urge man to further the gracious designs of Providence by the full cultivation of the earth, it has been ordained that population should increase much faster than food. . . . But it is impossible that this law can operate, and produce the effects apparently intended by the Supreme Being, without occasioning partial evil. (ibid. 112-5)

Let alone his use of the “necessity is the mother of invention” argument as theodicy, it may be remarked that Malthus, by giving such prominence to the development of the mind as an intermediary step between hardship and (technological) development, was, despite his insistence on the passions in stimulating mind to exertion, closer to those theories who described the progress to civilisation as a constant development of reason (like the very two authors he primarily attacked in his first *Essay*, namely Godwin and Condorcet) than to those, like Smith, who saw the progress of society merely as a response of natural human propensities to changing material circumstances. In Smith's theory, as we have seen, no development of the mind is necessary. Civilised man is different from savage man merely because of the difference in their circumstances, just as the philosopher is different from the porter by that virtue alone. Although Malthus also gave some importance to the difference of circumstance in the development of mind,<sup>132</sup> his theory implies that civilised man has, as a result of differing circumstances over time, altered his mental faculties, and is by that virtue intellectually superior to the savage. By that intermediary step between circumstances and results which the formation of mind represents, then, Malthus'

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<sup>132</sup> “It has been not infrequently remarked that talents are more common among younger brothers than among elder brothers, but it can scarcely be imagined that younger brothers are, upon an average, born with a greater original susceptibility of parts. The difference, if there really is any observable difference, can only arise from their different situations. Exertion and activity are in general absolutely necessary in one case and are only optional in the other.” (Malthus 1998 [1798], p. 116)

theory is a less universalist theory than Smith's (in the sense of the term adopted in section 1).

Malthus' theory, too, was primarily an attack on the very idea of egalitarianism. It is this aspect of Condorcet's and Godwin's theories, the prospect of the elimination of the class society, which was the main target of his criticism. In this context as well, the "pressure of want" imported from the four stages theory played an essential role. Yet, in order for him to use it to that end, Malthus needed to adapt the idea to his specific purpose.

Malthus' reasoning is as follows: The principle of population is always acting *specifically* on the lower orders of society. The principle of population is a necessary ingredient in the progress of society, as considered above. Therefore, the progress of society itself relies on the existence of social classes. For that reason, the progress of society cannot entail the elimination of social classes.

But in order to show that the principle of population is always acting specifically in this way — i.e. exerting itself exclusively on the lower classes of society — Malthus had to show that it was acting this way even in the first stage of society, that is among hunter-gatherers. For that he had to introduce into hunter-gatherer society a lower social class; which he did, in the form of women, children and the aged:

The North American Indians, considered as a people, cannot justly be called free and equal. In all the accounts we have of them, and, indeed, of most other savage nations, the women are represented as much more completely in a state of slavery to the men than the poor are to the rich in civilized countries. One half the nation appears to act as Helots to the other half, and the misery that checks population falls chiefly, as it always must do, upon that part whose condition is lowest in the scale of society. . . . In estimating the happiness of a savage nation, we must not fix our eyes only on the warrior in the prime of life: he is one of a hundred: he is the gentleman, the man of fortune . . . The true points of comparison between two nations seem to be the ranks in each which appear nearest to answer to each other. And in this view, I should compare the warriors in the prime of life with the gentlemen, and the women, children, and aged, with the lower classes of the community in civilized states. (Malthus 1998 [1798], p. 21)

Thus, according to Malthus, male middle-aged hunters may be compared to the nobility in civilised societies; and women, children and the elderly respectively to the poor. In the shepherd state, Malthus tells us:



Where there is any inequality of conditions, and among nations of shepherds this soon takes place, the distress arising from a scarcity of provisions must fall hardest upon the least fortunate members of the society. This distress also must frequently have been felt by the women, exposed to casual plunder in the absence of their husbands, and subject to continual disappointments in their expected return. (ibid., p. 15)

Even here, by singling out women in such a way, Malthus was in fact following an important theme of four stages theory. John Millar, notably, made the treatment of women a defining mark of a nation's degree of civilisation.<sup>133</sup> Smith too had remarked that women were to their husbands as slaves in some situations. None of those, however, occurred in the savage state.<sup>134</sup> In the savage state, indeed, there was no marriage at all (or no oath of fidelity at least), as there was no jealousy, according to Smith; even child-rearing is in this state of society (as among Plato's guardians) viewed as a communal affair (LJ(B) 104, p. 439). "When manners became more refined," Smith further told his students (ibid.):

jealousy began and rose at length to such a height that wives were shut up, as they are among the Turks at this day. As mankind became more refined, the same fondness which made them shut up women made them allow them liberties. In the latter ages of Greece women were allowed to go any where. This same fondness carried to a high degree gives as great a licence as when infidelity was disregarded. In no barbarous country is there more licentiousness than in France. (LJ(B) 104, p. 439)

In other words, while there is great inequality between women and man in some barbarous nations and in feudal countries, according to Smith, in the most

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<sup>133</sup> On Millar's treatment of this subject specifically, see Bowles (1984) and Olson (1998). For the role of women in theories of progress of the Scottish Enlightenment more generally see Sebastiani (2013, p. 133-50). Meek (1976b, p. 161) thought that "In Millar's books and lectures, it is hardly too much to say, the new social science of the Enlightenment comes of age. For one thing, the range of topics with which it deals is appreciably increased: although Millar's main emphasis is still on the development of systems of law and government, he is also concerned to explain the changes which occur (for example) in the condition of women, in father-child and master-servant relationships, in manners and morals, and in literature, art, and science, as society develops." Smith had considered all these subjects too of course, and was likely the main inspiration for Millar. Meek (ibid.) believed, however, that "No one before Millar had ever used a materialist conception of history — for, in his hands, that is what it in effect became — so ably and consistently to illuminate the development of such a wide range of social phenomena."

<sup>134</sup> Smith noted that women are as slaves to their husband especially in polygamy (LJ(A) iii.51, p. 160; iii.54, p. 161; LJ(B) 118, p. 445), as well as "amongst the Romans . . . By the ancient marriages, which were performed either by *confarreatio* or *coemptio*" (LJ(A) i.155, p. 65-6).

primitive state, there is a great deal of equality between the sexes, which becomes to a degree reinstated in the most civilised countries.<sup>135</sup>

Not only are women treated in the hunting stage with the most respect, but, according to Smith — and we find this identical in the accounts of the other conjectural historians —, hunter-gatherer society is in every respect a very egalitarian one:

there can be very little government of any sort, but what there is will be of the democraticall kind. . . . The power of making peace and war in such nations belongs to the whole people. . . . There may indeed be some persons in this state who have a superior weight and influence with the rest of the members; but this does not derogate from the democraticall form, as such persons will only have this influence by their superior wisdom, valour, or such like qualifications, and over those only who incline of themselves to be directed by him. In the same manner as in every club or assembly where the whole members are on an equall footing there is generally some person whose counsil is more followed than any others (LJ(A) iv.4-7, p. 201-2)

Thus, in such society, “each individuall had the same power as an other” (LJ(A) iv.19, p. 207). Malthus’ contention that women in the shepherd state were constantly left alone by their combating husbands also is in contradiction with the view of this state of society held by Smith, who wrote in the *Wealth of Nations* that:

When such a nation goes to war, the warriors will not trust their herds and flocks to the feeble defence of their old men, their women and children; and their old men, their women and children, will not be left behind without defence and without subsistence. The whole nation, besides, being accustomed to a wandering life, even in time of peace, easily takes the field in time of war. . . . Among the Tartars, even the women have been frequently known to engage in battle. (WN V.i.a.3, p. 690-1)

Hence Malthus, when introducing a lower class of people in hunter-gatherer society in order to prove the eternal validity of the population principle as he conceived it (i.e. as exerting itself always exclusively on the inferior ranks of people) in order to prove the impossibility of a classless society as conceived by

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<sup>135</sup> But to a degree only, as Smith tells us: “Tho’ there was little or no regard paid to woemen in the first state of society as objects of pleasure, yet there never was more regard paid them as rational creatures. In North America, the woemen are consulted concerning the carrying on of war, and in every important undertaking. The respect paid to woemen in modern times is very small. They are only put to no trouble for spoiling of their beauty.” (LJ(B) 105, p. 439)

Godwin and Condorcet, was introducing into the four stages framework a contrivance that went entirely against the grain of the theory as hitherto laid out. When Smith wrote that “in civilised society it is only among the inferior ranks of people that the scantiness of subsistence can set limits to the further multiplication of the human species” (WN I.viii.39, p. 97-8), indeed, he had clearly stated that this was the case, in particular, “in civilised society”. And although the authors previously considered in this chapter (including Smith) did not envision a fifth stage of society where perfect equality reigned, as would Godwin and Condorcet, nothing within four stages theory as laid out before explicitly precluded the advent of such a state. Indeed, the very first state had been, according to this theory, one of perfect equality, and even Smith’s (and Millar’s) musings, according to which the condition of women, after gravely worsening in the stages of society following the very first, gradually improved thereafter, points into the direction of improving equality (in any case between the sexes, precisely the criterion singled out by Malthus) in civilised society. Thus Malthus’ population principle was contained fully-fledged (only without the arithmetical and geometrical ratios) in the four stages theory; but Malthus’ argument that since the ‘necessity is the mother of invention’-type population and development mechanism contained in the theory relies on particular stress being put on the lower classes, these must always have existed and must always continue to exist, was not. In fact this idea went against the theory in many respects, which is likely why Malthus felt the need to begin his account by contradicting the supposed equality among savage societies: he was arguing here against the familiar and established account of savage society to be found in the four stages theory.<sup>136</sup>

In the context of the four stages theory as before considered, moreover, Malthus’ idea that the principle of population was exerting its pressure always exclusively on the lower classes was putting the carriage before the horse. Indeed, for lower classes to be concerned by the want created by the principle of population more than the rest of society, there first need to be different social classes, which Malthus simply postulated to have always existed, by contriving some artifice to introduce them even in the savage state. Malthus then uses the population principle to explain why social classes could never disappear. The four stages theory, by contrast, first explained the very emergence of social classes, starting from a state where there were none. Malthus hence breaks with a central

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<sup>136</sup> In James Mill’s later version of the four stages theory, inspired by Smith and Millar but also deviating from them in important respects, there is squarely a superior class of people present from the very first state. See for an analysis Bianchini (2015). Mill may have been influenced by Malthus in this regard.

tenet of the four stages theory: that the different stages are different and contain different elements entirely one from the other, in terms of social institutions, rules of conduct and make-up of society in general.<sup>137</sup> In any case in the exposition of the effects of his population principle, Malthus did not take this into account. In this sense, Marx' criticism of Malthus — to the effect that Malthus applied the law of population as he conceived it, i.e. as specifically acting on the lower classes only, to all times and places, while in fact, according to Marx, this was a particular feature of the capitalist mode of production — is more in keeping with four stages theory than Malthus' approach.<sup>138</sup> With regard to the laws of population, then, the continuity Pascal (1938) and Meek (1954a) saw between the four stages theory and Marx's historical materialism can be noted as well, notwithstanding the considerable imports Malthus (whom Marx so violently attacked) also made from this theoretical tradition.

Having noted in which way Malthus deviated from the four stages theory, then, stress should again be put on how much he adhered to it when it comes to the general effect of population on society. Thus, while Malthus strongly argued against the "perfectibility" of society, he was often misread to mean that population was an obstacle to the "progress of society" in general. Yet he portrayed population as an obstacle to the prospect of a perfectly egalitarian society only, and used it as an explanation of why such a society could never be realised. But it was also precisely through population pushing on the means of subsistence and bringing about hardship — and this is the important aspect Malthus took over from the four stages theory — that there was any progress in society at all according to him.

Much has been made of Malthus' expression of his opposition to birth control with the sentence that "Mr Condorcet . . . proceeds to remove the difficulty in a manner which I profess not to understand" (Malthus 1998 [1798], p. 48). This misunderstanding surely must have been a rhetorical one, for Malthus ends the same paragraph by observing that "To remove the difficulty in this way will, surely, in the opinion of most men, be to destroy that virtue and purity of manners, which the advocates of equality, and of the perfectibility of man, profess to be the end and

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<sup>137</sup> Notably, in Smith's theory, while sympathy and the ties of family-relationships and personal acquaintance suffice to direct affairs in savage society, self-interest comes to take on more and more importance as the principle by which economic life functions in society with increasing division of labour and population and the concurrent increasing anonymity that this necessarily brings about, as Smith explains in probably the most read and known part of his oeuvre (i.e. the first chapters of the *Wealth of Nations*).

<sup>138</sup> We shall consider Marx' criticism of Malthus in more detail in the last chapter. Meek (1976b, p. 224) noted that John Weyland, cited above, also used the four stages theory specifically to argue, against Malthus, that in different stages of society different laws of population prevailed.

object of their views” (Malthus 1998 [1798]). This moral stance, however, still does not fully enlighten us to the motives of Malthus’ opposition to birth control. For the entirety of these, the last two chapters of the first edition of the *Essay*, from the first of which was amply quoted in this section, must be taken into account. As clearly emerges from these, Malthus’ real motive for being opposed to birth control was that to refuse the children God had sent on the way to be born was to contravene the deity’s great design, in which the pressure of population was a necessary ingredient in spurring humanity on to those higher stages of mind and of existence which God can only have intended to be the purpose of humanity. It is for this reason that Malthus opposed birth control. If the pressure of population on the means of subsistence, and thereby the hardship it causes (in the lower orders of society), was entirely removed, this would take away the necessary spur to industry. As Malthus put it very clearly in the *Additions to the fourth and former editions of An Essay on the Principle of Population* published in 1817:

I should always particularly reprobate any artificial and unnatural modes of checking population, both on account of their immorality and their tendency to remove a necessary stimulus to industry. If it were possible for each married couple to limit by a wish the number of their children, there is certainly reason to fear that the indolence of the human race would be very greatly increased; and that neither the population of individual countries, nor of the whole earth, would ever reach its natural and proper extent. (Malthus 1817, p. 292)

In this sense, there was a more radical break between Malthus and the neo-Malthusians (who wanted to halt population growth completely) than between the four stages theory and Malthus.

It may be remarked that Malthus’ mention of the possibility of preventive checks to population in the form of delay of marriage is in contradiction with the necessity of the pressure of population. This is a potent objection. The preventive check was given far greater prominence in subsequent editions of the *Essay*, in which the additional vocabulary of “moral restraint” and “prudential checks/habits/restraint” was introduced and much used in this connection. The infamous passage of the banquet, where people coming into the world when the means of subsistence were not available for them were depicted as unwelcome guests, which was introduced in the second edition but removed from later ones, also seems to be in contradiction with the idea of the necessity of the pressure of population for the progress of society. Indeed, the last two chapters of the first edition, in which Malthus made the “goading of want” theodicy, were omitted entirely from all subsequent editions. Several possible reasons for this omission

have been evoked.<sup>139</sup> It may be — but the passage from 1817 just quoted seems to suggest the opposite — that Malthus came closer to believing, as time went by, that at least in civilised society, the pressure of population was no longer a much needed force for progress (while in the last two chapters of the first edition the stress of want was described as being constantly necessary to keep mind aroused), and delay of marriage may do society more good — a position later elaborated on by the neo-Malthusian John Stuart Mill, who wrote that “The density of population necessary to enable mankind to obtain, in the greatest degree, all the advantages both of co-operation and of social intercourse, has, in all the most populous countries, been attained” and exulted the advantages of a “stationary state” in which the “trampling, crushing, elbowing, and treading on each other's heels, which form the existing type of social life” could finally cease (Mill 1965 [1848], p. 754-6). But while the theological chapters were removed from later editions, the “goad of necessity” was still mentioned and presented in much the same way as before.<sup>140</sup> Himmelfarb (1984, p. 114) observes that the prudential checks may have been suggested to Malthus by Godwin, who criticised him after the publication of his first *Essay* for having neglected that restraint from childbearing could prevent the misery-inducing effects of the principle of population. Malthus, significantly, replied that this would remove a necessary spur to industry and thus reduce the means of subsistence (*ibid.*). Probably, Malthus’ seeming contradiction as to the necessity of population growth and its misery-inducing effect on the one hand but the possibility to reduce misery by moral restraint on the other can only be properly understood by bearing in mind the importance of balance and middle-positions in his thought.<sup>141</sup>

Why was Malthus misread to have believed that population was an obstacle to the progress of society in the absolute? It may be because of a shift in meaning of the concept of progress, at around the time he wrote. As both increasing equality and increasing wealth came to be seen, at the end of the 18<sup>th</sup> century, more so than when Smith wrote, as marks of the progress of society (notably through the credo of “égalité” during the French revolution<sup>142</sup>), Malthus’ attack on the “perfectibility

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<sup>139</sup> See the references in n. 119 on p. 136 above, as well as Rashid (1984).

<sup>140</sup> See n. 126 on p. 140 above for mentions of the concept in the first and sixth edition.

<sup>141</sup> On the importance of the idea of balance in Malthus’ thought see notably Winch (1992b, 1993).

<sup>142</sup> The famous hendiatis which now forms the national motto of France, although first uttered in an official context by Robespierre in a speech of 1790, only acquired the prominence it has today much later. The association of “égalité” with “liberté” (i.e. without the “fraternité”), however, was already common during the period running up and immediately following the French revolution, and the concept of “égalité” can well be

of society” came to be charged with a great weight of ambiguity and confusion (especially for later readers). Malthus’ ambiguity as to this positive role of population notably lead Senior, in correspondence (published as appendix to Senior (1829)), to politely confront Malthus with his own thoughts about population, thinking first that they were more in agreement than could appear from the formulations they both used (p. 55-9), discovering from Malthus’ response that their disagreement was in fact more substantial (p. 60-72), before settling on the position that they were essentially in agreement (p. 87).

For Malthus did believe in progress. But this progress, for him, did not — indeed, within the terms of his theory could not — include the realisation of a perfectly egalitarian society. It is crucial, in order to understand this distinction, to realise that when Malthus, in the preface to the first edition of the *Essay*, described the means by which “population must always be kept down to the level of the means of subsistence” as “to his<sup>143</sup> mind, the strongest obstacle in the way to *any very great future improvement of society*”, it is not the “improvement” that Adam Smith wrote of that he had in mind, but the one envisioned by Condorcet and Godwin. Thus, in Smith’s work, the “improvement of society” described such things as increase in the *general* level of wealth, higher agricultural yields, urbanisation, etc., all subsumed under the general movement of society, examined in the present chapter, from the state of savagery and barbarism to the ones of agriculture and civilisation. The “improvement of society” which Malthus described in his preface was designating, by contrast, the view of Godwin and Condorcet of the possibility of a total elimination of inequality in society; the realisation of a society, not only classless, but infinitely wealthy and healthy, to the degree of the future near-immortality of human beings (in Godwin’s work). It was *this* “improvement of society” that Malthus viewed as implausible, and to which the principle of population was described by him as the greatest obstacle. This distinction is made quite clearly in a famous passage of the sixth edition of the *Essay*, when Malthus affirms that:

On the whole, therefore, though our future prospects respecting the mitigation of the evils arising from the principle of population, may not be so bright as we could wish, yet they are far from being entirely disheartening, and by no means preclude that gradual and progressive improvement in human society, which, before the late wild speculations on

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taken as representative of the claims of the revolutionaries in France and their influence on British debate at the time. On the history of the tripartite motto see Borgetto (1997).

<sup>143</sup> Malthus was here referring to himself (as “the author”) in the third person.

the subject, was the object of rational expectation. (Malthus 1826b, p. 440-1)

Moreover — and this is the crucial part — this very principle of population, while being an obstacle to the kind of “improvement” described by Godwin and Condorcet, not only did not preclude the kind of “improvement” Smith had envisioned, but was viewed by Malthus, in line with the four stages theory, as the very engine of this type of improvement. Indeed, it was the very fact that the principle of population was necessary for Smithian-type improvement that, according to Malthus, made it an obstacle to improvement of the Godwinian type. Bearing in mind that according to him the principle of population acted always specifically on the lower orders, it is essentially this that Malthus was expressing when he wrote, in the same passage from which was just quoted:

A strict inquiry into the principle of population obliges us to conclude that *we shall never be able to throw down the ladder, by which we have risen to this eminence*; but it by no means proves, that we may not rise higher by the same means.

Quite to the contrary of the principle of population being an impediment to progress, Malthus thus saw the population principle itself, and the misery it brought about, as an engine of progress. In this, then, he did nothing more and nothing less than following the orthodoxy of the four stages theory. He deviated from this theory merely in two particular, and related, aspects: First, Malthus deviated from four stages theory in the *use* he made of the theory, taking one of its components (the pressure of population on the means of subsistence) to argue against the possibility to completely remove social classes in the future progress of society, which Condorcet and Godwin had speculated about. Earlier writers, as we have seen, had used the four stages theory principally to explain the development of laws and government. As has often been remarked, Malthus’ use of the population principle in this way was not an innovation, for the same argument (i.e. the impossibility of a perfectly egalitarian society due to the pressure of population on subsistence) had been invoked by Robert Wallace already four decades prior (see Luehrs 1987, p. 329-35). Even Condorcet and Godwin, against whom Malthus argued, had evoked it, but had dismissed it on the ground that in an egalitarian society, men would also, if need be, be able to regulate population growth, notably by birth control (which Marx and Engels would reiterate to be the case in communism). Second, and more fundamentally, Malthus deviated from the four stages theory in seeing social classes (in some form or other) as a timeless feature of society, while in four stages theory, a class society was the outcome, and not the starting point, of the development that the theory described. In line with four



stages theory, the population principle could not, then, have always exerted its pressure exclusively on the inferior classes of society as Malthus held.

## 8. Conclusion

This chapter was concerned with the four stages theory of socio-cultural evolution: its origin and nature, its presence in Adam Smith's work, and its relation with population theories in the 18<sup>th</sup> century, notably Malthus'. Five major points were formulated in the six preceding sections. It was argued, in sections 2 and 3 above, respectively, that the four stages theory is both a very ancient one and constitutes a universalist theory of human progress and human differences; and that this theory, and the four ideal-type categories it uses (savage/hunting, barbarian/shepherd, feudal/agricultural and civilised/commercial) are ubiquitous in Adam Smith's work, and play a central role therein, including in the *Wealth of Nations*. Possible reasons for the neglect of this dimension of Smith's work in intellectual histories of the past two centuries were examined in Section 4, including the link between the Adam Smith Problem, German nationalism and the universalist nature of the four stages theory. The remaining sections were concerned with the role of population in the four stages theory and the role of the four stages theory for 18<sup>th</sup> century population theory, including the one formulated at the close of the century by Robert Malthus. Sections 5 and 6 analysed the precise sequence of steps by which population growth induces technological and societal progress in the four stages theory, in Adam Smith's work, and in the work of a number of his predecessors and contemporaries who used the same theory with remarkably little variation. Section 7, finally, examined the influence of the four stages theory on Malthus' population theory, considering both the import and the deviation Malthus made from this theory. We shall at present briefly reconsider some of these points, and further attempt to situate the population theory to be found in the four stages theory in its wider theoretical context, in Smith's work and beyond, which will offer a bridge to the following chapter.

The essential shape and logic of the four stages theory can be found already in Plato: both the idea that population growth induces a shortage, and that this very shortage is — because necessity is the mother of invention — the origin of technological progress are present in Plato's work. Through a number of classical and modern writers of various origins this theory was transported into the 18<sup>th</sup> century. The connections between these authors are manifold, and it is difficult to know who — in the same period — exactly influenced whom. The theory that these writers have in common is characterised by the fact that it explains human

differences by the stage of societal development alone, itself explained by external circumstances (mostly geographic), rather than by the intrinsic characteristics of the culture, language, religion or ‘genetic make-up’ of human groups. (Rather, these latter elements were explained themselves by the material historical circumstances of the society in question.) In this sense, the theory relies on, and itself constitutes, a universalist representation of humanity and human societies.

In an effort to link the four stages theory to Marx’ historical materialism, Pascal (1938) and Meek (1954a) have insisted on the materialist nature of the four stages theory. As such, the theory could be read primarily as an ‘economic’ one, in the sense that economics is the branch of the human sciences most centrally concerned with the material conditions of individuals and societies. But let alone the anachronism of this perspective — insofar as economics did not exist as an independent branch of philosophy or speculation in the 17<sup>th</sup> and 18<sup>th</sup> centuries —, the theory was not used primarily, at the time, to describe ‘economic’ phenomena. Rather, it became associated, in the 17<sup>th</sup> century, with the natural law tradition and the effort by such writers as Grotius, Hobbes, Locke and Pufendorf to explain (or justify) the existence of property, government, social classes and inequality in modern societies, with the starting point being the Aristotelian (and Christian) view of the earth having been inherited equally by all its inhabitants (which makes the existence of property and inequality something *to be* justified). Tying Smith to *this* tradition (as Hont and Ignatieff (1983) have notably done), rather than to early 19<sup>th</sup> century political economy (i.e. classical economics, an intellectual movement Smith did not live to see, but in the category of which he is more frequently included) considerably mitigates his purported role as founder of an ‘independent’ discipline of economics, and the supposed “epistemic break” that the *Wealth of Nations* constitutes in 18<sup>th</sup> century social science, as argued by Foucault (1966).<sup>144</sup>

Use of the categories of the four stages theory is ubiquitous in Smith’s work, whether in the language of the savage-civilised spectrum (savages, barbarians and civilised people) or the corresponding subsistence-technology vocabulary of hunters, shepherds and commercial society, with the third stage (the age of agriculture) being defined either in socio-political terms (villains, serfs, barons) or again in subsistence-technology ones (peasants, husbandmen), and the last stage being further associated with cities and urban life. As a professor of moral philosophy and jurisprudence, Smith was naturally concerned with the major debates of 17<sup>th</sup> and 18<sup>th</sup> century social science, which itself was heavily influenced by classical Greek and Roman thought: natural law theorising seeking to explain

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<sup>144</sup> See on this also Winch (1983,1997)

the existence of the state and legal, social and administrative institutions of modern society as compared to the “state of nature” on the one hand, and the debate over the superiority of the moderns over the ancients, and more generally of civilisation over savagery, on the other, with obvious links between these two strands of thought. Yet, in the course of the 19<sup>th</sup> and 20<sup>th</sup> century, Smith’s work came to be, through the reading of economists, increasingly disconnected from these concerns, Smith himself having come to be regarded as a founding father of 19<sup>th</sup> century economics, itself increasingly conceived as being concerned primarily with such matters as value, prices and monetary and financial affairs, with the comparison of modern to ancient or savage societies moving increasingly to the background or being absorbed by the new fields of sociology and anthropology. What Smith *did* write about money, value, prices and finance thus came increasingly to be read independently from the 18<sup>th</sup> century debates mentioned above, which these things were clearly intended by Smith to contribute to (as a comparative reading of his work with a multitude of other contemporary works — most of which are not considered today to be ‘economic’ in nature — cannot fail to reveal).

Two major intellectual movements were identified as being instrumental in this severance of Smith’s ‘economics’ from his moral philosophy and jurisprudence. The first is the 19<sup>th</sup> century criticism of Smith’s work by German-speaking scholars, who saw in him both a “cosmopolitan” thinker, and a representative of British interests, both of which was seen as being a challenge to the efforts of German intellectuals of the period to conceptualise and bring about the German nation-state. Whether or not the attack on Smith as a cosmopolitan thinker was justified, the connected charge of him paying insufficient attention to particular local conditions was clearly misguided (the four stages theory is precisely built on the differing circumstances of different societies), but remained influential well into the 20<sup>th</sup> century and indeed to this day. In the 20<sup>th</sup> century, furthermore, economists came to take pride in the independence of the field from other social sciences (seeking to orient the discipline along the lines of the ‘hard’ physical sciences instead). The ‘dichotomy-view’ of Smith’s work, seeing his moral philosophy (and along with it the entirety of his earlier work) as disconnected from his ‘economic’ work that the *Wealth of Nations* purportedly represented, thus got revived and/or kept alive. Smith’s moral philosophy and jurisprudence was seen, by now, by economists as of little interest to their work, at best as interesting but non-substantial quirk. It is only in recent decades, and especially since the bicentenary edition of the *Wealth of Nations* together with the entirety of Smith’s work and correspondence, that a more interdisciplinary interest in his work,

especially from intellectual historians and other social scientists, has revealed anew the central position of the jurisprudential tradition in Smith's work as a whole.

The four stages theory, in Smith's work as in the one of the other authors considered in this chapter, has multiple dimensions. One dimension is primarily concerned with legal and political matters, consisting in an explanation of laws and public institutions: universal democracy and loose laws among hunters, strict hierarchy and severe punishment for theft among shepherds, continuing hierarchisation of property and political power in agricultural society, and a further complexification of laws and institutions, but coupled with a possible return to more democratic political forms, in commercial society. Another dimension of the four stages theory is more 'economic' in nature, namely the explanation of the mode of subsistence: savages hunt, barbarians are pastors, feudal society is generally associated with agriculture, and in commercial society, while agriculture remains the dominant mode of subsistence, an increasing number of people become invested in non-food-procuring activities through the division of labour, notably between towns and rural areas, while agriculture, in conjunction, becomes more and more productive as the soil is "improved". There is another much less known and studied dimension of the four stages theory, which was the focus of this chapter: the population theory contained therein. According to this theory, hunting communities are very limited in numbers (Smith speaks of circa hundred-fifty individuals), as hunters need a large territory to procure enough food by this method even for a small number. Shepherds can sustain larger numbers, especially when they migrate with their livestock, allowing it to periodically graze on new land. Together with these larger numbers also comes military might, especially as in this stage of society there is very little division of labour, and hence everyone (including women) is a warrior, as much as a shepherd. This permits barbarian societies further to absorb other nations in their wars of competition that arise from the limited availability of grazing lands. Eventually, however, this state must give way, if the territory and climate permits it (and otherwise further development will cease) to an agricultural mode of subsistence, implying sedentarisation. Agriculture, by the much larger food surplus it produces, permits population to increase much further, and this is amplified by the building of towns, division of labour and trade (first regional then international), progressively ushering in commercial society.

The decisive element moving human society through the successive stages, with legal and political systems, new socio-economic arrangements, and a larger population attached to each, is the growth of population itself. With a given state of

subsistence technology, the growth of population induces shortages, and thus forces societies to adopt more productive means of food procurement as well as new legal arrangement (the shepherd state introducing property and inequality) and therefore particular forms of government and judicial systems. While there has been some debate about whom, among Malthus and his contemporaries, 'invented' what later became known as the "law of diminishing returns", it has to my knowledge never been remarked that, in the form of the idea of shortages being created by the growth of population, the four stages theory in fact contains a clear anticipation of this 'law' — which constitutes another significant import Malthus made from the theory (if we choose to side with those who connect the law to his name). Thus, in the four stages theory, with increasing population, the same subsistence technology — whether hunting, pasturage or agriculture — yields ever decreasing returns per person, and hence needs eventually to be replaced by a superior technology. Or, said differently, on a given amount of land, food 'production' yields decreasing returns with increasing population. The surface of land is not entirely fixed, as hunters and especially shepherds may still periodically migrate, and the term "food production" squarely applies only in later stages, as food is initially not produced but directly consumed in its natural state, but the essential idea that the law of diminishing returns was still principally connected with in the 19<sup>th</sup> century, namely that the food to be obtained from land increases less than proportionally with population, is quite clearly contained in the four stages theory.<sup>145</sup>

In a way, Malthus, with his idea that population growth always presses on the means of subsistence and induces shortages directly and immediately, is more removed from the law of diminishing returns than the original four stages theory, in which this shortage only gradually comes about, and intensifies at the brink of each stage. Thus hunters, in Adam Smith's work, although often described as 'miserable' compared with the inhabitants of civilised society, are not suffering from hunger at every instance. Within the limits of the hunting stage, although they have to invest most of their labour in hunting, and this activity yields little surplus

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<sup>145</sup> Reid (1989) offers an interesting conceptualisation of Smith's stadial theory in terms of "Societal Growth Trajectories", which culminate in stationary states when the institutional arrangement of particular stages are no longer adequate for a changed economic reality, and thus need to be replaced, opening a new growth cycle. (Although not noted by Reid, there is here too, then, a clear parallel between the four stages theory and Marx' Historical Materialism with its inherent contradictions of capitalism — or any other stage — being exacerbated and ushering in new institutional arrangements.) Reid does not connect this theme to population and diminishing returns, but these are implicit in the concept of "stationary state" when this concept is read in the context of its theoretical emergence discussed in the General Introduction (p. 36 above).

(both of which, as well as the too small population, makes an intensive division of labour impossible at this stage), hunters can live relatively comfortably from this activity as long as they remain a small group.

It has often been noted that Smith was a direct influence on Malthus' and Ricardo's (and later Marshall's) ideas of diminishing returns in agriculture and increasing returns in manufactures by his singling out of the former as being much less amenable to division of labour (and thus increasing returns) than the latter. Revealing the presence of the idea of diminishing returns in the four stages theory, and the influence of this theory on Malthus, not only offers a more direct line of influence on Malthus' adoption of this idea, but also throws additional light on Smith's insistence on a more limited applicability of division of labour for the obtainment of food from land. Indeed, would food procurement be *directly and immediately* subject to the same increasing returns that can be obtained from employing additional people in manufactures, the explanatory mechanism of the four stages theory, which relies on shortage and necessity being created, so that people can be pushed by this necessity to be more productive, would no longer hold.

It has to be remarked, then, after having noted the presence of the idea of diminishing returns in the four stages theory, that these diminishing returns are themselves only the means by which increasing returns can be secured *in the long run*. Thus, after having been pushed to its limits by diminishing returns, a technology of food procurement is replaced by a superior one, which yields higher returns. In this way, it is *because* of these diminishing returns that increasing returns finally set in. It is because there are diminishing returns in the short run that there are increasing ones in the long run (to put the proposition in Marshallian terms). It is the shortage brought about by population growth that steers society to develop a new subsistence technology, more productive than the former. Hence there will be higher yields per person than before, once the new technology has been adopted, although this new technology may itself be subject to diminishing returns in the long run. In this way, the four stages comes closer, in fact, in its view of food-procurement technology, to the view of technology as production process or 'factor mix', subject to diminishing returns, prevalent in neoclassical micro-economics, than to the 'classical' idea of diminishing returns from land — although the two are certainly linked theoretically and genealogically.

What is of crucial importance furthermore — and this brings us to the subject of the next chapter — is that the new technology of subsistence, which characterises the new age of society, *could not have been adopted before*. Indeed, not only is necessity the mother of invention through the constraint it occasions, it

is also the mother of invention through the opportunity it offers. Thus, as long as people can live comfortably by hunting, the important investment in time and energy necessary to pass from the less (but at this point still sufficiently) efficient hunting habits to the more (but at this point excessively) efficient shepherding habits remains itself inefficient. What Smith expressed with the idea that “the division of labour is limited by the extent of the market”, which we shall examine in the following chapter, is that the efficiency gains the division of labour permits remain uneconomical as long as there is not sufficient need for them. As Allyn Young (1928, p. 530) put it in his justly famous exploration of the meaning and importance of this idea, “It would be wasteful to make a hammer to drive a single nail; it would be better to use whatever awkward implement lies conveniently at hand”.

This crucial feature of Smith’s view of economic organisation and economic progress — put emphatically in the short third chapter of the *Wealth of Nations*, and used as frame of reference throughout the work — is already expressed in the four stages theory: there will not be adoption of superior technology as long as there is no need for it. People are using technology in accordance with the task at hand. When the problem to be solved changes in proportion (more mouths to feed) solutions will tend to change in nature (use of a superior technique of food procurement). The need for this becomes pressing when population increases, as the current technology of food procurement outruns the natural reproduction of resources that this technology relies on: wild animals for hunters, which are decimated by too intensive hunting, grasslands for shepherds that becomes too scarce with intensive pasturage, and the “productive power of the soil” once agriculture has become the main mode of subsistence, which cannot keep pace with increasing population, as was more emphatically stated by Malthus.

There are thus two dimensions to the process of population and development outlined in the four stages theory, which in fact are the two faces of the same coin: the growth of population creates the necessity to adopt a superior technology of subsistence, but at the same time offers the possibility of doing so. Because the division of labour is limited by the extent of the market, this superior technology could not have been introduced at an earlier stage. The *need* is created by a larger population. But it is only through the larger population in turn that the *opportunity* for it is also created. One may observe the semantic affinity between the concepts of “need” and of the “demand” that expresses itself, and can be met, on a market (more on the link between “demand” and “the market” in the next chapter)..

This feature of the role of population in the four stages theory, that it is at once responsible for hardship and, through this initial hardship it brings about,

eventually makes for a higher level of development and thus opulence, is mirrored in Smith's theory of population formulated in the *Wealth of Nations*, even though it is expressed there in different terms. Although Robert Heilbroner, I believe, read Smith's population theory wrongly, through the prism of Ricardo's and not Smith's own wage theory, he pointedly observed (speaking of the *Wealth of Nations*) that "There is something fascinating in this automatic process of aggravation and cure, stimulus and response, in which the very factor that seems to be leading the system to its doom is also slyly bringing about the conditions necessary for its further health" (Heilbroner 1999, p. 66).<sup>146</sup>

A last point may be made at the close of this long chapter, directly related to the subject we shall next consider. Craig Smith (2006b) has put the principal focus, in his study of the four stages theory, on the role of knowledge in the succession of stages of society. This runs the risk, in my opinion, of giving undue weight to a feature of the theory that is in fact a mere by-product of the dynamic described therein. It is because the fundamental nature of the theory is a materialist, rather than an idealistic one, that it has been described (by Pascal and Meek) as a precursor to Marx' historical materialism. Even though it is difficult to maintain that the theory, with its many dimensions, is purely a materialist one, as Shearmur (2007) has more recently argued, this materialist dimension cannot be denied, and representing the role of ideas therein as the driving force is clearly a misrepresentation.<sup>147</sup>

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<sup>146</sup> Heilbroner sees the stimulus and response he describes here in the growth of population first reducing wages — and in this way, according to him, population growth brings about its own halt — but this very reduction in wages then allows capitalists to invest more, as reduced wages raise profits, and hence wages rise again and population can grow once more. But in Smith's theory, wages and profits do not directly compete with one another, as they do in Ricardo's. (In both Smith's and Ricardo's theories, profits tend to fall when wages rise, but for Smith it is not the rise in wages itself which occasions the fall in profits, but rather both have the same cause, namely the accumulation of capital.) Thus, while the precise sequence described by Heilbroner, to which the remark quoted pertains, may not be an adequate representation of Smith, the remark itself perfectly describes the stimulus-and-response-mechanism contained in Smith's population theory as a whole as it shall emerge from the analysis in the present and the next chapter: population growth may have a tendency to reduce wages by raising the supply of labour, but since at the same time the growth of population enlarges the market, it also allows for more division of labour and hence a rise in productivity and thus profits and capital accumulation, which will eventually lead to a rise in wages permitting a new cycle of growth.

<sup>147</sup> Craig Smith (2006a, p. 49-50) holds that "population growth itself cannot be the reason behind a change in the stage of the mode of subsistence. It certainly may act as a prompt to that change, but the means depend on the acquisition of the knowledge requisite to pursue the new mode." I cannot see any substantial difference in meaning between "the reason behind a change" and "a prompt to that change". There may be a distinction to be made



One aspect of this materialist dimension of the four stages theory is that what conditions the progress of society, especially in the early stages (questions of policy, to a larger degree volitional, take on more importance in later stages, especially in Smith's use of the theory) are material conditions, principally the geographical characteristics of the territory a people inhabit: its position in relation to navigable rivers and coastlines, the fertility of its soil, the clemency or harshness of its climate. These will allow a people to either obtain enough surplus of food from the environment for population to increase or conversely be condemned to stagnate in the early stages, as well as to entertain (or not) trade relationships with other people, which can help to overcome the limits of the immediate environment and thus act as motor to the progress of society. In line with what was advanced above concerning the two faces of the population-creates-necessity element, as being both a push and a pull factor, both a constraint and an opportunity, it has to be recognised that knowledge, as much as technology, can only be used in accordance with the task at hand, and the knowledge of how to build castles, ships and manufactures will be of no use in a society of hunters. Population pressing on the means of subsistence is itself a material factor, not an ideational one. Together with more mouths to feed, an increased population also represents more arms and legs to work, and more brains to invent, which can serve for the division of labour. Increased population also represents a larger market, allowing for this division of labour to be usefully deployed. It is with these crucial elements of Smith's thought — the relation of population to the extent of the market defining the scope for the division of labour and thus economic progress — to which Malthus (and Ricardo) paid insufficient attention, that we shall at present be concerned.

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between a *necessary* and a *sufficient* cause, but that is another matter. Also, "the acquisition of the knowledge requisite to pursue the new mode" which Craig Smith stresses is not given great stress by Adam Smith himself. As was customary in four stages theory (see notably Kames' description cited above p. 125), development of the knowledge of pasturage and agriculture are described by Smith in his lectures as casual chance discoveries (LJ(A) i.28-31, p. 14-5; LJ(B)150, p. 459); and the development of division of labour and exchange that underlie the emergence of commercial society are for Smith, as is well known, "not originally the effect of any human wisdom" but "the necessary, though very slow and gradual consequence of a certain propensity in human nature . . . to truck, barter, and exchange one thing for another" (WN I.ii.1, p. 25).

We have laboriously to rediscover and force through the obscuring envelopes of our misguided education what should never have ceased to be obvious. (Keynes 1963 [1951], p. 120-1)

# Chapter 2

## Population and the Market

### 1. Introduction

The proportion between a nation's "produce, or what is purchased with it" and "the number of those who are to consume it", meaning the degree to which a nation "will be better or worse supplied with all the necessaries and conveniences for which it has occasion", depends chiefly on "the skill, dexterity, and judgment with which its labour is generally applied". This Smith tells us in the first four paragraphs of the *Wealth of Nations*, in the 'Introduction and Plan of the Work' (WN 1-4, p. 10). And he adds a few paragraphs later, at the beginning of the first chapter, that "the greater part of the skill, dexterity, and judgment with which it [a nation's labour] is any where directed, or applied, seem to have been the effects of the division of labour" (WN I.i.1, p. 13). A nation's per capita wealth thus depends principally, according to Smith, on its degree of division of labour. Yet "the Division of Labour is limited by the Extent of the Market", title and subject of Chapter III of Book I. Capital accumulation too is vital for the wealth of a nation, as Smith develops in Book II, but capital accumulation itself is also limited by the extent of the market as noted by him earlier.<sup>1</sup> For Smith, the wealth of nations was thus largely conditioned by the size of their market. The concept of the market, indeed, may well be the single most important concept of the *Wealth of Nations*.<sup>2</sup> But what does Smith exactly mean by "the market", and what then defines its extent?

Modern-day economics is a poor guide to address the question of the meaning of "the market" for Smith. Surely, it seems safe to assume that the concept's meaning has changed since Smith's time; and economists today are not concerned primarily with 'what Adam Smith meant'. But the greater obstacle yet to

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<sup>1</sup> "the narrowness of the market may not admit the employment of a larger capital in the business" (WN I.x.b.36, p. 129). "The extent of the market, by giving employment to greater stocks" (WN I.x.b.37-8, p. 130). See also WN I.x.c.44, p. 152. The relationship between capital accumulation and division of labour will be more thoroughly examined in the next chapter.

<sup>2</sup> The word "market" appears more than six hundred times in the *Wealth of Nations*. It appears eighty-five times in *Lectures of Jurisprudence*, and only a single time in the whole *Theory of Moral Sentiments*.

using modern economics to interpret Smith's use of the concept is a more general deficiency of definition of "the market" in present-day economics. As Geoffrey Hodgson (2008) remarks in his entry 'markets' in the second edition of the *New Palgrave Dictionary of Economics*, citing three Nobel laureates in economics for support, the concept of the market, while central to most economists' concerns to this day, is itself insufficiently studied and largely left undefined by the discipline at present. Most standard economics textbooks lack a definition of the market (see also Hodgson 2008 ; Satz 2015, p. 538). And "neither the massive 1968 edition of the *Encyclopaedia of the Social Sciences* nor the otherwise comprehensive 1987 edition of *The New Palgrave*" comprise an entry on markets (Hodgson 2008). As Barrett (2008) notes in the *New Palgrave's* entry on 'spatial market integration': "Although contemporary economics rests fundamentally upon the concept of markets, the discipline struggles with the important and practical challenges of clearly defining a market". It may be no coincidence that the latter observation is made specifically in an entry on the connection between markets and space. After tracing the evolution of the definition of the market in French economics dictionaries from the late 19<sup>th</sup> to the late 20<sup>th</sup> century, Diemer (2003, p. 5), for example, concludes first that spatial considerations were progressively left out of the definition of the market; and further that economists have progressively abandoned the definition of the market altogether to concentrate on its functioning.<sup>3</sup>

As Douglas North remarked in his Nobel address: "Neoclassical theory . . . is concerned with the operation of markets, not with how markets develop". For that reason, he thought, it "is simply an inappropriate tool to analyze and prescribe policies that will induce development. How can one prescribe policies when one doesn't understand how economies develop?" (1994, p. 359).<sup>4</sup> 'Neoclassical

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<sup>3</sup> Hodgson's and Barrett's are the only entries in the *New Palgrave* drawing attention to this definitional problem. Remarkably, besides Hodgson's, not a single one of the seventy-nine different entries in total in the 1987 and 2008 (and later online-only) editions of the *New Palgrave* whose titles contain the word "market" offers a definition of the concept. (Only Scherer (1987, p. 6287), White and Eccles (1987, p. 8015) and Barrett (2008) include a succinct observation on what markets do; and Pelkmans' (2011) entry on "European Union Single Market: design and development" offers some observation about "What precisely is a *Single Market*".)

<sup>4</sup> Kaldor (1972, p. 1240) saw the quintessential problem with modern ("equilibrium") economics in the habit of "focusing attention on the *allocative* functions of markets to the exclusion of their *creative* functions" (italics in original); but he unfairly blamed Smith for this, referring to Smith's theory of "natural" and "market" prices. It is not very clear where Kaldor saw in this theory one of "allocative functions", but in any case Smith used the concept of the "*extent* of the market" throughout his work, at least as frequently as the one of "market price", and there cannot be the slightest doubt that Smith was far more

economics' is for the same reason an inappropriate lens through which to read Smith's theory of development, insofar as for Smith the development of society depended so critically on the development of the market.<sup>5</sup> Yet, the incurious attitude of 20<sup>th</sup> century economists about the definition of the central concept of their discipline seems to have translated also to Smith scholarship. In the *Essays on Adam Smith*, published as part of the Glasgow edition on the occasion of the two-hundredth anniversary of the *Wealth of Nations* (Skinner & Wilson 1975), there is, for example, no chapter dealing squarely with the market. And even the follow-up volume carrying the word "market" in its very title (Wilson & Skinner 1976), while it contains chapters on "The Market and the State", "The Product Markets" and "The Labour Market", does not at any place investigate the meaning of the concept of the market itself for Smith, a concept yet so central to the *Wealth of Nations*.<sup>6</sup> One finds the term "market" in the titles of many papers about Smith of the last quarter-century (Nielsen 1986 ; Johnson 1990 ; Rashid 1992 ; Goldsmith 1995 ; Elliott 2000 ; Kalyvas & Katznelson 2001 ; Young 2001 ; Vincent-Lancrin 2003 ; Kurz 2016). The question of the definition of this concept is, however, never explicitly addressed. Implicitly, the meaning of "the market" that is retained in all these contributions is the one of an institution, a set of rules, an organisational mode of society, often opposed to the institution of the state. But this is only one

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interested in the "creative functions" of markets than in their "allocative functions" (he was interested in their allocative functions, in fact, mainly insofar as these were conducive to their creative functions).

<sup>5</sup> That "the market", as used by Smith, and "the economy" as understood today are, however, not identical concepts shall be established in Section 3 of this chapter. (North seems to equate the two in the preceding remarks, which, as will be argued, is a common mistake in perspectives on "the market" in modern economics.)

<sup>6</sup> The absence of an investigation into the meaning of this concept in both these volumes may indeed be linked to the lack of definitions and studies of the meaning of the market in economics, insofar as most contributors were practicing economists. (Just as the absence of an interest in population questions in Smith by modern readers of Smith, most of them economists, was linked to the absence of this interest in economics in the General Introduction.) The 1976 volume contains essays by prominent economists and economic historians presented at the bi-centenary conference. The 1975 volume (an accompanying volume to the Glasgow edition of Smith's works on the occasion of the *Wealth of Nations*' bicentenary) was meant as "a series of essays by contemporary students of Smith which would cover the main areas of his work, as distinct from simply concentrating on the economics" (Skinner & Wilson 1975, p. 1). The volume was therefore divided into two parts, the first "mainly concerned with the broadly 'philosophical' and political aspects of Smith's contribution" and the second "with the subject matter (by no means entirely economic) of *The Wealth of Nations* itself" (Skinner & Wilson 1975, p. 1). However, the large majority of contributors to the volume — all contributors to the second part (on the *Wealth of Nations*), and more than a third even of those contributing to the shorter first part (on "the broadly 'philosophical' and political aspects of Smith's contribution") — were in fact economists.

dimension of the multifaceted conception of “the market” one can find in Adam Smith’s work. And, importantly, it does not permit to meaningfully explore the significance of the concept of the “extent of the market” in Smith’s theory.

In part, at least, the conception of “the market” as an organisational mode of economy and society opposed to the one of the state seems to be inherited from the 20<sup>th</sup> century opposition between “market” and “planned” economies, particularly prevalent during the cold war period, and as such represents an anachronistic reading of Smith. Smith opposed ‘planned’ mercantilist trade policies. But he surely did not pronounce himself on the “planned economy” of socialist regimes that only began to be imagined after his death (even though it emerges quite clearly from his work that he would have been more than sceptical of such “unnatural” and rigorist direction of economic affairs from the part of “m[e]n of system”). The term “the market” is not employed by Smith, as it frequently is today, to signify the opposite of a “planned economy” (as synecdoche for the “capitalist system”) nor does he use it as synonym for the societal stage he called “commercial society”.

Probably the most eminent treatment of Smith’s idea that the division of labour is limited by the extent of the market is the one by Allyn Young (1928). Young (1928, p. 529) thought that “Adam Smith’s famous theorem that the division of labour depends upon the extent of the market” was “one of the most illuminating and fruitful generalisations which can be found anywhere in the whole literature of economics”. He took Smith’s “theorem” as the basis of a theory of increasing returns and continuous, cumulative, and self-generating economic growth. Young’s article was very influential, notably in writings in the emerging field of development economics in the 1930s to 1960s, and remains frequently cited to this day, as much in the history of economic thought as in recent growth theory, although what he was advancing in his article was, as many observers agree, largely misunderstood (Kaldor 1972, p. 1243; Currie 1981, *passim*; Buchanan & Yoon 2000, p. 44; Perälä 2006, *passim*).<sup>7</sup> Furthermore, Young’s article, in which he interprets the relationship Smith draws between the extent of the market and the division of labour through Say’s observations on the relationship between supply and demand, seems to have led many Smith scholars to equate the

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<sup>7</sup> On the important differences between Young’s theory and the modern “endogenous growth” literature, in which he is often cited approvingly, see notably Grangeas, Lecaillon, Le Page, and Ottavj (1994); Sandilands (2000); Lavezzi (2003b,2003a); Chandra and Sandilands (2005) and Sandilands (2009). De Bandt, Ravix, and Romani (1990) and Ravix (1997) analyse Young’s contribution from the perspective of industrial organisation theory, but taking a sensibly different approach from Stigler (1951). For an excellent reconstruction of Young’s position as a whole see Colacchio (2009).

concepts of “market” and “demand”. Keynesian aggregate demand theory, through which Young was (after his death) often interpreted (Sandilands 2000, p. 310-13), probably contributed to this trend. But Smith clearly differentiated between the concepts of “market” and “demand” (although they surely are closely related), and equating the two does not accurately and completely capture what Smith described by “the market” — especially when “demand” is disincarnated from its demographic and geographic vectors and bounds, as is generally the case in modern treatments of Smith’s ideas on the extent of the market, often visibly influenced by Young’s paper.

Joseph Spengler, author of numerous writings on the history of thought on population, among which two of the rare articles that deal squarely with Smith’s treatment of population (Spengler 1970, 1976), observed that “Because Smith placed so much stress upon division of labour and its dependence upon the extent of the market, he could treat increase in population and/or its concentration as a source of increasing return, at least in the absence of emerging limitations” (1970, p. 379). Spengler here drew attention to the important fact that one of the main determinants of the extent of the market for Smith — indeed, as we shall see in this chapter, its most fundamental determinant — are the individuals to be found on a given territory and the spatial proximity between them. Growth and concentration of population, therefore, augment the extent of the market as Smith conceived it. Since the division of labour is limited by the extent of the market, growth and concentration of population thus augment the possible degree of division of labour in the society in question, and thereby the level of wealth a nation (insofar as we are concerned with the market of a nation) can attain.

After his statement on population and increasing returns, Spengler went on to remark that “Later on, some critics of Malthus pointed to this effect, and it was made use of some 150 years later by Allyn Young and Colin Clark, economists of great distinction” (Spengler 1970, p. 379). Clark’s pro-populationist stance is well-known, but Young was in his most famous article in fact rather evasive on the connection between increasing returns and population. He was more explicit about this connection elsewhere<sup>8</sup> — and also, apparently, in his teaching, as reported, precisely, by Colin Clark.<sup>9</sup> In his widely cited 1928 article, however, Young

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<sup>8</sup> See notably this statement by Young made in an entry on ‘capital’ in the *Encyclopaedia Britannica*: “Improvements in industry and in transport made the world capable of sustaining a larger population, while the growth of population, in turn, by creating larger markets, made it profitable for industry to use methods of a higher degree of roundaboutness”. (Young 1990 [1929], p. 145).

<sup>9</sup> Clark was Young’s research assistant at the LSE from October 1928 to his death in February 1929. He remarked (in Clark 1968 [1967], p. 256) that “Though Young wrote

abstracted altogether from geographic and demographic factors in his conception of the market. This is problematic when Young's article is treated as an authority on Smith's conception of the market; for geographic and demographic factors were for Smith precisely the most fundamental elements constitutive of markets.

Both sets of notes on Smith's jurisprudence lectures contain a strong and very explicit statement on the causal role of population for productivity and thus economic growth, via the division of labour:

For 20 millions in a society, in the same manner as a company of manufacturers, will produce 100 times more goods to be exchanged than a poorer and less numerous one of 2 mill. (LJ(A) vi.166, p. 392)

Twenty millions of people perhaps in a great society, working as it were to one another's hands, from the nature of the division of labour before explained, would produce a thousand times more goods than another society consisting only of 2 or 3 millions. (LJ(B) 265, p. 512)<sup>10</sup>

While not with the same strength of emphasis, this same idea — that the size of population determines the scope for the division of labour in a society or nation as a whole, and therefore its overall level of productivity, just as the size of the workforce in a particular manufacture determines the scope for this manufacture's degree of division of labour and productivity — is, in fact, mirrored in the *Wealth of Nations*. Smith thus concluded his chapter on wages (I.viii) with the observation that:

What takes place among the labourers in a particular workhouse takes place, for the same reason, among those of a great society. The greater their number, the more they naturally divide themselves into different classes and subdivisions of employment. More heads are occupied in inventing the most proper machinery for executing the work of each, and it is, therefore,

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little, and left many of his ideas to be disseminated by oral tradition, he followed his matter up to its logical conclusion, and contended that an industrial country would directly benefit economically from an enlargement of population. What British industry needed, he said, coming from Harvard to teach in London, was an internal market of 100 million population."

<sup>10</sup> Eltis (1975, p. 430) speculates that the student who took the Cannan notes (LJ(B)) may have added one zero. For all we know, it might be the other way round. (This is more probable in fact, insofar as the word "thousand" is written out, while "100" is written numerically.) In any case, Smith was not always exceedingly precise in his numerical illustrations. In the pin-factory parable, the productivity-enhancing effects of the division of labour are thus estimated at between 24.000 and 480.000%. These numbers were probably meant above all to render more visual (and not precisely measurable) the gains in productivity to be had from the division of labour; Smith's main idea being that the gains from the division of labour — and, in the quotes from the *Lectures of Jurisprudence* above, from a larger population, by means of the division of labour — were enormous.



more likely to be invented. There are many commodities, therefore, which, in consequence of these improvements, come to be produced by so much less labour than before that the increase of its price is more than compensated by the diminution of its quantity. (WN viii.57, p. 104)

This idea goes beyond the important and straightforward enough recognition by Smith that a larger supply of labour — whether in a workhouse or society as a whole — allows for more subdivision (which, through the gain in productivity, overcompensates for the rise in price of certain foodstuffs that the growth of population also occasions<sup>11</sup>). It involves the additional theoretical step that a larger population constitutes a wider market, and wider markets allow for more division of labour. Indeed, without this vaster market, as Smith explained five chapters earlier, the greater production that a more intensive division of labour makes possible could not be advantageously disposed of, thus precluding the division of labour from being gainfully augmented.

Since the market *as institution* only takes the central position in the economic life of society in the commercial stage, and population is a causal element in the progression of the four socio-economic stages, the fact that the *institution* of the market comes to take the central role in the economic organisation of society is itself, for Smith, an outcome of the growth of population. But, as noted, the institutional dimension is not the only dimension of the market for Smith. Indeed, before being an institution, the market for Smith relies on a physical reality. For a market to be *in place*, the physical environment needs to be such as to render exchange (physically!) possible, and to potentially act as its vehicle. Fundamentally, for this potential for exchange and possible vehicle of trade that defines the market in its material dimension, population and space — and the physical characteristics of the terrain that make space be easier or more difficult to overcome — are the determining variables.

The fact that transport costs are an important part of Smith's conception of the market is widely acknowledged (Groenewegen 1977, p. 163; Myint 1977, p. 237; West 1978, p. 345-6). But how geographical factors more widely enter the Smithian definition of markets is rarely enunciated clearly in the secondary literature.<sup>12</sup> The relationship with population, moreover, is almost universally disregarded. Even Eltis (1975) and particularly Lowe (1975), who note the crucial

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<sup>11</sup> We shall examine this last point in section 5 of this chapter.

<sup>12</sup> See, however, the account of this — unusually detailed, for a non-history-of-thought text — in the World Bank's *World Development Report* of 2009 (World Bank 2009, p. 14-5, 93-4, 126-8, 194).

role population plays for the Smithian conception of the market, do not point out how this link between population and the market is precisely articulated.

Spengler himself, two pages before his remark that “Because Smith placed so much stress upon division of labour and its dependence upon the extent of the market, he could treat increase in population and/or its concentration as a source of increasing return”, had stated that for Smith “discussion of population was essentially corollary to his treatment of economic development which, his analysis suggests, dominated demographic development” (1970, p. 377). This is inconsistent. If population growth is a source of increasing returns, indeed, then it is by that virtue a source of economic growth, and it is then imprecise to state that economic development dominates demographic development, which suggests a one-way relationship, with economic growth being exclusively the cause and not also the effect of population growth. That Smith conceived of the causal relationship between population growth and economic growth as unidirectional (or neglected the influence of population on economic variables altogether), though often repeated in the secondary literature (most notably in the introduction to the Glasgow edition of *Wealth of Nations*, p. 48; see for a recent example Sunna (forthcoming)), is inexact. Economic and demographic development in fact are both each other’s cause and effect in Smith’s analysis, as Alvin Hansen remarked long ago (1939, p. 2-3). Although not quite as explicitly as in his lectures, Smith clearly recognised this two-way relationship (and hence the role and importance of population growth and size for economic development) in the *Wealth of Nations*.

Scholars who espoused the unidirectional view (that economic development for Smith exclusively occasions population growth, not the reverse) did not recognise the way population played into the succession of Smith’s socio-political and economic stages, as examined in the previous chapter. As we have seen, before 1978 at least, or in any case before 1958, this can be explained by the explicit reference to population in this regard only being found in the second set of lecture notes, not yet available before these dates. However, as shall be examined in the present chapter, scholars adopting this position of population being exclusively an effect and not also a cause of economic development in Smith’s system of thought also miss another important element. This element, although maybe not entirely plain to see, — especially when Smith is read through the neo-Malthusian lens that he so frequently is these days — is, and has been for a long time, open for anyone to discover in the *Wealth of Nations*: the way in which population growth and market development are bound up in Smith’s view of the progress of society. This, too, becomes much more apparent when what is contained in the *Wealth of Nations*

is complemented by the material in Smith's other works. But there is enough material even in the *Wealth of Nations* alone to establish it.<sup>13</sup>

To deal with the question of the role of population for the Smithian market, it will be useful to examine, first, what Smith precisely understood by "the market" when writing about its "extent". Smith saw the extent of the market as embodying the *possible extent of trade* (section 2). This is related to, but distinct from, both aggregate demand and "the economy" as a whole (section 3). The possible extent of trade, in turn, is determined primarily by population and space, while wealth and technology enter only later, and indirectly, into the definition of the extent of the market (section 4). The extension of the market by the growth of population is related to Smith's description of how a society evolves through the different stages of economic progress, examined in the previous chapter, on which the relation between size of population and extent of the market sheds further light (section 5). The growth of population thereby acts on the size of the market through two compounding effects: the multiplication of possible trade relations (by the multiplication of potential trade partners) and the facilitation of trade relations by the diminution of the mean distance between trading partners (an effect of the population concentration accompanying population growth). In this, too, we can find Smith's theory of urbanisation fuelled by the social (and geographical) division of labour. These will be examined in the penultimate section (6). Section 7 concludes.

## **2. The extent of the market as power of exchanging, and some sociological implications**

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<sup>13</sup> All of Spengler's references to Smith in his two 1970s articles on Smith and population (Spengler 1970, 1976) are to the *Wealth of Nations*. Spengler justified this confinement to the sole *Wealth of Nations* by stating that "Smith's final expression of his views appeared in the *Wealth of Nations*" (Spengler 1970, p. 377). But insofar as Smith's different works deal with different themes and have different content (despite also much overlap), rather than being successive treatments of the same subject, this is an unsatisfactory approach when writing about Smith's views on such a broad theme as population. All of Smith's works contain elements of his perspective on this topic. All of Smith's works are thus relevant to an analysis of his position on this subject. Moreover, as was largely elaborated on in the previous chapter, there is little ground on which to conclude that Smith had in any way changed his mind with regard to the themes developed in the *Lectures of Jurisprudence* and the *Theory of Moral Sentiments* by the time he wrote the *Wealth of Nations*; insofar as there is overlap between themes in Smith's different works, then, these different works are certainly useful for a more in-depth analysis of affected themes.

Smith opens his chapter on the extent of the market (WN I.iii) with the following definition:

As it is the power of exchanging that gives occasion to the division of labour, so the extent of this division must always be limited by the extent of that power, or, in other words, by the extent of the market. When the market is very small, no person can have any encouragement to dedicate himself entirely to one employment, for want of the power to exchange all that surplus part of the produce of his own labour, which is over and above his own consumption, for such parts of the produce of other men's labour as he has occasion for. (WN I.iii.1, p. 31)

A corresponding passage in the first of the rediscovered “fragments on the division of labour” (FA) reads:

As it is the power of exchanging which gives occasion to the division of labour, so the extent of this division will always be in proportion to the extent of that power. Every species of industry will be carried on in a more or less perfect manner, that is, will be more or less accurately subdivided into the different branches according to which it is capable of being split, in proportion to the extent of the market, which is evidently the same thing with the power of exchanging. When the market is very small it is altogether impossible that there can be that separation of one employment from another which naturally takes place when it is more extensive. (FA 1-2, in LJ p. 582)

Thus, the extent of the market in Smith's theory is synonymous with “the power of exchanging”. It describes, in other words, the *possible extent of trade*.

If the division of labour is limited by the extent of the market, and hence by “the power of exchanging”, this is because the essence of division of labour, or specialisation (Smith himself never uses this last term), is that people formerly supposed to be self-sufficient (as we shall see in the next chapter, this is largely a “philosophical fiction”) narrow down the scope of their own production, and hence become dependent on exchange. In other words, the first effect of the division of labour is that people quit producing everything they are in need of, but produce more than what they need of a particular good, and therefore need to exchange what they are producing against other goods in order to provide for themselves all the “necessaries and conveniences of life”.<sup>14</sup> Division of labour (specialisation) is

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<sup>14</sup> In this sense, Witztum (2010, p. 170) notes that, while in modern economics specialisation is depicted as the *solution* to the problem of scarcity, in Smith's analysis, on the contrary, the risk of scarcity *emanates from* specialisation, since when individuals specialise, they cannot remain self-sufficient.

only viable, therefore, if the individuals in question have the assurance that they will be able to exchange the fruits of their new (or narrower) activity with others who are producing what they were producing before (and which is critical for their survival). As Smith himself expresses it, it is “the certainty of being able to exchange all that surplus part of the produce of his own labour, which is over and above his own consumption, for such parts of the produce of other men’s labour as he may have occasion for” that “encourages every man to apply himself to a particular occupation, and to cultivate and bring to perfection whatever talent or genius he may possess for that particular species of business” (WN I.ii.3, p. 28). And the more people specialise, the less of what they need they produce themselves, so the more of what they need they now have to obtain through exchange. The market (the power of exchanging) therefore needs to expand in order to make room for a wider division of labour in society.<sup>15</sup>

That the division of labour, in order to progress, requires an extension of exchange naturally follows from Smith’s discussion “Of the Principle which gives occasion to the Division of Labour” in Chapter 2 of Book I of *Wealth of Nations*. The division of labour is therein described by Smith as being “the necessary, though very slow and gradual consequence” of the human “propensity to truck, barter, and exchange one thing for another” (WN I.ii.1, p. 25). But the propensity to exchange, in order to bring about exchange, needs the power to exchange (the being of a market). Thus, strictly speaking, the division of labour is dependent on both the propensity and the power to exchange (a market), both being a necessary and none a sufficient condition (Jackson 2005, p. 208). Significantly, before describing the extent of the market as the power of exchanging in the first paragraph of the third chapter of *Wealth of Nations*, Smith explained in the last paragraph of Chapter II the impossibility for dogs to make use of their differences in talents by the “want of the *power or disposition* to barter and exchange” (WN I.ii.5, p. 30). In turn, as the division of labour progresses, it requires a further development of exchange. Smith is thus reported to have affirmed in his lectures that “The being of a market first occasioned the division of labour, and the greatness of it is what puts it in one’s power to divide it much” LJ(A)vi.64.<sup>16</sup>

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<sup>15</sup> This seems to have been the position of the physiocrats as well (Van den Berg & Salvat 2001, p. 17-20). Interestingly, André Morellet seemed to not have recognised this point in Smith, for he criticises him precisely for not taking it into account (Van den Berg & Salvat 2001, p. 18-9).

<sup>16</sup> Note that in this particular sentence from LJ(A), it is the *power* of exchanging (“the being of a market”) that Smith describes as the original trigger of the division of labour, while in WN.I.ii it is the *propensity* to exchange that is first described as such. As noted, Smith sees both these elements as preconditions.

Without claiming that these may be easily separable, one could see the disposition to exchange as a more sociological and the power of exchanging as a more economic, or materialistic, dimension of the phenomenon of market development as Smith explains it. Another component of the sociological (or socio-psychological) dimension of Smith's explanation of the development of the division of labour is the evolution of the motive for exchange. With the deepening of the division of labour, the obtainment of the necessaries of life for the individual becomes increasingly dependent on the procurement of those necessaries by others, but these others may not have any particular regard for the individual in question, and this becomes in fact increasingly so with the development of the division of labour. The deepening of the division of labour indeed augments the average social distance between individuals, more and more isolated from one another in their principal daily activities and engaged in increasingly indirect exchange with one another. This is when self-interest comes to take precedence as a leading motive of exchange (and further possibly people's actions more generally), while in savage society exchange happens mostly within the circle of personal acquaintances and is thus more deeply linked with regard to others.

It should be noted that this does not imply that in savage society individuals do not work *together* in the fulfilment of the necessary tasks of society. But labour is not *divided* insofar (and only insofar) as there is no strict division of employments — for which, indeed, the fact that everyone labours together at communal tasks is itself an illustration. As already noted in the previous chapter, Smith remarked for example that childcare was a communal affair in hunting nations (LJ(B) 104, p. 439). He also noted in the 'Plan and Introduction' of the *Wealth of Nations* that "Among the savage nations of hunters and fishers, every individual . . . endeavours to provide, as well as he can, the necessaries and conveniences of life, for himself, *or such of his family or tribe as are either too old, or too young, or too infirm* to go a hunting and fishing" (WN 4, p. 10). When Smith mentions in Chapter II that "*In civilized society* [man] stands at all times in need of the cooperation and assistance of great multitudes, while his whole life is scarce sufficient to gain the friendship of a few persons" (WN I.ii.2, p. 26), this does not mean, therefore, that in savage society, man does not *also* have "almost constant occasion for the help of his brethren" (ibid.). It means, only, that in savage society, as compared with civilised society, there are not "great multitudes" whose "cooperation and assistance" he requires; he requires only the help of the members of his "family or tribe", which actually constitute his whole society; and as the individual is usually well acquainted with the latter, it is, other than in civilised society, not entirely "vain for him to expect it [cooperation and assistance] from

their benevolence only” (ibid.). Indeed, in savage society, exchange, such as the offering of arrows by a hunter who makes them particularly well to another (for which he receives eventually, though not always directly, some of the other’s catch), is described in *Lectures of Jurisprudence* as “a present to some of his companions” (LJ(A) vi.46, p. 348; LJ(B) 220, p. 493). Thus Marx’s accusation of Smith’s misrepresentation of the human past by his invoking the “*isolated* hunter” was, as already noted (p. 96 above), unjustified. Smith’s hunters were neither purely self-interested in their exchanges nor were they isolated. Smith’s position is not all that distant, in fact, from Marcel Mauss’ (1923-24) famous study of gift-giving and reciprocity in hunter-gatherer society (where gift-giving, according to Mauss, serves both self-interested and other-regarding motives, and is a fundamentally social phenomenon).<sup>17</sup>

The evolution of the motive for exchange (becoming more self-interested as civilisation progresses) is bound up, too, with the peopling process. Hence, in the savage state, where man lives in bands of 100-150 individuals (LJ(A) iv.36, p. 213; FA.3, p. 583), an individual may easily personally know every single member of the clan. This becomes increasingly difficult as population grows, so that ties of personal acquaintance become increasingly insufficient as a basis for the cooperation of the members of society in the production of the total sum of products and services. It is thus also in relation to a larger population that Smith remarks about man “In civilised society” that “he stands at all times in need of the cooperation and assistance of great multitudes, while his whole life is scarce sufficient to gain the friendship of a few persons” (WN I.ii.2, p. 26). A growing population renders it increasingly difficult for the individual to be personally acquainted with all the members of society, while, at the same time, growing populations imply an increasing division of labour (notably under the impulse of the necessity-is-the-mother-of-invention mechanism analysed in the previous chapter) that increasingly isolates individuals in particular productive activities (which previously may have been carried out collectively). In the “progress of improvement and population”, therefore, the two effects of more people being present in the society, whom it is increasingly difficult for the individual to know all, and the increasing isolation in particular production processes that are an effect of the division of labour compound, both making for increased anonymity in

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<sup>17</sup> Marx did not have the benefit of reading the *Wealth of Nations* with notes from Smith’s lectures as guide, of course, but was confined to the sole *Wealth of Nations*, in which Smith indeed makes it appear as if he considered the hunters as fully self-sufficient (hence “isolated”). We shall examine this point in more detail in the next chapter (p. 224 *et seq.* below).

society. At the same time the number of people whose services individuals are in need of increases as an effect of the smaller and smaller part of their daily needs being covered by themselves because of the division of labour and the larger number of individuals being involved, directly and indirectly, in the production of all goods and services. As sympathy is conditioned by social distance, as Smith develops at great length in the *Theory of Moral Sentiments*,<sup>18</sup> it is therefore increasingly necessary to replace it with another motive for the also increasingly necessary (though increasingly roundabout) cooperation of society's members in the production of the goods and services necessary for their daily lives. Self-interest, then, through the "invisible hand" mechanism, assures that people involuntarily — or rather, without this being their prime motive — fulfil each other's needs. Thus, what can be taken to be the main sociological characteristic of the 'market economy' (or, in Smithian terms, "commercial society"), i.e. the self-interested motive for individuals' contribution to the provision of goods and services in society, is, too, a consequence of the growth of population.

This sociological dimension of the extension of commercial exchange in society, leading to the establishment of the societal state of "commercial society", in which "Every man . . . becomes in some measure a merchant" (WN I.iv.1, p. 37), while being related to an extension of the market (necessary for an extension of division of labour), is not the same thing with the extension of the market, however. The extent of the market does not describe, for Smith, the extent to which exchange *of a commercial nature only* occurs. As was already remarked (p. 172 above), the meaning of "the market" to signify "the market economy" (capitalism) is a contemporary one, which cannot properly be employed to interpret Smith's use of the term "the market", and Smith does not use the terms "the market" and "commercial society" interchangeably. Even the self-interested motive, which is inseparably linked with the modern conception of market exchange (and often so with reference to Smith's "invisible hand"), is not essential for Smith to consider exchange to be made via a market. Insofar as for Smith the market means the power to exchange, even savages exchanging arrows and meat as presents to each other (out of sympathy and not self-interest) make, by definition, necessarily use of a market. The extent of the market does not describe to what extent exchange *occurs* in actual facts at all, indeed, but to what extent it is *possible* for exchange to occur. Similarly to demand and supply curves in modern economics, it traces a map of potentialities only, it does not describe an actuality.

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<sup>18</sup> For commentary, see notably Forman-Barzilai (2005,2010).



The power of exchanging (the extent of the market) depends on a number of *material* elements, which Smith all treats in the short Chapter III of Book I of *Wealth of Nations*, without however always making the separation between them very clear. This separation shall be more explicitly established in what follows, in order to make the respective role of the different elements constitutive of the market for Smith more apparent. It shall be made clear, thereby, that demographic and geographic factors are fundamental for Smith, while the other factors directly and indirectly referred to by him, namely wealth and technology, are only relatively important, in that they are a result, over time, of the way a population relates to a particular geography.

We shall examine the intimate connection between population and the market for Smith (in its material dimension, essentially defining the *extent* of the market) in Section 4 and the subsequent two sections of this chapter. Before applying ourselves to this task, however, it is necessary to clear up some confusion that besieges the conception of the extent of the market in the secondary literature on Smith of the past hundred years (and possibly further back). Instead of exploring the different determinants of the power of exchanging for Smith so as to assess what determines the extent of a market, indeed, modern economists and historians of thought usually rely on a shortcut, substituting for “extent of the market” the term “demand” (sometimes preceded by “effective”, or “aggregate”) or the concept of the whole economy, or the whole economic system. Why this is not an accurate depiction of Smith’s position we shall at present inspect.

### **3. Demand, the economy, and the power of exchanging: the inaccuracy of Young’s Sayian reading of Smith**

West (1997, p. 434) casually asks and responds to the question “What is a market?” by stating that “Surely it is the ability and willingness of individuals to purchase, a function of produce offered in exchange.” This characterisation of the Smithian market visibly derives from Young (1928) (cited by West in another connection shortly after). “But just what constitutes a large market?”, Young asked, and answered that it was:

Not area or population alone, but buying power, the capacity to absorb a large annual output of goods. This trite observation, however, at once suggests another equally trite, namely, that capacity to buy depends upon capacity to produce. In an inclusive view, considering the market not as an outlet for the products of a particular industry, and therefore external to

that industry, but as the outlet for goods in general, the size of the market is determined and defined by the volume of production. If this statement needs any qualification, it is that the conception of a market in this inclusive sense — an aggregate of productive activities, tied together by trade — carries with it the notion that there must be some sort of balance, that different productive activities must be proportioned one to another. (Young 1928, p. 532-33)

Although Young mentions population and space first, everything that follows in his exposition actually draws attention away from these elements (and they are hardly mentioned by Young — and if so, as in this passage, mostly to de-emphasise their importance — in the remainder of his paper). Young here, in fact, presented the market more or less as synonymous with the economy as a whole — or what Spengler (1959b, p. 6) refers to as “the economic system itself” — and this has often been adopted uncritically as accurate depiction of Smith’s position.<sup>19</sup> Further, Smith’s concept of the extent of the market is often equated in the secondary literature today with the one of demand.<sup>20</sup> Young, in the quote above, conceived of the market as an “outlet” for goods. This is significant because, by being considered as “outlet”, the market is in fact looked at from one side only, i.e. from the perspective of the producer who seeks to dispose of his production. This conception by Young of the market as “outlet” can further be linked to Jean-Baptiste Say’s term “débouchés”. In this sense, it essentially describes the total demand of a product (and by extension of all products). By looking at the market from the other perspective, the one of the consumer, one will, conversely, conceive of the market principally as (total or particular) supply.

But this Youngian depiction of the market as “outlet”, and the frequent and related equivalence assumed between “market” and “demand” in modern readings of Smith, is in fact largely foreign to Smith himself. Demand, the market, and exchange (or trade, commerce) are all closely related in Smith’s account. Yet they differ, subtly maybe, but importantly. Significantly, in the whole of Chapter 3, Book 1 of the *Wealth of Nations* on the extent of the market, the word “demand” does not

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<sup>19</sup> In addition to West and Spengler just cited, see for example Brewer (1991, p. 3). Lowe (1954, p. 139) writes less definitely of the “growth of the system”.

<sup>20</sup> This is the case of Thweatt (1957, p. 227); Streeten (1959, p. 167); West (1964, p. 24); Eagly (1970, p. 62); Sylos-Labini (1976, p. 205); Rostow (1980, p. 159); Currie (1981, p. 53); Caton (1985, p. 850); Stull (1986, p. 295); Ahmad (1996, p. 444); Evensky (2003, p. 9); Lavezzi (2003b, p. 84); Negishi (2004, p. 35); Rima (2004, p. 181) and Aspromourgos (2010, p. 1171).

appear a single time.<sup>21</sup> The sense of “market” in Smith’s work for the most part still bears the mark of the medieval (and still contemporary) meaning of the term as signifying the physical location in which goods and services are exchanged.<sup>22</sup> This is especially apparent when Smith writes of goods being brought “to market”, an expression employed close to a hundred times in the *Wealth of Nations* (particularly often in chapters VII and XI of Book I); or when he writes of values or quantities of goods *in* or *at* particular markets such as at Windsor market (I.xi.b.20, p. 168; I.xi.f.4-g.8, p. 211-14; I.xi.n.5, p. 257), in the European (I.xi.e.7, p. 195; I.xi.g.16-35, p. 216-28) or in the Spanish market (I.xi.h.6, p. 231). More generally, the market for Smith describes the structure — be it physical or immaterial — that renders trade possible (whence the equivalence of the “extent of the market” and the “power of exchanging”). In Young’s article, by contrast, the market is regarded as the total sum of what *is* exchanged, rather than that which *permits* it to be exchanged.

Young’s assessment of what determines the extent of the market is clearly reminiscent of Say’s law; or rather, it *is* Say’s law that it is expressed by Young in the passage cited above.<sup>23</sup> “Say’s law” is evidently *related* to Smith’s considerations about division of labour and the extent of the market, and quite probably derived from them too, at least indirectly. The division of labour, by increasing

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<sup>21</sup> Negishi (2004, p. 35) observes about a statement by Smith on the long-run effects of an increase in demand (WN V.i.e.26, p. 748), which he takes as representative for Smith’s thoughts about the relationship between division of labour and extent of the market: “It is somewhat curious that this passage is not from Book I, chapter 3, of the WN, entitled ‘That the division of labour is limited by the extent of the market’”. But this is only curious if we take demand and the extent of the market to be, in fact, equivalents (apart from the known fact that Smith did not have the habit of neatly compartmentalising his subjects, as they were in later economic treatises and textbooks, but rather used some leitmotifs throughout his work; something particularly true for the division of labour and its relationship to the extent of the market).

<sup>22</sup> In the middle ages, the term “market” was describing the *time and place* of transactions (Harper 2001-2013). The older latin *mercatus* is largely a synonym for “trade”, and this meaning was carried over into old French, alongside the newer meaning of “marketplace”. (The medieval Old North French sense of “trade, commerce” has been carried over to a certain degree into modern French. It is thus spoken, colloquially, of “faire son marché”, literally “make one’s market”, meaning “to buy groceries”, and in more formal language of “passer un marché”, meaning, “to conclude a trade agreement”.) This sense of *mercatus* as synonym for trade has survived in the adjective “mercantile”. It was made use of by Smith himself in his term “mercantile system” (the term “mercantilism”, a variation of Smith’s term, having come into use later). But “the market” for Smith was *not* a synonym for trade (they are clearly treated as distinct, notably at WN I.x.b.38, p. 130).

<sup>23</sup> Young’s remark on balance (likewise made by Say in his chapter that gave rise to “Say’s law”) is also the starting point of the doctrine of “balanced growth”, which we shall further examine in the following chapter.

productivity, increases production (or supply), and consumption (or demand) thus has to increase proportionally for it to be viable. But there is an important difference between the two ideas that supply is intimately linked to (if not synonymous with) demand and that the division of labour is limited by the extent of the market. What Say wanted to bring out most centrally in his chapter on “débouchés” is that supply and demand, in the aggregate at least (barring certain possible imbalances between the production of different products and abstracting from the influence of money), should in fact be considered synonymous. The division of labour and the extent of the market, by contrast, are definitely *not* synonymous, neither literally nor figuratively (i.e. neither in the sense that the division of labour is literally the same thing as the extent of the market, nor in the sense that the volume of production made possible by a given degree of division of labour is always strictly equal to what can be exchanged in that market or by means of it).

In Say’s law, by virtue of that which is produced also being that which is exchanged, and thus the volume of production actually *defining* what is demanded, the two are necessarily equal and in fact synonymous, and the increase in production implies quite immediately an increase of demand exactly proportionate. In other words, aggregate demand and aggregate supply (as conceived of by Say) are the same thing, looked at from different sides of the exchange relationship.<sup>24</sup> Smith, in his considerations about division of labour and the extent of the market, had quite a different concern: that in the absence of the possibility to exchange an increased production, there was no economic sense in pushing further any given degree of division of labour in any particular place (and hence people would not usually further divide labour in that place, at least not for long, if they cannot exchange the surplus they thus produce). This does not preclude, however, that there may be an imbalance between what is produced and what can be exchanged economically (i.e. without exceeding in cost the very benefit that could be made from the transaction) *at any one time*. The degree of division of labour may fall short of the possibilities of exchange, notably by the lack of accumulation of capital (which also conditions the division of labour). It may be pushed beyond the limits of the extent of the market momentarily, for reasons of miscalculation or unforeseen events. Inversely, a transport route may break down for climatic or political reasons, for example, or a large part of the population be killed in war or an epidemic, suddenly restricting the size of the market, while the degree of division of labour is still adjusted to a larger one. In other words,

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<sup>24</sup> Becker and Baumol (1952), following Oscar Lange (1942), called this “Say’s identity”.

production need not be exactly proportional to the possibilities to exchange it at any one time. Nor do the volume of production and the possibilities of exchange always necessarily increase (or diminish) simultaneously or on a par. Other than supply and demand in Say's Law, the extent of the market *limits* the extent of the division of labour, but does not strictly define it (and this has nothing to do with the influence of money or saving; it is true even for a barter economy).<sup>25</sup> As Groenewegen (1977, p. 163) rightly puts it, "The greater the market", the greater is "the *potential* demand for final output".<sup>26</sup> Extent of demand and extent of the market are thus not equivalent, but the extent of the market is what *permits* a certain extent of demand. Young confused the two, and seems to have been followed in this by a great many historians of economic thought.

Jean-Baptiste Say sojourned in England from 1785 to 1786, and, on his return, became famous first and foremost as a populariser of Smith's thought in France. Say's "law" is derived from Chapter XV of Book I of the *Traité* (6<sup>th</sup> edition), with the original title "Des débouchés". It is significant in this respect that what was called in French "la loi des débouchés" has been rendered in English as "the law of market(s)". Chapter XV of Book I of the *Traité* was translated in English (translator C. R. Prinsep, editor Clement C. Biddle, published 1855) as "Of the *Demand or Market* for Products", while the proper English translation for the word "débouchés" is in fact 'opening, prospect, outlet'. The English translation is not only making it sound as if the concepts of "demand" and "market" were in fact equivalent; it is also odd insofar as the word "market" (marché) does not appear in Say's chapter at all. In this way, the English translation of Say's book, by equating "débouchés", "market" and "demand", may well have contributed to the confusion between "demand" and "market".<sup>27</sup>

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<sup>25</sup> Imbalances between demand and supply play a very explicit role in Smith's theory of market *price*. But what he considers therein are imbalances between demand and supply of particular goods only, not demand and supply in the aggregate, as Malthus and later Keynes would. Although Smith did not himself lay out Say's law before Say, he does not contradict it either. Say's reflections on the relation between supply and demand were almost certainly inspired at least in part by his reading of Smith, but it is uncertain what Smith would have thought of Say's developments.

<sup>26</sup> Franklin (1976, p. 380) also clearly distinguishes between demand and the market (although rather incidentally) when he writes that: "As the market expands and exchanges multiply, money as a medium of exchange becomes necessary and is generalized, a process which *facilitates* demand and establishes the distinction between use and exchange value".

<sup>27</sup> Say himself did not mention Smith in his chapter "Des débouchés", but he did mention him in Chapter VIII of his *Traité* (i.e. seven chapters earlier) entitled "Des avantages, des inconveniens et des bornes qui se rencontrent dans la séparation des travaux", which is, as the title suggests, essentially a detailed summary of Smith's views on the division of labour. (Say does not offer anything that is not contained in the *Wealth of Nations* in this

Smith himself sometimes presented the market as an outlet, giving the impression that what is really expressed by the term “market” is the demand for particular products or for the total production of a particular nation. This is the case, for example, in such expressions as “by means of water-carriage a more extensive market is opened to every sort of industry” (WN I.iii.3, p. 32); or “The wool of England . . . found a market in the then wealthier and more industrious country of Flanders” (I.xi.c.4, p. 179); and especially when Smith wrote of some place or condition ‘affording a market’ to any sort of produce.<sup>28</sup> At one place in the *Wealth of Nations*, Smith makes it appear, even, as if the words “market” and “demand” were interchangeable in his sentence: “The price of silver in the European market might perhaps have fallen still lower . . . *The gradual increase of the demand for silver, or the gradual enlargement of the market for the produce of the silver mines of America, is probably the cause which has prevented this from happening*” (WN I.xi.g.23, p. 220).

But at other places throughout the *Wealth of Nations*, Smith makes it very clear that “market” and “demand” are distinct; that demand can (or rather has to) express itself *in* or *through* a particular market; that the market is the structure, support, or vehicle *containing* a particular demand; but that this demand is not identical with that market. This is the case, for example, when Smith used such expressions as “If by the general progress of improvement *the demand of this market* should increase” (WN I.xi.d.4, p. 194) or “America, therefore, is a new market for the produce of its own silver mines, *of which the demand* must increase much more rapidly than that of the most thriving country in Europe” (WN I.xi.g.26, p. 222); or when he writes of the “demand *of the home-market*” (II.v.33-4, p. 372; IV.ix.23, p. 671) or “the demand *of the markets nearer home*” (IV.vii.c.48, 608). And as there is the demand, so there is also the “supply of the home market” (WN IV.v.a.34, p. 521; IV.v.b.25-32, p. 534-5; IV.v.b.36-41, 537-9; IV.viii.39, p. 657).

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chapter, but he ably renders Smith’s thoughts on the matter therein). Say does not confuse the extent of the market (a phrase he does not use at all in fact) with demand in that chapter, although he comes close to it when writing that one can enjoy the benefits of the division of labour only when *consumption* extends beyond a certain point (Say 1841 [1803], p. 94). This is not, of course, in *contradiction* with Smith (and neither would it have been had Say used the word “demand” at this point). But it is committing the same imprecision as Young later would, by confusing exchange and the means of exchange (insofar as speaking of consumption supposes that there *has been* exchange, rather than there being a potential for it).

<sup>28</sup> Smith writes of a market being ‘afforded’ to some kind of produce or industry (or the produce or industry of a particular country) at WN I.iii.3, p. 34; I.xi.b.27, p. 171; I.xi.c.35, p. 192; III.i.1, p. 376; III.iv.2, p. 411; IV.iii.c.4, p. 489; IV.iii.c.11, p. 494; IV.v.b.19, p. 531; IV.vii.c.100, p. 635; and V.iii.72, p. 935.

The constraint that the extent of the market poses to the division of labour for Smith is not merely one of demand (nor of supply). Rather, this constraint consists in the fact, first, that a demand for, say, a haircut in London, is largely irrelevant, under normal circumstances, to a barber in Glasgow; and second (but actually first in order of precedence), and relatedly, that such a specialised craft as that of a hairdresser can only come about in a community of a certain size, i.e. once there is a certain critical *number of people*, located sufficiently close together so that easy communication is assured among them all, by virtue of which they form a community of people, and the different communities so connected a nation. The *size of the community*, the *population of the nation* (when we *are* considering the nation as a whole) and the degree and quality of interconnectedness of the individuals (and of the communities that compose the nation) are thus of critical importance.<sup>29</sup>

A further difference between Say's law and Smith's idea of division of labour being limited by the extent of the market is that in Say's law (and Allyn Young followed Say and more importantly Mill and Ricardo in this regard), the economy as a whole — and, by convention, this is usually, implicitly, the *national* economy — is looked at as one single unit, inside which the exchange of goods is taken for granted. In Smith's concern with the extent of the market, conversely, it is most centrally the exchange of goods (both inside a particular place and from that place with the outside) which is *at issue*. The extent of the market, in the Smithian sense, indeed *defines* the degree to which it is possible to economically exchange goods from a particular place. Smith's concern, thereby, is not generally the national economy, but the economy of every particular place (generally a village, town, city, or particular area or region, and only sometimes a particular country, continent or even the world as a whole), and, furthermore, Smith is usually concerned, at any one time, with the economic opportunities of particular individuals and particular trades. It is only by aggregating these, insofar as this makes sense, that we arrive at the picture of the regional, the national, or the world economy. But this aggregation is itself conditioned by what we are considering, i.e. the extent of the power of exchanging, or the extent of the market. Otherwise, there could be no

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<sup>29</sup> Say perfectly understood this when he wrote in his chapter on the division of labour mentioned above: "Par cette raison, elle [la division du travail] ne peut être poussée à son dernier terme que lorsque les produits sont susceptibles d'être transportés au loin, pour étendre le nombre de leurs consommateurs, ou lorsqu'elle s'exerce dans une grande ville qui offre par elle-même une grande consommation. C'est par la même raison que plusieurs sortes de travaux, qui doivent être consommés en même temps que produits, sont exécutés par une même main *dans les lieux où la population est bornée.*" (Say 1841 [1803], p. 94)

different markets of different places, and for different trades, independently from the whole world market. And the limits of particular markets, even though Smith is concerned with the wealth of *nations*, are not for Smith always and automatically the ones of a *national* economy.<sup>30</sup> When equating “the market” with the economy as a whole, considering it as an “aggregate of productive activities, tied together by trade” as Young expressed it, i.e. as all the supply and demand that is being brought forth by all participants in the economic nexus (implicitly understood to pertain to an individual country), we are thus in fact taking for granted that the fruits of these various economic activities that are aggregated in this way to constitute “the market” will somehow be exchanged *within* this (usually national) economy we are considering. But this is taking for granted the very thing that Smith singled out as the *meaning* of the extent of the market: the *power* of exchanging!

For Smith, the market is what *underlies and supports exchange*. Total production or supply, or total consumption or demand, which are two ways of looking at the total exchanged product, or GDP in modern terms, of a nation, society or other economic entity, are not identical with the market, which is the vehicle, and the frontier, that renders this total exchange possible, and defines its limit (which may be surpassed momentarily but not for long). The relationship between the market and demand (or supply), in other words, is the one between a container and that which it contains. The market is not synonymous with exchange. It is the container, exchange is that which is (or can be) contained. By extension, the extent of the market is not synonymous with the volume of production, but it is what, by allowing for a certain volume of exchange, renders possible a given volume of production (insofar as what is produced, in an economy governed by the division of labour, is produced in order to be exchanged). The market, then, is a structure, a fundament, or a vehicle for economic exchange. And this structure or fundament, for Smith, is essentially of a geographic and demographic nature. We shall in the following section look at how this geographic and demographic nature of the market is precisely expressed by Smith.

#### **4. The critical geographic and demographic dimension of the power of exchanging**

Directly following the first paragraph of WN I.iii (cited on page 178 above), in which Smith defines the extent of the market as the possible extent of trade, Smith

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<sup>30</sup> Diatkine (2016) argues that the concept of the nation, economically speaking, is in fact absent from the *Wealth of Nations*.



goes on to illustrate this by contrasting the larger possibilities for specialisation in a town to the restrained opportunities of similar specialisation in the Highlands of Scotland, using the examples, respectively, of a porter, and of a nail-maker:

There are some sorts of industry, even of the lowest kind, which can be carried on no where but in a great town. A porter, for example, can find employment and subsistence in no other place. A village is by much too narrow a sphere for him; even an ordinary market town is scarce large enough to afford him constant occupation. In the lone houses and very small villages which are scattered about in so desert a country as the Highlands of Scotland, every farmer must be butcher, baker and brewer for his own family. . . . It is impossible there should be such a trade as even that of a nailer in the remote and inland parts of the Highlands of Scotland. Such a workman at the rate of a thousand nails a day, and three hundred working days in the year, will make three hundred thousand nails in the year. But in such a situation it would be impossible to dispose of one thousand, that is, of one day's work in the year. (WN I.iii.2, p. 31-2)

What this passage reveals is that the two most basic defining elements of the extent of the market for Smith are population and space. Demand, or “débouchés”, are clearly important — Smith speaks of the possibility to “dispose” one’s produce — but the way this demand can exert itself is tied to population and space. These are, in a way, the connecting elements between “demand” and “supply”, and insofar make up the market (the possibility of exchange). The passage further reveals how very closely these two elements of population and space are interconnected.

Thus, the market is larger in a town because there are more people for the porter to cater to. The porter needs to have at his disposition a large pool of potential customers (who each only occasionally have need for his services) in order to be able to exert his trade on a permanent basis. Yet, this element of population is inseparable from the element of space. What makes the town a larger market is not that it has a larger population in the absolute, but that this numerous population is present in one same place of limited size (which is of course the very definition of a town or urban area: a comparatively large population occupying a comparatively small territory). The large pool of customers, in order to actually be at the disposition of the porter, needs to be within reach. This is obvious but needs stressing. In the Scottish Highlands taken as a whole, indeed, population may be more numerous than in Smith’s unnamed town. But the Highlands having a much larger territory than any town, people are too scattered throughout, and they are thus not easily accessible. Potential buyers *in a close enough range* are so few that it hardly pays off to specialise in any one particular trade. A market, then, is

constituted by people, but these need to be located in space in such a manner as to facilitate their connexion. We may take this, for now, to be an expression of the relevance of population density. But this needs to be qualified and elaborated on, which will be done in the last section of this chapter.

Next, Smith stresses the importance of waterways to carry out trade over distance:

As by means of water-carriage a more extensive market is opened to every sort of industry than what land-carriage alone can afford it, so it is upon the sea-coast, and along the banks of navigable rivers, that industry of every kind naturally begins to subdivide and improve itself. (WN I.iii.3, p. 32)

In the remainder of the chapter, Smith more specifically points out the advantages of water-carriage and the importance for the extent of the market that the presence of navigable rivers or the proximity of the sea-coast thus implies. He substantiates this with the observation that all ancient civilisations developed along sea-coasts or large rivers which stretch and ramify into their territory. Still economically backward regions (such as Africa), conversely, were hindered in their development precisely by the absence of such waterways. Not only need there be large rivers to serve as inlets into the mainland, indeed, but these also need to be close enough to each other to permit inland trade between them (which is not the case in Africa and Tartary, where large rivers are few and far between).<sup>31</sup> Smith points out that wherever agriculture has a long history (such as Egypt, Bengal and the eastern provinces of China), large waterways that ramify out into the country can be found (WN I.iii.6-7, p. 34-5). Smith hence considers a sufficiently dense network of navigable rivers a necessary condition for the passage to the third stage of society (agriculture).<sup>32</sup>

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<sup>31</sup> Smith nowhere suggests that Africa's underdevelopment has anything to do with culture or race, but bases his explanation of it purely on geography. Along with Smith's statement that the division of labour is more the cause than the outcome of differences between individuals, illustrated by the parable of the porter and the philosopher (WN I.ii.4, LJ.A vi.47-8), this non-ethnicisation of the explanation of the economic inferiority of Africa, half a century before the abolition of slavery in Britain, is an illustration of Smith's universalism, or of his basic belief (possibly in line with Stoic philosophy, which is generally believed to have significantly influenced him) in the basic equality of human beings. This distinguishes him from his friend Hume who (although also opposed to slavery) explicitly considered "negroes" to be inferior to "whites" (see n. 13 on p. 75 above). (For Smith's condemnations of slavery, see — on economic grounds — WN I.viii.41, III.ii.9, IV.ix.47; LJ.A iii.112; LJ.B 138, 290, 299; ED 44 and — on moral grounds — TMS V.2.9; and for commentary Pack (1996), Griswold (1999, p. 198-202), Lapidus (2002), Wells (2010) and Elmslie (2010).)

<sup>32</sup> See also LJ(A) iv.53, p. 220: "As the Tartars have been always a nation of *shepherds*, which they will always be from the nature of their country, which is dry and *high raised*

By greatly facilitating exchange, natural waterways substantially augment the volume of trade that it is possible to conduct, and thus increase the size of the market. It may appear that this presence of rivers and coasts in a territory is a geographic element that has nothing to do with demography, but this is not so. Natural waterways (or any other characteristics of geography that potentially represent natural facilities for trade) can be actual means or facilities of exchange only if there are people to use them. Since the extent of the market in Smith's theory describes the possible extent of trade, rivers are of interest only insofar as they connect potential trading partners. Only this will enlarge the market. Rivers that run through uninhabited land will be of no influence on the size of the market. When Smith writes that rivers are critical for the extent of the market, therefore, he is actually taking for granted (without pointing this out) that we are considering rivers that are connecting together loci of productive activity, i.e. human agglomerations. Smith may have deemed this fact too obvious to warrant mentioning. It is important to take into account, however, to uncover the primary importance of population for the Smithian market. It is precisely for this reason, indeed, that Smith advocated that such works as a "highway, a bridge, a navigable canal . . . be both made and maintained by a small toll upon the carriages which make use of them" (V.i.d.3, p. 724) in order that they be primarily built where they are needed (so as to enlarge the market) and that "A magnificent high road cannot be made *through a desert country* where there is little or no commerce, or merely because it happens to lead to the country villa of the intendant of the province" (V.i.d.6, p. 725).<sup>33</sup>

Smith thus identifies three interdependent and mutually reinforcing factors that determine the total size of the market. The first is the number of people (on a

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*above the sea, with few rivers tho some very large ones, and the weather and the air is too cold for the produce of any grain".*

<sup>33</sup> Of course, if rivers run through hospitable/fertile land, the fact that they do will likely favour human settlement there. The history of human settlement and the presence of navigable rivers and sea-coasts are closely connected in Smith's account, as illustrated by his examples of Egypt and Bengal having developed along and by means of these waterways (and conversely Africa and Tartary not having developed because of their absence) (I.iii.4-8, p. 34-6). This, indeed, is congruent with Smith "circular cumulative" way of conceiving economic development, which we shall examine in the following chapter. (It may be remarked that, as would natural rivers, so "magnificent high roads" could, in principle, promote settlement and development in a hitherto "desert country" — but, as with restrictions to or promotions of trade, Smith was not in favour of such 'artificial' means to direct development, which, other than natural rivers already present on a territory, needed an initial investment by the state, for no statesman or group thereof could, according to Smith, possess sufficient understanding of the natural process of societal development to outdo in quality the spontaneous, i.e. natural, ordering of this process).

given territory). The second is the extent to which they are in reach of each other, i.e. how close they are situated to each other in space. The third element is how well people are connected through the particular distance that separates them, i.e. how easy or difficult it is to overcome this distance with the given means. In the chapter on the extent of the market in the *Wealth of Nations*, Smith lays primary stress on navigable rivers or other natural waterways. In *Lectures of Jurisprudence* he also mentions the importance of the presence and quality of roads in this context (LJ(A) vi.65, p. 356; LJ(B) 222-3, p. 494).<sup>34</sup> Other geographical elements (mountains, deserts, parasite- and disease-infested swamps and jungles, etc.) represent obvious obstacles to trade.<sup>35</sup>

Why population and space are the *primal* constituents of the extent of the market becomes clearer when we further consider what the other factors that Smith directly names in WN.I.iii (natural waterways and “riches”), as well as the one he indirectly alludes to (technology), precisely amount to. What is significant in this context is Smith’s insistence on the importance of time.

When speaking of the inland market, Smith points out that in earlier periods of development (i.e. before the “commercial stage”, when trade is conducted with the exterior) these inland parts of the country have a size of market (a power of exchanging) that is limited to the one that exist *within* themselves only. This power of exchanging within the inland parts of a country is determined, Smith holds, by their “populousness”. But Smith also mentions at this point that it is determined by the country’s “riches”:

The inland parts of the country can for a long time have no other market for the greater part of their goods, but the country which lies round about them, and separates them from the sea-coast, and the great navigable rivers. The extent of their market, therefore, must for a long time be in proportion to the riches and populousness of that country, and consequently their improvement must always be posterior to the improvement of that country. (WN I.iii.4, p. 34)<sup>36</sup>

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<sup>34</sup> That Smith continued, in the *Wealth of Nations*, to consider the quality of roads and other man-made facilities of trade of crucial importance for the extent of the market is not in doubt, as manifest notably by Smith’s long considerations on the financing ‘Of the publick Works and Institutions for facilitating the Commerce of the Society’ in Book V (V.i.c-d, p. 724-58), which was already referred to. See also WN p. 32, editor’s note 8.

<sup>35</sup> Smith does not mention these negative elements, which somewhat suggests themselves, in WN I.iii. At LJ(A) iv.56, p. 221, and iv.62, p. 223, however, several negative and positive elements of the terrain are considered as conditions for a society’s progress.

<sup>36</sup> Note how in this instance it becomes clear that the extent of the market is always tied to a particular location. Smith speaks of the “extent of *their* market”, i.e. the extent of the market of the inland parts of the country, meaning the power of exchanging *from* these

A hundred rich people will represent a larger market than a thousand poor people, if they permit, by their larger buying power, a larger power of exchanging. Wealth is therefore clearly important for the extent of the market.

Smith also repeats this in his critique of mercantilism. He states at IV.iii.c.11 (p. 494), for example: “As a rich man is likely to be a better customer to the industrious people in his neighbourhood, than a poor, so is likewise a rich nation. A rich man, indeed, who is himself a manufacturer, is a very dangerous neighbour to all those who deal in the same way. All the rest of the neighbourhood, however, by far the greatest number, profit by the good market which his expence affords them.” The two quotes from *Lectures of Jurisprudence* linking population and division of labour, cited in the introduction of this chapter (p. 174 above), also appear in that context, and are preceded and/or followed by the observation that free trade with France would be more advantageous than with Spain or Portugal, as France is not only more populous but also much richer.

But no more than natural waterways can wealth be considered an independent factor — independent, that is, of the elements that were already established as the fundamental constituents of the extent of the market: the size of population and the quality of its connection through space. First, wealth, of course, is of no influence on the extent of the market without people to use it. (From a more ontological standpoint, indeed, without people to use it, there can be no wealth at all.) And while for certain goods, few people will suffice to circulate a lot of wealth, whether in the form of stock or income (luxuries, for which wants are unlimited), for other goods, there is necessarily a certain proportionality between consumption and size of population (especially foodstuff, because of the limited capacity of the human stomach, WN I.ix.c.7). Second, and more significantly, wealth is itself not independent of the level of the division of labour and capital accumulation attained by a society, by which it is created and accumulated.<sup>37</sup> Division of labour is limited by the extent of the market, the determination of which must thus rely, *at the outset*, on other factors but division of labour, as otherwise Smith’s depiction of the relation between the market and the division of labour would be a mere tautology. Wealth can therefore not be counted as a primal element constitutive of markets. Originally, it is the result, and not the cause, of the

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inland parts. See also the same proposition at WN III.i.1: “The greater the number and revenue of the inhabitants of the town, the more extensive is the market which it affords to those of the country”.

<sup>37</sup> Recall that Smith is concerned with “real wealth, the annual produce of the land and labour of the society” (WN 9, p. 12).

division of labour. Wealth is a result of the *development* of society in the Smithian system, which itself depends on the extension of the market.

Young (1928, p. 533) famously expanded Smith's analysis to imply that the division of labour is limited by the division of labour: "Modified, then, in the light of this broader conception of the market, Adam Smith's dictum amounts to the theorem that the division of labour depends in large part upon the division of labour." And Young added that "This is more than mere tautology". It is more than mere tautology, however, only by virtue of the element of time. What is significant is not that the "division of labour depends on the division of labour", which is a mere tautology, but that the *current* division of labour depends on *previous* division of labour. What Young seeks to describe with this pseudo-tautology is a continuous, path-dependent, cumulative and self-enforcing process of change.

It is significant, therefore, that the extent of the market is considered by Smith in conjunction with time. (References to time are italicised in the following quotes.) Smith's opening sentence on the advantages of water-carriage at the beginning of the third paragraph of Chapter III Book I (WN p. 32), explaining that since water-carriage augments the power of exchanging, development (improvement), spurred by the division of labour, must naturally proceed faster near the coast and navigable rivers, continues and ends with this clause:

and it is frequently *not till a long time after* that those improvements extend themselves to the inland parts of the country.

After illustrating the advantages of water carriage over land-carriage by some numerical examples in the remainder of this paragraph, Smith begins the next paragraph by repeating in only slightly different wording the first sentence of the previous one just considered:

Since such, therefore, are the advantages of water-carriage, it is natural that the *first* improvements of art and industry should be made where this conveniency opens the whole world for a market to the produce of every sort of labour, and that they should always be *much later* in extending themselves into the inland parts of the country. (WN.I.iii.4, p. 34) <sup>38</sup>

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<sup>38</sup> It should be noted that in Smith's own terms, this is somewhat of an exaggeration. In fact, even water carriage does not "[open] the whole world for a market *to the produce of every sort of labour*", since the cost-effectiveness of carrying products over long distance for sale is itself relative to the value of these products where these can be exchanged. It is important to note, therefore, that when Smith writes of "the market", it is generally tied not only to a particular place, but also to a particular product. Insofar as the market is related to geographical considerations, it is crucial to attach it to a particular place. How far the market reaches *from* that place depends, however, on the particular product to be exchanged. For some products, their high value, coupled with their relative ease of

While wealth cannot be counted as a *primal* element of the extent of the market, it thus later gets incorporated and forms a defining element of the latter. The same is true for technology, in the sense that for Smith it is largely integrated into the division of labour (Lowe 1954, p. 135; Elmslie 1994a). Eventually, technological development will obviously make people more accessible to each other by using better means of transportation, etc. But this technology is an outcome of the very process we are considering. Hence, at the elemental level, technology is also not included by Smith into the definition of the extent of the market.

Technology is not directly mentioned by Smith in his chapter on the extent of the market, although it is indirectly alluded to. Arguably, a basic technological component is thus included into the extent of the market with the element of natural waterways. Indeed, to make use of waterways for transportation, a society needs to have at least developed a rudimentary form of shipping technology. For two reasons, however, this is not fundamental. First, this technological component could be very rudimentary indeed. Rafts and canoes can be made quite simply from (fallen) tree trunks and branches found along river shores. Beyond this reason that very rudimentary technology suffices here, however, is a more fundamental point, which can only be understood by keeping in mind the circular nature of causality in the Smithian system, which shall be analysed in more detail in the following chapter. This is that while we need *some* form of technology to make use of rivers, the opposite is also true, and essential for Smith's argument. Thus, it is *because* there are rivers (augmenting the extent of the market) that the technology to make use of them (through ever-increasing division of labour and hence scientific and technological progress) will be developed. Incrementally, from

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transportation ("such whose price was very considerable in proportion to their weight" WN I.iii.3), warrants exchange over long distance, while for others, where this relation is less favourable, the market is confined to the immediate vicinity. Smith illustrates this with the example of coal and metal mines. The market of the metal mine is potentially the whole world, since the value of metal renders economical the cost to transport it virtually everywhere. The coal mine, on the other hand, has a smaller potential market, since, relatively to the metal mine, it is not economical, given its lower value, to transport the coal very far for sale (WN I.xi.c.21). (These markets are *potential* only because in early stages of society they rely on foreigners to take charge of the carrying trade, see WN III.i.7, p. 380). Smith also contrasts clothes with materials of lodging (WN I.xi.c.5), wool and raw hides with butcher's-meat (I.xi.m.4-5), manufactures with corn or cattle, and finer manufactures with coarser ones (IV.ii.16, VI.i.29-30, IV.ix.41), the former and latter of these being respectively more economical and less economical to transport. He often refers to the ease of transport of precious metals relative to their high value (WN I.xi.m.18, IV.i.5, 12-13; IV.iv.15). If, hence, the whole world was opened for a market "to the produce of every sort of labour", Smith's theory of the relative market for products — relative, that is, to distance, cost and value — would be pointless.

rafts to canoes to bigger ships, by the progressive division of labour and capital accumulation made possible by the extension of the market that these waterways constitute and further permit, shipping technology will be developed in order to make use of them for transportation. What is fundamental here is the presence, in the first place, of these waterways and people to use them. This brings us back squarely to the theme of the connection between the expansion of the market and the development of society over the very long run, which, as we know, is organised by Smith in four stages of progress. It is the connection between the development of the market and the progression of Smith's stages which we shall at present consider.

## 5. Population growth and the market in the early stages of society

In Smith's "primitive stage", there is hardly any technology, no capital and only very few people — as well as no private property, but this does not need to concern us here.<sup>39</sup> Smith considered that groups of early humans, due to the nature

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<sup>39</sup> It may be argued that the very idea of a market (or of exchange more generally) depends on the existence of private property. Some critics of Smith, notably Karl Polanyi (2001 [1944], p. 45-6), have in fact argued that Smith's idea of exchange among hunter-gatherers is in contradiction to anthropological evidence that commercial exchange was (is) not present in such societies. (For a similar treatment of the historical record see Heilbroner 1999, Chapter 2.) But Smith in fact conceived of the 'beginning' of exchange *precisely* in a setting where there is *no* private property (i.e. in the primitive, hunter stage). Exchange as such, indeed, does not need to be of a commercial nature, and Smith actually made it very clear — at least in his lectures — that, at first (i.e. in the "primitive state"), exchange happened as a form of gift-giving (above p. 177). Private property, therefore, is no more necessary for the existence of markets than the motive of self-interest (see above p. 176-178). This suggests that the "propensity to truck, barter and exchange", which Smith attributes to man, either as an original part of human nature or as a consequence of the faculty of speech and reason (WN.I.ii.2, p. 25) is indeed present according to him even among people who have not (yet) instituted the right to or practice of private property. Polanyi's critique of Smith rests on the 20<sup>th</sup> century meaning of market as institution (discussed above p. 168 and 178). In Smith's theory of the dependence of the division of labour on the existence of a market, however, the market describes the "power of exchanging", without which exchange, whether of a commercial nature or not, is thus *by definition* impossible. Polanyi's charge against Smith, of having elevated commercial motives over all other human motivations — in particular in "primitive man", as opposed to "modern man" where such a view would, it is held, be more justified — is a common misreading of Smith, related to the Adam Smith Problem, which can only be sustained by declaring the rest of Smith's oeuvre either irrelevant to or in contradiction with the particular passages in the *Wealth of Nations* from which such a view is inferred. In order to establish that division of labour does *not* depend on markets (which he misreads to imply commercial exchange), Polanyi is further driven, contra Smith's egalitarian view of the relationship between division of labour and people's talents (n. 31 above), to revert to a



of their mode of subsistence as hunters, were limited in numbers to about a hundred fifty people (LJ(A) iv.36, p. 213; FA.3, p. 583). In this small human group, if all individuals were fully self-sufficient, there would be zero connections of exchange between the members of the group. It is important to stress that this is a totally fictitious situation. Humans (like the other great apes) are by nature social animals (and pack hunters), which are engaged in mutual aid and assistance (including provision of food and thus material goods) from the very start of and throughout their lives.<sup>40</sup> Indeed, the inherently social nature of human beings irrespective of time and place was one that was opposed by Smith and Hume to the 17<sup>th</sup> and 18<sup>th</sup> century theories of the state of nature and original contract.<sup>41</sup> Smith clearly expressed this idea in his discussion of the division of labour in the second chapter of *Wealth of Nations*:

In almost every other race of animals each individual, when it is grown up to maturity, is intirely independent, and in its natural state has occasion for the assistance of no other living creature. But man has almost constant occasion for the help of his brethren (WN.I.ii.2, p. 26)

A total absence of division of labour in human society was therefore quite unthinkable (just as it is unthinkable in a beehive, Mandeville's famous metaphor

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view of the origins of division of labour that harks back to Plato (but was also again adopted, after Smith, by Ricardo in his theory of 'comparative advantage' and through the latter endures in economic theory to this day): "Division of labor, a phenomenon as old as society, springs from differences inherent in the facts of sex, geography, and individual endowment; and the alleged propensity of man to barter, truck, and exchange is almost entirely apocryphal" (Polanyi 2001 [1944], p. 46).

<sup>40</sup> That Smith had no issue in seeing man as belonging generally to the animal kingdom is clear from such statements as "It is common to all men, and to be found in no other race of animals" (I.ii.2) or "As men, like all other animals, naturally multiply in proportion to the means of their subsistence" (I.xi.b.1). Linnaeus — whose work Smith was familiar with — had, in 1758, placed man in the order of primates. (In 1776, the year of the publication of the *Wealth of Nations*, humans were given their own separate taxon by Johann Blumenbach, to be reintroduced into the order of primates again only a century later.)

<sup>41</sup> Thus, in addition to what was remarked in n. 39 above, Polanyi's (2001 [1944], p. 48) observation that "if one conclusion stands out more clearly than another from the recent study of early societies, it is the changelessness of man as a social being", which he opposes to Smith's view of "primeval man as bent on barter and truck" (Polanyi 2001 [1944], p. 47) is in fact entirely in line with what Smith himself advanced. Man's social nature and his propensity to truck and barter were inherently linked for Smith. It is the impartial spectator (an inherently social mechanism) that is invoked by Smith in his lectures on jurisprudence to explain that a thing is considered as belonging to someone when he has invested his labour in it (such as an apple plucked from a wild apple tree), and it is the same explanation that is used in the *Wealth of Nations* for formulating the (labour) theory of value valid in the primitive state (see LJ(A) i.36-7, p. 17; i.41-44, p. 19-20; and i.59-60, p. 25; and WN I.v.2, p. 47).

of human society). Smith's use of a situation *preceding* the division of labour must in fact be considered to be a "philosophical fiction" in the sense that Hume laid out in 1739 (we shall consider this further in the next chapter, p. 229 below). Further, it can be considered that when Smith spoke of the division of labour, he was referring to an already fairly advanced kind of specialisation, as is the view defended by Meek and Skinner (1973, p. 1109), and that the basic form of division of labour existing among "savages" would thus not be referred to by Smith as such.

In the *Wealth of Nations* as well as the *Lectures of Jurisprudence*, Smith mentions the activity of arrow making as a possible first coming into existence of the division of labour. Starting from a (hypothetical) situation of no exchange of goods and services in society (a clan of hundred-fifty hunters), the introduction of this single activity would, by necessity, influence relations of exchange in society. A highly specialised activity like making weapons, as opposed to hunting and gathering, needs a comparatively large market to be viable. Other than food, which can be used every day by everyone, the hunters will only be in need of new weapons occasionally, so that the only way for the maker of weapons to viably exercise his or her specialisation on a continuous basis within the group is to be able to exchange with all the hunters occasionally, whenever they are in need of a new weapon, so that he may constantly exchange new weapons with one or the other of them. The human group in question, i.e. hundred fifty savages, is in fact a market. And it needs a market of such a modest size at least for the activity of arrow- and bow-making to arise. Eventually, with additional specialisations arising, this will lead to the introduction of some type of currency for the new types of more and more indirect exchanges to be feasible (as developed in WN I.iv).

What, then, is our human group to do when the division of labour has progressed to its absolute limit with that size of market, in order to extend the division of labour? How can the market be enlarged? Since the market is defined by the power of exchanging, to increase the size of the market, possibilities of exchange need to be multiplied. As developed in the previous section, technological advance or capital accumulation are not an option, as these are themselves bound up with the development process, which is itself constrained by the extent of the market.<sup>42</sup> This being the primitive stage, "original accumulation" has not yet occurred.

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<sup>42</sup> It may be noted that capital accumulation is determined by profits and savings. For these to occur, however, wealth needs to expand, and this, as Smith announces in the preface of the *Wealth of Nations*, is the result primarily of labour becoming more productive, which itself is the result of the division of labour, which again is limited by the extent of the market.

Two solutions seem to offer themselves to this human group: either the population grows, which augments the possibilities of exchange internal to the society in question, or the group engages in foreign trade.

With the growth of population the market will in effect be enlarged, since with more people there will be further opportunities of exchange. The growth of population could take place either internally, or the group could converge with another, creating a more drastic increase.

The possibilities to engage in external trade, on the other hand, are limited precisely by what we are considering: the extent of the market. Or, more precisely, the possibilities to engage in trade (external and internal) are what *determines* the extent of the market; they in fact *are* the extent of the market. Even if silver lies in the soil, right in the vicinity of our group of hunter-gatherers, for example, they neither have the technology nor the capital to carry it to where they may exchange it against something of use to them, let alone to get it out of the ground in the first place. We can see here the problem with external trade as a means to enlarge the market. Considering that the market can be enlarged by trade is putting the carriage before the horse. Once a society has evolved to a certain level of technical sophistication and capital accumulation, it becomes economical for the society to engage in all kinds of trade. In order for the society to amass — and, more importantly, to implement — this technology, however, the market first needs to expand. The only way the market can be enlarged through foreign trade is by enlarging the *possibility* to engage in foreign trade, which for an isolated group of hunter-gatherers is a feat largely outside of their control. Since they do not possess the capital and technology (the two being closely linked) to facilitate long-distance trade themselves (by building roads or ships for example), the only way this could happen is if another human group reaches out to them by building such connections, or through human migrations which will put them in contact with other groups (or, in a longer term perspective, by climatic or geographical change, increasing the flow of rivers for example, making them more navigable, or transforming deserts into more fertile grassland or indeed connecting formerly disjointed land-masses, making them more easily crossable). This makes it very clear that in a situation where the whole world was composed of small groups of hunter-gatherers, the only way (other than geological change) by which the overall market of humanity (the power of exchanging of all humans in the world with all others, of all goods in general) could be expanded was through the growth of population.

It is important in this respect that the geographical features that may facilitate trade, in particular navigable rivers, which Smith singles out as making

for a larger market, are natural (not man-made) ones. Indeed, Smith held that “The being of a market first occasioned the division of labour” (LJ(A)vi.64). Society needs the being of a market (the possibility of exchange) in order to progress from the savage state, in which division of labour is minimal. The means to create artificial waterways (or other large infrastructure or ‘overhead capital’ that facilitates transportation) are only available to a society having advanced to a considerable degree of division of labour and accumulation of stock already; and for society to advance to this late stage a comparatively large market needs to exist in the first place. The waterways that Smith mentions hence are (and can only be) natural ones. In the first two stages (the hunting and the pastoral ones), however, waterways are of little incidence to the extent of the market, as there is as yet little produced that would warrant transportation over water, and the technology and capital necessary to engage in such carriage by navigation are not available in any case. At these initial stages of society, therefore, only the growth of population can possibly enlarge the market.

The growth of population also augments the relative scarcity, and therefore the price (in labour), of some foodstuff. The increased possibilities of division of labour that an enlarged population create, however, more than compensate for this. A larger population, on balance and in the long run, is a positive force (indeed a necessary condition) for society’s progress, in fact, as we have seen in the previous chapter, not only despite, but at least partly *because* population growth first creates hardship, through greater difficulty in food procurement as long as the mode of subsistence remains unchanged. The same idea of increasing difficulty (diminishing returns) in food procurement with a rising population is developed by Smith especially in the long Chapter XI of Book I of *Wealth of Nations*.<sup>43</sup> Indeed, in each stage of society, the prevailing source of nourishment (wild animals in the hunter stage, raised animals in the shepherd stage, raised crops *and* animals in the agricultural and commercial stages) becomes more expensive as population progresses, as the necessary input or source of this foodstuff becomes relatively scarcer in relation to population. Thus, wild animals rely on the wilds (forests, savannas, steppes), which mechanically diminish in per capita terms as population expands, and the same is true for grazing land in the shepherd state and agricultural ground thereafter. The latter was given greater emphasis in Ricardo’s

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<sup>43</sup> In particular, one may find this idea developed in the part “Different Effects of the Progress of Improvement upon the real price of three different Sorts of rude Produce” (l.xi.j-m, p. 234-55). l.xi.m.15, p. 253, contains a statement of the law of diminishing returns, expressed by the procurement of fish, very much resembling the Ricardian rent theory.

and Malthus' theory of rent. Ricardo and Malthus, however, thereby neglected the other (and dominant) effect that Smith saw deriving from a larger population.

While Malthus, as we have seen in the previous chapter, incorporated Smith's view (possibly unbeknownst to him, as it does not appear in the *Wealth of Nations*) that the hardship that the greater relative scarcity of land occasions with rising population prompted technological development ("industry" or "exertion" in Malthus' words), Malthus did not adopt Smith's idea that the rise of productivity was produced, also, *directly* by a larger population, through the division of labour.<sup>44</sup> For Smith, the division of labour needs a growing market to progress, but this growing market, as we have seen, is in fact provided directly and immediately by an increasing population. Thus, the growth of population does not only create the *need* for improved technology (notably of food-procurement), but also — and at the same time — provides the *opportunity* of improved technology (via increased division of labour) through the enlargement of the market it occasions. And this improved technology and deepened division of labour does not simply compensate for the larger relative scarcity of certain natural resources, but it more than compensates for it, so as to make the average real price of goods (i.e. their average price in labour) sink.

The growth of population is thus the most important driver of market growth (indeed the only possible one for an isolated group) in the original setting of Smith's primitive state. The importance of the growth of population for the growth of the market, more generally, is proportionate to the stage of development and the isolation of the society in question. The less developed and the more isolated a society, the more important is the growth of population for the extension of its market. The following section will examine by which *two* conjoining forces the growth of population extends the market, related to the peopling progress and the stadial evolution of societies (and humanity as whole).

## **6. Population, distance and the stages of society**

The growth of population augments the number of potential trading partners. This increases the power of exchanging. The growth of population thus quite mechanically enlarges the market. The process, moreover, is an exponential one. The number of possible trade relations augments much more than proportionally

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<sup>44</sup> See the quote on p. 142 above in which Malthus holds that it was not a larger population itself that occasioned progress, but only the greater hardship it occasions, which Malthus used to back up his anti-egalitarian stance.

to the growth of population. Thus, increasing, for example, a group from ten individuals to a thousand individuals (i.e. multiplying them by a hundred) multiplies the possible relations between any two individuals by a hundred thousand.<sup>45</sup>

The preceding considerations, however, abstract from space. Considering only the amount of potential trading partners neglects the difficulty that they have to trade with one another (the power of exchanging, precisely), which is determined in large part by the distance that separates individuals.<sup>46</sup> The importance of distance for the extension of the division of labour is directly apparent in Smith's comparison of the highlands of Scotland with more populated towns. The difference between the two is not the overall population size, but the distance at which the individuals are placed from one another. In other words, other than the number of potential trading partners, what is relevant for the power of exchanging is the accessibility of these potential trading partners — if they are not accessible, they are not potential trading partners in the first place, indeed. Most of the goods that are produced are not so valuable as to warrant transportation over great distances for the benefit that can be obtained through their exchange. For many of the goods and services produced by a society — and this is all the more the case as the society is relatively little developed — the only individuals that come within the range of being possible trading partners are the ones in the immediate vicinity of the producers.<sup>47</sup>

As was already remarked, the extent of the market is conceived by Smith usually in relation to a particular place, *from* which the power of exchanging is thus designated. Smith also speaks of the extent of the market of particular countries or

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<sup>45</sup> As Christakis (2012, p. 81-2) puts it: "The whole is greater than the sum of its parts. . . . Perhaps the most impressive [example] is that carbon, hydrogen, oxygen, nitrogen, sulfur, phosphorus, iron, and a few other elements, mixed in just the right way, yield life . . . not present in or predictable from these constituent parts. . . . It is also the case that the whole has a complexity that rises faster than the number of its parts. . . . If we have 10 people in a group, there are a maximum of  $10 \times 9/2 = 45$  possible connections between them. If we increase the number of people to 1,000, the number of possible ties increases to  $1,000 \times 999/2 = 499,500$ . So, while the number of people has increased by a hundredfold (from 10 to 1,000), the number of possible ties (and hence this one measure of the system's complexity) has increased more than ten thousandfold."

<sup>46</sup> The same shortcut is hence taken by considering population separately from space as the one that was described to be made if considering demand as separately from space; see above p. 179.

<sup>47</sup> Even today, although transport costs have drastically fallen since the 18<sup>th</sup> century, distance between population centres and their accessibility from everywhere else remain absolutely decisive for patterns of trade (and the market, understood as the possibility of trade). See on this for example Brakman and van Marrewijk (2008).

regions as a whole, however. In this case (as when considering the extent of the market of the whole world), this must be understood to be an implicit computation of all the powers of exchanging of the individuals or economic entities within the territory considered. As mentioned above, Smith is not concerned always with *national* boundaries only in this regard. He considers the extent of the market of towns and regions, as well as continents. All these, however, cover a certain territory, and the power of exchanging of these towns, regions, countries or continents must be understood as a computation of the whole (or average) power of exchanging of all economic entities within the territory with each other and with the rest of the world. Other considerations aside (notably how difficult it is to overcome a given distance, which varies with the type of territory and the technology and capital available — but these, as we have seen, are themselves dependent of the process we are examining), the power of exchanging *within* a given territory is directly dependent on the average distance separating individuals from one another within that territory.

How, then, is this average distance of individuals one from another related to the growth of population? The answer might appear straightforward: 'An increase of population on a given territory mechanically augments population density within that territory. The denser the population, the shorter the distance between individuals on average, the easier is exchange between individuals or, in other words, the greater is the power of exchanging. Higher density of population makes for a larger market.'

The question hence becomes what influence the growth of population has on population density. This, of course, depends in large part on the territory that can be occupied. As long as there is vast unoccupied land round and about a human group, the initial population could grow for a long time without any necessary increase in population density: a group of hunters finding their population increasing because of ready availability of food, inhabiting a (part of the) world still largely unoccupied by human beings, would simply spread out over the land, forming numerous new groups, continuing the same nomadic lifestyle of hunting and gathering at different locations, without any marked increase in population density. It is clear, however, that once we consider a population confined to a certain territory, or even the world as a whole, growth of population will necessarily augment population density.

The increase of population density, as we have seen, is both cause and consequence of the change of the mode of subsistence: it is when population starts increasing on a given amount of land that food starts becoming scarce, and this will enjoin the human group to adopt a new mode of subsistence (recall that Smith uses

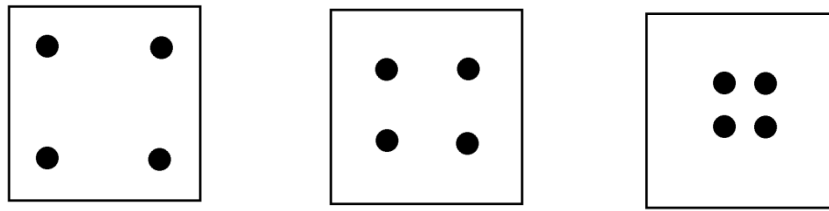
an island metaphor to illustrate the development of society through the four stages of subsistence, thus building in the constraint of a fixed territory). This new mode of subsistence, in turn, can accommodate a larger population on a given surface of land. As we have seen, Smith (see above p. 105), and before him Franklin (above p. 123), had remarked that the more primitive a society, the larger is the territory that the same number of humans need for their subsistence. “the difference is very great between the number of shepherds and that of hunters whom the same extent of equally fertile territory can maintain” (WN IV.vii.c.100, p. 634). Thus a territory of equal size will be able to nourish a much larger number of people in the shepherd state than in the hunter stage, in the agricultural state than in the shepherd state, and in commercial society than in the agricultural state. Put differently, the same society occupying the same territory will have a comparably larger population the further evolved it is on the stadial scale. More evolved societies have both larger and denser populations therefore, so that their market is larger both for their larger amount of potential trading partners and their greater accessibility.

So far, however, we have considered population density and accessibility of individuals one to another within a territory to be equivalents. This is not strictly accurate. Overall population density does not entirely capture what we are interested in, in fact, i.e. the (average or absolute) physical proximity of individuals to one another on a given territory. A large city with a large area of relatively empty space around it, for example, could have both the same overall size of territory *and* the same size of population (and therefore the same average population density) as a large rural area (such as the highlands of Scotland). Yet the average distance between individuals is lower in a territory of equal size and population comprising a city than in one where population is more spread out (see Figure 1).<sup>48</sup>

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<sup>48</sup> Which part of a territory we are considering is relevant then, and all the more relevant as the population is unevenly distributed. Thus, moving from the left to the right square in Figure 1, while overall density remains the same, the density of only the central area of the square is increased. Moreover, the portion regrouping the four individuals in the centre of the square on the right has a much larger population density than any other equal size portion of that same square, but also than any portion of equal size of the two other squares. When calculating simple average population density on a territory, the concentration of population is however not taken into account.



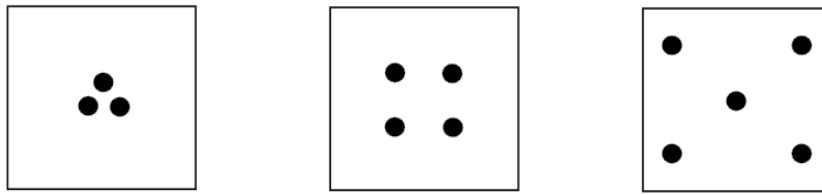


**Figure 1: Population density and average distance**

Average population density is the same in all three boxes, but the average distance of individuals from each other decreases from left to right

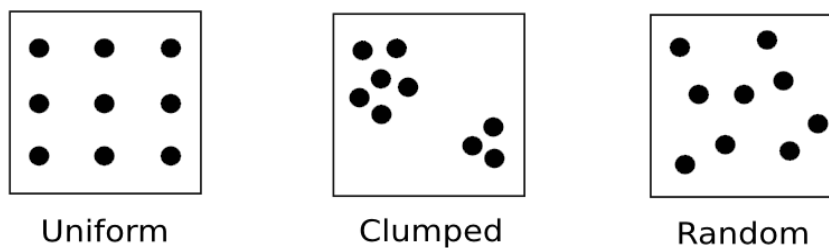
The value of population density is obtained by dividing the whole number of people by the whole size of the area considered. Therefore a territory of the same size with the same size of population will always have the same population density. But this does not tell us where people are situated on the area in question. As noted, if population is concentrated in one or a few central places, the average distance between individuals will be much smaller than if it is scattered throughout the territory, while the value of overall population density on the territory remains the same. It is even conceivable, in a large enough territory, that increase of population (and thus increase of average population density over the whole territory) goes hand in hand with an *increase* of the average distance between individuals, if population growth results in the spread out to yet unoccupied parts of the territory, instead of the concentration of population (see Figure 2). Thus average population density on a territory does not give us a very precise account of the average distance between individuals on that territory.

What, then, other than the number of people on a territory (i.e. population density) alone, determines the distance between people, which allows or constrains their ability to trade, and hence further conditions the power of exchanging? And how is this related to the growth and size of population? Why is it that people are found more or less far away from each other in any given region? This is a feature of the settlement process, the process by which a population grows, and, as a result, both spreads out over the land, in an early stage of the process, and, at a later stage, concentrates in a limited number of places (i.e. urbanises). In other words, it is intimately linked to Smith's conception of the stadial progress of society through different modes of subsistence.



**Figure 2. Population size and average distance.** Population size (and with it population density) increases from left to right. Average distance between individuals increases too.

In population ecology, the ways populations are distributed over a territory are referred to as patterns of dispersion. Populations can be evenly distributed, randomly distributed, or lumped together in a number of places.<sup>49</sup> In terms of average distance between individuals, there is no great difference between the uniform and the random pattern. The clumped pattern, however, makes for a much larger average proximity between individuals (see Figure 3). The clumped pattern is thus much more conducive, when human population is considered, to an extension of the market.



**Figure 3. Patterns of dispersal.** A clumped pattern of dispersal of an equally sized population makes for a much smaller average distance of individuals from one another than a uniform or random pattern of dispersal.

<sup>49</sup> These patterns of dispersion, however, also depend on the area considered. While over a larger territory population may be “clumped”, when we look at only the area of one of the lumps, it may appear to be evenly or randomly distributed (or again lumped, forming a fractal pattern).

When the whole world, or any large territory, is beheld, human populations are of course never entirely uniformly or randomly distributed. Although our species has come to occupy almost every sort of habitat, some regions (deserts, the polar regions, high mountain ranges) are less attractive than others (with easy access to points of freshwater and abundant sources of food), so that the former are less occupied, and the general pattern of distribution — over the whole world, or the larger regions that compose it — of human population, even in its savage condition, is thus more or less clumped. When only the more hospitable parts of the world are considered, human populations can however be much more evenly distributed. The degree to which population will be clumped together, in fact, varies greatly with the mode of subsistence.

In primitive society, bands of humans roam through a territory, and, since they need a large stretch of land in order to hunt, will need to keep a relative distance from other such human bands. Hunters thus live in small groups with a relatively large distance between them. Shepherds can sustain larger groups (which makes them notably a much larger threat to civilised nations). As Smith is reported to have observed in his lectures:

In a nation of hunters and fishers few people can live together, for in a short time any considerable number would destroy all the game in the country, and consequently would want a means of subsistence. Twenty or thirty families are the most that can live together, and these make up a village, but as they live together for their mutual defence and to assist one another, their villages are not far distant from each other. . . . On the other hand a much greater number of shepherds can live together. There may be a thousand families in the same village. The Arabs and Tartars who have always been shepherds have on many occasions made the most dreadful havoc. (LJ(B) 27-9, p. 407-8)

The more significant change in the mode of occupation of territory, however, comes in the third and fourth stage. Thus, while a population of hunters may have a tendency to spread out over the land to find new grounds to hunt, and a population of shepherds to find new lands to let their animals graze on, once a population is fully settled (i.e. from the third stage of society onwards), the tendency is toward population concentration. This is a direct corollary of the development of the division of labour. Thus, from the onset of agriculture, human populations show a much more markedly clumped pattern of dispersion. Indeed, when such a human population expands, it will regroup around places offering greater opportunities for trade — along the shores of navigable rivers and seas, as Smith points out in the third chapter of *Wealth of Nations*, and along roads on which trade is conducted, at a more advanced stage of society. As humans stand by nature in need of one another, and increasingly so with the deepening of the

division of labour, a growing population will naturally be drawn closer together, i.e. become more concentrated geographically. Population growth thus naturally leads (via the division of labour) to human concentration.

Thus urbanisation is, for Smith, the outcome of the process of the social division of labour, which starts first as specialisation outside of agriculture and thereby leads naturally to the formation of towns, as people not exercising agriculture are no more tied to the land, and find it more convenient to congregate in central places to be better able to exchange their respective services:

Without the assistance of some artificers, indeed, the cultivation of land cannot be carried on, but with great inconveniency and continual interruption. Smiths, carpenters, wheel-writes, and plough-writes, masons, and bricklayers, tanners, shoemakers, and taylors, are people, whose services the farmer has frequent occasion for. Such artificers too stand, occasionally, in need of the assistance of one another; and as their residence is not, like that of the farmer, necessarily tied down to a precise spot, they naturally settle in the neighbourhood of one another, and thus form a small town or village. The butcher, the brewer, and the baker, soon join them, together with many other artificers and retailers, necessary or useful for supplying their occasional wants, and who contribute still further to augment the town. (WN III.i.4 p. 378)

The same argument can be found in *Lectures on Jurisprudence*:

Trades men naturally choose to live in towns, as they have there a market for their goods and an opportunity of bying those which they stand in need of; whereas if they stay in the country, there must be a great loss of time in providing their tools, d etc. and going to sell their commodities. (LJ(A) iv.142-3, p. 256)

The very *raison d'être* of towns is thus to create markets, at the same time as they are also an outgrowth of the market process, in Smith's characteristic circular and cumulative way, which we shall look at more closely in the next chapter.

As we have seen in Section 2 above, the social distance between individuals increases with the progress of society, under the effect both of an increasing population and an increasing division of labour. An increasing population makes it necessary for the individual to know an ever larger number of people to be acquainted with the same proportion of the total population, while his capacity to form friendships is however absolutely limited, and in fact restrained by the other component of the progress of society, the division of labour, which increasingly isolates him in his professional life. Average physical distance between individuals, on the other hand, is constantly diminishing with the progress of society, as increasing division of labour requires an increasing number of exchanges with an increasing number of people, making the population gather in central places in order to be able to better exchange their produce.

The growth of population, then, has a double-incidence on the extent of the market. First, the multiplication of individuals within a territory increases the amount of possible trade relations within that territory. Second, the growth of population on a territory reduces the mean distance between individuals on that territory, facilitating trade relations — not in itself, but through the particular mode of the occupation of space and of settlement that is characteristic of growing human populations on a limited territory, under the influence of the successive changes in mode of subsistence that this growth of population on a limited territory brings about (as analysed in Chapter 1). The effectiveness of the first effect is largely conditional on the second one being operative. (A growing population of hunters surrounded by vast uninhabited land may simply spread out, not greatly augmenting the number of potential trade partners, as the number of people accessible to each individual or group remains sensibly the same). But once a growing population starts settling on the land, and congregating in central places, after the onset of agriculture, the growth of population both augments potential trading partners *and* shortens the average distance between them. In this way, population growth has an escalating or exponential effect on the power of exchanging, which is further compounded by the accumulation of capital, wealth, and technology, as the market expands.

## **7. Conclusion**

In this chapter, we considered the importance of population for Smith's conception of the market. It was shown that population is the primal constituting element of the extent of the market in Smith's theory. This implies that division of labour, and thereby economic development, is spurred by the growth of population, since "the division of labour is limited by the extent of the market". The importance of the size of population for the extent of the market, and the productivity-enhancing effect of the growth of population that this implies, are in line with the role population growth plays for the advancement of society in the four stages theory, analysed in Chapter 1, and shows how closely the two ideas of the four stages theory and the division of labour being limited by the extent of the market are related.

Going deeper into the analysis of the relation between population growth and market growth, we have to consider not only overall growth but also location of population, which are inseparable to begin with, as population is necessarily located in space in a certain manner. By looking at the particular mode of the occupation of space of (growing) human populations, it becomes clear that a

growing human population will enlarge the market by two conjoining forces: the growth of the possible number of trade connections implied by the growth of the number of people; and the facilitation of these connections by the shortening of the mean distance between individuals through densification of population, itself a joint effect of population growth and the increased division of labour that ensues from it, of which urbanisation is the spatial manifestation. Thus population growth has an escalating or exponential effect on the increase of the market, which is further compounded by the accumulation of capital, wealth and technology as the market expands.

Allyn Young's 1928 paper has the great merit of having highlighted the ongoing importance of Smith's theorem that the division of labour is limited by the extent of the market for modern economics and of having motivated many Smith scholars (and economists) to study this particular aspect of Smith's theory. The pitfall of this is that, by the very reputation of that paper and its engaging language, many scholars have taken it as the main authority on Smith's ideas on division of labour and the extent of the market. While Young himself wrote that he was merely "borrow[ing] a theme from one of the masters and add[ing] certain developments or variations of his own" (p. 529), not that he was engaging in an analysis of Smith's theory per se, later scholars have often taken his paper as an accurate description of what Smith centrally expressed in Chapter III of Book I of *Wealth of Nations* (and which he reiterates or alludes to throughout the entire work, it forming the basis of his theory both of development and of trade).<sup>50</sup>

My intention, in this chapter, was not to belittle Young's article in any way. Indeed, the general thrust of the argument developed in this work, with regard notably to circular cumulative causation, as will become clearer still in the next chapter than it may have been in the present one, owes much to Young's important paper (and the other, largely unknown pieces in which he developed his argument, available to the present generation of economists and historians of thought mainly through the work of Roger Sandilands<sup>51</sup>). I merely wished to highlight in this chapter that there is another component to Smith's conception of the extent of the market, largely disregarded by Young in his famous paper (which is, in the

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<sup>50</sup> As Tony Aspromourgos expressed it to me in conversation, he was often wondering if what he was reading on Smith on the theme of division of labour and extent of the market did not have more to do with Young than it did with Smith.

<sup>51</sup> See notably the volume edited by Sandilands and Mehrling (1999), which unites many largely unknown pieces by Young (chiefly encyclopaedia entries and contributions to popular science books, many of them unsigned) and the lecture notes of Young's LSE class by Nicholas Kaldor edited and published in full by Sandilands (1990) and in part by Blicht (1990).

overwhelming majority of publications citing Young, the only piece by him cited); and that this other aspect of the extent of the market was arguably more important to Smith himself, for it is a condition for the other component, highlighted by Young, to hold. Although this aspect (the geographical and demographic nature of the Smithian market) is in itself readily recognised at least by some commentators on Smith, the importance of this feature of the extent of the market for the aspect Young stressed (the size of demand, or of the whole economy), the inseparable link between the two in fact, is insufficiently taken into account throughout.

It has been noted in the previous chapter that the progressive separation of economics from the other social sciences in the 20<sup>th</sup> century correlated with the treatment of Smith's oeuvre, the interpretation of Smith inherited from the 19<sup>th</sup> century German scholars who accused him of having abandoned moral philosophy (and other earlier concerns) in his work of political economy remaining influential (see p 101 above). The lack of interest in the definition of markets in contemporary economics, mentioned in the introduction to this chapter, and the implicit treatment of "the market" exclusively in its institutional dimension and as shorthand for the 'capitalist system', seem to have affected Smith scholarship in like fashion. But the transfer to the interpretation of Smith's work of this reduced conception of markets (stripped of their material — including geographic and demographic — dimension) seems to have happened, as it were, more surreptitiously, and hence uncritically, than the adoption of the dichotomy-view of his work inherited from the "Adam Smith Problem". The dichotomy-view, indeed, was vigorously rejected, notably by those scholars associated with the Glasgow edition of Smith's works, and the coherence-view today largely prevails among historians of thought (although it does so to varying degrees and the dichotomy-view still prevails in popular opinions about Smith, including among economists). The little noticed and discussed change in the acceptance of the concept of the market in economics has been adopted, I surmise, mostly unconsciously by historians of economic thought — for the most part themselves economists and necessarily influenced in their views by the current practice of the field — who, until the most recent past, represented the majority of scholars still studying Smith. Young's 1928 reconsideration of Smith's "theorem" that the division of labour is limited by the extent of the market, by offering an operational definition of this concept, filled the definitional void and was consequentially adopted by economists, including by historians of economic thought, as a useful analytic tool. But the verification of its applicability to Smith's work was neglected.

But while, thus, many historians of thought seem to have inadvertently taken Young's conception of the market as representative of Smith, some commentators

have, on the other hand, given too much weight to Young's originality vis-à-vis Smith. These scholars interpret Young's own indication that he was using Smith's theorem "in much the way that some minor composer borrows a theme from one of the masters and adds certain developments or variations of his own" (1928, p. 529) as excessive modesty on his part. In this view, it is Young, not Smith, who is credited with developing a theory of industrial differentiation and of economic growth as a self-perpetuating, circular and cumulative process, starting from what is taken to be Smith's rudimentary and confined vision of the division of labour, limited to division of crafts in the pin factory.<sup>52</sup> In fact, both these elements (industrial differentiation and cumulative endogenous growth) are fully present in Smith's work, and developed in much greater detail than in Young's article — unsurprisingly, given that Young's 1928 paper is only sixteen pages long, while the *Wealth of Nations*, in its different non-shortened editions, abuts a thousand pages. Regarding the pin factory as sole representative of Smith's views on the division of labour is a frequent interpretation but one that stems from a very incomplete reading of Smith. Smith himself expressly stated that the pin factory, appearing at the very beginning of the *Wealth of Nations*, was only taken as example, because the phenomenon can there be observed under one roof, to better understand "the division of labour, in the general business of society" (or what Marx was to call the "social division of labour") (WN I.i.2, p. 14). Industrial differentiation is described from the very start of Smith's treatment of the subject in the *Wealth of Nations*, notably in the example of the woollen coat, to be found in the same first chapter as the one of the pin factory, which it concludes (WN I.i.11, p. 22-3). The cumulative circular nature of growth, moreover, or the view of economic development as a process of positive feedback, as we shall see in the next chapter, clearly emerges as the central feature of Smith's own theory of economic development from a reading of the *Wealth of Nations*, especially when complemented by a reading of the *Lectures of Jurisprudence*, even though Smith did not, of course, use the modern vocabulary employed by Young to describe the phenomenon. It is thus with the circular and cumulative nature of Smith's theory of development that we shall be concerned in the next chapter.

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<sup>52</sup> For this view see notably Chandra (2004); (2006), for which he is rightly confronted by Grieve (Grieve 2006a, 2006b). Earlier, Currie (1981, p. 52-3) stated that "Young's major contribution was in recognising that what Smith viewed chiefly as a limitation on the division of labour — the size of the market — is at the same time the clue to self-perpetuating growth. . . . Although Young modestly dubbed these findings mere variations on a theme of a master composer, they actually went far beyond not only what Smith envisaged but what Young's contemporaries were thinking."





Nineteenth-century science went wrong mostly because of the hard and narrow concept of causation which dominated it. . . . the two sharp ideas or rather situations of cause and effect were made to confront each other in every case of causation like two opposing forces. This logical precision immediately had the effect of making it impossible to understand how the one passed into the other in actual causation. . . . there is no way out of the impasse but by retracing our steps and recognising that these concepts are partial and misleading abstractions. . . . cause and effect are not at arm's length but interlocked, and embrace and influence each other through the interpenetration of their two fields. (Smuts 1927 [1926], p. 1, 17-18)

# Chapter 3

## Positive Feedback in Adam Smith's theory of demo-economic development

### 1. Introduction

Carl Linnæus — a contemporary of Smith who was not only the creator of the modern nomenclatura of life and a renowned botanist, but also ventured himself into the territory of political economy — held that “it is difficult, if not impossible, to discern beginning and end in divine works. In a circle, namely, runs everything” (Linnaeus [1760] 1764, p. 18, cited and translated by Müller-Wille 2003, p. 166). Giambattista Vico, who had died in 1744, also held a view of the world of running in circles, and this being an expression of divine will.<sup>1</sup> When in such a causal circle, there is not just “reproduction” of the cycle, but “enlarged reproduction” (in Marxian terms), i.e., when in successive points in time throughout the (repeating) cycle, an amplification of the phenomena thus causally linked has occurred, we are in the presence of a positive feedback mechanism, as it was called in the 20<sup>th</sup> century. It is in this manner that Smith, in general, conceived of causation. This concerns population as it does other elements of Smith's theory of the development of society. It is characteristic, indeed, of Smith's theory of progress as a whole, with the different elements composing it causally linked in such a manner. James Welling (1888, p. 9) believed that this mechanism “in which cause perpetually becomes effect and again turns effect into cause” was the “primary principle of causation in social progress”.<sup>2</sup>

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<sup>1</sup> Linnaeus also wrote, one year after Vico (in 1744 and 1745 respectively) about the rather peculiar subject of word impairment in what is today called aphasia (Östberg 2003), which seems to indicate that one read the other, although I have not been able to find evidence of this in biographies of either. About Vico and his possible influence on Smith, see further above page 246, n. 38. On the relation between Linnaeus and Smith, see the annex to this chapter.

<sup>2</sup> Welling (ibid.) thought that “We should not wonder that the opponents of Malthus have often failed to credit him with a due allowance for this primary principle of causation . . . because Malthus himself has often failed to take this principle into account in checking the too absolute logic with which he pits the law of population against the law of food supply, as if these two great and opposing protagonists filled alone the lists of the world-struggle.” In the rather careful way Welling expresses his criticism, it may be justified. See however

It is the opposite mechanism, however, that is a central feature of modern economics. *Negative* feedback is, indeed, the mechanism necessary for establishing and maintaining ‘equilibrium’, a concept around which the discipline, at least since the name “economics” has come into general use, has been built. The 19<sup>th</sup> century saw wide application of the principle of negative feedback in mechanics and chemistry. The transfer to the social sciences suggested itself.<sup>3</sup> The mechanism of negative feedback is also present in Adam Smith’s work, notably contained in his theory of natural and market prices elaborated in Chapter VII of Book I of the *Wealth of Nations*.<sup>4</sup> Considered as the basis for the development of equilibrium economic theory, this feature of Smith’s work has been elevated by some to his most valuable contribution to economics (Hollander 1973, p. 306; Schumpeter 1986 [1954], p. 183).<sup>5</sup> For the same reason, Nicholas Kaldor (1972, p. 1240), by contrast, in a paper that acknowledged its debt to Allyn Young, identified Smith’s concern with the price mechanism (in the context in which the principle of negative feedback is used) precisely as the moment when “economic theory went astray”.<sup>6</sup> While some have gone so far as to depict Smith entirely (and approvingly) as an equilibrium theorist (Samuelson 1977), it is, however, very much the opposite mechanism, the one of positive feedback, that underlies Smith’s view of the social, economic and political development of societies; and this, the development of societies, much more than the theory of natural and market prices, is the central theme running through the whole of the *Wealth of Nations* – not just the three opening chapters, as Kaldor seemed to imply – and a major theme underlying Smith’s entire work (see Chapter 1).<sup>7</sup>

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Pullen (2016) for a large number of examples in which Malthus, too, employed a circular logic of causation.

<sup>3</sup> On the influence of mechanics on both the natural sciences and economics (and vice versa) see especially Mirowski (1989) (the phenomenon of negative feedback is not treated specifically by Mirowski however). On the role of negative feedback in economic theory see Hodgson (2009) and in the same volume Holt and Pressman (2009, p. 78) and the rest of the volume edited by Berger (2009). See further Tassier (2010, p. 886-7) and Hornung (2015).

<sup>4</sup> For a look at the use of negative feedback by Smith, see Mayr (1971).

<sup>5</sup> Schumpeter writes: “The rudimentary equilibrium theory of Chapter 7, by far the best piece of economic theory turned out by A. Smith, in fact points toward Say and, through the latter’s work, to Walras.” Hollander, more approving of Smith throughout, also praises him most for the development of equilibrium theory.

<sup>6</sup> As was noted in the previous chapter (n. 4 on p. 166 above), this was an unfair criticism of Smith, as the argument made in the present chapter shall further establish.

<sup>7</sup> On the question of what the concept of *general* equilibrium implies for how the economic system is viewed, there is of course wide-ranging debate. ‘General equilibrium’ is often conceived as a means to encapsulate the interconnectedness of economic phenomena, and

Smith thus generally conceived of the relationship between different variables not exclusively as a change in one variable causing a change in the other, but rather as a complex relationship of cause and effect, whereby the behaviour of one element causes the other to behave in such a way as to bring about in the first precisely what provoked that behaviour in the second. As Viner (1927, p. 198) put it, Smith was applying “to the wilderness of economic phenomena . . . the unifying concept of a co-ordinated and *mutually interdependent system of cause and effect* relationships which philosophers and theologians had already applied to the world in general”. David Hume and his attack on the Aristotelian view of causation surely influenced Smith’s ideas on this subject.<sup>8</sup>

This makes it difficult to clearly ascribe the respective roles of cause and effect to the different variables invoked by Smith. Moreover, the relationship of mutual cause and effect thereby frequently results in an amplification of the phenomenon under consideration, that is, a positive feedback loop, or what Gunnar Myrdal (1944, p. 75) referred to as “the principle of cumulation”. This underlies also to a large extent what has been considered as Smith’s notion of ‘emergent’ or ‘spontaneous order’ (for which the “invisible hand” metaphor is epitomic). While the terms “positive feedback” and “cumulative causation” are

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as such Smith can clearly be linked to it. Critics of the ‘equilibrium approach’ in economics, on the other hand, highlight its static implication. Seen in this light, the concept of equilibrium (of the whole economy) clearly was not central to Smith’s concerns. On the theme both of equilibrium in economics in general and of Smith’s conception of equilibrium and the role of equilibrium in his theory, see notably Robbins (1930); Kaldor (1972); Myers (1976); Colander (1995); Fiori (1996); Hart (2003); Montes (2003b); Lawson (2005); Arthur (2010); Metcalfe (2010); and Witztum (2010).

<sup>8</sup> Schweber (1980, p. 198, fn. 11) holds that: “Scottish philosophy from Hume to Dugald Stewart and Thomas Browne rejected the notion that one could explain anything by referring to ultimate principles or processes whose existence and operation could not be ascertained from the observation of particular instances. And Hume’s notion of causality played a central role in the development of the “social” sciences and in ascertaining mechanisms of evolution.” The influence of Hume’s ideas about causation on Smith is clearly visible, notably, in section II of ‘History of Astronomy’ (see in particular II.7-8, p. 40-42). On this see further Raphael and Skinner (1980). At one point in the *Theory of Moral Sentiments* (II.ii.3- 5, p. 87), Smith affirmed that it is important to distinguish final from efficient causes, which Hill (2001, p. 6) takes as sufficient ground to affirm that “Smith’s entire vision is underpinned by the design principle and by a belief in Final Causes; indeed he rejects as untenable any explanation that refers solely to efficient causation”. But Smith’s concern here is with the distinction of outward appearance and internal functioning of the social fabric, not with the theory of causation per se, and the Aristotelian language Smith here used is in all appearance merely a pragmatic choice to make his particular point. The terminology of final and efficient causes is used neither in the *Wealth of Nations* nor in the student notes to Smith’s lectures. The cited paragraph (TMS II.ii.3- 5, p. 87) and the title — but not the text — of the last chapter of Part II of the same work (TMS II.iii. 3, p. 104) are, in fact, the only instances in Smith entire oeuvre where the terms are used.

fairly recent, indeed, what they describe is in keeping with the central concern of the Scottish Enlightenment in which Smith evolved, being the study of complex chains of causation in the working of human society, or, as Smith put it in his “juvenile” essay on “The Principles which Lead and Direct Philosophical Enquiries” (see above p. 89), “those hidden chains of events which bind together the seemingly disjointed appearances of nature” (Astronomy III.i.1, p. 48).

Allyn Young (1928) famously interpreted Smith’s thoughts on the interrelationship between division of labour and market growth as one of cumulative self-generating growth where “change becomes progressive and propagates itself in a cumulative way” (1928, p. 533). The surplus generated from within the economic system (not by particular firms or industries but through the synergy arising from the interconnectedness of the whole) Young designated with the term “increasing returns”. He took care to distinguish the way he used this concept — that is, to analyse the phenomenon of economic progress — from the narrow technical conception it had come to acquire in economic theory after Marshall, who still used it in a broad sense (Marshall 1920 [1890], p. 318). The narrow technical sense the concept had acquired in the meantime (as used for example by Chapman (1908)), Young believed, had misled economists into the fruitless “cost controversy” of the 1920s that Clapham’s (1922) and Robertson’s (1924) “empty economic boxes” critique of Pigou (1912) had spurned, away from the broader question of economic progress, undoubtedly the central theme of the *Wealth of Nations*. Contra those who would, later, interpret Smith as an equilibrium theorist, Young (1928, p. 533) held that the “The apparatus which economists have built up for the analysis of supply and demand in their relations to prices does not seem to be particularly helpful for the purposes of an inquiry into these broader aspects”. In Young’s sense, Kerr (1993) and Elmslie (1994a ; 1994b) have more recently interpreted Smith’s theory of development as one of positive feedback.<sup>9</sup> And Negishi (2004, p. 31) held that Smith’s theory both of trade and of increasing returns by division of labour can “be fully demonstrated only as a disequilibrium theory”.

Allowing for the occurrence of “positive feedback” and “cumulative causation” in Smith’s system makes it possible to resolve some apparent contradictions in his thought, having arisen precisely from his interpretation through the lens of the modern equilibrium theory of economics. Of course, some

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<sup>9</sup> “Positive feedback” and “circular cumulative causation” (as well as “synergy” and “increasing returns”), while not strictly identical concepts, can for the broader purposes of the argument made in this chapter (to the effect that a conception of causation akin to the one at work in these phenomena is present in Smith’s theory) be treated as synonyms.

amount of conflict or contradiction may always remain in his work, which it will not be possible to interpret away. However, certain interpretations allow one to resolve apparent contradictions between different ideas of past thinkers, while others do not. Whether the former should necessarily be preferred is a matter of debate. Certainly, it should not be preferred at any cost. Quentin Skinner (1969) famously urged historians of thought to accept that past thinkers, whatever their fame and reputation in their lifetime and/or thereafter, could very well have contradicted themselves, especially when different works of theirs are considered that have been composed at very different moments in their lives. Yet, for the same reason for which Skinner argued against the forced establishment of *coherence* between different utterances of past thinkers, however contrived, as the paramount objective of the history of ideas — i.e. the need to consider ideas in their historical, linguistic and intellectual context and to pay heed to an author's intention with regard to his main audience — we should also reject such interpretations of past thinkers that find *conflict* between their ideas only and precisely because these ideas are interpreted in modern terms, i.e. out of context. The debate about Smith's purported "vent-for-surplus" argument for trade is a classic example of such apparent contradiction brought about only because a past author has been interpreted in light of latter ones' work.<sup>10</sup> The meaning of the terms employed by the earlier author is thereby necessarily deeply distorted, and, by mistaking the question this author is attempting to answer for the one that his or her commentators (or the dominant school of the day) are concerned with, a misinterpretation of the answer of the author to the question he was himself addressing is almost inevitable.<sup>11</sup>

We shall analyse the use Smith makes of cumulative causation by looking at three particular instances of his considerations of social development, which will allow us, at the same time, to address three vexing questions in the history of economic thought and Smith scholarship regarding precedence, order and cause-and-effect relationship of the involved elements of analysis.

Smith's treatment of the question of "primitive accumulation" in the *Wealth of Nations* was famously Marx's starting point for his chapter on this topic in *Capital*. But it can be shown, especially through an examination of Smith's lectures

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<sup>10</sup> This point shall be developed in a forthcoming work.

<sup>11</sup> A useful example of this was related to me by Daniel Diatkine in conversation: while Smith was attempting to answer the question "why are we so rich", Ricardo instead was interested in the question "why are we so poor", and this would necessarily have distorted Ricardo's interpretation of Smith's work when read through his own opposite question, which he may well have done.

and the 'Early Draft', that the two authors fundamentally differed with regard to the understanding of this concept. While for Marx it was inseparably tied to the emergence of an advanced capitalist economy, Smith conceived this notion within the context of the "early and rude stages" of society that formed the starting point of his theory of socio-cultural evolution examined in Chapter 1. As we shall see, this distinction throws important light on the contentious question of which of these two elements — division of labour or capital accumulation — *principally* causes economic development for Smith. The following section (2) will thus examine the role of capital accumulation and division of labour in Smith's theory of economic development, and the relation between these two elements.

In Book III of the *Wealth of Nations*, Smith laid out the famous theory of the "natural progress of opulence", and its opposite, the "unnatural and retrograde order", the first proceeding from the development of agriculture (the "industry of the country") to the development of manufactures (the "industry of the town"), the latter proceeding in opposite fashion. Here, Smith then clearly seems to lay out a blueprint for a policy of favouring agricultural development over the development of manufactures, at least at an early stage of the process of urbanisation. His account of how Europe in fact progressed, in an "unnatural" and "retrograde" fashion, therefore has appeared to many commentators as either in contradiction with Smith's seeming advice, or as even proving the contrary of what he set out to prove. But reading an advocacy of the favouring of any kind of industry or sector over another into Smith's position is in fact to interpret him to advocate for what precisely he criticised. The overarching principle is the one of natural liberty, which however should not be enforced, but must itself come about through free (natural) means. Here lies part of the resolution of the apparent conflict, as shall be laid out in Section 3. The relationship between town and country is one of mutual promotion, i.e. of positive feedback. This cycle can work any way around, but the order will depend on conditions in place.

Another scholarly dispute in the interpretation of Smith's work concerns the long-term prospect for economic growth, and the question whether it is bounded or without limit. Section 4 does not offer a definite answer to this question. When the process of economic development described by Smith is analysed in its full complexity, as a process of positive feedback with multiple elements variously linked in a circular and cumulative fashion, however, many of the passages in Smith's work read as laying out a view of stagnation can be seen as containing themselves the seeds for a movement out of this stagnation. This must also be linked to the theme of the "slow progress of opulence", treated in Section 1, which outlines a far greater difficulty of development in the early stages as in the later



ones, a characteristic feature of positive feedback. This theme is itself, in conclusion (Section 5) related to 20<sup>th</sup> century development literature, in which, by a reading of Smith (via Young) via modern equilibrium economics, a situation of positive feedback (with characteristic slow growth at the origin) was mistaken for one of negative feedback, describing a “low level equilibrium trap”.

Although, as we shall see, the question of urban and regional growth for Smith, in particular, has to be considered within the context of the peopling process (which is the approach that has been adopted in the present work), the present chapter is thus not primarily concerned with the question of population. Rather, what will be attempted herein is an interpretation of the functioning of the overall system of Adam Smith’s theory of economic development, through a look at the particular way that Smith conceived of causal relationships between the different elements of his system of thought in treating of economic development. This, in turn, shall make it apparent in which way population — itself a crucial causal element in Smith’s conception of progress, as we have seen in the previous two chapters — is connected with the other elements of the system and integrates into the overall theory.

## **2. The division of labour and “primitive” accumulation**

From the second part of Book I and throughout Book II of the *Wealth of Nations*, Smith exposes his view that capital accumulation is the basis for the economic and demographic development of societies. This can appear to be in conflict with the “Introduction and Plan of the Work” and the first three chapters of Book I. Here Smith had told us, first, that the principal circumstance which determines a nation’s ‘per capita GDP’<sup>12</sup> is “the skill, dexterity, and judgment with which its labour is generally applied” (WN 1-4, p. 10); second, that “the greater part of the skill, dexterity, and judgment with which it is anywhere directed, or applied, seem to have been the effects of the division of labour” (WN I.i.1, p. 13). Different scholars have defended the position *either* that division of labour is the major element explaining economic growth in the *Wealth of Nations* (Lowe 1954 ; Loasby 1996);<sup>13</sup> *or* that this role is taken up by capital accumulation (Clark 1990 ; Brewer

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<sup>12</sup> i.e.: the proportion between “all the necessaries and conveniences of life which [every nation] annually consumes” and “the number of those who are to consume it”.

<sup>13</sup> “economic growth . . . can be stimulated only by a rise in productivity . . . In this factor we now encounter the strategic variable of the whole system. . . . The decisive variable is

1991).<sup>14</sup> When looking for a prime mover (“decisive variable” or “independent cause”) in the constitution of economic growth in Smith’s writings, it is indeed not eminently clear which factor should be interpreted as taking this role. The difficulty can be removed by recognising that no one single variable in Smith’s system of concurrent emergent phenomena plays this role. Thus *both* division of labour *and* capital accumulation (and other elements, notably population) are, in Smith’s view, part of a complex virtuous cycle of development, in which the different elements reinforce each other in a positive feedback loop.

Book II of the *Wealth of Nations* “treats of the nature of capital stock, of the manner in which it is gradually accumulated, and of the different quantities of labour which it puts into motion” (WN 6, p. 11). Smith opens the short introduction to Book II with the observation that, where the division of labour is absent and exchange not developed enough (i.e., in the primitive stages of society), there can (or rather needs) be no accumulation of stock. He then affirms a few sentences later that this accumulation must always precede the division of labour (WN II.1-2, p. 276-7). A few paragraphs later, at the beginning of the first chapter of Book II, Smith draws a distinction between mere stock, and that part of stock he calls “capital”:

When the stock which a man possesses is no more than sufficient to maintain him for a few days or a few weeks, he seldom thinks of deriving any revenue from it. He consumes it as sparingly as he can, and endeavours by his labour to acquire something which may supply its place before it be consumed altogether. His revenue is, in this case, derived from his labour only. This is the state of the greater part of the labouring poor in all countries.

But when he possesses stock sufficient to maintain him for months or years, he naturally endeavours to derive a revenue from the greater part of it; reserving only so much for his immediate consumption as may maintain him till this revenue begins to come in. His whole stock, therefore, is distinguished into two parts. That part which, he expects, is to afford him this revenue, is called his capital. (WN II.i.1-2, p. 279)

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a particular form of technology, namely, “division of labor.” It has always been recognized that for Smith division of labor is the true dynamic force.” (Lowe 1954, p. 135)

<sup>14</sup> “Without doubt, capital accumulation is the driving force of Smith’s economics” (Clark 1990) “In Adam Smith’s *Wealth of Nations* economic growth is caused by capital accumulation, which is in turn the result of saving. Increases in productivity through increased division of labor are a more or less automatic result of accumulation, not an independent cause of growth.” (Brewer 1991, p. 1) Brewer repeated this position in several works thereafter (1995a, p. 633; 1995b, p. 185; 1998, p. 79; 1999, p. 249)

Smith thus established, at the beginning of Book II of *Wealth of Nations*, that division of labour depends on accumulation of stock, and that once people start accumulating more stock than is necessary for their consumption, they will start using the remainder (which is the part of stock Smith designates specifically with the term “capital”) as input in production, and more precisely to put other people to work who have no stock of their own. What Smith does *not* do is to point out precisely how this division, between those who accumulate capital and those who do not, precisely comes about. Marx took offence with this.

For Marx, famously, Smith’s opening of Book II on the accumulation of stock was the starting point for his theory of primitive accumulation.<sup>15</sup> Marx ridiculed Smith for describing the process by which capital originally gets accumulated as an “idyllic” one, chastising him for having obscured the social implications of this “primitive accumulation”. Marx himself equated this concept with the historical emergence of a salaried class replacing the serfs of feudal society, through the overthrow of feudal lords by the bourgeoisie; a process which, according to Marx, involved in reality a lot of violence:

This original accumulation plays in Political Economy about the same part as original sin in theology. Adam bit the apple, and thereupon sin fell on the human race.<sup>16</sup> . . . In actual history it is notorious that conquest, enslavement, robbery, murder, briefly force, play the great part. In the tender annals of Political Economy, the idyllic reigns from time immemorial. . . . As a matter of fact, the methods of original accumulation are anything but idyllic. . . . The capitalist system pre-supposes the complete separation of the labourers from all property in the means by which they can realize their labour. . . . The process, therefore, that clears the way for the capitalist system, can be none other than the process which takes away from the labourer the possession of his means of production. . . . And the history of this, their expropriation, is written in the annals of mankind in letters of blood and fire. (Marx 1996 [1887], p. 704-6)

Marx had quite a precise idea of when this separation of the labourer from the means of production occurred in world history:

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<sup>15</sup> That Marx was inspired by Book II of the *Wealth of Nations* is visible notably in such sentences of Smith’s as “The goods of the merchant yield him no revenue or profit till he sells them for money, and the money yields him as little till it is again exchanged for goods. His capital is continually going from him in one shape, and returning to him in another, and it is only by means of such circulation, or successive exchanges, that it can yield him any profit.” (WN II.i.4, p. 279), describing in a nutshell Marx’s ‘General Formula for Capital’ laid out in Chapter IV of *Capital*, Vol. 1.

<sup>16</sup> Note the equivocality — so typical of the use of allusions and citations by Marx — of the use of “Adam” in this phrase.

The starting point of the development that gave rise to the wage-labourer as well as to the capitalist, was the servitude of the labourer. The advance consisted in a change of form of this servitude, in the transformation of feudal exploitation into capitalist exploitation. To understand its march, we need not go back very far. Although we come across the first beginnings of capitalist production as early as the 14<sup>th</sup> or 15<sup>th</sup> century, sporadically, in certain towns of the Mediterranean, the capitalistic era dates from the 16<sup>th</sup> century. . . . In the history of original accumulation, all revolutions are epoch-making that act as levers for the capital class in course of formation; but, above all, those moments when great masses of men are suddenly and forcibly torn from their means of subsistence, and hurled as free and "unattached" proletarians on the labour market. The expropriation of the agricultural producer, of the peasant, from the soil, is the basis of the whole process. (Marx 1996 [1887], p. 706-7)

It is Marx's explanation of primitive accumulation that has become the prime reference for this phenomenon in economic thought, largely overshadowing Smith's. Certainly Marx's exposition sheds more light on the emergence of the capitalist class, as distinct from wage earners, than Smith's indefinite remarks about those who accumulate more than what they need for their consumption and those who do not. But Marx and Smith were not, in fact, dealing with the same issue in their considerations of "primitive accumulation". There is a fundamental difference, indeed, between both the temporal scale and the conceptual context within which Smith and Marx, respectively, conceived of this phenomenon. Both Smith and Marx were deeply concerned with the causes and effects of the emergence and evolution of different social classes. However, while Marx evoked "primitive" (or "original") accumulation in the context of the emergence of the capitalist and salaried classes, which he situated in the 16<sup>th</sup> century (with tentative beginnings in the two centuries prior, see quote p. 226 above), Smith considered this phenomenon with reference to the "rude and early stages" of society, prior to the advent of agriculture (of which the dating depended on which people one was referring to; in the *Wealth of Nations* at least, Smith considered this in the abstract, without reference to a particular people or civilisation).<sup>17</sup>

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<sup>17</sup> I do not wish to suggest that Smith did not himself see the accumulation of stock as the origin for the emergence of the 'capitalist class'. Indeed, Smith examines the relationship between the division of labour and the accumulation of stock, in the context of which he introduces the idea of 'previous accumulation', in Book II, which, as he announces in the Plan and Introduction of *Wealth of Nations* "treats of the nature of capital stock, of the manner in which it is gradually accumulated, and of the different quantities of labour which it puts into motion" (WN 6, p.11). A few chapters before the beginning of Book II already, in his chapter on wages (WN I.viii), Smith had stated that it is the accumulation of stock and the appropriation of land that made the labourer no more earn the totality of the

The very first paragraph of Book II thus reads:

In that rude state of society in which there is no division of labour, in which exchanges are seldom made, and in which every man provides every thing for himself, it is not necessary that any stock should be accumulated or stored up beforehand in order to carry on the business of the society. Every man endeavours to supply by his own industry his own occasional wants as they occur. When he is hungry, he goes to the forest to hunt; when his coat is worn out, he cloaths himself with the skin of the first large animal he kills: and when his hut begins to go to ruin, he repairs it, as well as he can, with the trees and the turf that are nearest it. (WN II.1, p. 276)

Smith then proceeds with affirming:

But when the division of labour has once been thoroughly introduced, the produce of a man's own labour can supply but a very small part of his occasional wants. The far greater part of them are supplied by the produce of other men's labour, which he purchases with the produce, or, what is the same thing, with the price of the produce of his own. But this purchase cannot be made till such time as the produce of his own labour has not only been completed, but sold. A stock of goods of different kinds, therefore, must be stored up somewhere sufficient to maintain him, and to supply him with the materials and tools of his work till such time, at least, as both these events can be brought about. A weaver cannot apply himself entirely to his peculiar business, unless there is beforehand stored up somewhere, either in his own possession or in that of some other person, a stock sufficient to maintain him, and to supply him with the materials and tools of his work, till he has not only completed, but sold his web. This accumulation must, evidently, be previous to his applying his industry for so long a time to such a peculiar business. (WN.II.2, p. 276-7)

The rationale for the prior accumulation of stock being necessary to carry out the division of labour is thus in essence what Böhm-Bawerk would later

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product of his labour (since, as he explained in the previous chapters, land and stock are now also remunerated, by rent and profit). Marx may well have been inspired by Smith in this regard. What he failed to recognise (or chose to ignore for his own purposes) was that in the introduction to Book II, where Smith expounds the idea of previous accumulation, the latter was dealing with a distinct issue altogether. Indeed, the origin of private property Smith sees already in the primitive stage, the accumulation of stock (in the form of animals) in the shepherd stage and the appropriation of land in the agricultural stage. The accumulation of stock on a grander scale, bringing about the capitalist class, only occurs for Smith, however, in the commercial stage (with its manufactures and commerce), which is also what Marx had in mind.

elaborate on in great length: the time-lag involved in “roundabout” production.<sup>18</sup> Smith is also reported to have insisted on this element of time in the lecture notes first published by Cannan:

Again, after the ages of hunting and fishing, in which provisions were the immediate produce of their labour, when manufactures were introduced, nothing could be produced without a great deal of time. It was a long time before the weaver could carry to the market the cloth which he bought in flax. Every trade therefore requires a stock of food, cloaths, and lodging to carry it on. (LJ(B) 233, p. 498)

It is evident from this quote, as from the very beginning of Book II of *Wealth of Nations* quoted above, that Smith considers the phenomenon of “primitive accumulation” in the context of the four stages theory examined in Chapter 1, and that it was an event he situated in the early stages of society (and more specifically the second stage, the age of shepherds, in which accumulation of stock first occurs in the form of the domestication — and appropriation — of animals, i.e. *livestock*). For Smith, then, “primitive accumulation” was an event neither large in scale nor in time. It was a minor (in size, though maybe not in importance), and likely incremental event in the remote past (as far as Britain and Europe were concerned). Marx saw this purely as a cunning stylistic device, akin to “original sin” in the Bible (see quote page 225 above). Yet, for Smith, what he referred to as the “rude state of society”, was an integral part of his four stages theory of the socio-cultural, political, economic and demographic development of society.<sup>19</sup>

The exact dating of this original accumulation, if we admit it is situated in the “rude state” of society, was indeed of no consequence for Smith, and this for two distinct but related reasons.

First, in the case of Europe, or even, if we want to take humanity as a whole and consider the advent of a new age of subsistence as the time when that mode is introduced by *some people somewhere*, then the third age, agriculture, is an event in the far distant past. The advent of agriculture (Neolithic revolution) is dated by archaeologists today at about 12.000 BC. This is very far removed, indeed, from Marx’s musings about the 14<sup>th</sup> to 16<sup>th</sup> centuries. Even though 18<sup>th</sup> century thinkers

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<sup>18</sup> Allyn Young also employed this term in his famous 1928 article with reference to Smith and the division of labour.

<sup>19</sup> See also on this Perelman (1983, p. 451): “Smith’s concept of primitive accumulation was initially introduced to explain the origins of the capital which had come into existence during the mythical time prior to the beginnings of capitalism. The exact dating was of no consequence. For Marx, in contrast, primitive accumulation coexisted in time with capitalist accumulation.”

were incapable of such precise dating, it was believed, by Enlightenment writers in both France and Scotland, who jointly developed the four stages theory (as recounted in Chapter 1) that there was a “primitive time” of mankind prior to civilisation, which preceded agriculture and even pasturage, and which was to be situated somewhere in the ‘remote past’.

The second reason why the dating of the first or second stage in the four stages theory is necessarily somewhat indefinite is that the development of this theory in the middle of the 18<sup>th</sup> century was itself influenced by the study of American natives and other “primitive” peoples *still* practising their primitive life-style at that very time. And while the study of the way of life of these American natives and other indigenous peoples was thought to shed light on the history of humanity as a whole,<sup>20</sup> it was also evident, by the same token, that if the four stages theory that was inspired by this study was in fact a universal theory of human historical development, then not all human groups everywhere were at the same stage of this development.

An important remark must be made at this point concerning the opening paragraph of Book II (quoted above p. 227). Smith here writes of a “rude state of society in which there is no division of labour, in which exchanges are seldom made, and in which every man provides every thing for himself”. As was noted in the previous chapter (p. 199 above), it is quite improbable that Smith in fact believed there ever was a state of mankind where “there is *no* division of labour” and “every man provides *every thing* for himself”. This image of men who provide for themselves, and at some point ‘enter into’ relationships of exchange (as opposed to this being a part of human nature and there not being a ‘prior’) actually closely resembles the view of a “social contract” into which previously independent individuals enter, which both Hume and Smith criticised precisely for its lack of realism.<sup>21</sup> This absolute stance on the division of labour was not in fact used by Smith in his earlier drafts and lectures. Note also that while Smith mentions “no” division of labour, and men who provide “every thing” for themselves, he writes of exchanges not never-, but only “seldom” being made. This already hints at the fact that this view of man is an exaggeration by Smith even by his own standards, as division of labour and exchange are closely linked in his account (WN I.iii; LJ(A) vi.63-66; LJ(B) 222-23). Indeed, he continues his narrative by the sentence “when the division of labour has once been *thoroughly*

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<sup>20</sup> Sebastiani (2013) gives a good account of this. (The theme is treated throughout the book, but see especially chapter 3.)

<sup>21</sup> Smith covered this at LJ(A) v.114-119 (p. 315-18), v.127-129 (p. 321) and LJ(B) 15-18 (p. 402-4).

introduced”, which again shows that his depiction of an *absolute* absence of division of labour prior to that is more stylistic device than firm belief. In that sense Marx’ remark that primitive accumulation plays in political economy (read “for Smith”) about the same role as original sin in the Bible — i.e. a narrative device akin to *deus ex machina* — is partly correct.<sup>22</sup> This depiction of an absence of division of labour is in fact a “philosophical fiction”, such as Hume singled out, in his criticism of state of nature- and social contract theory, as permissible uses of such:

'Tis utterly impossible for men to remain any considerable time in that savage condition, which precedes society; but that his very first state and situation may justly be esteem'd social. This, however, hinders not, but that philosophers may, if they please, extend their reasoning to the suppos'd state of nature; provided they allow it to be a mere philosophical fiction, which never had, and never cou'd have any reality.” (Hume 1888 [1739], p. 493)

It was noted in Chapter 1 (p. 106 above) that the island narrative used in the exposition of the four stages theory is such a philosophical fiction as well. So is the narrative of hunters exchanging arrows to illustrate the emergence of the division of labour in society, as we saw in Chapter 2 (p. 199 above). The pin factory account at the beginning of the *Wealth of Nations*, although not a philosophical fiction as are original accumulation or the island metaphor in the four stages theory, plays a very similar role. It is a synecdoche, used to illustrate a complex and extensive process by use of an example limited to a few individuals. Smith tells his readers this himself when introducing the pin factory story, at the very beginning of the first chapter of *Wealth of Nations*, by noting that:

The effects of the division of labour, in the general business of society, will be more easily understood by considering in what manner it operates in some particular manufactures. . . . To take an example, therefore, from a very trifling manufacture; but one in which the division of labour has been very often taken notice of . . . (WN I.i.2-3, p. 14)

And just as the pin factory parable is not chosen by Smith as an opening for his magnum opus to reveal anything new about the division of labour in pin

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<sup>22</sup> See also Ahmad (1996, p. 447): “Both Smith and Rae were so enthusiastic about the importance of their chosen factors (accumulation for Smith and invention for Rae) that in spite of their full awareness of the roles of other factors, they sometimes appear to claim that the *major* factor is the *only* factor. A more complete reading of the respective texts, however, makes clear the weakness of these apparent claims; they are essentially rhetorical rather than substantive.”



making to the world — rather this subject “has been very often taken notice of” already, as he clearly states<sup>23</sup> —, but instead the example is chosen, as he also clearly states, because with help of it “The effects of the division of labour, *in the general business of society*, will be more easily understood”, so, in like manner, the introduction of a “philosophical fiction” in the form of a pre-social kind of ‘state of nature’ in his broach of the subject of capital accumulation is in fact used by Smith, not so much to say anything about the early state of society (or ‘non-society’, in this case) itself, but to get at the underlying functioning of the process of economic growth.

When bringing up the idea of “primitive accumulation”, Smith was thus not concerned, as Marx, with the emergence of social classes, which would occur in any meaningful way only at a much later point in his stage-theory of development. The topic of capital accumulation in general was considered by Smith, not with regard to the development of wealth *differentials*, but to deal with the theme of economic growth, i.e. wealth *creation*.<sup>24</sup>

Let us then proceed to a more detailed analysis of the interplay between the division of labour and the accumulation of capital as depicted in Smith’s work, and of the precise nature of the problem he was examining when writing about what Marx dubbed “ursprüngliche Akkumulation”. As we shall see, although the consequences of this “original accumulation”, i.e. the onset of the process of the division of labour, may be seen as formidable (given Smith’s sensationalist description of this feature in the opening chapters of the *Wealth of Nations*), what is of much greater relevance for the *ongoing* process of economic development is the fact that not only does *further* division of labour also need *further* prior accumulation, but *the opposite is also true*. In order to more properly establish this, we cannot rely on the sole *Wealth of Nations*, but need to consult also the two sets of lecture notes on jurisprudence and the ‘Early Draft’ of the *Wealth of Nations*.

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<sup>23</sup> Therefore the many efforts to prove that Smith ‘stole’ the idea from the Encyclopédistes that followed a footnote by Edwin Cannan to this passage in his 1937 edition of the *Wealth of Nations* (Smith 1937 [1776], p. 7, n. 12), are quite pointless — especially with regard to the fact that the French Encyclopédistes could have equally ‘stolen’ the ‘idea’ from Ephraim Chambers’ *Cyclopaedia* published fourteen years earlier, or from other English writers of the 1730s, ‘40s and ‘50s, whom Smith surely had in mind when he wrote that it “has been very often taken notice of”. On the latter writers see Groenewegen (2008). For a serious treatment of Smith’s engagement with the *Encyclopédie*, see Kafker and Loveland (2013).

<sup>24</sup> In Smith’s four stages theory, as we have seen in Chapter 1, the emergence of social classes and wealth differentials is more meaningfully approached, although — certainly by Marxian standards — it is not satisfactorily elucidated therein either.

In the “primitive” time previous to the accumulation of capital and a widespread division of labour in society, the accumulation of some stock of provisions is necessary in order for any individual to specialise. This, as we have seen, is because there is a time-lag involved in any kind of activity between the moment one engages in it and the moment one reaps the fruits from it. As long as this lag is not very long (as with hunting and gathering), and everyone engages in all activities (as Smith supposes, or at least postulates, to be or have been the case during the “rude states”), this is of no consequence to the functioning of society. However, as was touched upon in the previous chapter, what is inherent in the very act of specialisation, which can be defined as the concentration of productive activities in the procurement of a more limited set of goods and/or services, is that part of the previous activities are therefore abandoned (by those who specialise in the new or more narrow activity). If we start, then, from a situation when human beings were each and everyone preoccupied mainly with the procurement of foodstuff (hunting and gathering), and all of the foodstuff thus procured by the group on a daily basis was essential for the group’s survival, then the act of specialisation of some member of the community in the procurement of non-foodstuff would, in the first instance, create a shortage. It therefore becomes necessary, prior to specialisation, for there to have been some accumulation of a stock of necessaries to secure the survival of the group:

A rude and barbarous people are ignorant of the effects of the division of labour, and it is long before one person, by continually working at different things, can produce any more than is necessary for his daily subsistence. Before labour can be divided some accumulation of stock is necessary. A poor man with no stock can never begin a manufacture.<sup>25</sup> Before a man can commence farmer he must at least have laid in a years provision, because he does not receive the fruits of his labour till the end of the season. Agreeably to this, *in a nation of hunters or shepherds no person can quit the common trade in which he is employed, and which affords him daily subsistence, till he have some stock to maintain him and begin the new trade.* (LJ(B)286, p. 521) <sup>26</sup>

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<sup>25</sup> As becomes clear from the example of a farmer in the next sentence, Smith’s use of the word *manufacture* here was intended to mean any trade or occupation in general (an 18<sup>th</sup> century acceptation of the word), not industrial production, which had become its acquired meaning in the 19<sup>th</sup> century, that Marx employed. (Indeed *manufacture*, literally and originally, means *to make by hand*). See also on this point Stark (1944, p. 25-7) and Singh (1959, p. 116).

<sup>26</sup> It is apparent in this passage that Smith did not have to wait for meeting the Physiocrats in order to develop the idea of capital as advance, as one frequently reads in Smith commentary to this day. Eltis (2004, p. 153) for example writes that “There is nothing in

This “prior accumulation” need in fact consist in nothing more than a surplus beyond what is necessary for survival. It is very conceivable that, in favourable enough conditions, the realisation of such a surplus is/was possible even in hunter-gatherer societies (many species of animals are able to conserve food over time by some means, indeed). Hence, mere surplus, in and of itself, does not, in fact, presuppose capitalist production, as Marx enunciated (see quote page 239 below).<sup>27</sup> And from then on, the specialisation of individuals or sub-groups in the group becomes very conceivable, without any ‘grand scheme’ of “primitive accumulation”.

In time, indeed, the availability of a surplus of (different kinds of) food, making possible the less-than-total dedication of some members of the group to its (their) procurement, will further increase the surplus of food available, by different kinds of positive feedback mechanisms. First, the increasing specialisation of different members of the group in different productive activities will increase the overall production of goods and services by the famous three productivity-enhancing mechanisms tied to the division of labour, outlined by Smith at the beginning of the *Wealth of Nations*. Second, there will be synergistic effects between the different activities, as between newly specialised tool-making and the use of these tools, made better by means of increased dexterity in- and dedication to tool-production. Thus, for example, hunters using better bows and arrows will hunt better. And there is a synergistic effect created by the separation of the activities of hunting and bow- and arrow-making: not only is the production of both meat and bows-and-arrows directly increased as an effect of the newly emerged specialisations in hunting and bow-and-arrow-making (by means of the three advantages of the division of labour), but also this increase in quality and quantity of bows and arrows produced will indirectly raise the production of meat, because hunters can now hunt better by means of these tools; and, conceivably, better-fed arrow makers (by means of more and/or better meat) will in turn produce more and/or better arrows, and so on ad infinitum.

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the Early Draft and the Glasgow Lectures on the interconnection between capital accumulation and economic growth. He only introduced this into his analysis after his acquaintance with the economics of Quesnay, Turgot and the physiocrats.” In addition to the passage the present note is attached to, see the very many references to accumulation of stock (and frequently its relation to economic growth, notably because of its interdependence with the division of labour) that were given in n. 46 on p. 90 in Chapter 1 above.

<sup>27</sup> Marx, of course, speaks here of “surplus value”, not merely of “surplus”, and the former has a very particular meaning and function in his theory. To the extent that he links his remark to Smith’s theory, however, the observation to which this note is attached is justified.

The important part, for the argument being made here, is that Smith writes that the dependency of the division of labour on the accumulation of stock is not only an initial condition, but will be maintained dynamically through time; further, that thereby a balance needs to be maintained between the accumulation of stock and the division of labour:

As the accumulation of stock must, in the nature of things, be previous to the division of labour, so labour can be more and more subdivided *in proportion* only as stock is previously more and more accumulated. (WN II.3, p. 277)

It lies in the nature of this dynamic balance that the accumulation of stock is not only necessary for the division of labour, but that further accumulation of stock also necessitates further division of labour. In other words, the two are mutually dependent. That Smith indeed recognised this circular and cumulative nature of the development process becomes clear from a sentence in *Lectures on Jurisprudence* (appearing shortly after the quote on page 232 above):

till some stock be produced there can be no division of labour, and before a division of labour take place there can be very little accumulation of stock. (LJ(B) 287, p. 522)

It is clear from this sentence by Smith that further accumulation of stock — i.e. beyond that initial accumulation, that ‘mystical’ unmoved mover, however small it may have been — is in its turn conditional on a prior advance of the division of labour. Division of labour and accumulation of stock in fact build on each other in a cumulative fashion. So the division of labour switches from being only an effect of the accumulation of stock to become the very cause of any *further* accumulation. It is only through the increased productivity of the economy that the division of labour permits, indeed, that accumulation on a grander scale becomes possible.

Dellemotte and Walraevens (2015, p. 717) interpret the two passages cited above as “Smith simultaneously affirm[ing] in his works that a prior accumulation of stocks is a prerequisite for any division of labour (WN, II.3, 277) and that any constitution or accumulation of stocks is impossible to conceive, before the division of labour was first introduced (LJ(B), 286–7, 521)”, which they describe as an inconsistency. For Marouby (2004, p. 158), whom they cite, this is so much as a contradiction in terms, and would preclude, logically, the division of labour from ever arising. These readings are a perfect illustration of the difficulty involved in interpreting Smith without paying heed to his conception of dynamic interdependence.

First, the account given of Smith's (written and reported) words by Dellemotte and Walraevens should be reconsidered. Smith wrote in the *Wealth of Nations*, not that "a prior accumulation of stocks is a prerequisite for *any* division of labour" but that "the accumulation of stock must, in the nature of things, be previous to *the* division of labour" (WN, II.3, 277). As observed in the previous chapter (p. 200 above), Smith meant by *the* division of labour an advanced degree of separation of different professions, not simply *any* separation of tasks. Admittedly, this may be seen as hair-splitting on my part. More importantly, then, Smith's sentence continues, with him observing "so labour can be more and more subdivided *in proportion only* as stock is previously more and more accumulated" (ibid.). As noted above, Smith's stress is thus on the proportionality between division of labour and capital accumulation more than on the necessary precedence of one over the other. In the *Lectures on Jurisprudence*, furthermore, Smith is reported to have said, not that "*any* constitution or accumulation of stocks is impossible to conceive, before the division of labour was first introduced", as Dellemotte and Walraevens (2015, p. 717) put it, but that "before a division of labour take place there can be *very little* accumulation of stock" (LJ(B), 287, 522).<sup>28</sup> This is not the same thing. And, more significantly, the full sentence of the lecture notes is "*till some stock be produced there can be no division of labour, and before a division of labour take place there can be very little accumulation of stock*". Smith is thus reported even in his lectures to have affirmed the necessary precedence of some accumulation of stock over the division of labour, and not only the inverse dependence of the accumulation of stock (beyond a "very little" amount) on the division of labour. And, here too, he is reported to have stressed, most of all, the necessary proportionality, in time, between the accumulation of stock and the deepening of the division of labour. There is thus no inconsistency between the *Wealth of Nations* and the lecture notes on this point whatsoever.<sup>29</sup>

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<sup>28</sup> The sentence occurs at p. 522, not p. 521 cited by Dellemotte and Walraevens, but since on p. 521 Smith only speaks of the dependency of the division of labour on accumulation of stock, and not the inverse, this must be a simple slip.

<sup>29</sup> When writing of the dependency of the division of labour on the extent of the market, however, Smith does not always mention that the division of labour is also conditional on the accumulation of stock. He thus affirms in the first sentence of Chapter III, Book I, of the *Wealth of Nations* that "it is the power of exchanging that *gives occasion* to the division of labour", with no mention of the necessity of capital accumulation for the division of labour at this point, which is only brought in several chapters later. In the first 'Fragment on the division of labour' Smith similarly affirms: "As among such nations, therefore, tho' they have scarce any foreign commerce, the home market is somewhat more extensive, we may expect to find something like the beginning of the division of labour" (FA.3, p. 583). No need for capital accumulation for the division of labour to arise is mentioned here.

The problem of interpretation arises, in fact, not from any contradiction or inconsistency on Smith's part, but from attempting to understand Smith with a strictly linear conception of causation in mind. The recognition of the chicken-and-egg relationship between the division of labour and capital accumulation by Smith make such a reading inappropriate. Whether *the* chicken or *the* egg preceded one another is a meaningless question. Insofar as the very existence of chickens and the one of chicken-eggs absolutely depend on one another, they can be considered only as an inseparable whole. The only pertinent question is (and even here only a very approximate answer can be given, which depends on the definition retained) at what point in time the chicken as a separate or new species came about, which includes the embryonic (egg), infant (chick) and adult (chicken) form. So it is with the division of labour and capital accumulation. Insofar as both depend on one another, it is vain to want to establish precisely which one preceded the other (even if Smith may *seem* to do just that). The pertinent question is when the *integrated whole* arose, which the mutually interdependent relationship between divided labour and capital constitutes.<sup>30</sup> Smith's answer, in the different documents contained in *Lectures on Jurisprudence*, is that it basically began in the primitive state. There are rudimentary forms of division of labour in barbarous nations (FA.3, p. 583). And people even in savage societies of hunters use tools, which, as Ricardo recognised (in an effort to amend Smith's value-theory), can be considered a rudimentary form of capital. The challenge for economic growth in the primitive stage, according to Smith, is not that either capital or divided labour are *absolutely* lacking. It is that both are present in infinitesimal quantities only, and, precisely since they depend on each other, they can thus augment only at a very slow rate. It is for this reason that the "knowledge of agriculture and of other useful arts", which "the colonists carr[ie]d out with them" to America, were "superior to what *can grow up of its own accord in the course of many centuries among savage and barbarous nations*" (WN IV.vii.b.2, p. 564).

Thus, if "till some stock be produced there can be no division of labour, and before a division of labour take place there can be very little accumulation of stock", then the process must, at the outset, be very slow. The issue of "primitive accumulation" was considered by Smith, indeed, in connection with the "slow progress of opulence". And the necessity of a primitive accumulation was his answer to the question of why economic growth is harder to set off than to sustain. The above-quoted sentence from the lecture notes describing the mutual

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<sup>30</sup>"In this circumstance lies the possibility of economic progress", as Allyn Young (1928, p. 539) remarked about the equally interdependent nature of the relationship between division of labour and extent of the market.

dependency, dynamically speaking, between the division of labour and the accumulation of stock thus appears precisely in the context of Smith's examination of the reasons for the slow progress of opulence (of which it is the reason). The whole section starts thus:

We come now to the next thing proposed, to examine the causes of the slow progress of opulence.

When one considers the effects of the division of labour, what an immediate tendency it has to improve the arts, it appears somewhat surprising that every nation should continue so long in a poor and indigent state as we find it does. The causes of this may be considered under these two heads, first, natural impediments, and secondly, the oppression of civil government. (LJ(B) 285, p. 521)

If the division of labour was indeed so formidable in its productivity-enhancing abilities as Smith made it out to be in the opening chapter of the *Wealth of Nations*, he was faced with the question of why it then took so long to take hold in society. Why, in other words, is the process of development so hard to initiate? Why did societies remain for so long in a state of low division of labour before reaching the commercial stage, where division of labour and with it economic progress came to proceed at an unprecedented pace? As could be expected from a philosopher so acutely concerned with the topic of the "progress of society", this was an important question for Smith. It features in all of Smith's unpublished (until recently or much later) work on political philosophy or statesmanship (legal and economic matters), i.e. both sets of the (re)discovered lecture-notes of Smith's teachings on jurisprudence (or "police and arms") and the 'Early Draft' of the *Wealth of Nations*, before being restated (rather scantily for that matter) in the final version of what is today his most famous work.

After the passage in the Cannan notes just quoted follows the passage already quoted on page 232 above ("A rude and barbarous people . . . begin the new trade."). Then Smith goes on to write:

Every one knows how difficult it is, even in a refined society, to raise one's self to moderate circumstances. It is still more difficult to raise one's self by these trades which require no art nor ingenuity. A porter or day labourer must continue poor for ever. In the beginnings of society this is still more difficult. Bare subsistence is almost all that a savage can procure, and having no stock to begin upon, nothing to maintain him but what is produced by the exertion of his own strength, it is no wonder that he continues long in an indigent state. The meanest labourer in a polished society has in many respects an advantage over a savage. He has more assistance in his labour; he has only one particular thing to do, which by

assiduity he attains a facility in performing; he has also machines and instruments which greatly assist him. An Indian has not so much as a pick-ax, a spade, or a shovel, nor any thing else but his own labour. This is one great cause of the slow progress of opulence in every country; till some stock be produced there can be no division of labour, and before a division of labour take place there can be very little accumulation of stock. (LJ(B) 286-7, p. 521-2)

This section is directly mirrored in the 'Early Draft' of the *Wealth of Nations*:

Chap. 5th Concerning the causes of the slow progress of opulence.

Those causes of two kinds. First, natural impediments; and, secondly, oppressive or injudicious government.

The original poverty and ignorance of mankind the natural impediments to the progress of opulence. That it is easier for a nation, in the same manner as for an individual, to raise itself from a moderate degree of wealth to the highest opulence, than to acquire this moderate degree of wealth; money, according to the proverb, begetting money, among nations as among individuals. The extreme difficulty of beginning accumulation and the many accidents to which it is exposed. The slowness and difficulty with which those things, which now appear the most simple inventions, were originally found out. That a nation is not always in a condition to imitate and copy the inventions and improvements of its more wealthy neighbours; the application of these frequently requiring a stock with which it is not furnished. (ED 42, p. 579)

This is what Smith considers the “natural impediments” which make for the difficulty and the slowness of the progress of development in its beginning. This process becomes easier (more fluid) and faster as it gathers momentum: a characteristic feature of positive feedback. Indeed, the mechanism of positive feedback, which underlies Smith’s considerations of economic development, explains why progress is an initially slow, and increasingly accelerating process. Note that Smith considers this, too, an explanation for the impossibility or at least great difficulty of technology transfer between nations at different stages of advancement (in the last sentence of the quote above): as capital, technology, and specialised labour and skills are dependent on one another, they can only be introduced gradually and develop in a cumulative fashion. Another, more picturesque, passage to the same effect can be found in the *Wealth of Nations*. Here Smith compares the accumulation of capital in a nation with that of an individual (the context is the discussion of the falling rate of profit, but this is irrelevant to the issue at hand):



It is with industrious nations who are advancing in the acquisition of riches, as with industrious individuals. A great stock, though with small profits, generally increases faster than a small stock with great profits. Money, says the proverb, makes money. When you have got a little, it is often easy to get more. The great difficulty is to get that little. (WN I.ix.9, p. 109-10)

Smith's treatment of primitive accumulation, and of the question of the relationship between division of labour and capital accumulation more generally, thus relies on a circular, cumulative and incremental conception of the growth process. Hence Smith's theory — even though he might not have been as explicit about it as later were Alfred Marshall and Allyn Young, who built on and made more explicit the cumulative nature of Smith's ideas on the division of labour and the extent of the market<sup>31</sup> — can best be understood when viewed as an unfolding process of organic growth, where each incremental step not only adds to the previous one, but in conjunction with this previous one makes a sum that is greater than its parts, and thus makes possible further incremental change, which can become the more and more vigorous the more and more previous steps have already been accomplished, just as from a seed a tree grows to maturity, and the more branches grow out of the initial stem, the more further branches can possibly grow.

Marx in fact also had such a view of history. Indeed, his historical materialism can be seen as following an evolutionary logic, with unintended consequences and emergent order playing a major role. It is also probable that he was influenced in this by Smith, although he did not acknowledge this particular debt.<sup>32</sup> Yet, in the particular instance of the relationship between capital accumulation and division of labour, Marx, as many later commentators, does not seem to have discerned the evolutionary reasoning involved in Smith's conception. This can be seen, notably, in Marx's enunciation of the paradoxical question of the onset of capital accumulation:

But the accumulation of capital presupposes surplus value; surplus value presupposes capitalistic production; capitalistic production presupposes

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<sup>31</sup> On the relationship between Marshall, Young and Smith on this point see Lavezzi (2003b).

<sup>32</sup> Marx did praise Smith for his recognition of the 'alienating' effects of the division of labour. But he did not, to my knowledge, draw a link between his own historical materialism and Smith. This attitude toward an author who influenced him would not be untypical for Marx. Some have even postulated an inverse relationship between the hostility he expressed for certain writers and the degree of influence they had on him (Schumpeter 2003 [1943], p. 22).

the pre-existence of considerable masses of capital and of labour power in the hands of producers of commodities. The whole movement, therefore, seems to turn in a defective circuit,<sup>33</sup> out of which we can only get by supposing a primitive accumulation (previous accumulation of Adam Smith) preceding capitalistic accumulation; an accumulation not the result of the capitalist mode of production, but its starting point. (Marx 1996 [1887], p. 704)

This depiction by Marx of a “defective circuit” which it seems impossible to break out of actually resembles in many respects the purported vicious circle of underdevelopment — with which a number of mid-20<sup>th</sup> century authors were concerned, as depicted notably by Nurkse (Nurkse 1952, p. 571):

The inducement to invest is limited by the size of the market. That is essentially what Allyn Young brought out in his reinterpretation of Adam Smith's famous thesis. What determines the size of the market? Not simply money demand, nor mere numbers of people, nor physical area. Transport facilities, which Adam Smith singled out for special emphasis, are important; reductions in transport costs (artificial as well as natural) do enlarge the market in the economic as well as the geographical sense. But reductions in any cost of production tend to have that effect. So the size of the market is determined by the general level of productivity. Capacity to buy means capacity to produce. In its turn, the level of productivity depends-not entirely by any means, but largely-on the use of capital in production. But the use of capital is inhibited, to start with, by the small size of the market. Where is the way out of this circle? How can the market be enlarged? <sup>34</sup>

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<sup>33</sup> The first translators of *Capital* into English (Samuel Moore and Edward Aveling, version published in 1887, edited by Friedrich Engels, adopted for the Collected Works here cited) have translated this as “vicious circle”. In the much more recent translation by Ben Fowkes, the latter translated it as “never-ending circle” (Marx 1976 [1890], p. 873). Marx, in the original German, did not use the German word for “vicious circle” (“Teufelskreis”) — nor did he write of a never-ending circle —, but used the words “fehlerhaften Kreislauf”, i.e. literally a “defective circuit”. Although in the French version (which Marx himself oversaw), the word used is also “cercle vicieux”, I have used a formulation closer to the original here. The rest of the paragraph is true to the source cited.

<sup>34</sup> Nurkse, although alluding in this regard to Young's 1928 paper, indeed may have had a situation described by Marx in mind. In some unfinished notes he was preparing as an answer to criticism of his doctrine of balanced growth by Streeten just before his death (edited by Tobin and published posthumously), Nurkse thus wrote, in an only slightly different connection: “What I had in mind there was the 'basic contradiction of capitalism' as Marx put it and as Malthus dimly saw it before him, namely, the fact that when the means to invest are there the will may be lacking, and vice versa.” (Nurkse 1959, p. 297)

This question of origin, of ‘result’ and ‘starting point’ (or cause and effect), with regard to the accumulation of capital and the division of labour (as with other circular relationships drawn out by Smith), is really a chicken-and-egg question. In other words, the only satisfactory view of the relationship between capital accumulation and division of labour (and the surplus generated through the productivity gains from the division of labour) is a circular one, one of mutual relation, of mutual causation, or in modern terms of co-evolution.

### **3. Sequence and Circularity in Smith’s “Natural progress of opulence”**

When Dugald Stewart described the particular sort of historical inquiry he baptised “*Theoretical or Conjectural History*” (Stewart II.48, p. 293), and remarked that “Something very similar to it may be traced in all [of Smith’s] different works” (II.44, p. 292), he had in mind both Smith’s general theory of socio-cultural evolution laid out in his Glasgow lectures — which it has become customary today, following Meek (1976b, p. 2), to refer to as the “four stages theory” — and the theory of the “natural progress of opulence”, developed in Book III of the *Wealth of Nations*. Stewart thus singled out, as an instance of conjectural history in the *Wealth of Nations*, “particularly the theoretical delineation [Smith] has given of the natural progress of opulence in a country; and his investigation of the causes which have inverted this order in the different countries of modern Europe”, before remarking that “His lectures on jurisprudence seem, from the account of them formerly given, to have abounded in such inquiries” (II.52, 295). Yet, as the four stages theory moved more and more to the background as an approach to explain development, and in the absence of a clear textual layout of its content and nature in Smith’s work until the rediscovery of the second lecture notes on jurisprudence in the later 20<sup>th</sup> century, Smith’s theory of the “natural progress of opulence”, describing the demise of feudalism in Europe through the merchant activities of towns, came to represent the main embodiment of what Stewart had called conjectural history. It is today possible, and certainly crucial for modern Smith scholarship, to reconstruct Smith’s theoretical history as a whole, and to restore the missing link between the “natural progress of opulence” and the four stages theory.<sup>35</sup>

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<sup>35</sup> The work of Istvan Hont, alone and in collaboration with Michael Ignatieff, and the one of Donald Winch in particular require mention here (see notably Hont and Ignatieff (1983), Hont (1989)).

As we saw in Chapter 1, the latter theory is certainly present in the *Wealth of Nations*, and can be taken to form the backbone of the work, but references to it are unclear without detailed knowledge of the theory. Smith opens nearly every book of the *Wealth of Nations*, indeed, and many chapters within books, with the phrase “among nations of hunters” or some variation thereof (then to be contrasted with the advanced stages of society). Like formulas appear in the ‘Introduction and Plan of the Work’ (“Among the savage nations of hunters and fishers”, I.4) and in Book I, at the beginning, respectively, of Chapter 2 (“In a tribe of hunters or shepherds”, I.ii.3), of Chapter 6 (“among a nation of hunters”, I.vi.1), of Chapter 10 (“in the rude state of society”, in which “Hunting and fishing [are] the most important employments of mankind”, I.x.b.3) and of Part II of Chapter 11 (“Among nations of hunters and shepherds” and, in the same paragraph, “among the hunting nations of North America”, I.xi.c.4). A similar phrase appears at the very beginning, respectively, of Book II (“In that rude state of society”, the rest of the paragraph making it very clear Smith is here talking about the hunting stage, II.1) and of Book V (“Among nations of hunters, the lowest and rudest state of society, such as we find it among the native tribes of North America”, V.i.a.2). The formula “savages and barbarians” is preferred in Book IV, where it is employed in some form in Chapters 1, 3 and 7.<sup>36</sup> In Book III, by contrast, no such parallel is drawn. This Book, indeed, deals wholly with the development of Europe from the stage of agriculture to commercial society, corresponding to the last two stages of development in the four stages theory (the first two being the “savage” and the “barbarous” stages, or, synonymously for Smith, those, respectively, of hunting and shepherding).

Urbanisation, indeed, is and can only properly be, for Smith, a feature of commercial society, insofar as cities are a concentration of population engaged in non-food producing activities. As such, they need, in order to exist, the prior development of agriculture, which alone can allow the production of a surplus of foodstuff sufficiently large to feed the important number of non-food producers that cities contain. In other words, the stage of agriculture must at least have commenced for cities to emerge, and they can properly flourish, in natural symbiosis with *their own* regional economy, in commercial society only. Though not employing, at this point, the vocabulary of stages of society, Smith expresses this, in temporal terms, at the very beginning of Book III:

As subsistence is, in the nature of things, prior to conveniency and luxury, so the industry which procures the former, must necessarily be prior to that which ministers to the latter. The cultivation and improvement of the

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<sup>36</sup> IV.i.33, p. 448; IV.iii.c.11, p. 495; IV.vii.a.8, p. 559; IV.vii.b.2, p. 564-5; IV.vii.b.4, p. 567.

country, therefore, which affords subsistence, must, necessarily, be prior to the increase of the town, which furnishes only the means of conveniency and luxury. (WN III.i.2, p. 377)

If town and country development are mutually beneficial and mutually dependant on one another, however, then in fact the interaction of city and country-side poses a chicken-and-egg question, analogous to the ones between division of labour and capital accumulation, analysed in the previous section. What came first, the city or the country-side? Or, more meaningfully, is it the development of the town that brings about the development of the country-side, or the other way round? Is the development of agriculture a necessary precedent to the development of towns, or are towns in fact the initiators of agriculture? Smith has a clear stand on this. In the natural order of things, the development of agriculture must necessarily precede the development of manufactures (and hence the development of the country-side must precede the one of towns) as subsistence is a pre-requisite to convenience and luxury, and so it must be for their respective production.

Smith seems to build his entire theory of the “natural progress of opulence” for the sole purpose of denouncing the past and remaining feudal institutions of Europe, which led to a development that runs counter to this model. But in acknowledging that the “unnatural and retrograde order” (from the development of commerce, to manufacture to agriculture, instead of the other way around) characterised Europe’s actual development, Smith concedes of course that the development of commerce and manufacture may well, and indeed has, positive feedback effects on the development of agriculture.

Smith’s emphasis on the different order(s) of things has even been read as contradicting his own position, by proving the contrary of what he claims (Bowles 1986 ; Blecker 1997 ; and more recently Paganelli 2013). But Smith is in fact very aware that his “natural” sequence is an ideal, and that the usual course of things is another. “If a nation could not prosper without the enjoyment of perfect liberty and perfect justice” he remarks indeed, “there is not in the world a nation which could ever have prospered.” (IV.ix.28, p. 674).

As it is commonly understood today, the word “natural” describes anything that has not been tempered with by human hands. This was also its general meaning in the 18<sup>th</sup> century. “Nature” is the world as it exists independently from human beings. It is synonymous, in many respects, to ‘the wild’. By analogy, we describe as nature that which has been minimally influenced by humans (most forests in the world today were actually planted by humans, but are still largely considered as “nature”). Smith and his Scottish contemporaries pushed the analogy

in another direction. For him, indeed, the term “natural” is applied in the context of human society itself. What he considers as natural, then, is the way human society evolves, “as it were, of its own accord, and independent of any plan or project” (WN I.xi.p.8). As Adam Ferguson put it:

If we admit that man is susceptible of improvement, and has in himself a principle of progression, and a desire of perfection, it appears improper to say that he has quitted the state of his nature, when he has begun to proceed; or that he finds a station for which he was not intended, while, like other animals, he only follows the disposition, and employs the powers that nature has given. (Ferguson 1995 [1767], p. 14)

What Locke and Hobbes had called the state of nature, i.e. the state of humanity before the advent of civilisation, was thus no longer considered by thinkers like Ferguson and Smith to be the only natural state of mankind. Following the natural state, now called savage state, societies follow a path of development that is itself natural, insofar as it derives entirely from man’s innate, and hence natural, “principle of progression”. This propensity, the “natural effort of every individual to better his own condition” (WN IV.v.b.43, p. 540), “the principle from which publick and national, as well as private opulence is originally derived” is, for Smith, indeed, “frequently powerful enough to maintain the natural progress of things toward improvement, in spite both of the extravagance of government, and of the greatest errors of administration” (II.iii.31, p. 343).

The words “unnatural” and “retrograde” which Smith uses to qualify the development of Europe should thus not be interpreted as meaning that the development of Europe was in any way unusual. What happens “naturally”, for Smith, is what happens “of its own accord” (a phrase he uses interchangeably with “natural”), unaided or undirected. The natural process of opulence, in Smithian language, is the one that arises out of the self-interested action of individuals, of whom each “neither intends to promote the publick interest, nor knows how much he is promoting it” (IV.ii.9, p. 456). It is the one which is in accord with “the obvious and simple system of natural liberty”, in which “Every man, as long as he does not violate the laws of justice, is left perfectly free to pursue his own interest his own way, and to bring both his industry and capital into competition with those of any other man, or order of men” (IV.xi.51, p. 687). Indeed, Smith tells us, just before he describes the latter:

every system which endeavours, either, by extraordinary encouragements, to draw towards a particular species of industry a greater share of the capital of the society than what would naturally go to it; or, by extraordinary restraints, to force from a particular species of industry

some share of the capital which would otherwise be employed in it; is in reality subversive of the great purpose which it means to promote. It retards, instead of accelerating, the progress of the society towards real wealth and greatness; and diminishes, instead of increasing, the real value of the annual produce of its land and labour. (IV.xi.50, p. 687)

The “natural order of opulence” is the one that is in accord with the “system of natural liberty”. In this sense, Smith’s thesis of the unnatural vs. the natural order in Book III of the *Wealth of Nations* was motivated principally by an attack on the physiocratic plan of favouring the agricultural sector over manufactures (Hont 1989). Human society progresses in a ‘natural way’ for Smith, then, when it is not directed ‘consciously’.

For Smith, the city is by its very essence a herald of commercial society. What Smith calls the “unnatural and retrograde order” is a feature of feudalism. And the way that feudalism was to evolve to “capitalism” (commercial society) was through towns. This is because a town, in a sense, is the very expression of the institutional system and societal stage of commercial society. Smith considered the towns that continued to exist during feudalism as residuals of a merchant class that existed prior to feudalism, was driven out of power by the Germanic invasions, but survived throughout the dark-ages or middle-ages, and finally brought feudalism to an end. The Germanic invasions, according to Smith, interrupted the “natural progress of opulence” that would otherwise have continued. Some Marxist scholars see this as an ideological way of claiming the superiority of capitalism (see notably Mumy 1978/1979). But accusing Smith of naturalising the market-system (Mumy 1978/1979, p. 460-1), and thereby claiming the superiority of capitalism, is reading into Smith support of a system that succeeded him by at least a century, and that he could hence not have been concerned with (Winch 1997). Such view also neglects the severely critical attitude of Smith towards masters and tradesmen, which got significantly watered down with Dugald Stewart’s and subsequent interpretations of Smith’s work (Rothschild 1992).

It ought to be remarked, then, that Smith’s criticism concerns not so much the order of development per se, as the repressive institutional settings that led to it. What Smith is *not* saying is that the development of cities is in itself unnatural; that it is harmful to the overall development of societies or that investing in towns somehow curtails investment in the country-side. In fact he emphatically states that town and country (and the development of towns and of the country-side) are complementary, cumulative and mutually beneficial (WN III.i.1-4, p. 376-8). The problem lies not in city development, but in artificially trying to bring it about, and bring it about at the detriment of the country-side, by favouring international trade

over the one between cities and their hinterland, “The great commerce of every civilised society”(WN III.i.1, p. 376). The opposite is equally true, however, and in this sense Smith condemns favouring the development of the country over the one of the town:

Phillip IVth went to the plow himself in order to sett the fashion. He did every thing for the farmers except bringing them a good market. He conferred the tittles of nobility upon several farmers. He very absurdly endeavoured to oppress manufacturers with heavy taxes in order to force them to the country. He thought that in proportion as the inhabitants of towns became more numerous, these in the country decreased. This notion was highly ridiculous, for the populousness of a town is the very cause of the populousness of the country, because it gives greater encouragement to industry. Every man in a town must be fed by another in the country, and it is always a sign that the country is improving when men go to town. There are no parts of the country so well inhabited nor so well cultivated as those which lye in the neighbourhood of populous cities. (LJ(B) 297-98)

By not wishing for any particular impetus to be given to foreign trade beyond that which would “naturally” occur, Smith expresses a priority for the development of the interior market. This makes sense in the light of the fact that what are today called urban-rural linkages are at the core of Smith’s conception of the market, the widening of which it was essential to further to favour the unfolding of the division of labour and thus economic progress. In his digression on silver, in chapter 11 of Book 1 of the *Wealth of Nations*, Smith explains how this precious metal warrants far distant trade, and how the market of a silver mine most anywhere is thus likely the whole world, as the high value of this metal relative to its cost of transportation makes exchange over great distance remain profitable. This is the same reason, however, why the direct vicinity of a silver mine does not seem to benefit very much from its presence in terms of economic development. Thus the goods that it is profitable to trade even in backward nations do not seem to be the ones that have the most forward and backward linkages, to employ Hirschman’s (1958) vocabulary. While there is no reason to discourage the trade in silver, then, it is also not particularly useful, for the development of the country, to artificially boost this particular trade, at the expense of agriculture notably, as Smith denounced. Smith applies the same logic to mercantile cities, which may “derive their subsistence from the most remote corners of the world”, and thus, although they must necessarily be in commercial interaction with *some* rural area *somewhere*, do not necessarily contribute greatly to the regional economy. Smith cites the Hanseatic towns as examples for mercantile cities which have not greatly



contributed to the development of the regional economy (WN III.iv.24, p. 426-7). The particular dynamic of economic progress that Smith described, and that he called the “natural progress of opulence”, was a phenomenon being mostly beneficial to, and essentially taking place within, the interior market of a nation or territory, in any case before a nation had fully evolved to an advanced state of commercial society.

Moreover, in the context of the four stages theory, towns, being a feature of commercial society, can only arise after the development of agriculture (and surely neither in nations of hunters, far too small numerically for cities to form, nor in nations of shepherds, characterised by a nomadic lifestyle necessitated by the need to periodically find new grazing ground for livestock). On the other hand, cities do form prior to commercial society proper in Smith’s account, or rather, in the case of Europe, they had formed long before, in a prior commercial age which had gotten lost by the barbarian invasions, the barbarians being nations of shepherds. Europe had thus already known a commercial age, indeed, prior to these. In the time between this partial retrogression into the shepherd state — partial because part of commercial society survived in the form of cities — cities not only continued to exist, but actually played an active role in the demise of feudal institutions tied to the agricultural age, into which Europe had progressed in the meantime. These cities, being surrounded by a country-side dominated by these feudal institutions, was bound to trade with more far-away lands, rather than with the surrounding country-side. And while this failed to immediately benefit the surrounding country-side, it did eventually bring about the demise of the antiquated feudal institution, by a subtle play of unintended consequences: the cities, engaging in long distance trade, eventually began a process of import substitution; the feudal lords, seduced by the “trinkets and baubles” (WN III.iv.15, p. 421) thus produced, starting accumulating wealth instead of offering occupation and livelihood to the surrounding population, and thus progressively lost the power they had over them and introduced commercial institutions into the country-side. We are here in the presence of a subtle mix of economic (materialist) and political and moral factors. The four stages theory, while used as a backbone, is shown to be insufficient to explain the history of Europe, not only because different nations finding themselves at different stages, when conquering and dominating each other, can bring about intermediate forms of society which do not belong strictly to only one stage, but also because specific *political* events can alter the course of the natural *materialistic* progress of society. As Donald Winch (1995) remarked, while this part of *Wealth of Nations* was already present in the *Lectures of Jurisprudence* (Scott held it to be the oldest part of *Wealth of Nations*), Smith

engages here in actual history, not of the conjectural type, recounting specific events in the history of Britain and Europe which have altered the natural progress of opulence. And while Smith seems to be saying that this “unnatural and retrograde order” was inferior to the natural one, this is not *necessarily* implied (as Spencer Pack (1995) observes, “natural” does not necessarily mean “good”).

In the state of Europe described by Smith in Book III of the *Wealth of Nations*, features of the agricultural age are present (there are towns and agricultural areas, which exchange their produce with each other), but there are still features of the previous shepherd stage as well (the very great authority of chiefs and the total dependence on them of the rest of society) which constitute a hindrance to the seamless progress to ulterior stages of development (the authority of the feudal barons notably disturbs the free trade between town and country). It is the fact that Europe was stuck in these antiquated institutional arrangement that Smith used to explain why Europe, instead of by the “natural progress of opulence”, had to develop through an “unnatural and retrograde order”, whereby it were elements of the next stage (commercial society), that finally liberated the current state (if we can agree on situating the Europe described in Book III in the agricultural stage) from its elements of the former (shepherd) stage. It is the commerce of the towns with other far-away towns (a feature — international trade — that would “naturally” be one of commercial society only) which weakens the authority of the feudal lords (the remnant from the shepherd stage) and finally lets the agricultural stage progress to the commercial one, by extending this commerce between towns ‘backwards’ (or ‘unnaturally’) to the rural areas.

Hence Smith’s description of the “unnatural and retrograde order” may in fact serve the purpose of showing that this “unnatural” order is nevertheless (despite being unnatural) a functional one. Society develops either way, but it does so in unpredictable and unintended ways. This does not prove the contrary of what Smith tried to prove, however, but is indeed his main point throughout: that there are forces within the socio-economic system which move society toward progress, out of the confrontation of natural (i.e. in this case: innate) human propensities confronted to the natural (non-human, material) world; these forces are acting in an intricate interplay of various inter-connected cause and effect relationships, all connected in a large positive feedback loop, which, because of their complexity, it is impossible for any central authority to fully comprehend and hence imitate and direct, let alone enforce. It is here that Smith’s ‘bottom-up’ liberalism clashed with the more ‘top-down’ centralising spirit of a directed and even enforced liberalism of the physiocrats.

Jane Jacobs (1969, p.?) famously contradicted Smith as to the precedence of agriculture over cities, claiming that cities arose as trading posts before the adoption of agriculture, and that agriculture was actually created *by* cities as a form of import-substitution for foodstuff and other products gathered (and hunted) that had to be purchased from without. A recent article by three archaeologists holds that “Jacobs’ idea was out of line with extant archaeological findings when first advanced decades ago, and it remains firmly contradicted by a much fuller corpus of data today.” (Smith, Ur, & Feinman 2014, p. 1525). However that may be, what Jacobs (as many others who have and do criticise Smith) failed to see, is that her ideas were much more similar to Smith than they were contradictory to them.<sup>37</sup>

For Smith, as it turns out, it is more the mutual dependency of these variables on each other that is of interest, than the precedence of one over the other, even if he does sometimes establish such precedence. While Smith *does* describe a “natural” sequence in regional development, in which cities naturally emerge as a result of the development of the country-side, he not only acknowledges that the sequence also works in reverse, he even describes how this “unnatural” order has in fact been the way Europe (i.e. the major part of the developed world, certainly in the 18<sup>th</sup> century) *has* developed. Much as with the order that Smith described between the first occurrences of capital accumulation and the division of labour, there are positive feedback effects that largely blur the importance of this order. What is crucial is the mutual dependency of these processes (capital accumulation and division of labour, population and development, in general, and urbanisation and the development of the country-side, in particular) on each other. The important fact is that “the gains of both are mutual and reciprocal, and the division of labour is in this, as in all other cases, advantageous to all” (WN III.i.1, p. 376).

#### **4. Limits to growth?**

Did Smith believe in continual progress, or did he see definite limits to it? Some authors have taken the position that he did in fact see such a limit in the stationary state, which is a definite and material boundary, determined by the limited availability of land (Hollander 1973 ; Heilbroner 1975 ; Wrigley 1988). The passage often cited in support of this view is the following:

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<sup>37</sup> Jacobs also criticised Smith’s ideas on the division of labour (Jacobs 1969, p. 83), claiming it was a static theory, which is a patent misreading of Smith. She offered her own theory of spontaneous order in return, which again was actually strikingly similar to Smith’s.

In a country which had acquired that full complement of riches which the nature of its soil and climate, and its situation with respect to other countries allowed it to acquire; which could, therefore, advance no further, and which was not going backwards, both the wages of labour and the profits of stock would probably be very low. In a country fully peopled in proportion to what either its territory could maintain or its stock employ, the competition for employment would necessarily be so great as to reduce the wages of labour to what was barely sufficient to keep up the number of labourers, and, the country being already fully peopled, that number could never be augmented. In a country fully stocked in proportion to all the business it had to transact, as great a quantity of stock would be employed in every particular branch as the nature and extent of the trade would admit. The competition, therefore, would everywhere be as great, and consequently the ordinary profit as low as possible. (WN.I.ix.14, p. 111)

Others, criticising the former authors for “Malthusianising Smith” have noted that in fact it is laws and institutions (which can evolve and be changed) that determine the prospect of a country’s advancement, not the availability of land alone, citing the very following paragraph of *Wealth of Nations* for support (Winch 1995):

But perhaps no country has ever yet arrived at this degree of opulence. China seems to have been long stationary, and had probably long ago acquired that full complement of riches which is consistent with the nature of its laws and institutions. But this complement may be much inferior to what, with other laws and institutions, the nature of its soil, climate, and situation might admit of. (I.ix.15, p. 111-2)

Smith here points out that a country may well be stationary even if it has not as yet attained all the limits pointed out in the preceding paragraph (amount of “riches” in relation to “soil and climate” and “situation with respect to other countries”; size of population with regard to territory and stock; and amount of stock in proportion to “business . . . to transact”). And another limit or condition to the progress of opulence is added, which, however, appears more flexible than the others, namely “institutions”. The question is a delicate one, as (like much of what Smith wrote) these passages are not devoid of ambiguity. In fact, the second paragraph (WN.I.ix.15) does no more invalidate the view of Smith as seeing progress as being absolutely limited by the availability of land than the first paragraph (WN.I.ix.14) supports it. Strictly speaking, indeed, Smith nowhere refers precisely to the availability of land as such in either of these two paragraphs. But the first sentence of the second paragraph (“perhaps no country has ever yet arrived at this degree of opulence”), at least strongly suggest that Smith believed

that *eventually*, countries would attain a “degree of opulence” at which the various limits Smith enumerates were reached, which would lend support to the “Malthusianised” view of Smith. And at the end of this paragraph, Smith also refers again to countries’ “soil, climate, and situation”, suggesting that these are indeed somehow more decisive than a country’s “laws and institutions”, which he had just singled out for playing a special role.

Another noted passage of Smith concerning history and progress is one in which he considers the usual duration of periods of prosperity as being generally limited to two-hundred years:

It is now more than two hundred years since the beginning of the reign of Elizabeth, a period as long as the course of human prosperity usually endures. (WN.III.iv.20, p. 425).

So is history cyclical for Smith; an ever repeating cycle of progress and decline? This was clearly the case in Vico’s *New Science*, as it had been in Khaldun’s much earlier work, both of which share many similarities with Smith’s approach.<sup>38</sup> As (Nohara 2010) shows, Smith in fact rejects this view in the absolute. But this does not mean, necessarily, that “there is no resolution possible [between progress and stagnation] within the terms of Smith’s premises” (Heilbroner 1975), nor that “the commentator is forced to choose between passages in Smith’s work in order to support a particular interpretation of the former’s view of history” between either “commercial society is the end of history because 1) it supplies the ends of nature that he identifies; 2) it is inevitable; and 3) it is permanent” or “commercial society does not supply the ends of nature, nor is it inevitable, nor is it permanent” (Alvey 2003, p. 1). Rather, I would suggest, most passages by Smith on this question *in and of themselves* allow for alternative interpretations.

Maybe, to attempt to resolve the apparent contradictions in Smith’s premises which Heilbroner and Alvey point out, we must stop to see them as contradictions. A refutation of the ‘absolute limit to progress’ view of Smith can perhaps best be carried out by recognising the actual multitude of ‘limits’ to the progress of opulence that Smith enumerates, and their multiple dependencies on each other. In the sense of the argument developed in this chapter (the presence of circular

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<sup>38</sup> There is no evidence that Smith was aware of the work of either. On Fisch and Bergin’s (1944) claim that Vico may have influenced the Scottish Enlightenment (and in particular Adam Ferguson) Forbes (1954) writes: “It is an interesting suggestion, but . . . the eighteenth century was full of Vichian thoughts that do not necessarily stem from Vico, and in the writings of Kames, Adam Ferguson, Adam Smith and Gilbert Stuart much that is ‘Vichian’ is clearly and confessedly derived from Montesquieu.” In the remainder of the same paragraph and the next, Forbes however cites many references to Vico by the Scottish Enlightenment historian John Gillies. See also Skinner (1965)

causation and positive feedback in Smith's work), it is possible, in fact, looking at WN.I.ix.14 quoted above, to not see the seemingly absolutist formulation of Smith as quite so absolute, if we recognise the complexity of the different relationships referred to here by Smith between "riches", "soil and climate", "situation with respect to other countries", "wages", "profits", population, "territory", "stock", "employment", "business", "nature and extent of the trade" and "competition". All these elements are actually linked to each other in various and intricate ways by Smith at different points in the *Wealth of Nations* (and *Lectures on Jurisprudence*), and hence the whole complex interrelationship here drawn by Smith, the "system" as a whole, is indeterminate. Thus, in this very paragraph, Smith tells us that "riches" are limited not only by "soil and climate" but also by the "situation with respect to other countries"; that the number of people is limited not only by the carrying capacity of the territory, but also by what its stock can employ, and that the "quantity of stock" itself is limited by the "nature and extent of the trade", which, as we know from earlier expositions of Smith,<sup>39</sup> is limited, in turn by the "situation with respect to other countries" mentioned at the beginning of the paragraph, as well as by the development and availability of technology (through the progress of the division of labour), which itself depends on such things as geography ("territory"), the amount of capital ("stock") and the size of population. Seen thus, it is hard to single out any one element as *the* 'absolute limit' to progress.

All of these variables in fact exert some influence on the whole. And, significantly, for the most part they are precisely that: variables. While "soil and climate", which Smith mentions first (and to which Hollander, Heilbroner and Wrigley devote the greatest attention), is an absolute and not a variable quantity, most other 'limits' enumerated by Smith thereafter are variables. The "situation with respect to other countries" depends notably on the extent and nature of settlement, both of the country in question and of the other countries. Thus, if population grows in one country and comes to settle in greater proportion nearer the border with another country, the situation of both these countries with respect to each other (and hence "to other countries") changes. With respect to population, Smith points out in the contentious passage we are considering here that a country can be "fully peopled in proportion to what *either* its territory could maintain *or* its stock employ". The fact that Smith here uses "either" and "or" rather than "and", however, is significant. If population was limited by the extent of the territory *and* the amount of stock, this would be an absolute limit. But what the *either* implies is

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<sup>39</sup> Chiefly WN.I.iii, but also, importantly the *Early Draft*, and the *Fragments on the Division of Labour*. See Meek and Skinner (1973).

that population is limited by the extent of the territory only insofar as we are considering only this necessary relation to territory (which, in the absence of conquest for a single nation, and, in any case, for the world as a whole, is fixed). *Independently* from this first condition, population is also dependent on the amount of stock, and the latter can be increased. Stock itself depends on “amount of business to be transacted”, and is thus variable too. So is commerce. The snake bites its tail at this point. Circular cumulative causation is at work throughout.

Over the long run, with enough velocity gathered, a movement may have gained enough momentum to begin a new cycle. Although there are certain laws of motion, therefore, in the development of society, we can never fully determine outcomes, which depend on too many variables, which are themselves linked together in too many ways. Maybe what Ricardo so much criticised in Smith, his ambiguity and indefiniteness with regard to the determination of different variables of his system, was actually an important and valuable feature of Smith’s edifice. In line with writers having linked Smith with Darwin, and what has been said in this chapter about Smith’s growth theory resembling one of organic growth, the laws of the development of society depicted by Smith resemble the laws of biology, with its inherent indeterminacy, more than the social physics that Ricardo seems to have wished to construct.<sup>40</sup> In that sense, it may be with historical development, for Smith, as it would be with biological development for Darwin: successive generations are born, but they are never fully identical. Over many cycles of biological reproduction, species evolve, just as over many cycles of social and economic reproduction (depicted by the circular flow of the Physiocrats), societies evolve.<sup>41</sup> As Nohara (2010, p. 89) puts it: “what Smith denied was the repetition of the *same* process of the rise and fall of civilization”. Thus, history may repeat itself, but never quite identically. Though civilisations may rise and fall, overall progress is still conceivable when looked at on a larger scale, just as the oscillations of a wave may appear as cycles from close-up, while from a distance the wave shows to have an overall direction independent of its oscillations, and may even look linear.

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<sup>40</sup> Coats (1979, p. 605) calls this “the gap between the Smithian Scottish tradition of economic thought and the Bentham-Ricardo tradition of rationalistic analysis which has been so dominant in twentieth century professional economics”.

<sup>41</sup> In this line of argumentation, see Houthakker (1956) for an analogy between the concepts of specialisation and speciation.

## 5. Conclusion

The question of why the development process is so hard to set in (or to set off), in fact, is precisely the question mid-20<sup>th</sup> century development economists grappled with, leading them to try to identify the conditions necessary for a “take-off into self-sustained growth” (Rostow 1956), for which they advocated a “big push” (Rosenstein-Rodan 1943 ; Nurkse 1952) or “critical minimum effort” (Leibenstein 1957).<sup>42</sup> And this is no coincidence, as they were inspired in this, precisely, by Allyn Young’s (1928) reconsideration of Smith’s theory of development, as visible in the quote from Nurkse above. In many respects, however, these authors of the mid-20<sup>th</sup> century development literature missed maybe the most important insight in Smith’s (and Young’s) approach: That it is a process of positive feedback in which a multitude of elements are involved which are linked to each other in multiple ways, making the process necessarily a slow and gradual one (with the additional implication that this process, by its sheer complexity, is one that can be favoured or hampered, if we arrive at a better understanding of its working, but which can hardly be absolutely controlled, as it depends on the simultaneous working of too many variables).<sup>43</sup>

In an industrialised economy, an entrepreneur might decide to start producing a given good on an industrial scale, knowing there will be a demand for it, as people already consume industrial (“mass-consumption”) goods; but in a largely agricultural subsistence economy, where people do not earn wages, or have little income more generally, they cannot purchase these goods on a large enough scale for their industrial production to be economically undertaken. Investment can work in augmenting production. But it can solve the problem of demand only insofar as the different activities and goods in the economy/society remain balanced, in the precise way that the increase of supply is actually a response to an increase of demand (or vice-versa), i.e. that the two do not pertain each to different activities and/or goods, which would render them out of sync. The problem is highly circular, which on the one hand adds to its difficulty, but on the other hand,

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<sup>42</sup> Paul Krugman (who, incidentally, heavily relied on the Smithian perspective of positive feedback — or increasing returns — for his own “New Economic Geography” and “New Trade Theory”; see on this Kibritcioglu (2002)) referred to this group of authors collectively as “High Development Theory” (Krugman 1993).

<sup>43</sup> Which is why Smith thought that for a “stateman” to “fancy himself fit” to “attempt to direct private people in what manner they ought to employ their capitals” was “folly and presumption” (WN V.ii.10); because “the duty of superintending the industry of private people, and of directing it towards the employments most suitable to the interest of the society” is one for “which no human wisdom or knowledge could ever be sufficient” (WN IV.ix.51).



is also the solution to the problem. In an economy where only few goods are exchanged, this balance will be more difficult to obtain. The more goods are exchanged in an economy, the easier it becomes to introduce new goods into it, as there are more goods against which the new goods can be exchanged.

Yet authors of the 1940s-1960s, just like growth theorists today in general, did and do not approach the problem of development with Smith's theory of development in mind (as a cumulative process that unfolds over the very long run, and proceeds in stages), but from the perspective of modern equilibrium theory; and this theory, as North (1994) observed, is concerned with the functioning instead of the growth of markets. In other words, conditioned by the obsession of the discipline with negative feedback, economists of the 1940-1960 failed to see that economic development was subject to the opposite logic, namely positive feedback, and got enthralled by "paradoxes" (the purported "poverty traps" or "low level equilibria") that really were none.<sup>44</sup> In a Smithian perspective of positive feedback, there is no "low level equilibrium trap" in poor countries, but a situation of development not having gathered enough momentum to proceed at a fast pace; so much so that many 20<sup>th</sup> century economists failed to see the slow but very real progress that *was* happening and took the situation for one of stagnation.<sup>45</sup>

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<sup>44</sup> The irony of this is that in fact both Rosenstein-Rodan and Nurkse were inspired in their reflections by a reading of Young's 1928 article, which is precisely about positive feedback in the process of economic growth, but of which apparently they failed to see the deeper implications. See also on this Perälä (2006)

<sup>45</sup> "Much of that thought pattern seems based on taking snapshots before and after some large change, and then not being able to readily imagine a step-by-step process to go from one to the other." (Ellerman 2004)

## Annex: Links from Linnaeus via Smith to modern biology

We know that Smith read Linnæus (through the books that were found in his library and his essay 'Of the External Senses') and that he was studying botany while writing *Wealth of Nations*. Smith's library contained four books by Linnaeus (*Philosophia Botanica*, 1751, *Genera Plantarum*, 9<sup>th</sup> ed., 1767, *Systema Naturae*, 13<sup>th</sup> ed., 1768, and *Species Plantarum*, 2<sup>nd</sup> ed., 1762-63) (Bonar 1894, p. 59), as well as *An Introduction to Botany* (2<sup>nd</sup> ed., 1765) by James Lee (ibid., p. 58), "containing an explanation of the theory of this science, and an interpretation of its technical terms, extracted from the works of Dr Linnaeus" (Ross 2010, p. 227)). In a letter to Andreas Holt, dated October 1780, Smith reported that while he was writing *Wealth of Nations* he was also "studying Botany (in which however [he] made no great progress)" (Corr. 208, p. 249). But it is almost certain that Smith was acquainted with the works of Linnaeus well before this time, as there are four references to that author in 'External Senses' (§ 70, 71, 77 and 83, p. 162-6), which the Glasgow editor of this essay, based on the references it does and does not contain, considered to be one of Smith's earliest known works, having probably been written in the 1740s (Wightman 1980, p. 133-4). As Schabas (2003, p. 273) notes, Smith also used Linnaeus' classifications of living beings into "Genera and Species" in 'Astronomy' (II.1-2, p. 38).<sup>46</sup> The portion of that essay in which Smith makes these observations is estimated by Raphael and Skinner (1980, p. 6-8), based on various evidence, to also have been composed in the late 1740s.<sup>47</sup>

On the possible cross-influence of Linnaeus and the political economists, Müller-Wille (2003, p. 167) holds that:

it is not necessary to assume that Linnaeus was 'influenced' by Quesnay or any other economist of his time. To my knowledge, there is no evidence that he ever read any of the economic works of his day (cf. Koerner 1999, 2). Rather the converse seems probable, that Quesnay knew the work of Linnaeus and other naturalists of his time .... John Locke had a medical background as well and kept a herbarium (Coleman 2000); Jean-Jacques

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<sup>46</sup> There does not appear to me in this passage, however, to be any notion of the "adaptiveness of species", which Schabas (2003, p. 273) also perceives Smith to have observed therein.

<sup>47</sup> Schabas (2003, p. 273) further remarks that Smith also had in his library Benjamin Stillingfleet's 1759 translation of Linnaeus' *Oeconomy of Nature*. Linnaeus' *Politia naturae*, the essay which contains the passage quoted at the beginning of the chapter this note is annexed to, does not figure in Smith's library, so he may or may not have been acquainted with this particular passage.

Rousseau practiced botany late in his life and was a devoted admirer of Linnaeus (Cook 1994); and Adam Smith was "studying Botany" as a pastime while writing his *Inquiry into the Nature and Causes of the Wealth of Nations* . . . Yet it is equally unnecessary to postulate any 'influence' in this converse direction, as both Linnaeus and the 'economists' just mentioned had a sufficiently common background in belonging to a scientific community that shared certain methodological vantage points, both in theory and practice.

Müller-Wille (*ibid.*) is much less reserved in attributing to the Linnaean "œconomy of nature" (later renamed "œcologie" by Ernst Haeckel) a significant role in the work of Charles Lyell and Charles Darwin.<sup>48</sup> If we accept the possibility of an actual influence of Linnæus on Smith — As Müller-Wille suggests but then dismisses as an unnecessary supposition — this would thus also be an important link to take into account in the much-discussed Smith-Darwin connection (Schweber 1977, 1980 ; Gordon 1989 ; Marciano & Pelissier 2000). Rausing (then Koerner 1999, p. 102), more resolute on the actual influence of Linnaeus, with particular reference to Smith, writes in this sense:

Adam Smith, upon reading the great botanist, imports the cybernetic concepts governing Linnaeus' natural theology into his human economics of the "invisible hand," and Charles Darwin in turn re-imports Linnaeo-Smithian conceptions of the economy and its self-regulatory features into the realm of nature.

Rausing further remarks that "Linnaeus himself stands outside that more general reception of his thought" as he did not, himself, import those "cybernetic concepts" from his "natural theology" into his "national economics". Linnaeus indeed favoured autarky over free trade and did not believe the "human economy", as opposed to the "divine economy" (of nature) to be self-governing (Koerner 1999, p. 96-102; see also Rausing 2003).

Smith quite evidently believed there was something to infer from the natural world for the understanding of human society, as attested by his many statements classifying humans as a particular species of animals, sometimes to liken man to other animals, sometimes to distinguish him from them. In the first category, we must put his statement that "men, like all other animals, naturally multiply in proportion to the means of their subsistence" (WN I.xi.b.1, p. 162); in the second category, his depiction of the "propensity to truck, barter, and exchange" — which

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<sup>48</sup> Darwin of course read Linnaeus. He was also a member of the Linnaean society, in front of which he presented his work for the first time.

he singles out as the origin of the division of labour — as being “common to all men, and to be found in no *other* race of animals” (WN I.ii.1-2, p. ).<sup>49</sup>

This distinction by Smith, between humans practising exchange by their very nature, and (other) animals being incapable of doing so, and, in so far as the division of labour is based on exchange, division of labour hence being a distinctively human trait, is rather odd (and one is tempted to believe that had Smith studied zoology instead of botany, he would probably not have drawn this particular distinction), given how widespread the phenomenon of the division of labour in fact is in the animal world (notably the extremely intricate division of labour among social insects such as ants, bees, wasps and termites).<sup>50</sup> Possibly, the denial of division of labour among animals by Smith is justified by the rather restrictive conception of the division of labour that he held, meaning a substantial amount of specialisation of occupations (Meek & Skinner 1973, p. 1109). Yet, even this strict conception of the division of labour would still apply to the above-named species of insects. The beehive had indeed already been chosen as metaphor for the division of labour in society in Bernard Mandeville *Fable*. Another possibility is that Smith here implicitly draws a distinction between the division of labour between humans and between other social animals based on his own conception of the cause and effect of the division of labour among humans, developed in the same chapter. Inequality between humans, according to Smith, develops out of the division of labour rather than being at its origin. In social insects, he may have believed, the different social functions are largely biologically determined (such as in canines, which he singles out for contrast; he did not recognise, however, that the stark difference between different races of dogs was mainly the effect of age-long human breeding). Yet, even here, the animal world gives examples of

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<sup>49</sup> Smith also sometimes referred to men as animals to convey, it seems, irony or derision, or add dramatic effect; as when writing about politicians at: “that insidious and crafty animal, vulgarly called a statesman or politician” (WN IV.ii.39, p. 468); or when speaking of the usefulness of alcohol in *Lectures on Jurisprudence*: “Strong liquors are almost a necessity in every nation. . . . Man is an anxious animal and must have his care swept off by something that can exhilarate the spirits” (LJ(A) vi.85, p. 363; LJ(B) 231, p. 497). See also in the Anderson Notes: “the most tender of all animals, viz infants” (Meek 1976a, p. 476).

<sup>50</sup> Ahmad (1996, p. 443, fn. 3) holds that “Marx (1844) places the division of labor even prior to exchange, since it is practiced within the family where no explicit exchange takes place, and even among other creatures, whom Smith explicitly excludes from the possible practitioners of exchange. Bees are an obvious example.” I have, however, found nothing to this effect in Marx (1844). Marx mentions bees, but not in connection with the division of labour, but rather to — like Smith — *distinguish* animals from men, who, at the difference of animals, produce not only for mere necessity. (Neither is the family mentioned by Marx in connection with the division of labour in the work Ahmad cites.)

precisely the mechanism of the creation of inequality by the division of labour described by Smith, such as, again, in bees. That queen bees are genetically identical to worker bees could not have been known by Smith of course, but the history of beekeeping commences at least three millennia before Smith's time (Kritsky 2017), documented notably by Aristotle, and that queen bees were bred out of regular bee larvae was likely known among beekeepers in the 18<sup>th</sup> century Scotland.

In so far as Smith was arguably the most important proponent of the concept of the division of labour in political economy, which influenced Darwin's conception of evolution (Schweber 1977, 1980 ; Marciano & Pelissier 2000), Smith was, inter alia, himself instrumental in favouring the import of the concept into biology, where it is today routinely used (maybe more so than in economics, where it has long been abandoned as a meaningful theoretical tool<sup>51</sup>) — ironically, given Smith depiction of the division of labour as a distinctively human trait.

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<sup>51</sup> See General Introduction (p. 27 above).



# Chapter 4

## **Smith and Marx versus Malthus and the Beckerians on the Demographic Transition and the Industrial Revolution**

### **1. Introduction**

The title of the present chapter will provoke some by the crass anachronism it appears to espouse. Neither Smith, nor Malthus, nor Marx, had a precise notion of the demographic transition, of course, and neither Smith nor Malthus had a concrete grasp of the Industrial Revolution. Nor could they have had any kind of precise knowledge of these historical phenomena, which only started to unfold during the latter part of their lives (with the exception of the Industrial Revolution for Marx, which was already well underway in Britain when he wrote). Nor is this what is claimed in this chapter.

In recent years, there has been a resurgence of the theme of the demographic transition in the economics literature, this theme being related to the question of the industrial revolution and economic development in developing countries in the 20<sup>th</sup> and 21<sup>st</sup> centuries. The demographic transition was often mentioned in economic texts of the 1950s and 1960s, when the broader theme of economic development was also more central to economists' writings, but had seen a relative disinterest from the part of economists during most of the rest of the 20<sup>th</sup> century. The way this phenomenon is approached in recent years, however, is a direct development of the "New Home Economics" which had arisen in the 1970s as an expansion of Gary Becker's "Economic Analysis of Fertility" (Becker 1960), culminating in his *Treatise on the Family* (Becker 1991 (1981)). This literature did *not* consider the question of the number of children per family (and related ones of choices in mating, marriage and reproductive behaviour) in the context of economic development. Although this was mostly implicit, the context was one of industrialised countries. It was also a micro-economic framework which abstracted from considerations of society-wide and historical phenomena and developments. In recent years, however, the way of theorising reproductive

behaviour characteristic of the “New Home Economics”, with the Beckerian “economic” way of reasoning as basis (the term having been employed by him in a presentist sense referring to the behavioural model of 20<sup>th</sup> century mainstream economics), was applied to an analysis of such macro-economic and macro-historical phenomena as the demographic transition and the industrial revolution. Examples are Lucas (1996), Galor and Weil (2000), Galor (2005), Bar and Leukhina (2010), and the literature around the “demographic dividend” (Mason 1988 ; Kelley & Schmidt 1995 ; Higgins & Williamson 1997 ; Bloom & Williamson 1998 ; Bloom et al. 2001).

The first exposition of the precise sequence of events that constitute the demographic transition, and the prediction that it would proceed in a similar manner in all human societies, is attributable to three authors, who apparently had not read each other (Kirk 1996): William Thompson in 1929, Adolphe Landry in 1934 and Frank Notestein in 1945.<sup>1</sup> Simply put, the theory states that every society, as an intrinsic part of its socio-economic development (its “modernisation”), will proceed from a pre-transitional stage, where both fertility and mortality rates are high, to a post-transitional stage, where both are low. The transition itself is characterised by a stark decline in mortality, followed after a certain delay by a strong fall in fertility, with population growth occurring in the interval.<sup>2</sup> This theory of the demographic transition was essentially an observation of what had actually taken place in the industrialised countries up to this date. The

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<sup>1</sup> A large part of Landry’s 1934 book is constituted of texts already published as articles in 1909, 1924 and 1933. In parallel with Notestein, Kingsley Davis (1945) published a brief article in an issue of the *Annals of the American Academy of Political and Social Science* solely dedicated to demographic matters, of which he was the editor. The title of the article, ‘The World Demographic Transition’, is possibly the origin of the term.

<sup>2</sup> Adolphe Landry and William Thompson, unlike Notestein and later writers, did not think that population growth would stabilise around zero but that fertility would pass below mortality and population consequently decline, which is what effectively happened in some industrialised countries (some compensating the decline by immigration). Demographers are today divided over the temporary or permanent character of this decline. Landry attributed the fall of the Roman and Egyptian empires to population decline; he thus thought a demographic transition had already occurred there. Fertility and consequently population declined, he thought, and was progressively replaced by immigrants from the conquered nations. Both Thompson and Landry also saw this as the risk attached to declining fertility in Europe. The same idea had been developed by Ibn Khaldun in the 14<sup>th</sup> century, who also attributed the decline of societies to a decrease of their population and their subsequent invasion by surrounding tribes. Alarmist theses like those of Landry and Thompson continue to be defended today mostly by political parties on the extreme right. When Landry was writing, the French fertility rate was indeed fairly low, which worried many observers. But it redressed and is today the highest in Europe.



theory did not point out in any detailed way what were the underlying causal mechanisms.<sup>3</sup>

The precise mechanisms underlying the demographic transition have been the subject of much debate since. The conceptions of many economists today still, however, can actually be traced back directly to the classical wage doctrine. In the modern literature, one can still find many references to (although seldom citations of) Malthus. Malthus is thereby presented as a sort of monolith, sole representative of the whole of economists' writings on population throughout the 18<sup>th</sup> and 19<sup>th</sup> century, totally disregarding the great controversy that his ideas on population — themselves having been many times previously expressed in various ways, and as often times disputed — stirred in their midst. In this extraordinary act of historical simplification, the other prominent classical writers are simply “Malthusianised” for convenience (as denounced notably by Himmelfarb 1984 ; the expression is by Winch 1995).

Smith, Malthus and Marx (who in most aspects resembles Smith in this regard), and the recent literature cited above, which is linked to Malthus' (an affiliation with Malthus was claimed by Becker in 1960), are picked out here for closer scrutiny in order to highlight two main points of divergence of the Malthusian from the Smithian and Marxian positions. The first is the predominant attention paid to fertility by the Malthusians, while Smith and Marx were more concerned with mortality (and morbidity). The second is the belief in decreasing returns to population, while in the Smithian framework (adopted by Marx) there are increasing returns to population size and concentration via the productivity-enhancing effects of the division of labour, largely ignored (or dismissed) by Malthus and the Malthusians. When the two points are combined, the Smithian and Marxian position offers a radically different way of theorising the interaction of population growth and economic development, which, it is held, is much more in line with historic and contemporary developments than the Malthusian theory that features so prominently in the economic literature to this day.

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<sup>3</sup> “Stripped to essentials [demographic transition theory] states that societies that experience modernization progress from a pre-modern regime of high fertility and high mortality to a post-modern one in which both are low. The term 'modernization', is not defined, nor does it include the crucial questions about causation that form the subject of much modern demographic literature” (Kirk 1996, p. 361) . Notestein and others however identified urbanisation and industrialisation as important factors.

## 2. Smithian Ambiguities

Adam Smith saw population growth as a response to a higher labour demand, this demand being expressed through a rising wage level. The idea had been expressed similarly by Richard Cantillon, whom Smith cites. In this framework, supply of labour does not manifest itself principally through the willingness of workers to work more or less, which is what has been retained in the contemporary (neoclassical) version, but through actual supply of workers, i.e. their births and deaths, which is a point all classical economists shared. In times of higher wages more of the workers' children (and more workers) would survive, and in times of lower wages more of them would die, which thus would make the wage rate return to its "natural" level. In his explanation of the link between wages and population growth, however, Smith was not utterly specific.

In an observation about North America, Smith thus first held that the high wage rate prevailing there was the main motivation for bearing children and therefore early marriage:

Labour is there so well rewarded that a numerous family of children, instead of being a burthen is a source of opulence and prosperity to the parents. The labour of each child, before it can leave their house, is computed to be worth a hundred pound clear gain to them. . . . The value of children is the greatest of all encouragements to marriage. We cannot, therefore, wonder that the people in North America should generally marry very young. (WN I.viii.23, p. 88)

Smith thus believed that high wages were an incentive to marry, and marry young, in order to have (more) children and send them to work, so the high wages of the children could contribute to the income of the household. On the other hand, Smith noticed that wealth, especially that of women, could limit fertility:

Poverty, though it no doubt discourages, does not always prevent marriage. It seems even to be favourable to generation. A half-starved Highland woman frequently bears more than twenty children, while a pampered fine lady is often incapable of bearing any, and is generally exhausted by two or three. Barrenness, so frequent among women of fashion, is very rare among those of inferior station. Luxury in the fair sex, while it enflames perhaps the passion for enjoyment, seems always to weaken, and frequently to destroy altogether, the powers of generation. (WN I.viii.37, p. 97)

If we consider these two quotes from Smith in terms of the determinants of population growth, i.e. fertility and mortality, an imprecision in his thought

becomes apparent. Indeed, the first passage tells us that high wages in North America made large families an economic asset, and inversely, it is implied, large families are a “burthen” where this is not the case (where wages are low), and that *this* is the reason for people in North America to marry young. Marrying young, seems to be implied, makes it possible to have more children, i.e. to raise the couple’s fertility. Smith thus draws a link between the intensity of the desire for children (augmented by the potential gain to be obtained from their labour) and a younger age at marriage, suggesting that the younger couples marry, the more children their marriage will produce, i.e. the higher the couple’s fertility. This, however, stands somewhat in contradiction with the second passage quoted above. It is indeed contradictory that a higher wage should increase fertility, on the one hand, as we have just deduced from the first quote, but that wealth should reduce fertility, on the other hand, as the second quote implies.

Of course, Smith was reasoning in terms of social classes that were rather stable. Social mobility was not very developed in 18<sup>th</sup> century Britain. It was rare for an individual to be born a “half-starved Highland woman” and become a “pampered fine lady” during her fecund lifetime. And, then as now, one would hardly, if ever, become rich through wage labour. Smith could therefore well regard fertility to be universally high among the poor and low among the rich, without having to worry too much about the fertility of individuals that would pass from one category to the other, as these were rare. Still, if one observes a negative relationship between fertility and material well-being, it is contradictory to affirm at the same time that higher wages should *raise* fertility. Smith indeed explicitly considered high wages in connection with raised material well-being for the labouring population.

Smith does not seem to consider any adaptation of reproductive behaviour to higher wages of couples that are already married. It appears, indeed, that Smith saw the rate of conception of children (through time) as a constant. Hence the only way for couples to increase fertility would be to increase the length of their union, which explains the link Smith draws between the desire to have (more) children that could be sent to work for higher wages and the desire to therefore marry young. Whether Smith was aware of the possibility for couples to exert some control over their reproductive behaviour at any given moment of their union (hence not solely by its length) is of course up for debate. He himself was never married and might not have given this question much thought at all. His observation about “fine pampered lad[ies]”, however, seems to suggest that he knew that at least the rich had ways to control their fertility. Malthus followed Smith in seeing the rate of conception of children as a constant, and therefore

advocated delaying marriage as a “preventive check” on couple’s fertility (while refusing to consider birth control as such).

To obtain more precision about Smith’s thoughts on these matters, one must look at a further passage in the *Wealth of Nations*, following shortly after the one quoted above (WN I.viii.37, p. 97). It becomes apparent therein that Smith saw population growth as a function of wages, principally, not because of the effect of higher wages on fertility, but because of their effect on mortality. Families would be more numerous when wages are higher because this would permit them to keep more of their children alive, not because they would bear more children. Hence Smith’s sentence, quoted by Malthus in the preface to his second essay, “every species of animals naturally multiplies in proportion to the means of their subsistence, and no species can ever multiply beyond it”, is directly followed by a qualification:

But in civilized society it is only among the inferior ranks of people that the scantiness of subsistence can set limits to the further multiplication of the human species; and *it can do so in no other way than by destroying a great part of the children which their fruitful marriages produce*. The liberal reward of labour, by enabling them to provide better for their children, and *consequently* to bring up a greater number, naturally tends to widen and extend those limits. (WN I.viii.39-40, 97-8)

Smith here first observes that “poverty . . . seems even to be favourable to generation” (I.viii.37). He rightly deduces that “among the inferior ranks of people . . . the scantiness of subsistence can set limits to the further multiplication of the human species . . . in no other way than by destroying a great part of the children which their fruitful marriages produce” (I.viii.39), i.e. that poverty limits population growth exclusively by raising mortality, not by reducing fertility.

Yet, this does not fully resolve the incongruity. First, Smith’s explanation of mortality being the sole determinant of family size stands in conflict with his own earlier assertion that higher wages are an incentive to marry young and thereby increase fertility. Second, even if the number of children labourers have is determined solely by the infant mortality rate, which itself depends on the wage rate, then fertility (at least among the lower classes) must be considered a constant. And this still stands in conflict with Smith’s observation on the negative influence of wealth on fertility. Indeed, if fertility is a constant, then it cannot vary according to material well-being. If fertility varies according to material comfort, on the other hand, then it can have as much of a bearing on population growth as can mortality. Smith neglected this. He did not take into account that the negative effect of rising material well-being on fertility that he himself pointed out could

well result from higher wages, which could thus potentially reduce, rather than increase, population growth.

This neglect does not necessarily disturb the general framework of Smith's theory, as applied to the context of 18<sup>th</sup> century Britain. Indeed, to be able to result in lesser population growth and hence the abortion of Smith's theory of labour market adjustment, the reduction in fertility during times of higher wages would have had to be so strong as to compensate for the reduction in child mortality that increased well-being also brings about. In Smith's time, this was probably not yet the case anywhere. After Smith's death, however, (infant) mortality decreased in Europe to an extent Smith could hardly have foreseen. In that context the negative effect of wealth on fertility that Smith observed comes increasingly to stand in conflict with the positive effect of wealth on population growth that Smith theorised. Thus, while Smith's incongruity did not invalidate his theory of the interaction of wage and population growth with regard to 18<sup>th</sup> century Britain, it does invalidate this theory as a general theory independent of historical conditions. This points to Marx's critique of Malthus: that an abstract population law cannot exist for humans independently of historical conditions (see section 3 below).

As later demographic developments unfolded in Europe, repeated since in all other regions, it became more and more apparent that there indeed exists a negative correlation between fertility and income. This, however, does not inform us on the direction of causality between the two (or whether there is in fact such a causality). Smith's ambiguities can be thought to have given rise to both of the two converse explanations offered for the relationship between fertility and incomes by Malthus and by Marx. It appears, indeed, that, at least in their premises, both the views of Marx and Malthus on the relation between income and fertility — however diametrically opposed — can be found in Smith. Malthus thought of high fertility as a factor of impoverishment; consequently, the fall in fertility could be seen as a factor of rising wealth. Marx thought on the contrary, that poverty was the reason for high fertility, hence that causality ran in the opposite direction, and offered an explanation for it.

### **3. Malthusian Explanations of the demographic transition — fertility decline as the cause of income rise**

Malthus saw children merely as a cost to parents. He also thought that it was the natural desire of man to have as many children as he possibly could. Malthus

concluded, therefore, that a rise in wages would not make workers better off, but that they would only have more children as a result, which would cancel out any higher material well-being that they could otherwise have gained through this pay-rise. As Malthus did not, like Smith, believe in increasing returns to a larger labour-supply (population), but on the contrary in decreasing ones, he also thought that the additional child-bearing of parents earning higher wages was a factor of impoverishment, rather than enrichment, as much for the households themselves as for society as a whole. This mechanism, then, would ensure that the poor would always stay poor, and that any attempt at the betterment of their condition through policy measures would turn against society as a whole, by depressing overall productivity through excessive population – a bleak response to Godwin’s (1793) and Condorcet’s (1794) prospects of the voluntaristic progress of society toward increasing equity, well-being and equality.<sup>4</sup>

Malthus was heavily criticised after the first edition of his essay (1798) — written in the form of a pamphlet with very few references and original data and unsigned (but he was quickly identified as the author) — for presenting a dilemma between food availability and population growth, but refusing to consider any solutions other than catastrophe, euphemiously termed “positive checks”. He was notably opposed to any measures of birth control, which he thought of as blasphemous.<sup>5</sup> Malthus reacted to his critics by offering, from the second edition of his essay (1803) onwards, a text much broader in scope and extent of original research and referencing, and developed the theme of “preventive checks” to population growth, mainly in the form of delayed marriage (and, also, prostitution<sup>6</sup>). The position today commonly thought of as “neoMalthusian”, the promotion of birth control and family planning measures in developing countries, was never accepted as an option by Malthus himself. The justification of this

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<sup>4</sup> The role of human knowledge and reason, on which Godwin and especially Condorcet based their argument, however, was ignored by Malthus, therefore his theory does not as much represent a response as a simple rejection of Godwin’s and Condorcet’s views. Indeed, Malthus takes up and develops what Condorcet had already described as the menace facing humanity in the absence of the expansion of human knowledge and reason; the latter was, however, the central feature of Condorcet’s theory. The opposition between the two authors thence really boils down to the changeability or unchangeability of human nature, a theme that would be taken up again by Marx, in stark opposition to Malthus precisely on this point.

<sup>5</sup> The reasons for this, directly related to Malthus’ economic theory, were analysed in the first chapter. See above p. 142.

<sup>6</sup> Smith had also exposed a belief in a negative effect of prostitution on population growth, in his lectures on jurisprudence (LJ(A) iii.95, p. 178). This seemed to have been a common belief in the 18<sup>th</sup> century.

position, however, remains a direct following of his line of thought. In this perspective, if excessive population growth is the main element holding back the growth of per capita income, as Malthus argued, then it should suffice to cut back the population growth rate to achieve higher per capita economic growth.<sup>7</sup>

In a 1997 lecture at Yale University, Robert Lucas underlined the necessity to understand the sustained income per capita growth since about 1800 in industrialised countries, after millennia of stagnation, in terms of the demographic transition (Lucas 1996). Lucas depicts the neoMalthusian worry about population eventually outstripping resources as “simply nonsense” (*ibid.*). Population has been rising, he points out, and so has income. Moreover, if current trends in the growth of population and income were extrapolated into the past, we would obtain quite ridiculous results. Today’s situation in the developing countries, like the one of Europe during the industrial revolution, thus has to be understood in terms of a transition. The event Lucas identifies as the salient feature of this transition, however, is the decline in fertility. It is the decline in fertility, Lucas advances, that made incomes finally outstrip population growth, after the millennia where population growth has kept up with income growth. In other words, Lucas thinks that for the millennia preceding the demographic transition, the relationship between population and economic growth was basically “Malthusian” (economic growth was “consumed” entirely by population growth), but that at some point fertility started to decline and that this is what finally made incomes rise more than proportionally to population. Recent models that have followed Lucas’ account about the relation between the demographic transition and the Industrial Revolution (Becker, Murphy, & Tamura 1990b ; Galor & Weil 1999 ; Mokyr 2005), use the same Malthusian logic of the relationship between population and economic growth.

A Malthusian outlook is also observable in recent work about what has been dubbed the “demographic dividend”, where it is held that the period of fertility decline, i.e., the second phase of the demographic transition, by reducing the number of young dependents, is an opportunity for countries to realise larger investment, as a larger working age population relative to the total population will

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<sup>7</sup> It should be noted that this view rests on the additional assumption that the total economic growth of a region itself is independent of the size of the population. It is only under this condition that it is possible to augment per capita economic growth by reducing the population. When the link between economic growth and the division of labour, and the link between the division of labour and the extent of the market, determined in large parts by the size and proximity of the population (i.e. Smith’s view of economic growth), is upheld, however, this view must be rejected. The neoMalthusian perspective, in other words, is incompatible with Smith’s theory of economic growth by division of labour limited by the extent of the market as laid out in Chapter 2.

realise larger savings. Earlier, Coale and Hoover (1958) had made the same argument in reverse for India and Mexico: the high number of dependents, Coale and Hoover advanced, inhibited savings and thus investment and ultimately economic growth. The demographic transition, indeed, has an important influence on a population's age structure. During the first phase of the transition, only mortality falls, which concerns chiefly infant mortality, and this makes the proportion of children in the population rise. The dependency ratio, i.e. the ratio of the fraction of a population too young and too old to work — referred to as “dependent” — to the working-age population (by definition the ages 15 to 59), thus rises. Coale and Hoover advanced that then-high dependency ratios in India and Mexico were an obstacle to economic growth in these countries and that economic growth would be enhanced if fertility was reduced (which would reduce the proportion of children). Their argument was inspired by the life-cycle consumption models of Brumberg and Modigliani (1954) and Friedman (1957), which hold that individuals consume during their whole life but save only during their working life, as well as by the Solow (1956) model and the general belief in the importance of savings (and conjointly investment) for economic growth. The recent literature about the “demographic dividend”<sup>8</sup> focuses instead on the phase in the demographic transition whereby working-age population comes to exceed the non-working-age (dependent) population for a certain time as a result of declining fertility. Following the argument of Coale and Hoover, this particular period of time is supposed to offer great opportunities of increased growth and development. One of the recommendations is therefore to sustain efforts in fertility reduction, notably in Africa, through family planning programs.

The problem with this analysis, as John C. Caldwell (1976) convincingly argued, is that it takes people's fertility behaviour as an irrational response to economic conditions.<sup>9</sup> Economists, generally holding dear to the hypothesis that people are rational, should be sensible to this. Indeed, if people could escape poverty by simply having fewer children, it would be quite irrational to have many — unless people really wanted to be poor, or were simply “primitive”, hence irrational, which is indeed what Malthus believed.

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<sup>8</sup> Alternatively referred to as the “demographic bonus”, “demographic gift” or “demographic window” ; see for instance Mason (1987); Higgins and Williamson (1997); Bloom, Sachs, Collier, and Udry (1998); Bloom and Williamson (1998); Bloom et al. (2001); Mason (2001); Malmberg (2006).

<sup>9</sup> Caldwell made the same reproach to the original formulations of demographic transition theory, in which Notestein in particular — and Caldwell cites many others following him — had seen the demographic transition as part of a general move toward a more rational apprehension of the world by hitherto primitive societies.



The “New Household Economics” initiated by Becker (1960) hold that fertility falls when parents replace child quantity with “child quality” (i.e., investment in their children’s human capital – meaning mostly education for Becker). Following from the general microeconomic framework underlying the “New Household Economics” literature, this begins to be the case when returns to human capital start becoming high in society – which they would be in an urban industrial society. Becker saw his theory basically as an extension of Malthus’:

Malthus’ famous discussion was built upon a strongly economic framework; mine can be viewed as a generalization and development of his . . . I will try to show that the theory of demand for consumer durables is a useful framework in analyzing the demand for children. (Becker 1960, p. 209-11).

This view of Becker (1960,1991 (1981)) that children could be considered consumption goods, however, would imply that in poorer societies people should actually have *fewer* children. Indeed, if rearing children is costly, and if it is held that people naturally desire to have as many children as possible, as Malthus thought, then the rich should have more children than the poor. Yet today the rich in general seem to have fewer and not more children than the poor, as Smith already noted to be the case in the 18<sup>th</sup> century. Becker’s theory resolves this patent conflict with reality by introducing ‘human capital’ into the explanation of fertility decisions and positing a trade-off between “child quality” and child quantity. As human capital becomes more valuable, parents would start investing more in the human capital of their children and have fewer children to compensate for the costs of these investments. That is, this trade-off would weigh more than the pure demand-framework just laid out, so much so as to revert it: the rich would as a result of it have less rather than more children than the poor (as is observed in reality).

For what reason returns to human capital augment, however, is not identified by the theory. While an urban industrial society is identified as being the one where returns to human capital would generally be higher, indeed, this does not explain how a society passes from an agricultural subsistence economy to an urban industrial one. With regard to this augmentation or “improvement”, in other words, the “New Household Economics” are not less vague than were the early theorists of demographic transition with regard to the meaning of “modernisation” and the cause of fertility decline.

In a comment on Nerlove (1974), Griliches (1974) observed what he thought was the “main shortcoming of the “new home economics””:

The basic postulates are that children are goods, that all goods are subject to two constraints—time and money—and that children are relatively time-intensive goods. But this does not distinguish children from hi-fi sets! . . . My belief is that if we want to study the demand for children, we have to put more content into the theory and start asking why do people want to have children; what are the returns and not just the costs of this activity? . . . If we are studying the demand for children rather than for hi-fi sets, we have to ask ourselves what it is about children that distinguishes them from other time-intensive durable goods. . . . I would distinguish at least three interdependent motives: (1) economic security (current labor and old-age provisions), (2) the production of reciprocal caring, and (3) an attempt at immortality via one's offspring.

Griliches' motives are in line with Marx's analysis rather than with Malthus's.

#### **4. Marxian explanations of the demographic transition — income rise as the cause of fertility decline**

For Malthus, the poor were the cause of their own poverty because they reproduced too much in the face of limited food supply. Marx pointed out that the inverse relationship was true: it was because people were so destitute that they had such a high fertility rate. Marx observed that children's work is the more necessary in order to sustain the family household the more the household is poor, and that this is the primary motive for having children. This also implies that there can be no trade-off between having many children and spending more on a few. The money to spend on children, whether few or many, is not available in the first place. Children, on the contrary, are supposed to complement the household's income. The level of income must therefore rise *first* before a reduction in fertility could occur. It is clear, then, that income cannot rise as a consequence of fertility decline. It is the rising income that brings about the fall in fertility, and not the inverse.

Malthus's "principle of population" rested on two assumptions. One was explicitly postulated by him: the passion between the sexes and hence human reproduction could be considered a constant. The second was implicit but was later developed by Malthus, and was to be more consequentially exposed by Ricardo a few years later: the law of diminishing returns. Engels refuted this law by the invocation of science (see above, p. 142). Malthus' postulate concerning human reproduction, moreover, was rejected by Marx for its ahistorical character. As for

Godwin and for Condorcet, so for Marx, human nature was not a constant, but was itself subject to change. Marx pointed out that there were no natural laws that apply to man outside the precise historical context in which he evolves:

every particular historical mode of production has its own specific historically valid laws of population. An abstract law of population exists only for plants and animals (as long as man does not intervene historically). (Marx 1996 [1887], p. 626)

Marx held that as capitalism had brought the larger number of people into relationships of employment (he defined the advent of capitalism as the moment when labour was commodified), those people that were on the employee side of the relationship, i.e. those that were thus deprived of capital and had little prospect of acquiring it, would attempt to accumulate the only factor of production that they could bring under their control: namely labour. Hence having a high number of children was motivated on the part of parents by the possibility to make them work and thus complement the family's income, and to be able to continue perceiving an income in old age, there being no generalised pension system as yet. In other words, Marx saw childbearing and -rearing as an investment on the parts of parents, not as a mere expenditure as did Malthus.<sup>10</sup>

That the children of the poor would work was the normal state of affairs in Europe until the late 19<sup>th</sup> century. Wages for children were lower than for adults, even when carrying out the same work than adults or work that adults could not (some machines having been specifically designed to be possibly operated only by children). The cost of maintaining children, however, was merely the cost of food, which was lower than the wage (or other income) that children could earn. The lower the wage, then, the more pressure rested on workers and their spouses to have more children, so as to be able to pay for food and shelter at least for themselves and the children they already had. A higher wage would instead release this pressure, and couples might be content to have fewer children instead of many, which would crowd already small accommodations. Thus Marx brought forth an explanation for what Smith had observed without being able to properly incorporate it into his theory: that poverty seems to further both mortality and fertility and wealth limit them both — an observation in line with modern demographic transition theory, where rise of living standards is taken as one

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<sup>10</sup> Brezis and Young (2003) devise a model of the demographic transition in which children are represented as “production goods”, in line with the Marxian analysis. This, they hold, can better explain the demographic transition than a Malthusian view representing children as “consumption goods”.

explanatory variable of the passage from high death and birth rates to low death and birth rates (Burkett 1998).

It is still an integral feature of societies in developing countries today that children work for the household or community, and often very hard. Widespread child labour and particularly such phenomena as street kids, child prostitution and child soldiers trouble the observer from industrial societies, where these phenomena have largely disappeared today. They were equally present in today industrialised countries during their own demographic transition, however, as the literature of the time (Dickens, Hugo, Zola...) amply testifies. Also, homelessness, prostitution and warfare are still features of industrial societies, but the difference in the age structure makes these phenomena be largely (though certainly not exclusively) confined to the adult world. It is evident that in societies where the majority of the population is still below the age of 20, the different occupations will also be carried out to a larger degree by people of young age than in those societies where the mean age is much higher.

The neoMalthusian reaction to this situation is to prescribe birth-control programs with the goal of reducing the fertility rate so as to lower the proportion of children in these societies. In the Marxian perspective, by contrast, measures to limit fertility before incomes have risen are likely to accentuate the phenomenon of child work rather than to reduce it. The lessened income accruing to households which will have had fewer children as a result of these measures would indeed lay even more pressure on the remaining children to provide for the household.

Other factors have to be taken into account, moreover, in line with the general transformation of society that took place during the demographic transition in Europe and again recently in Latin America and East Asia. The setting up of a generalised system of old-age care (relieving the necessity of having children to provide in old age) has thus notably accompanied the fertility-transition in all countries that have today reached low fertility. This coincidence of the society-wide change in reproductive behaviour and the structural change of the political-economic system which the rise of attributions of the public sector represents is in line with Marx' analysis of human reproduction as being conditioned by the historical evolution of the system of production. As Taylor (1998) notes, the large size of the public sector in all contemporary industrial societies would have amply sufficed for Schumpeter to consider these economies as "socialist", in line with his (2003 [1943]) predictions of the fate of capitalism. In this perspective, Marx's and Engels' predictions that the birth rate would naturally decline in such "socialist" societies are confirmed.

Furthermore, as has become apparent from the consideration of Smith's wage theory above, fertility cannot satisfactorily be analysed in isolation from mortality when population growth is considered, as the latter is always determined jointly by these two variables. The (neo)Malthusian perspective in fact pays insufficient attention to the role of mortality.

## **5. The critical role of mortality**

The predominant attention given to fertility is a salient characteristic of the Malthusian tradition. As Chesnais (1985) argued, this preoccupation with fertility is an obstacle to a proper understanding of the demographic transition. It diverts attention from the fact that what has historically preceded fertility decline, often by a considerable time span, is always a decline in mortality, of which the implications for a developing country are much more considerable than the decline in fertility, which comes into the picture, indeed, only once a country has already gone through the great part of the process. Marx, and Smith, in contrast, paid close attention to mortality and morbidity. The high mortality rate of children and adults in the cities of industrialising England indeed are a central feature of Marx's critique of capitalism.

Looking exclusively at fertility will inevitably give a very partial view of both historical demographic developments and the current situation of Sub-Saharan Africa and other regions. It is the fall in mortality which marks the beginning of the demographic transition and it is this fall in mortality which is primarily the main determinant of population growth, which in turn is the principal agent for the growth of the labour supply. For an illustration of this point, it is useful to consider a contribution by Nerlove (1974; on which Griliches [1974] mentioned above is a comment), who made some pioneering "speculations on how the "new home economics" may be integrated in a theory of economic growth and development". From these "conjectures and speculations", he held, the "outlines of a revised Malthusian model begin to emerge, albeit dimly," which he described thus:

In this model, the value of human time and changes in that value over time are pivotal, and the limitations imposed by natural resources are mitigated, if not eliminated, by technological progress and increases in the stock of knowledge and of capital, both human and nonhuman. . . . [T]he increased value of human time results in fewer children per household, with each child embodying greater investments in human capital which in turn result in lower mortality and greater productivity in the economically active years. Such greater productivity in turn further raises both the value of a

unit of time and income in the subsequent generation and enables persons of that generation to make efficient use of new knowledge and new physical capital. . . . over time the model does predict in rough qualitative fashion declining rates of population growth (perhaps eventually zero rates or even negative rates for a time) and declining rates of infant mortality. These are the main features of the demographic transition. (emphasis added)

What is apparent from the passages put in italics (by me) is that the “New Household Economics”, as outlined here by Nerlove, represent mortality decline *as a result* of fertility decline, or at least as subsequent to it. This totally inverts the sequence historically observed in all societies during roughly the past two and a half centuries! It is a matter of common sense, moreover, that before other factors come into play, the primary condition for the reduction of fertility can only be the reduction of mortality, and in particular of infant mortality. Before mortality declines, there can be no question of having fewer children, as having many children is a necessity simply for generations to renew and avoid population decline<sup>11</sup>.

Further, what is apparent from the passage just quoted is that technological progress is regarded by the “New Home Economics” literature (as by neoclassical/modern mainstream economics generally) as an exogenous factor. This is not the case in the Smithian nor the Marxian model (Marx having adopted the Smithian explanation in this regard), where the degree of technological

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<sup>11</sup> Whether people actually care about population rising, declining or remaining constant as a consequence of their reproductive behaviour is of course a question which remains unresolved. Parents in many industrialised countries today, notably, do not seem to be utterly concerned about the fact that their current fertility rate does not suffice to maintain the level of population of these countries (not counting immigration). Authors worried about too large a population often thought that people’s reproductive behaviour would bring about excessive growth if unchecked (for example Hardin 1968), while those concerned with too low a population similarly thought people would naturally have too few children (for example Sauvy & Debré 1946). Quite naturally, those that worried about excessive growth tended to write when population increased while those that worried about insufficient growth were facing a static or declining population. As was observed in the previous section, both sets of writings can be seen as a fearful reaction in the face of important structural changes affecting society and the ignorance of the underlying causes. A useful assumption to make when exploring those underlying causes is that people’s reproductive behaviour is a rather reasonable response to changing economic and social conditions. This assumption, however, should not be taken as a synecdoche for the idea that every human action is necessarily in the interest of society as a whole. Smith’s theory of the “invisible hand” is often caricatured as implying that all individual action is necessarily beneficial to society. Demeny (1986) applies this view, which he attributes to Smith, notably to reproductive behaviour. It is quite absurd to infer such a view from a book (*The Wealth of Nations*) that goes to such lengths in denouncing the nefarious consequences of special privileges and monopoly power.

sophistication is a corollary of the division of labour, and as such depends on the extent of the market, which, as we saw in Chapter 2, is determined primarily by the size of population.

The question whether, during the Industrial Revolution in England, i.e. between about 1750 and 1815,—the time that also saw rising levels of fertility—the standard of living for the masses of people was rising or declining, has given rise to a controversy in Economic History, of which Hartwell (1961), answering Hobsbawm (1957,1963), were the instigators. The answer to this question can be thought to support either Malthus' or Marx' position on the relationship between fertility and wages. Fertility and wages, however, are only partial aspects of the broader context of population and income dynamics, from which they can hardly be separated. Even if it was proven that fertility and wages were moving, for the given time, in either the same or opposite directions, this would not prove, in and of itself, that either Marx or Malthus were right, without checking at the same time for the variation in mortality. Thus mortality may temporally increase as a side-effect of industrialisation and urbanisation associated with poor hygiene and adverse living conditions, before the development of a public sector able to provide social services on a large scale<sup>12</sup>. This supports Marx's explanation of fertility behaviour, independently of any possible decline of the real wage in early 19<sup>th</sup> century Europe. Indeed, even if it was the case that the real wage was rising at this time, which Marx thought would offer incentives to lowering fertility, fertility could still have risen as a result of the temporal rise in mortality more than offsetting the effect of a rising wage. This temporary set-back effect induced by industrialisation is also consistent with Kuznets' (1955) observations on the effects of the early stages of growth. Structural Adjustment Policies are indeed likely to have accentuated this effect, where they have led to cuts in the health

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<sup>12</sup> When the decline in infant-mortality slackened in sub-Saharan Africa in the late 1980s and early 1990s, which many attribute to the adverse effects of Structural Adjustment Programs on the quality and availability of health services, and overall mortality actually increased (largely as a result of the AIDS epidemic, combined with the former), fertility decline also slowed. It accelerated again since the mid-1990s, together with GDP per capita growth. As Malmberg (2006) notes:

the kind of set-back that Sub-Saharan Africa suffered during the closing 20<sup>th</sup> century is not a unique event. A similar increase in mortality affected England (Huck 1995) and the United States during the 19<sup>th</sup> century (Haines and Steckel 2000). Mortality increased as a consequence of rapid urbanization and poor health conditions in urban areas. Large reductions in infant mortality in these countries didn't start until the end of the 19<sup>th</sup> century, and then, in response to ambitious efforts to improve public health (Cain and Rotella 2001).

budget. If a comprehensive view of “standards of living” is adopted, such as reflected by the Human Development Indicators collected by the United Nations Development Programme, moreover, a rising level of mortality would of itself have a negative incidence on measures of the standard of living. The net effect would depend on the different weighting one ascribes to the separate indicators.

Furthermore, following the Smithian framework, the rise or decline of wages itself is not independent of the growth of population. In the Smithian wage-mortality-population mechanism, outlined in the first section above, population seems to be a passive effect of economic factors for Smith. As such, it is indeed a “Malthusian” way of theorising. And Malthus indeed cited Smith as one of his main mentors. But Smith’s overall view on population includes the positive effect of population on the size of the market (analysed in Chapter 2), which determines the scope for division of labour, capital accumulation and thus economic progress, and through this effect also the rise in wages (Lowe 1975).

By the time we are much more certain that rising standards of living set in, i.e., during the later part of the first half of the 19<sup>th</sup> century, when laws were also notably promulgated in Europe that limited both the legality of child labour and the duration of the working day, and as notably the first pension systems came into being, rising material well-being for the masses of people was accompanied by a decline of average fertility.

Arthur Lewis (1954) explicitly recognised that his theory of economic development with surplus labour applied specifically to countries under “population pressure”<sup>13</sup>, and that mortality decline was the main factor of this labour force increase:

There is no evidence that the birth rate ever rises with economic development. In Western Europe it has fallen during the last eighty years. We are not quite sure why; we suspect that it was for reasons associated with development, and we hope that the same thing may happen in the rest of the world as development spreads. Of the death rate we are more certain. It comes down with development from around 40 to around 12 per thousand; in the first stage because better communications and trade eliminate death from local famines; in the second stage because better

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<sup>13</sup> Interestingly, he thought there was at this time “an acute shortage of male labour in some parts of Africa”, which he thus did not count among the countries to which his theory applied. This situation has certainly changed today, after six decades of sustained population growth on the continent. (Ironically, Lewis did include Egypt and India into the list of countries his theory could apply to, the latter in fact having had a population growth rate between 1950 and 1955 considerably lower than that of sub-Saharan Africa – 1.73 as compared to 2.21; figures from UN DESA).



public health facilities banish the great epidemic diseases of plague, smallpox, cholera, malaria, yellow fever (and eventually tuberculosis); and in the third stage because widespread facilities for treating the sick snatch from the jaws of death many who would otherwise perish in infancy or in their prime. Because the effect of development on the death rate is so swift and certain, while its effect on the birth rate is unsure and retarded, we can say for certain that the immediate effect of economic development is to cause the population to grow; after some decades it begins to grow (we hope) less rapidly. Hence in any society where the death rate is around 40 per thousand, the effect of economic development will be to generate an increase in the supply of labour. (Lewis 1954).<sup>14</sup>

With regard to his classification of the three different stages in mortality decline, it may be observed that Sub-Saharan Africa today notably still has some way to go to reaching the second one.

The neoMalthusian approach pays insufficient attention to the role of variations in mortality. It also ignores another important aspect of demo-economic dynamics, namely the effect of population growth (and the population size thus attained) on the growth of markets, directly related, in the Smithian perspective, to the growth of the economy. As noted, in Smith's work the growth of population entertains relations of causality with the growth of income. Population increase is in Smith's theory a central feature of the "progressive state", of which it is both cause and effect (as developed in the preceding chapters). We shall at present examine what a comprehensive analysis of the socio-economic dynamics underlying the demographic transition, combining insights from Smith and Marx (counter Malthus and the Beckerians), could look like.

## **6. Endogeneity of income growth, and a Smithian-Marxian theory of the demographic transition and the industrial revolution**

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<sup>14</sup> Lewis identified two other potential factors of a continuous labour supply: the integration of women into the workforce (whereby he noted the enormous efficiency gains that could be reaped from specialisation and the division of labour by outsourcing the chores traditionally carried out by women, such as rearing children and housework – an idea also expressed, interestingly, by Godwin, in the book that Malthus' *Essay on the Principle of Population*, at least in its first edition, was a response to); and the fact that small entrepreneurs and artisans would be unable to compete with the efficiency attained by large scale urban industries and thus join the "reserve army", as analysed by Marx (Lewis remarked, however, that this mechanism was probably not as straightforward as Marx had advanced).

In the Smithian perspective, population size (and hence -growth) and productivity (and through it incomes) entertain relations of causality that make it problematic to consider these two variables independently from one another. As population grows and concentrates in urban areas, this permits a wider division of labour throughout society and renders the industrial organisation of production profitable, which entails enormous productivity gains. The Malthusian analysis relies on the assumption that average production is negatively correlated with the number of people (every additional person adds less to overall production than the previous one, i.e. there are decreasing returns to labour). This is necessary for it to make sense that a smaller population should be able to produce (and thus consume) more on average, and that reducing population (or at least stopping its expansion) could hence have positive effects on average well-being. In the Smithian perspective of increasing returns to labour, conversely, the higher the number of people engaged in a productive process, whether at the level of the household, the firm, a city or the whole economy, the higher will be the overall productivity under the effect of the division of labour. When population is reduced, absolutely or relatively, productivity will be respectively lower. This is indeed where the Smithian logic of increasing returns and the Malthusian/Ricardian logic of decreasing ones are diametrically opposed, and correspondingly have opposite implications for the effects of population growth. Malthus never explicitly rejected this part of Smith's analysis, but he did so somewhat covertly by downplaying this part of Smith's theory and emphasizing those that (considered independently of the first) gave support to his own.

In Smith's theory, it is precisely the productivity gains brought about by an increased division of labour, furthered by population growth, which translate into higher standards of living; and it is these same productivity gains from an increased division of labour in a larger population that make more resources available to a society for investing in children, rather than being dependent on children's work, as Marx would have it. This includes parents being able to transfer income to their children rather than having to rely on them to complement theirs. In a perspective combining the insights from Smith on the positive correlation between population and productivity and the one of Marx on poverty, mortality and fertility, first, it is the increase in population, not the fall in fertility, which makes incomes rise, as population increase permits a deepening of the division of labour raising productivity throughout the economy; second, investments in human capital (intergenerational transfers from parents to children) become possible only as a result of these productivity gains. Thence they cannot be their cause.

Another criticism of the “demographic dividend” theory comes from someone theoretically much closer to the authors who have formulated it. Bloom, Canning and Sevilla (2001) hold that the fall of fertility, producing a less youthful population, will augment the economic growth rate through the rise of the savings rate. As Paul Schultz (2005) points out, however, the life-cycle savings model, on which the mechanism relies, by which a rise in working-age population is supposed to raise savings, does not include children. Relying on a model that excludes children—and thus the economic behaviour of children and the economic behaviour of adults towards children—for the analysis of the economic implications of certain phases of the demographic transition is odd, as the number of children is precisely what differentiates families in the different stages of the demographic transition. The representation of the household as an individual, which the life-cycle theory is based on, indeed, comes much closer to modelling the type of household characteristic of contemporary industrial societies (with few children)—societies, that is, which have already completed the demographic transition—than to modelling the numerous households of transitional societies. It is highly problematic, therefore, to infer from precisely this model how families in transitional societies react to the age-structural shifts that are characteristic of the demographic transition. Treating saving-behaviour as an exogenous variable, then, the theory of the “demographic dividend” ignores the probable adaptation of savings behaviour to the changes in age structure brought about by the demographic transition<sup>15</sup>.

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<sup>15</sup> In addition to a theoretical critique, Schultz (2005) also attacks the evidence offered for the savings argument in the “demographic dividend” literature both on empirical and methodological grounds. Himself applying the method of the authors that Bloom, Canning and Sevilla (2001) rely on for their data (Higgins and Williamson 1996), Schultz (p. 21-22) finds:

The long-run effect of the age composition on savings, under the hypothetical assumption that it is exogenous, is a fourth the magnitude reported by Higgins and Williamson (HW,1996, 1997). Instead of attributing a third of the increase in Asian savings and growth in this period to the exogenous change in the age composition, as HW do, my estimate in Table 2 (X-1) accounts for a tenth of the rise in Asian savings rates, according to their calculations. When linear time trends are introduced, which are allowed to vary for each country, the estimated effect of the age composition on savings is reduced by another two-thirds.

Before (p. 21) he noted that the “treatment of a lagged dependent variable as exogenous in an adaptive behavioral model of savings is implausible, both conceptually in a macro economic model, and empirically according to a Hausman test of exogeneity”. Further (p.22):

Including time trends specific to each country, a common practice in panel data studies to check the robustness of estimates, the age composition has unstable and imprecise effects on savings. Finally, if the model is estimated in first

In the Smithian-Marxian perspective outlined here, the defining triggers of the industrial revolution and sustained per capita economic growth are not the decline in fertility, as is the case in the neoMalthusian model. The main characteristics of a country's settlement and development process are, in this perspective, population growth, the division of labour and urbanisation. It is these circumstances that cause incomes to rise. And it is only the rise in incomes, in turn, which eventually can let fertility subside. Attempting to precipitate fertility decline by large scale public and private (often foreign) intervention (as is still advocated by major international organisations to developing countries, notably in Africa) — rather than directing these measures at the improvement of general health conditions, including notably the reduction of infant mortality — does not, in this light, appear as a useful policy. It would only absorb energies critically needed to facilitate the peopling process underway, which are amply more likely to further economic and social progress. In Africa, notably, if we follow the Smithian (and Marxian<sup>16</sup>) perspective on this, with the delay attending on the region's particular historical circumstances, the process of the social division of labour and the settlement process that is concomitant to it will be able to aptly unfold only during the present century.

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differences to remove bias from dynamic autoregressive components, the age composition effects on savings appear to be statistically insignificant.

<sup>16</sup> Marx, as is well known, predicted the eventual collapse of capitalism out of its own internal dynamic. But, before this can occur, the capitalistic system (or commercial society, as Smith called it) must first have arisen. It is on this phase that this paper has focused with regard to Marx. (Most of what Marx wrote was indeed about capitalism; he wrote rather little—and what he wrote was rather vague—about the attributes of the communist system which he thought society would culminate in). For a reading of Marx's historical materialism as an extension of Smith's "conjunctural history", see Meek (1954c).

# Conclusion

In classical economics population was an important variable. It was also so in Adam Smith's work. The Glasgow editors of the *Wealth of Nations*, notably, have disputed that population played a large role for Smith and have denied to population the status of an independent element in Smith's thought (Campbell and Skinner 1976, p.48). It is in fact questionable if anything could be deemed an *independent* element in Smith's thought (Lowe 1975).<sup>1</sup> Smith's is a monumental theory of human society and its progress, encompassing demographic, economic, geographic, sociologic, psychological and political aspects. It is the all-inclusive "science of man" called for by Hume. His system is a *finished* one (despite the fact that much of it was not published, and he did not himself consider it completed). It is not without incongruities — Smith was certainly brilliant, but not omniscient. But it is the dominant opinion — to which this work adhered — among historians of thought today, as opposed to the 19<sup>th</sup> century in particular, that, overall, the many *congruities* in Smith's system, in the form of complex yet coherent multiple interrelationships, outweigh and are much more impressive than the incongruities (on which economists, in particular, have spent a lot of ink over the past two centuries and a half). Most of the incongruities that have been at various times discerned and highlighted, in fact, are the product of anachronistically reading back into Smith's writings arguments about issues and debates which only arose after his death in this form and to which he could hence not have intended to contribute, and these purported incongruities disappear when a contextual and well-disposed reading of his texts is substituted for the former. Read as a coherent whole, Smith's "system of social science" (Skinner 1996 [1979]), presented throughout his entire oeuvre, shows to be one of the grand systems of philosophy, comparable, in the degree to which it comprises different aspects of reality in its interpretation and explanation of human history, to the likes of Hegel and Marx after, Vico in his own century, and Ibn Khaldun four centuries prior to Smith (not to go back even further). Smith's system has the merit of explaining, with the aid of a large but limited amount of cause-and-effect relationships, the entire human experience since its inception (variously defined). This is a grand claim, and Smith himself never made it explicitly. Yet his system of thought truly mobilises aspects of all of the current social sciences in its design, and population is an important piece of the puzzle.

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<sup>1</sup> Lowe also recognised the central role played by population in the Smithian system.

In recent decades, with the revival of interest in Adam Smith's work in general, and in the non-economic aspects and the coherence of the whole of his oeuvre in particular, and after the rediscovery of many parts of his work before unknown or thought destroyed, there have been many, more complete, reconstructions, aiming at reconnecting the well-known to the lesser-known and neglected aspects of Smith's work (on the theme of the coherence of Smith's work specifically, see notably Skinner (1976), Coats (1979) and more recently Haakonssen (2006)). Population, however, remains, overall, one of the most ignored constituents of Smith's system of thought. This neglect is understandable, possibly, given that, overall, despite their importance, population aspects are largely implicit in Smith's writings. Moreover, there has been a more pronounced disconnection of demography or population science from other social science, and economics in particular, in recent decades, and coeval with it a relative disengagement from population questions from the part of economists. This neglect of population aspects in Smith's work is unwarranted, however — it was argued, and hopefully shown in this work —, given the importance of population as an all-connecting element in Smith's system. The present work has aimed to bring the importance of the element of population in Smith's system back into the light.

Although the focus of the present study have been Smith's ideas as relating to the theme of population and development, many related topics have been touched upon, sometimes between the lines. Some of these themes (related or not to the topic of population) I would like to take up here again, with no aim at exhaustiveness and irrespective of the precise order they appear in the present work. (This order is in any case somewhat random if we rely on the idea, defended in the preceding chapters, and especially in Chapter 3, that the elements of Smith's system are all interrelated to an important degree — even though Smith himself did in fact pay great attention to the order in which ideas are presented, a theme he elaborates on in his lectures on rhetoric). The topics I have picked here for some concluding (re)considerations are: the relationship between Smith's "stages" and "states" of society in his theory of population and development (1); the relationship between circular cumulative causation and equilibrium (2); population and the extent of the market (3); migration and urbanisation (4); Smith, the demographic transition and the stages of society (5).

# 1. Population, stages and states of society

In his lectures on jurisprudence, as known to us through the published student notes, Smith laid out an elaborate description of his version of what has commonly been called the “four stages theory” of economic development (or socio-cultural evolution) since the foundational work of Ronald Meek (1971, 1976b). As was considered in Chapter 1, Smith, in line with other contemporary writers who made use of this theoretical framework, such as Kames, Helvétius and Blackstone, stressed one causal element in the succession of socio-economic stages: population. Thus, in Smith’s account, the ages of hunters, shepherds, agriculture and commerce are actually instigated by the growth of population, in a Boserupian fashion. Precisely as in the theory of Esther Boserup (1965), it is hence the pressure of population on subsistence which provokes technological change and thus initiates a new technological age, by inciting people to find a new mode of subsistence consistent with the need to feed higher numbers on the same territory.

While the mechanism by which population furthers economic progress in the *Wealth of Nations* is quite distinct, the two are not mutually exclusive and can be considered as two alternative explanation for the correlation between population growth and technological progress — or simply as two ways of looking at the same phenomenon. The main element through which population growth furthers the economic progress of society in the *Wealth of Nations* is thus through the extension of the market that population growth brings about, centrally examined in Chapter 2, which shall be reconsidered here too shortly. Smith also makes it clear in the *Wealth of Nations* that he believes population growth to be a feature of a society in what he called the “progressive state”, which he contrasted with the “stationary” and “declining” states. How, then, do these “states” of society correlate with Smith’s “stages” of society?

Wages are directly correlated, for Smith, to the level of economic growth. This is because economic growth determines the demand for labour, which establishes the level of wages. Demand for labour is for Smith a function of capital accumulation (or rather the accumulation of “stock”, what Smith himself called “capital” forming only a part of it), because Smith thought that it was out of accumulated stock that wages were paid (the later controversial “wage fund”). If wages are higher in times of economic growth according to Smith, it is because demand for labour is higher in this “progressive state” relative to labour supply. And this is because a growing stock will be used by those in possession of it to employ more labour (I.viii.19-21, p. 86-7).

Wages are determined by a bargain between the masters and the workmen. The relative position of power of workmen and masters, however, is — besides the legal and political framework which is also important<sup>2</sup> — determined by economic conditions, i.e., in Smith's words, by whether the state of the economy is progressive, declining or stationary, and whether the fund out of which wages can be paid is therefore growing or not. In the progressive state, according to Smith, the immediate effect of a growing stock is that it stimulates labour demand, while population (labour supply) can only respond with a lag, which shifts the bargaining positions between employers and wage earners in favour of the latter, and this is the mechanism that ensures high wages and thus the growth of population. Since this effect is obtained by a growing stock, what matters for the level of wages is not so much the absolute wealth of a country, but whether this wealth is increasing or decreasing. It is the growing state of the economy which maintains a high demand of labour relative to labour supply (WN I.viii.24, p. 89).

It naturally follows that it is in the progressive state "that the condition of the labouring poor, of the great body of the people, seems to be the happiest and the most comfortable." (WN I.viii.43, p. 99). As was examined in Chapter 3 (above p. 249), whether an economy is in fact progressing, stationary, or declining, seems to be, for Smith, mostly related to political conditions, and more particularly to whether a system of "natural liberty" is in place. In an often quoted passage he thus remarked:

China has been long one of the richest, that is, one of the most fertile, best cultivated, most industrious, and most populous countries in the world. It seems, however, to have been long stationary. Marco Polo, who visited it more than five hundred years ago, describes its cultivation, industry, and populousness, almost in the same terms in which they are described by travellers in the present times. It had perhaps, even long before his time, acquired that full complement of riches which the nature of its laws and institutions permits it to acquire. (WN I.viii.24, p. 89)

Smith contrasted the progressive state, which characterises a society which experiences economic growth, with the stationary (no growth) and declining (negative growth) states, without however going into much detail about either of the latter two. The most detail that is provided about them is to be found, in fact, in Smith's chapter on wages, from which has here been quoted from and referred to, and these states are directly related, thus, to the progressive, stationary and

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<sup>2</sup> Smith complained about the laws that forbade the congregation of large numbers of workers to prevent the formation of unions pressing for higher wages, while no similar law did and probably could prevent employers to contrive to keep wages low.



declining state not just of economic growth but of population, which forms the main subject of this chapter. These “states” are loosely correlated with Smith’s “stages”, in that the progressive state will lead a society to progress through the different stages, as long as a system of natural liberty is in place that allows the division of labour and market growth to unfold (see Stull (1986) and Reid (1989). However, Smith believed that even under restrictive political conditions, some progress was inevitable, for:

the natural effort which every man is continually making to better his own condition, is a principle of preservation capable of preventing and correcting, in many respects, the bad effects of a political oeconomy, in some degree, both partial and oppressive. Such a political oeconomy, though it no doubt retards more or less, is not always capable of stopping altogether the natural progress of a nation towards wealth and prosperity, and still less of making it go backwards. If a nation could not prosper without the enjoyment of perfect liberty and perfect justice, there is not in the world a nation which could ever have prospered (WN IV.ix.28, p. 674).

Thus, while the progressive state is the most favourable to population, and Smith actually describes, in his chapter on wages, stationary and declining states as ones where population is respectively stationary and declining, in Smith’s more long-term view of historical development, as described in the preceding quotation from Book IV of *Wealth of Nations*, he expresses a view of population having likely, through the ages (despite certain setbacks and reversals) continuously increased (and contributed to society’s progress as well as being an outcome of it) even if perfect conditions were not in place (which indeed Smith thought to never be, which was the cornerstone of his critique of the physiocrat’s “system”). This fits well with the picture of population growth leading society through the different economic stages discussed in Chapter 1.

## **2. Circular causation and equilibrium**

“The most decisive mark of the prosperity of any country”, Smith held, “is the increase of the number of its inhabitants” (WN I.viii.23, p. 87-8). In this sentence, again from the chapter on wages in the *Wealth of Nations*, population is presented by Smith (although not entirely unambiguously) as an *effect* of economic progress. This does not mean, however, that it is *exclusively* its effect, and not also its cause. Many commentators (notably Campbell and Skinner (1976), more recently Sunna (forthcoming)) have in fact interpreted Smith to view population only as a consequence of economic growth. But there are ample passages even in the *Wealth*

*of Nations* that show this not to be true, and many more can be found in the rest of Smith's writings. As Hansen (1939, p. 2-3) recognised (quoted in the General Introduction p. 28 above), population was thus seen by Smith as both cause and effect of economic progress, a view that was indeed common at the time Smith wrote (General Introduction p. 29). It was the aim of Chapter 3 to examine this theme of circular causation in Smith's work more generally, and establish through several examples that this was indeed the general mode of causation employed by Smith.

What characterises economic growth for Smith is the continual accumulation of capital (or stock). The accumulation of capital is also tightly linked with the division of labour, and together these determine economic growth, which determines the demand for labour and thus the wage rate. Capital accumulation and division of labour are thereby more closely intertwined than is commonly appreciated. Indeed, rather than one causing the other in a one-way relationship, they are mutually determining, in the characteristic way of Smith's circular system (Chapter 3, p. 223).

Jacob Viner wrote in 1927 that "an economist must have peculiar theories indeed who cannot quote from the *Wealth of Nations* to support his special purposes" (1927, p. 207). Indeed, a great variety of subjects are treated in the *Wealth of Nations*, and a great variety of ideas are expressed by Smith, some of which appear contradictory. Historians of thought and economists have tried in various ways to resolve these apparent conflicts. The most prominent of these was the famous Adam Smith Problem, discussed in Chapter 1 (above p. 97), to which Viner indeed adhered and which he helped to perpetuate in 20<sup>th</sup> century America (above p. 102). But there are many other conflicts and apparent contradictions in Smith that have been noted and continue to be noted. Anthony Waterman, for example, recently (2014) asked the question, forming the title of his article: "Is there another, quite different, "Adam Smith Problem"?", which he takes to be the inconsistency between Smith's view of increasing returns contained in his growth theory and his price theory, implying according to Waterman constant returns.<sup>3</sup>

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<sup>3</sup> This is in fact a misconception based on a reading of Smith from the vantage point of modern micro- and macro-economics (Waterman explicitly refers to Samuelson's formalisation of Smith and classical economics). The confusion (which Allyn Young already commented on in 1928, as noted in the General Introduction, see above p. 30) arises because of considering competition and technical progress as being determined by entirely different causes and not causally interacting with each other (and technology in fact being exogenous to the model), whereas in Smith's theory these elements are all endogenous and interact with one another, and there is no conflict between technical progress and competition. (The conflict-view can be taken to have been introduced into

One such seeming inconsistency is the view of causality presented by Smith. Thus, there are very strong statements throughout Smith's work that point to a definite sequence in a causal relationship described (such as the necessary precedence of capital accumulation to the division of labour), but these same statements are sometimes contradicted a few hundred pages later, or in other works of Smith, where he holds that causation works the other way round (i.e. that what was previously or elsewhere clearly labelled as the effect *causes* what was in that other instance strongly emphasised to be the cause). This can only be construed to be a contradiction, indeed, when a strictly linear and one-directional view of causation is upheld (i.e. when a retroaction of the effect on the cause, amplifying the latter and then again the former, etc., is ruled out). It is here, I venture, that the idea of circular causation is helpful. With regard to population, notably, in Smith's view the growth of population is conditional on economic progress, but economic progress itself is furthered by population growth. This is paradoxical — or so it appears to modern economists trained in the tradition of 'equilibrium' economics, where negative feedback effects dominate. The apparent contradiction can be resolved and the underlying theory uncovered by recognising the presence of circular causation in Smith's theory. Effect and cause — in the present example, population growth and economic progress — are causing each other, in a chain of continual circular causation, or a continual feedback mechanism. And, moreover, in each cycle, there is not merely simple reproduction and repetition, but the sum or end result is greater than its part, the output is greater than the sum of the inputs. It is the principle of a virtuous circle, where synergy between the different elements working in conjunction produces an outcome that is greater than the sum of the individual inputs contributed by the different elements. This is precisely the mechanism that is at work in Smith's theory of economic progress, epitomised by the constant interplay between the deepening of the division of labour and the growth of the market, a mechanism famously pointed out by Allyn Young in his celebrated article of 1928.

Population in Smith's theory is thus both a cause and an effect of the progress of society. For this to ensue, there must be a positive feedback process at work. And as was examined in detail in Chapter 3, this is indeed the fundamental mechanism behind Smith's theory of development. But population growth is not only cause and effect of economic progress (and hence economic progress cause and effect of population growth) in Smith's theory. Population concentration (i.e. urbanisation) is also cause and effect of economic progress, and thereby cause and

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economic thought principally through the work of Karl Marx in fact, before neoclassical economists took it up for distinct reasons.)

effect of population growth. The division of labour is cause and effect of population growth and concentration. The growth of the market is cause and effect of population growth and concentration and of the division of labour. The accumulation of capital is cause and effect of population growth, the division of labour, and economic growth. Trade is cause and effect of the division of labour, the growth of the market, population growth, urbanisation, and economic progress. Population is thus at the centre of a large network of interconnected positive feedback loops, which expand and complexify as society itself expands and complexifies, which is what the theory sets out to explain. This complex system, much like the Darwinian system, which it might have contributed to inspire (see Annex to Chapter 3, above p. 256), is driven by a general process of what was later to be called “spontaneous order”. At the same time, negative feedback mechanisms introduce setbacks and inertia into the system, which make the overall directionality and outcome of the process uncertain.

A subject that was merely grazed in the present work (in Chapter 2, p. 183), but on which much more could and should certainly be written, is the intricate relationship between Smith’s writings on the extent of the market, Say’s conception of the interrelationship of supply and demand, having given way to the famous (19<sup>th</sup> century) “law of markets”, and 20<sup>th</sup> century debates about balance and imbalance in economic growth (considered in Chapter 3 p. 254) and the related ones on equilibrium versus disequilibrium as the more appropriate frame of reference for economics. These questions, if they are not much more ancient still, can well be thought to commence with the Newtonian theory, in which equilibrium and turning points are central. Both Adam Smith and Robert Malthus are said to have been strongly influenced by Newton (on Smith see Montes (2003b, 2006, 2008, 2013); the relation between Malthus and Newton is discussed by Donald Winch (1992b) in his introduction to the shortened variorum edition of Malthus’ *Essay*). The question of the proper *balance* between population and resources is ubiquitous in Malthus’ *Essay*, and has continued to be at the centre of debates about human progress and environmental degradation in the 20<sup>th</sup> and 21<sup>st</sup> century. These questions, concerning equilibrium or disequilibrium, balance or unbalance, proportionality or disproportionality of major economic variables, are certainly among the most vexing question in economics to this day, touching upon the most fundamental principles of the discipline. Ricardo and Malthus in their debates, Karl Marx, and later J. M. Keynes, are among the major thinkers who grappled with them and invoked these questions, often to highlight a fundamental difference of their own theory against the supposed orthodoxy of the day. These debates are certainly not ready to subside. The division of labour, which, through

its relation to the extent of the market in Smith's foundational work and Marshall's and Young's reconsiderations of Smith's insights on which so many 20<sup>th</sup> century economists drew, is at the centre of the issue, "will probably supply sufficient questions to keep researchers going to 2076", as Peter Groenewegen remarked in his "Bicentenary Estimate" (Groenewegen 1977, p. 162).

As was noted in the General Introduction (p. 39), population questions were always intimately linked to these debates about increasing and diminishing returns and their mutual articulation in the conceptualisation of economics and economic change. These links — between population and increasing/diminishing returns, as much as between balance and equilibrium, necessity being the mother of invention and invention being the mother of necessity, i.e. the interplay of negative and positive feedback — have not always clearly been discerned by the protagonists of these debates, especially in the 20<sup>th</sup> century and 21<sup>st</sup> century thus far. It has been at least partly the aim of this work to bring more clearly to light some of these links. It is likely that these questions will keep researchers occupied well beyond 2076, indeed, in the history of economic thought as much as in economics and science and philosophy more generally.

### **3. Population and the extent of the market**

"That the Division of Labour is limited by the Extent of the Market", title of Chapter 3 of Book 1 of the *Wealth of Nations*, is one of the most famous observations of Adam Smith. The extent of the market, if not identical with the size of population, is highly correlated with the latter, as Smith makes clear at several instances in the *Wealth of Nations* (see quotations at p. 169 above). This connection between population and the extent of the market was readily recognised by many of Smith's contemporaries and followers, notably Alexander Everett in his criticism of Malthus, holding that

an increase of population on a given territory is followed immediately by a division of labor; which produces in its turn the invention of new machines, an improvement of methods in all the departments of industry, and a rapid progress in the various branches of art and science. The increase effected by these improvements in the productiveness of labor is obviously much greater in proportion than the increase of population, to which it is owing. (Everett 1823, p. 13)

But it was largely ignored by Ricardo and Malthus, which most probably contributed to this connection seldom if ever being taken notice of in contemporary readings of Smith and being entirely ignored in modern economics.

It was the aim of Chapter 2 to bring this connection between population and the extent of the market to light, making use of the entirety of Smith's work.

Chapter 2 began by highlighting the change in meaning of the concept of "the market" between Smith's writings and modern economics, from a notion grounded in physical reality, notably geographical and demographic, to one almost exclusively nonmaterial, describing an institution in and mode of functioning of society (p. 169). While the meaning of institution was sometimes intended, too, in a figurative sense, by Smith, he used the concept of the market generally in a material sense (of area and place), without which the concept of the "extent of the market" becomes largely meaningless, or at least conveys an entirely different meaning, as is often observed in modern readings of Smith not taking into account this difference in meaning (Chapter 2, p. 171). Many equate the concept of market with the one of demand. But while this surely goes some way towards what Smith expressed, it is not the whole story. Significantly, in the whole chapter titled "That the Division of Labour is limited by the Extent of the Market", the word "demand" does not appear a single time. Smith states at the beginning of this chapter that:

As it is the power of exchanging that gives occasion to the division of labour, so the extent of this division must always be limited by the extent of that power, or, in other words, by the extent of the market. (WN I.iii.1, p. 31)

He does not use that same formulation again until the beginning of the next chapter on money, but throughout the chapter in question he establishes what determines the power of exchanging (i.e. the extent of the market). And for Smith this power of exchanging is directly related to geography, and more specifically to population. Smith thus first contrasts the larger possibilities for specialisation in a town, where the market is larger, to the restrained opportunities of similar specialisation in the Highlands of Scotland, using the examples, respectively, of a porter, and of a nailmaker:

There are some sorts of industry, even of the lowest kind, which can be carried on no where but in a great town. A porter, for example, can find employment and subsistence in no other place. A village is by much too narrow a sphere for him; even an ordinary market town is scarce large enough to afford him constant occupation. . . . It is impossible there should be such a trade as even that of a nailer in the remote and inland parts of the Highlands of Scotland. (WN I.iii.2, p. 31-2)

The importance of both population and space become apparent here. Indeed, if the market for any particular trade is larger in a town than it is in the country, it is because there are more people there (and therefore, some will argue, potential

demand is higher — but this demand is directly tied up with demographic and geographic considerations, and cannot be considered independently from them). The porter needs a large pool of customers in order to be able to exert his trade on a permanent basis. But in the highlands of Scotland, taken as a whole, there could be as many people as in Smith's unnamed town. If demand is higher in towns than in the country it is because there are more people in towns *who are in the immediate vicinity* of any particular business and hence do not encounter large additional costs in terms of time and transport spent to purchase particular goods and services. Potential buyers *in a close enough range* are so few in the Highlands of Scotland that it hardly pays off to specialise in any one particular trade. The "power of exchanging", then, is greater in towns because of high population density, which makes more people with the same needs be in such a range of each other that transaction costs are low enough to make the transaction worthwhile for both parties. It is population density, then, which is the decisive element in the "power of exchanging" and hence the extent of the market, at least for common goods which do not have such a high value and are so particular to certain locations that it is worthwhile transporting them over great distance. And this represents the larger a proportion of goods produced the less advanced the society in question is. Smith further talks about navigable rivers, which make for larger markets in some continents than others. Thus Smith already held that the low level of economic development on the African continent was due to the absence of many navigable rivers, which are close enough together to permit inland trade between them (Chapter 2, p. 192).

From this we can establish that there are three elements determining the power of exchanging: general population density (relative to the territory, this amounts to population size), urbanisation rate, and natural ease of conveyance (expressed notably by the amount and relative distance one from another of navigable rivers, but including logically also other geological elements such as presence or absence of mountains, deserts, swamps and other man-unfriendly terrain). Together, what we get is a measure of the average proximity of economic agents in terms of transaction costs. The reason to include both population density (on average) and urbanisation rate is to get a measure of the actual average amount of proximity between people — that is to say: a measure of how costly it is in terms of time and energy, on average, for a member of the society in question to get in touch with any other, or, expressed differently, an average measure of how costly it is for a given member of the society to get in touch with all others. If vast stretches of land on a given territory are unoccupied, for example, but most people on this territory live in cities (hence close together), the average population

density (obtained by dividing the total population by the total surface of the territory) would be much lower than the actual average proximity, and the more so that more people live in fewer cities, and ones closer or better connected to each other, and vice versa if people live in a relatively small territory but mostly in villages quite distant from each other.

The measure of the extent of the market (or the “power of exchanging”) then, is obtained by compounding population size and distribution, taking into account the natural ease or difficulty of transportation over that territory and its size. At any particular moment in time, we also need to add to this the level of technological development and the standard of living (or level of wealth). The further a society is technologically developed, indeed, the cheaper transportation in general becomes. And the wealthier the society in question, the more its members can consume and therefore the greater the outlet for production. However, the progress of both technology and wealth are part and parcel of the process of economic growth, steered by the cumulative advance of division of labour and capital accumulation (Chapter 2, p. 194). Insofar, they are, like the division of labour itself, conditioned by the extent of the market. Thus, the level of both technology and wealth is itself constrained by the size of the market, and can thus not be analytically included into the concept of the size of the market. In the circular cumulative process which development represents for Smith, of course, the level of wealth and technology will be progressively incorporated into the measure of the extent of the market with each cycle of enlarged reproduction. But there has to be an analytical distinction between the level of wealth and technology at the beginning of the cycle, which, incorporated into the extent of the market, form a cause of the further progress of wealth and technology, and that very progress, measured at the end of the cycle, which is an effect of the extent of the market at the beginning of the cycle.

## **4. Migration and Urbanisation**

Considerations of population density and distribution over a territory take us to the next theme, which was considered in Chapters 2 and 3. It has often been stated that in Smith’s work migration does not play a large role. This is inferred from a statement in Chapter 8 of Book 1 of *Wealth of Nations*, the chapter where Smith describes the interaction of economic growth, wages and population, where he holds that:



After all that has been said of the levity and inconstancy of human nature, it appears evidently from experience that a man is of all sorts of luggage the most difficult to be transported. (WN I.viii.31, p. 92-3)

This observation, however, was made by Smith to explain the persistence of geographical wage differentials (McNulty 1973, Sunna 2012). It was not a denial of the reality and importance of migratory movements. Moreover, in book 3 of *Wealth of Nations*, where Smith develops his theory of the “natural progress of opulence” through the dynamic interplay of the division of labour between town and country, Smith has a different take on migration. In this book, Smith spends a great deal of time uncovering whether it is urbanisation that causes the progress of the country or the progress of the country that causes urbanisation. If we accept the idea of circular causation, the question does not seem utterly important (the development of the town and the country will work in mutually reinforcing ways). In fact, Smith seems to formulate his whole theory of the “natural” progress of opulence to denounce the actual development of Europe, which runs counter to this model. But in acknowledging that the “unnatural and retrograde order” (from the development of commerce, to manufacture to agriculture, instead of the other way round) characterised Europe’s development, Smith concedes, of course, that the development of commerce and manufacture may well, and indeed has had, positive feedback effects on the development of agriculture. Yet, Smith is not, thereby, proving the opposite of what he seems to set out to prove, when seen against the other elements of his theory of trade and economic progress, as Blecker (1997) for example held. Here too, a reading in terms of circular causation is useful to understand the full extent of Smith’s argument (Chapter 3, p. 241). In fact, and this is the crucial point to unravel what many have perceived as a paradox, Smith’s criticism concerns not so much the order of development as the policy choices that have led to it. Smith believed, indeed, that the policy environment of Europe favoured the “mercantile system”, where large public expenses were undertaken to favour the activities of merchants and manufacturers, located essentially in cities, and agriculture was on the contrary restrained by excessive taxes. Had neither of the three sectors (agriculture, manufactures and trade) been given any encouragement or restraint through bounties and taxation, Smith believed, economic development would have run naturally from agriculture to manufacture to commerce (with constant feedback effects on the other sectors) and development in such a system of “natural liberty” would actually have been faster. Smith looked to the “American colonies” for an instance where the “natural progress of opulence” was unfolding unhindered.

By not giving any particular impetus to foreign trade beyond that which would “naturally” occur, Smith expresses a priority for the development of the interior market. This makes sense in the light of the fact that what are today called urban-rural linkages are at the core of Smith’s conception of the development process (as examined in Chapter 3 p. 241). In his digression on silver, in Chapter 11 of Book 1 of the *Wealth of Nations*, Smith explains how this precious metal warrants far distant trade, and how the market of a silver mine most anywhere is thus likely the whole world, as the high value of this metal relative to its cost of transportation makes exchange over great distance remain profitable. This is the same reason, however, why the direct vicinity of a silver mine does not seem to benefit very much from its presence in terms of economic development. Thus the goods that it is profitable to trade even in backward nations do not seem to be the ones that have the most forward and backward linkages, to employ Hirschman’s (1958) vocabulary. While there is no reason to discourage the trade in silver, then, it is also not particularly useful, for the development of a country, to artificially boost this particular trade, at the expense of agriculture notably, as Smith denounced.

The particular dynamic of economic progress that Smith described, and that he called the “natural progress of opulence”, was thus a phenomenon concerning mostly, and essentially taking place within, the interior market of a nation or territory, at least until a fully fledged commercial society had been naturally attained. And for Smith, the dynamic division of labour within society which defined this process was at the core of the phenomenon not just of economic growth, but also of urbanisation, the two being intricately linked one to the other. The way this worked out more specifically is that as specialisation beyond agricultural activities progressed, those no more employed in agriculture would find it advantageous to congregate in central places, so to make it easier to defend themselves, and to exchange with one another. More non-agricultural workers would join them bit by bit, making for the growth of cities (WN III.i.4, p. 378; see Chapter 2, p.209 above).

The towns eventually come to be the main markets for the produce of farmers, who, notably by utilising tools and inputs purchased from manufacture in the towns, come to improve yields, and hence progressively liberate more and more people to work in the other sectors. As agricultural output per man continually improves the towns keep growing, one being each other’s natural cause and effect. As wages in this progressive state of affairs remain high, population keeps growing, which feeds into the process by further augmenting the towns, which further augments agricultural output, etc. The same phenomenon

that raises productivity and thus produces economic growth — the division of labour — is hence at the same time at the root of urbanisation. It is thus misleading to say that either urbanisation causes economic growth or that economic growth causes urbanisation. Rather, the correlation between the two phenomena is explained by the fact that they both have the same cause, or rather still are both an expression of the same phenomenon: the division of labour.

## 5. Smith, the demographic transition and the stages of society

It is seldom noted that Smith wrote about fertility. He did so, of course, mostly incidentally. In one passage of his chapter on wages (WN I.viii.37, p. 96-7), Smith mentions the “pampered fine lady” having fewer children than common workers, who have many children but many of them die. And although the rich could rear more children, as they are able to cater for them more unsparingly, they do not actually bear more children. It seems then that to Smith poverty was seen as favourable to population, and luxury, though it might enflame other passions, does not ignite the passion for procreation. Here Smith does not venture into giving any cultural, religious, moral or other non-material explanation for the matter he observes (other than speaking of “passion”), but, as was analysed in Chapter 4, this might indeed be where Malthus took off to explore precisely these (notably in terms of the higher prudence of certain parents, waiting to have sufficient means to properly raise a limited number of children, a theme — prudence — that Smith also wrote about at large, in the *Theory of Moral Sentiments*, though not in this connection). Interestingly, Malthus thought that more wealth for the poor (notably in terms of poor relief) would actually *augment* their fertility, at the opposite, seemingly, of Smith (for Smith higher wages were thought to be favourable to population, but through the mechanism, mostly, of the reduction of *mortality*, in particular of infants; his remarks on the lesser *fertility* of the rich would suggest an opposite effect on fertility).

Smith observed that labourers in America were incited to marry younger by the prospect of the high wages their children could earn (implicitly stating that earlier marriage would allow them to bear more children). Malthus observed that higher wages would incite labourers to bear more children, but he thought of these children, it seems, exclusively in terms of costs, not additional revenues, to parents. For this he got severely criticised by Marx, notably. As was argued in Chapter 4, Smith’s observations about wages, fertility, and mortality, although much more

tentative than Malthus', are easier to reconcile with the reality of the demographic transition that took place after his lifetime, but partly during the one of Malthus.

When we think Smith's observation about the relationship between wealth and fertility out in a dynamic way, it actually comes to conflict, potentially, with the rest of his theory of the labour market. This is because if wages increase, labourers will also become richer. And if wealth limits both fertility and mortality, then the end result in terms of population growth is indeterminate. It will depend on whether it is fertility or mortality that is more elastic to the change in standard of living. We can safely assume that in Smith's time this was not of great consequence. Even though Smith believed in continuously high wages, he did not believe in a classless society, where wage earners would one day nearly catch up with the higher classes in terms of basic material comforts (today, of course, this is still not nearly the case, and recent decades have witnessed a regain in a phenomenal degree of inequality, both on a global scale and within societies;<sup>4</sup> but the larger part of the people, in the industrialised countries, have certainly attained a level of material comfort that would have been hard to imagine even for Smith, with his optimistic outlook, although such speculations are necessarily merely that).

There is thus another potential conflict ('another, yet quite different, Adam Smith Problem') in the views of Smith on the interplay of material comfort, fertility and mortality. Following this lead, one would hold that it did apparently not appear to Smith that if the rich have lower fertility and infant mortality than the poor, and fewer surviving children in the final outcome, then with increasing wealth for the larger part of the population, which indeed was his own definition of economic progress, the labour supply to labour demand adjustment mechanism via the wage rate which he pointed out would eventually be disturbed; that once the poor have reached a certain standard of living, higher wages would reduce rather than augment population growth.

Yet the conflict can be resolved, once again, by looking at the entirety of Smith's work, and in particular his four stages theory (though establishing this connection goes beyond what Smith himself wrote and is reported to have taught, and is thus, again, of a highly speculative nature). In his four stages theory, indeed, Smith presented population as the driving force for society to move from one stage to the next. Yet, this element of population is conspicuously absent from Smith's introduction to the commercial stage. While population growth is presented as the causal element in the progression from the hunting to the shepherd, and the shepherd to the agriculture stage, it does not feature in the presentation by Smith

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<sup>4</sup> See on this notably the recent book by Branko Milanović (2016).

of “commercial society” (see the quotes in Chapter 1, p. 108). Could it be that while population is a necessary element in the progression of society — notably because it is the only one akin to augment the market, in the absence of division of labour and stock — it becomes less and less important as society progresses, and ceases to be absolutely necessary to the development of society (a possibility explicitly denied by Malthus! see the quote p. 146 in Chapter 1) in commercial society? So that we end up with the situation presented, once again, by Allyn Young:

Even with a stationary population and in the absence of new discoveries in pure or applied science there are no limits to the process of expansion except the limits beyond which demand is not elastic and returns do not increase.<sup>5</sup> (Young 1928, p. 534)

And:

just as there may be population growth with no increase of the average per capita product, so also, as I have tried to suggest, markets may grow and increasing returns may be secured while the population remains stationary. (Young 1928, p. 536)

While Smith did not formulate out and maybe did not think out his tentative ideas on the differential mortality *and* fertility of the rich and the poor, it is very interesting nonetheless that if one does pursue this line of thought, combined with the general Smithian theory of economic progress pointed out above, one arrives precisely at the outcome which demographic history has followed in the Western world and everywhere else ever since: namely the demographic transition. Indeed, in this Smithian model of the relation between wealth on the one hand and both fertility and mortality on the other, population growth will, through the enlargement of the market and the economic progress this engenders and the consequent increase in the general level of wealth, eventually provoke its own stall, as higher wages come progressively to have a stronger reducing effect on fertility relative to their effect on mortality in the same direction.<sup>6</sup>

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<sup>5</sup> Young distinguished “new discoveries” in this instance from “such new ways of organising production and such new “inventions” as are merely adaptations of known ways of doing things, made practicable and economical by an enlarged scale of production”, a theme which had earlier been discussed by Marshall. The concept of ‘demand elasticity’ as here used by Young is distinct from the way this concept is generally used in modern microeconomics. He discussed it at some length in his article and presented a short mathematical model, which has yet to find a fully satisfactory interpretation.

<sup>6</sup> This is an alternative explanation to the one of Heilbroner, discussed in footnote 146 in Chapter 1 (p. 162), of how population growth brings about its own stall. The present explanation is based on Smith’s considerations of the interplay between fertility, mortality, population growth and the extent of the market in the *Wealth of Nations* and *Lectures on*

## 6. Final thoughts

Let us then recapitulate the circular cumulative process operating in Smith's account of population and development that was described in the present work. Starting with population growth (but we could start anywhere, of course, if the relation is circular): population growth (mechanically) augments the market, both through the overall augmentation of producers and consumers and through the densification of population attendant to population growth, which reduces the mean distance of individuals from one another and with it the cost of exchanging, thereby raising the power of exchanging (Chapter 2). This makes more division of labour and capital accumulation possible. Productivity and thus wealth increases, and there is therefore a higher demand for labour. Thus wages increase. This makes (infant) mortality decrease and population grows some more, initiating a new cycle (Chapter 4).

While this dynamic unfolds, structural changes are ongoing throughout society. Not just do people become wealthier, but they change their occupations, and society thus progressively changes its mode of subsistence (Chapter 1). This has a further effect on the geographical distribution of the people. Being less and less tied to the land for subsistence, as it takes fewer and fewer people to produce the necessary subsistence for all by augmented productivity through the division of labour, more and more people come to leave the countryside and congregate in central places to form ever-growing towns and cities (Chapter 3). This further enlarges the market through the densification of population, and further division of labour can take place, including between town and countryside at the micro- and macro-level, which feeds back into agricultural productivity and releases yet further people from the land, continuing the upwards cycle.

Finally, something Smith did not formulate out, yet which follows from his observations on wealth and human reproduction, is that as wealth has a negative effect on both mortality and fertility, when wealth increases throughout society, this can potentially both have an accelerating and a decelerating (and possibly even stalling) effect on population growth, according to which effect dominates. Although Smith did not predict a spread of material wellbeing throughout society as consequential as the one that was observed following the industrial revolution in the industrialised nations, it follows from his observations that with such a

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*Jurisprudence*, while Heilbrunner's explanation ignores the interplay of fertility, mortality, population and the extent of the market and relies on Ricardo's rather than Smith's own theory of the relationship between profits and economic growth.

spread of wealth throughout society fertility could eventually stall, thus providing a possible explanation of the demographic transition (Chapter 4).

The benefit of considering Smith's account of history and progress not just in its economic dimension, but taking geographic and demographic (as well as social and political) factors into account, while keeping the whole picture in mind, then, is that the Smithian model thus takes on an enormous heuristic power with regard to economic history: three fundamental transitions of the past few centuries concerning economy, geography and demography — namely the spectacular growth in the standard of living, the shift from rural-agricultural to urban-industrial societies in terms of both modes of subsistence and population distribution, and the demographic transition — can in this way be explained by causal relationships pointed out in Adam Smith's different works, shining more light on the true range of the philosopher's oeuvre.

Il fut un temps, pendant l'âge d'or de l'économie classique, où la démographie appartenait à l'économie politique. L'offre de travail était l'une des variables endogènes importantes dans les systèmes de Smith, Malthus, Mill et Marx ... Une caractéristique de la théorie économique néoclassique qui la distingue de la version classique est l'élimination de la population en tant que variable (Samuelson 1985, p.166-7).

le lien entre croissance démographique et développement économique ... n'est pas un sujet qui apparaît très fréquemment dans les discussions modernes de la théorie du développement ... Mais il figure de manière importante dans la pensée antérieure sur notre sujet. Dans la perspective classique, discuter du développement sans tenir compte des tendances de la croissance de la population aurait été omettre l'ingrédient le plus essentiel ; et à cet égard, je suis enclin à penser que, avec toute son imperfection évidente, la pensée classique avait une beaucoup plus ample signification pratique que la plupart des modèles théoriques de notre temps. (Robbins 1968, p. 22)

La séparation actuelle entre la démographie et l'analyse économique peut difficilement conduire à une théorie soutenable de la croissance économique. (Kuznets 1954, p. 167)

Les théories de la population ... ont reçu relativement peu d'attention de la part des historiens de la pensée économique au cours des 25 dernières années ... les critères de l'analyse économique moderne ne sont peut-être pas les plus appropriés pour évaluer ces écrits. (Black 1985, p. 5)

il ne faut pas admettre sans conteste l'hypothèse commune selon laquelle les continuités entre l'entreprise de Smith et celle de ses successeurs du 19<sup>e</sup> siècle — ceux avec lesquels il est habituellement regroupé en tant qu'économiste « classique » — sont plus impressionnantes que les discontinuités. (Winch 1997, p. 385)



# Traduction française d'une partie de l'introduction<sup>1</sup>

Les œuvres classiques grandissent avec le temps, littéralement et métaphoriquement, à travers le volume croissant autant des commentaires adossés à leurs rééditions que celui de leurs interprétations, distorsions, appropriations et réinterprétations. L'œuvre d'Adam Smith est une telle œuvre par excellence. Le volume de la littérature secondaire sur Adam Smith a pris des proportions indigestes aujourd'hui, à même de remplir une bibliothèque municipale de taille moyenne. Il semble donc difficile de dire quoi que ce soit de pertinent ou de significatif sur cet auteur monumental aujourd'hui qui n'ait pas encore été dit ou écrit quelque part, par quelqu'un d'autre. Pourtant, Adam Smith reste l'un des auteurs les plus commentés des sciences sociales. À ce jour, des dizaines d'articles, des livres entiers et des thèses doctorales sur Smith sont écrits chaque année dans le monde, ce qui montre à la fois la vitalité de ce champs disciplinaire et peut-être combien il reste à dire sur cette figure majeure de l'histoire intellectuelle mondiale. Il n'empêche que, même en supposant une contribution très modeste de chaque nouvelle étude, il semble particulièrement important, dans un tel domaine, de préciser en quoi consiste précisément la valeur ajoutée d'encore un nouveau travail sur Adam Smith, en vue de l'immensité de la littérature secondaire existante sur cet auteur.

Les économistes sont sans doute le groupe de chercheurs qui se sont le plus intéressés, au cours des deux derniers siècles, à Adam Smith. Pour la plupart des 19<sup>e</sup> et 20<sup>e</sup> siècles, la grande majorité de la littérature sur Smith a ainsi été l'œuvre d'économistes. Et les économistes, aujourd'hui encore, sont considérés par le public comme les experts les plus évidents sur Smith. Les économistes, par ailleurs, sont depuis longtemps intéressés aux questions de population. Robert Malthus, l'écrivain probablement le plus étroitement associé, dans l'opinion publique, au sujet de la population, et considéré également par beaucoup de démographes comme le père fondateur de leur discipline (tout comme Smith est considéré par beaucoup d'économistes comme le père fondateur de la leur), a également été le premier à détenir une chaire d'économie politique dans une université. En

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<sup>1</sup> Toutes les citations dans cette partie ont été traduites en français par mes soins. Il s'agit ici d'une traduction d'une sélection du contenu de l'introduction. Les notes de bas de page ont été omises en totalité. Il est renvoyé à la version anglaise en début du document pour les références et explications plus détaillées.

formulant son célèbre principe de population, Malthus nomma Smith comme l'une de ses principales sources d'inspiration. Pourtant, malgré la vastitude de la littérature secondaire sur Smith, qui couvre aujourd'hui les sujets les plus variés, très peu d'écrits traitent directement des contributions de Smith aux idées sur la population. Il existe d'innombrables articles, chapitres et livres entiers sur la théorie de la population de Malthus, mais remarquablement peu de publications qui traitent spécifiquement des idées de Smith sur ce sujet. La référence à la population est pratiquement absente des écrits plus récents sur cet auteur.

Il a fallu plusieurs centaines de milliers d'années à l'humanité pour atteindre une population d'un milliard d'individus. Il a fallu un peu plus d'un siècle pour que ce nombre double. Ce siècle était le 19<sup>e</sup>. On estime que la population mondiale est passée d'un milliard à près de deux milliards d'individus entre 1804 et 1927. Cette croissance extraordinaire de la population mondiale au 19<sup>e</sup> siècle a été largement surpassée encore au cours du 20<sup>e</sup>. La population mondiale a plus que triplé, passant de 1,65 à 6 milliards de personnes entre 1900 et 2000 (Secrétariat des Nations Unies, 1999). En parallèle, le monde a connu, au cours de ces deux siècles, une poussée d'urbanisation et d'industrialisation et une croissance sans précédent de l'espérance de vie et du niveau de vie matériel, accompagnés, d'abord dans les pays les plus riches puis partout ailleurs ces dernières années, par une baisse saillante et sans précédent des taux de natalité. Comment se fait-il qu'en cette période d'intenses changements démo-économique, si peu de l'immense corpus de commentaires sur Adam Smith ait porté sur ses idées sur la population et le développement ?

L'absence générale du sujet de la population des études récentes sur Smith ne peut s'expliquer que par la combinaison de deux facteurs : le divorce croissant de l'économie de la démographie au cours du siècle dernier (dans une certaine mesure un effet normal de la division du travail entre disciplines académiques) et le fait que Smith a été principalement étudié, pendant cette période, par des économistes. Le rôle de la population dans l'œuvre d'Adam Smith est ainsi un sujet largement négligé à ce jour autant par les démographes que par les économistes. Par les démographes, Adam Smith est considéré principalement comme un économiste et un partisan du libéralisme. La plupart des économistes, j'ose l'affirmer, bien qu'ils puissent voir Smith comme le père fondateur de leur discipline et en premier lieu comme un important contributeur à la pensée économique, sont au courant qu'il était avant tout un philosophe moral, ayant écrit un traité de philosophie morale — pour lequel il est devenu célèbre — avant de se consacrer au sujet de l'économie politique. Mais très peu de chercheurs dans les deux domaines n'admettraient que Smith était aussi un démographe, ou que quoi

que ce soit de conséquent sur le thème de la population soit une partie importante de son travail. Pourtant, le sujet de la population faisait partie intégrante de la philosophie morale et de l'économie politique au 18<sup>e</sup> siècle (Tomaselli 1988, 1995). Il eût été étrange qu'Adam Smith, l'un des plus éminents philosophes moraux et économistes politiques de ce siècle, n'ait rien eu à dire sur le sujet.

Pour illustrer l'omission quasi-totale d'Adam Smith dans les considérations contemporaines touchant à la population en économie, on peut noter que dans la *Population and Development Review*, revue phare dans ce champs d'étude par nature interdisciplinaire qu'est la population est le développement (une grande sinon la plus grande partie des contributeurs à la revue sont cependant des démographes et des économistes), un seul article sur les idées de Smith sur la population a été publié à ce jour (Spengler 1976). La revue publie pourtant un nombre d'articles conséquent portant entièrement ou en partie du moins sur l'histoire des idées (par rapport au *Journal of Population Economics* par exemple, dans lequel cet intérêt est extrêmement marginal). Il y a même une série spéciale dans la *Population and Development Review* intitulée « Archives », dans laquelle de courts extraits du travail de grands penseurs du passé sur le thème de la population sont publiés et commentés. Un tel extrait de l'œuvre de Smith fut également publié en 1978. Mais même ici, dans une revue entièrement consacrée, en principe, aux questions de population et de développement, ce ne sont pas les idées de Smith sur ce thème plus large qui ont été retenues, mais un extrait de Smith dans lequel il fait un plaidoyer en faveur de la mobilité libre des travailleurs, alimentant l'idée, aussi fausse que commune, que tout ce que Smith avait à dire sur les questions relatives à la population se limitait à son traitement du marché du travail.

Au cours des quarante dernières années, il y a eu un intérêt renouvelé et accru pour Adam Smith de la part des historiens de la pensée, parmi lesquels non seulement des historiens de la pensée économique, mais aussi des historiens de la pensée philosophique et des sciences sociales et humaines (et même des sciences naturelles). La publication des œuvres et de la correspondance d'Adam Smith, à partir de 1976, pour le bicentenaire de la publication de la *Richesse des Nations*, en particulier, a suscité un regain d'intérêt pour la pensée de Smith et a initié une grande vague de nouvelles études sur ses œuvres qui se poursuit à ce jour. Cela a notamment conduit à une réhabilitation de la philosophie morale de Smith, qui depuis le 19<sup>e</sup> siècle avait pris un rang largement secondaire par rapport à ses idées « économiques » dans l'étude et l'enseignement de son œuvre. A été révisé le vieux « Adam Smith Problem » du 19<sup>e</sup> siècle qui décrivait une prétendue contradiction entre la *Théorie des sentiments moraux* de Smith et sa *Richesse des nations*, la

première œuvre étant soi-disant basée sur la sympathie en tant que principe central du fonctionnement de la société alors que dans la seconde œuvre ce principe central était supposément représenté par l'intérêt personnel. Le nouveau consensus parmi les historiens de la pensée est qu'aucune contradiction n'existe de fait entre ces deux ouvrages, la sympathie n'étant aussi peu le seul principe directeur de la philosophie morale de Smith que l'intérêt personnel n'est le seul principe à l'œuvre dans sa théorie économique et politique. Plutôt, ces penchants humains jouent tous deux un rôle important dans la vision générale de Smith sur la société, les conséquences sociales involontaires des actions individuelles et « l'ordre émergent » de la somme des comportements individuels formant un thème transversal dans ses travaux. En d'autres termes, dans cette vague plus récente des études sur Smith, une cohérence est recherchée entre ses différentes œuvres, la nouvelle édition de Glasgow de ses œuvres et de sa correspondance présentant pour la première fois une collection complète de tous ses livres et essais publiés et non publiés ainsi que de sa correspondance, et surtout la totalité des notes d'étudiants retrouvées de ses leçons sur la jurisprudence et sur la rhétorique. Les différents éléments du grand récit de Smith, qui avaient été pour la plupart oubliés par les spécialistes des sciences sociales, Smith étant invoqué alors presque exclusivement par les économistes (et rarement lu, encore moins en son intégralité, par la majorité de ces derniers), ont donc été réévalués chacun individuellement, et l'articulation entre eux est devenue un thème majeur de cette nouvelle vague d'études sur Smith. Le présent travail s'inscrit pleinement dans cette tradition.

Il reste que l'opinion selon laquelle le thème de la population ne joue pas un rôle important dans le système de pensée de Smith est à ce jour largement répandue y compris chez les historiens de la pensée. Parmi le grand volume de commentaires sur Smith qui ont été pris en compte pour la présente étude, seule une poignée de contributions publiées traitent principalement du sujet de la population. Un court article paru dans les années 1950 sur Smith et la population est, comme à son habitude, essentiellement limité aux vues de Smith sur le marché du travail (Nilson, 1952). Deux articles (tous deux du même auteur) et un chapitre de livre (Spengler 1970, Bowen 1976, Spengler 1976), qui examinent la question plus en détail, datent de l'époque des célébrations du bicentenaire de la *Richesse des nations*. Deux autres contributions qui traitent directement des idées de Smith sur la population sont très récentes et, de fait, ne sont pas encore publiées (Brennan 2013, Sunna à paraître). Schumpeter (1986 [1954]) et Robbins (1968) ont également traité de Smith de manière assez détaillée dans leurs chapitres respectifs sur le thème de la population dans l'histoire de la pensée économique.

Mais globalement, le sujet de la population semble avoir été laissé de côté dans la littérature secondaire sur Smith au cours du 20<sup>e</sup> siècle, de même que Smith a été généralement omis des traitements du thème de la population dans l'histoire de la pensée (ou mentionné seulement en passant, en rapport avec ses théories du marché du travail supposées pointer vers Malthus).

Il semble y avoir un intérêt accru ces dernières années pour « l'économie géographique » ou la « géographie économique » de Smith (voir notamment le *Rapport sur le développement dans le monde 2009* de la Banque mondiale). La contribution de Smith dans ce domaine est reconnue. Mais ce thème n'est pas explicitement lié par la grande majorité des auteurs qui en parlent à ses idées sur la population. Des sujets tels que la répartition de la population sont traités de manière statique et en tant que « données ». Dans l'ensemble, un traitement intégral des idées de Smith sur la population et le développement fait cruellement défaut. Ce travail vise à contribuer à combler ce fossé.

Le sujet du rôle de la population dans le travail d'Adam Smith est particulièrement important en raison de deux raisons confluentes. Tout d'abord, la démographie (ou ce qui est plus communément appelé, aux États-Unis, « population science »), étant l'une des plus récentes des sciences humaines à devenir une discipline autonome, est généralement retracée par ses praticiens au travail du début du 19<sup>e</sup> siècle de Malthus, plus rarement à des auteurs antérieurs (en particulier John Graunt et/ou William Petty) (Demeny & McNicoll 2003, p. 7), mais qui sont généralement considérés isolément, c'est-à-dire indépendamment du mouvement intellectuel plus large de leur période respective. En revanche, les idées démographiques du 18<sup>e</sup> siècle, de la part de David Hume, Montesquieu et Adam Smith notamment, est relativement peu connue des démographes. Plutôt, de la même manière qu'Adam Smith et d'autres économistes classiques sont généralement considérés par les économistes actuels seulement comme des précurseurs primitifs des idées plus élaborées des théoriciens économiques ultérieurs — illustré par l'affirmation influente de Schumpeter que « de loin la meilleure partie de la théorie économique d'A. Smith » était « la théorie de l'équilibre rudimentaire du chapitre 7 » qui « pointe vers Say et, à travers le travail de ce dernier, vers Walras » (1986 [1954], p.183) — les auteurs antérieurs sur les questions de population sont considérés par la plupart des démographes comme des précurseurs et des versions plus rudimentaires des idées plus complètes de Malthus et des néo-malthusiens. La controverse du 18<sup>e</sup> siècle sur la population comparée de l'Europe ancienne et moderne, impliquant notamment Montesquieu, Hume et Wallace, par exemple, est généralement considérée simplement comme un sorte de bizarrerie, et regroupé avec tout ce qui a été écrit sur la population

avant Malthus dans la catégorie générale d'« idées préscientifiques », menant à Malthus. Cette vue est implicite dans les titres des études de ces idées contenant les mots « pré-Malthusien » (Stangeland 1904) ou « avant Malthus » (Gonnard 1929a, 1929b ; Black 1985 ; Hecht 1986) — de la même manière que les théories économiques « pré-smithiennes » sont souvent ainsi étiquetées et traitées —, négligeant à la fois combien Malthus lui-même s'inspirait de- et reprenait des thèmes précédemment ressassés (notamment la question de la population et des inégalités traitée de la même manière que dans l'*Essai* de Malthus par Wallace dans son *Various Prospects of Mankind, Nature, and Providence* écrit quatre décennies plus tôt) et comment, inversement, ces débats antérieurs portaient sur des thèmes qui *n'étaient pas* inclus dans l'approche de Malthus.

Pourtant, cette façon téléologique de concevoir l'histoire intellectuelle (et l'histoire en général) — comme une progression linéaire ou une chaîne d'événements qui, par amélioration constante, a produit la situation ou le paradigme actuel, plutôt que comme un débat ou une confrontation de points de vue divergents avec beaucoup de répétitions sous différentes formes dans des périodes successives —, alors qu'elle est toujours la vue dominante de l'histoire de leurs disciplines respectives tenue par la plupart des chercheurs dans les sciences naturelles et humaines, est aujourd'hui largement rejetée par les historiens (de la pensée) eux-mêmes. Herbert Butterfield a nommé la vision téléologique de l'histoire « Whig History », dans son *The Whig Interpretation of History* en 1931, et le terme a été largement adopté comme une dénomination péjorative de la pratique par les historiens des idées. Ceci est pertinent, en ce qui concerne la théorie de la population, en particulier dans la mesure où une grande partie de la théorie de Malthus elle-même va largement à l'encontre du paradigme néo-malthusien actuellement prédominant. Et ceci est vrai d'autant plus des œuvres de Smith, Hume et Montesquieu qui constituent le contexte immédiat dans lequel Malthus a écrit.

La première raison pour la pertinence d'une étude des idées de Smith sur la population est donc l'importance de ces idées pour elles-mêmes, c'est-à-dire en tant que théorie de population, distincte de celle de Malthus et d'autres auteurs. Cette raison est, en d'autres termes, de découvrir la dimension démographique de la pensée de Smith, afin de déterrer la contribution de Smith à l'histoire de la pensée sur la population, sa contribution — encore pertinente aujourd'hui — à la discipline de la démographie, qui n'était pas une discipline distincte au moment où il écrivait, comme c'est le cas pour l'économie.

La deuxième raison de l'importance d'une étude sur les idées de Smith sur la population est que, dans l'œuvre de Smith, les concepts aujourd'hui englobés sous

la notion de population sont intimement liés à tous les aspects du « progrès de la société ». Ce sujet, « le progrès de la société », doit sans aucun doute être reconnu comme le thème dominant de la pensée politique et économique de Smith. Ce thème comprend des facteurs politiques, économiques, sociologiques, culturels, démographiques et géographiques, à savoir le développement : du gouvernement et des institutions gouvernementales (y compris les lois) ; du marché ; de la division du travail ; de l'inégalité (des classes sociales) ; des mœurs et les coutumes ; du capital et de la technologie ; tous ces éléments étant connectés dans la théorie de Smith au thème général de ce que j'appellerai désormais « le processus de peuplement », à savoir la population, dans son sens originel non d'une quantité de personnes se trouvant sur un territoire particulier, mais du processus par lequel un territoire se *peuple*, y compris la croissance, la propagation et la concentration de la population dans son sens contemporain.

Foucault (2004 [1977-78], p. 69) nota que le mot population, qu'il considérait comme une grande innovation conceptuelle du 18<sup>e</sup> siècle, se référait à l'origine, en français et en anglais, au « processus de peuplement d'un territoire » (McNicoll 2007, p. 829), dérivant (plutôt que, comme on pouvait s'y attendre, l'inverse) du mot « dépopulation », qui dénote encore exclusivement l'idée de processus. Mais selon Théré et Rohrbasser (2011, p 141-2), bien que le mot « dépopulation » apparaisse dans les dictionnaires avant le mot « population », il n'y a pas lieu d'affirmer que ce dernier dérive du premier. En outre, la signification autant de quantité que de processus aurait une longue histoire selon ces auteurs. Mais celle de processus semble être plus répandue au 18<sup>e</sup> siècle. Un parallèle intéressant de cette double signification — de processus et d'état — d'un concept utilisé au 18<sup>e</sup> siècle peut être trouvé chez Hume, qui affirma d'une passion qu'elle est « une existence originale, ou, si vous voulez, une modification d'existence » (Hume 1888 [1739], page 415). À noter que la signification de processus du mot « population » est également présente dans le « principe de population » de Malthus. Pour exprimer le concept ultérieur de « surpopulation » (entendu comme quantité statique), Malthus lui-même utilisa le mot « over-populousness » dans la première édition de *l'Essai*.

Dans les toutes premières lignes de la *Richesse des nations* Smith nous dit : « Ainsi, selon que ce produit, ou ce qui est acheté avec lui, est en proportion plus ou moins grande avec le *nombre de ceux qui le consomment*, la nation sera mieux ou moins bien fournie avec toutes les nécessités et convenances ». Cet accent mis sur le revenu par habitant comme mesure de la richesse par Smith a souvent été noté. Mais le lien avec la population est rarement discerné. Foucault, au contraire, considérait que l'engagement de Smith avec la population à cet égard était

déterminant dans le sens établi que le concept de population acquis (2004 [1977-78], p.70-81), Smith représentant, selon lui, un moment déterminant dans le développement de la science sociale moderne (1966).

Le fait qu'il existe un *processus de peuplement*, c'est-à-dire un processus de croissance et d'établissement d'une population sur un territoire, inhérent et inséparable du processus de développement économique et social dans son ensemble, est une notion entièrement étrangère à la plupart des économistes modernes, plus habitués à voir la croissance de la population en termes de « pression démographique », un obstacle à surmonter plutôt qu'une force positive dans le développement économique. Pourtant, dans la pensée du 18<sup>e</sup> siècle relative au « progrès », et certainement dans le travail d'Adam Smith, cette notion est non seulement présente, mais joue un rôle déterminant dans sa théorie générale, même si les récits modernes ne s'y intéressent quasiment jamais. La théorie du développement économique des « quatre étapes » du progrès de la société de Smith, notamment, est essentiellement structurée autour d'un récit du processus de peuplement d'une nation.

Adam Smith est donc considéré à tort comme une figure mineure de l'histoire de la pensée sur la population. Les commentateurs de Smith sur le thème de la population ont par ailleurs trop insisté sur son chapitre sur les salaires et le marché du travail dans la *Richesse des nations*, dans lequel Smith décrit la demande de main-d'œuvre et son offre (la population) comme étant ajustée par le taux de salaire. De fait, la théorie de Smith donne un rôle beaucoup plus important à la dynamique de la population. En effet, la population joue un grand rôle dans la définition même du concept possiblement le plus fondamental de la *Richesse des nations* : le marché. L'étendue du marché est ainsi décrite par Smith comme déterminée en grande partie par la proximité physique des agents économiques individuels les uns par rapport aux autres, c'est-à-dire la concentration de la population. Au cours du « progrès naturel de l'opulence » d'une société rurale-agricole vers une nation commerçante urbaine-industrielle, « l'état progressif » est maintenu par la croissance démographique continue et la division du travail qui s'ensuit entre ville et campagne, à l'origine de la croissance des villes. Ainsi, Smith ne formule pas seulement une théorie de la croissance démographique dans la *Richesse des nations*, mais les travaux de Smith comprennent aussi des éléments fondamentaux d'une théorie des mouvements de population et de l'urbanisation.

L'œuvre de Smith n'accorde pas seulement un plus grand rôle à la population qu'une vision déconnectée de ces éléments dispersés, chacun considéré séparément, pourrait suggérer, mais ces éléments sont en fait reliés les uns aux autres dans la théorie de Smith du développement économique et social, de



manière à pouvoir affirmer que Smith a développé une véritable théorie de la population, qui d'ailleurs lui est propre — même si cette théorie n'est qu'accessoire à son souci plus large du progrès matériel des nations et des moyens de le favoriser. Je ne prétends pas que cette théorie de la population est tout à fait originale ni particulièrement remarquable, étant donné le travail des prédécesseurs de Smith. Plutôt, la population, comme le commerce, joue un rôle important dans sa théorie du développement économique — sa théorie du commerce (international) étant un autre élément pour lequel Smith a longtemps été critiqué comme n'étant ni original ni remarquable, et le thème du commerce étant, lui-aussi, étroitement lié à la théorie générale du progrès de la société de Smith.

Je ne prétends pas non plus que la population est une variable *indépendante*, ou qu'elle est à elle seule une force motrice ou le premier moteur dans la théorie de Smith (bien que cette idée puisse être défendue, en particulier en ce qui concerne l'état primitif). Plutôt, la théorie de Smith du progrès implique une série de facteurs qui sont si intimement liés et dépendants les uns des autres qu'ils ne peuvent augmenter d'autre façon que proportionnellement les uns aux autres. Ainsi, la division du travail, l'accumulation du capital, la population et le développement des lois et du gouvernement dépendent tous les uns des autres. En tant qu'élément de la vision systémique que Smith développe dans la *Richesse des Nations* (ainsi que dans la *Théorie des sentiments moraux* et les *Leçons sur la jurisprudence*), le traitement de la population par Smith mérite toute l'attention des chercheurs spécialistes de Smith et de tous ceux qui s'intéressent à la perspective Smithienne sur le développement économique.

Le sujet de la population est donc d'une grande importance pour l'étude de l'œuvre de Smith et, inversement, le travail de Smith peut être d'une grande importance pour l'étude du sujet de la population. Ce que l'on pourrait appeler la « perspective smithienne » est, en effet, à bien des égards une heuristique plus utile pour comprendre l'interrelation des différentes variables qui affectent et sont affectées par les questions relatives à la population que la perspective dominante néo-malthusienne. Il est donc important de repérer le rôle crucial de la population dans le travail de Smith, à la fois pour une meilleure compréhension de Smith et pour le rétablissement d'une vision alternative importante des interrelations entre population et économie.

Cependant, l'importance de l'élément de la population dans la pensée de Smith a été pendant longtemps minimisée. Une déclaration caractéristique de cette minimisation est faite dans l'introduction à l'édition Glasgow de la *Richesse des nations* (Campbell & Skinner 1976, p. 48). Puisque « Le spectre de la famine et de

certaines maladies avait été supprimé », et « la forte augmentation de la population et les problèmes de sa concentration étaient encore à venir » Campbell et Skinner croyaient qu'« il était facile [pour Smith] de concevoir le problème de la croissance économique comme correspondant à l'utilisation de la *force de travail* d'une manière qui répondrait le plus efficacement possible aux opportunités offertes par l'*expansion du marché* ». Ce traitement par Smith du « problème de la croissance économique » est présenté par les éditeurs de Glasgow comme étant déconnecté de la question de la population. Pourtant, les deux éléments invoqués, la force de travail et l'expansion du marché, sont directement liés, dans la théorie de Smith, au sujet de la population. La croissance démographique, en effet, augmente à la fois la force du travail et l'étendue du marché, de sorte que ce qui est à l'origine de l'expansion des opportunités de marché sert également à répondre à ces opportunités. Plutôt que d'ignorer la question de savoir si « L'augmentation de la population » est « une cause de la croissance économique, ou quelque chose à craindre », Smith répond en fait directement à cette question dans sa théorisation du développement économique. Comme Smith l'exprime dans les quatre phrases finales de son chapitre sur les salaires:

Ce qui se produit entre les ouvriers dans un atelier particulier a lieu, pour la même raison, parmi ceux d'une grande société. Plus leur nombre est grand, plus ils se divisent naturellement en différentes catégories et subdivisions d'emploi. Plus il y a de têtes occupées à inventer les machines les plus appropriées pour l'exécution des travaux de chacun, plus leur invention est probable. Il y a beaucoup de produits, donc, qui, à la suite de ces améliorations, viennent à être produit par tellement moins de travail qu'auparavant que l'augmentation de son prix est plus que compensée par la diminution de sa quantité. (WN I.viii.57, p. 104)

A l'inverse de ce que Campbell et Skinner prétendent, une population plus nombreuse est ici très clairement présentée par Smith comme une force positive dans le développement économique, approfondissant le développement technologique (l'invention) et la division du travail (les deux étant intimement liés dans la théorie de Smith plus généralement).

Conformément à la façon dont le sujet a été traité par les éditeurs Glasgow, la population est généralement considérée comme étant simplement un effet passif du développement économique dans la théorie de Smith. Cette déclaration ne présente qu'une vue partielle sur le rôle de la population dans la théorie de Smith, et il est étrange que les éditeurs de Glasgow, familiers avec les *Leçons sur la jurisprudence* (référéncés par eux tout au long de la *Richesse des nations*), où la population est articulée avec les arguments de Smith en ce qui concerne la

croissance et le développement de manière beaucoup plus explicite que dans ses publications, aient présenté une vision si incomplète du sujet. Il est difficile, bien entendu, y compris pour les historiens, d'échapper à leur propre époque, et la façon dont le sujet est introduit et présenté par les éditeurs de Glasgow est très caractéristique du point de vue néo-malthusienne qui était prédominant tout au long du 20<sup>e</sup> siècle, mais en particulier dans les années 1970 — lorsque le taux de croissance de la population mondiale, plus élevé que jamais avant ou depuis, était un grand facteur de préoccupation au niveau international. Ainsi, le « spectre de la famine » qu'ils évoquent fait très clairement allusion aux œuvres d'Ehrlich et des Meadows publiés quelques années avant l'édition de Glasgow. Alvin Hansen, au contraire, avait remarqué qu'« Adam Smith considérait la croissance de la population à la fois comme une conséquence et une cause du progrès économique » (1939, p. 2-3).

Les remarques de Hansen demeurent pertinentes aujourd'hui et sont illustrés et développées dans le présent travail. Lors de la présentation des ces idées sur Smith — énonçant que la population est un élément important dans son système de pensée et qu'elle joue un rôle positif dans le cercle cumulatif ou la « spirale » de progrès qui caractérise la théorie de Smith de la croissance, au moins dans ce qu'il appelait l'« état progressiste » — j'ai souvent entendu l'objection « si la population était un élément aussi important pour Smith, jouant un rôle positif pour la croissance économique, il l'aurait déclaré sans équivoque » ; ou bien, « si Smith a énoncé le rôle positif de la population pour la croissance économique de manière moins équivoque dans ses leçons sur la jurisprudence et d'autres travaux antérieurs à la *Richesse des nations*, il doit avoir changé d'avis à ce sujet dans l'intervalle. » Mais ce sont là des objections trop simples. Non seulement cela n'a pas empêché des auteurs dans le passé de reconnaître ce rôle important de la population chez Smith, comme ce fut le cas de Hansen, mais l'un des rôles primordiaux des historiens de la pensée est précisément d'examiner le travail des auteurs historiques de telle manière à mettre en évidence ce qui, bien qu'implicite dans leurs écrits, doit avoir été évident pour un public contemporain à ces auteurs, mais a cessé de l'être au fil du temps, parce que les références souvent tacites aux auteurs, œuvres, débats, controverses et événements contemporains sont devenus incompréhensibles pour les lecteurs de nos jours. La récupération de ces indices contextuels peut être effectuée uniquement en resituant l'œuvre dans le contexte de son temps : en la replaçant dans le cadre des débats auxquels elle a contribué, en divulguant quel public a été visé et quelle position a été appuyée dans le cadre de ces débats, en déchiffrant le vocabulaire caractéristique de l'époque et le sens contemporain des mots utilisés par l'auteur et qui sont encore utilisés aujourd'hui

mais dont le sens a évolué. Bien que chaque auteur puisse avoir l'espoir intime qu'elle sera encore lue deux siècles après sa mort, en effet, aucun auteur, à moins d'être divinatoire, peut contribuer sciemment à des controverses qui ne verront le jour que dans un avenir distant. En règle générale, les auteurs, que ce soit de littérature, de science ou de philosophie, s'adressent à un public contemporain et font référence à des idées et des événements de telle sorte qu'ils puissent être compris par leurs lecteurs au moment de la publication. Faire des références implicites plutôt qu'explicites peut être autant un choix stylistique, épargnant au public des spécifications fastidieuses et superflues, que ça peut être une stratégie délibérée pour créer une complicité avec le lecteur en flattant son intelligence. Ça peut aussi être simplement la manière habituelle, au moment de la composition de l'œuvre, de traiter de certaines idées et relations entre idées connues et nullement polémiques à cette époque, mais qui le sont devenus à une date ultérieure. En dépit de quelques déclarations explicites à cet effet, le rôle positif de la population dans ce qui est aujourd'hui considéré l'œuvre principale de Smith est en effet largement implicite, ce qui justifie qu'on s'efforce à le déterrer.

En effet, en matière de population étant à la fois l'effet et la cause du développement économique, Smith n'avait pas de position très controversée à faire valoir. Malgré des préoccupations face à une possible menace de surpopulation — par une expression implicite de l'idée de rendements décroissants d'une population croissante — véhiculée notamment dans les travaux de Wallace, Quesnay, Cantillon et Steuart, l'avis que la population était à la fois la cause et l'effet du développement économique était largement partagé au 18<sup>e</sup> siècle. Comme Schumpeter (1986 [1954], p 240-1) l'écrit :

au cours des dix-septième et dix-huitième siècles ... Les économistes ... Sauf rares exceptions ... étaient enthousiastes à l'idée d'état « populeux » et de l'augmentation rapide du nombre des habitants. De fait, jusqu'au milieu du dix-huitième siècle, ils étaient aussi quasi-unanimes dans cette attitude « populationniste » qu'ils l'ont jamais été en quoi que ce soit. Une population de plus en plus nombreuse était le symptôme le plus important de la richesse ; c'était la principale cause de la richesse ; c'était la richesse elle-même — le plus grand atout pour toute nation à posséder. Les déclarations de ce genre étaient aussi nombreuses que de rendre les citations superflues.

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« Mon sujet peut apparaître formidable de façon alarmante, mais je ne voulais pas qu'il en soit ainsi. » Ainsi commence le discours présidentiel d'Allyn Young devant la section F (Economie et Statistiques) de l'Association britannique pour

l'avancement des sciences, tenue à Glasgow le 10 Septembre 1928, et publié la même année (Young 1928). La même année aussi ont été publiés les actes de la conférence commémorant le cent-cinquantième anniversaire de la *Richesse des nations*, tenue à Chicago deux ans auparavant (Hollander et al. 1928). Que le prochain anniversaire majeur de ce travail (le bicentenaire de la *Richesse des Nations*, en 1976) allait avoir lieu là où il parlait, Allyn Young ne pouvait pas le savoir, bien sûr. Mais qu'il ait choisi de faire du « célèbre théorème d'Adam Smith selon lequel la division du travail dépend de l'étendue du marché » le leitmotiv de son discours, « de la même façon dont certains compositeurs mineurs empruntent un thème de l'un des maîtres et ajoutent certains développements ou variations propres », était probablement lié à la tenue de son discours dans la ville où Smith avait étudié et enseigné. « Ce théorème, je l'ai toujours pensé, » écrit Young, « est l'une des généralisations les plus illuminantes et les plus fructueuses que l'on puisse trouver où que ce soit dans la littérature économique en son ensemble » (Young 1928, p. 529).

Le « théorème » de Smith selon lequel la division du travail est limitée par l'étendue du marché a donc été porté à l'attention des économistes dans l'article justement célèbre de Young, au milieu d'une controverse qui faisait rage à ce moment au Royaume Uni (et aux États-Unis) en sciences économiques sur la question des coûts et des rendements croissants et décroissants et des économies externes, souvent appelée la controverse des coûts des années 1920. Alors que Young écrivit au cours de cette controverse (qu'il avait lui-même contribué à susciter, dans une recension remarquée du livre *La richesse et le bien-être* de 1912 de Pigou, en 1913), il a de fait commencé son discours (et article) de 1928 en déclarant qu'il n'avait pas pour but de contribuer à ce débat, que Young trouvait trop limité, mais plutôt de montrer que ce débat lui-même devait être resitué dans une perspective plus vaste, celle de la croissance et du développement, le thème central de la *Richesse des nations* de Smith (et peut-être de la science économique classique dans son ensemble). Ce thème avait alors été largement mis à l'écart, s'il n'avait pas été abandonné complètement, par une classe professionnelle qui — comme Nicholas Kaldor, un étudiant de Young quand il tenu son discours, fit remarquer cinquante ans plus tard — était habitué à « focaliser l'attention sur les fonctions allocatives des marchés à l'exclusion de leurs fonctions créatives » (Kaldor 1972, p. 1240).

Young est mort en 1929. Il était donc incapable de réagir lui-même aux utilisations et lectures qui ont été faites de son travail — ou bien de lui-même contribuer au « formidable » programme de recherche qu'il aurait pu susciter par le rappel des idées de Smith sur la division du travail et de l'étendue du marché.

« En relisant ce papier après une période de plusieurs années », écrit Kaldor (1972, p. 1243), « je suis convaincu qu'il était tant d'années en avance sur son temps que le progrès de la pensée économique lui est passée à côté, en dépit de l'attention qu'il a reçu au moment de sa publication originale. Les économistes ont cessé de lui prêter attention bien avant qu'ils aient pu en saisir toutes les conséquences révolutionnaires. » Robbins (1968, p. 40) déclara de manière similaire : « cela a toujours été une chose stupéfiante pour moi que ce développement révolutionnaire ait attiré relativement si peu d'attention. » Ceci n'est pas tout à fait exact. Joseph Schumpeter, lui aussi, avait mis en garde, dans son traité posthume sur l'histoire de l'analyse économique, que « Ce grand économiste et brillant théoricien est en danger d'être oublié » (1986 [1954], p. 842). Mais ce qu'il a écrit à propos de Young dans un article publié quelques années après la mort de Young est peut-être plus pertinente, à savoir que le travail de Young « survit dans le travail d'autres dans une mesure qu'il est impossible d'estimer » ; et : « Rarement, sinon jamais, une renommée comparable à la sienne a-t-été acquise sur la base de si peu de travail publié » (Schumpeter 1935, p 514-5). Il n'est pas exagéré de déclarer, en effet, que le papier de Young de 1928 à lui seul a profondément marqué la pensée de toute une génération d'économistes du développement (la première telle génération, en fait). Lauchlin Currie (un autre des étudiants de Young) observa plus tard que « les économistes qui, comme moi-même, ont souligné l'importance d'un taux de croissance initial élevé et continu (le Big Push de Rosenstein-Rodan, l'Effort Minimum Critique de Leibenstein, ma stratégie de la Percée ou du Secteur Entraînant, et d'autres qui prônaient des politiques d'exportation ou d'autre type sans leur donner des noms spéciaux) ont sans doute à un moment donné lu Young sur Smith » (1981, p. 59). Ainsi, alors que l'article de Young ne trouva pas beaucoup de résonance dans la théorie économique générale au cours du 20<sup>e</sup> siècle, il influença fortement les économistes de ce siècle qui étaient préoccupés par les questions de croissance et de développement, acquérant davantage de présence institutionnelle après la fondation des Nations Unies suivant la Seconde Guerre Mondiale et l'inscription du développement du « Tiers-Monde » comme un objectif majeur de la diplomatie internationale au cours (et dans le cadre de) la Guerre Froide. Young a ainsi profondément influencé, notamment, les deux grands économistes du développement d'après-guerre Paul Rosenstein-Rodan et Ragnar Nurkse. Un autre économiste du développement remarqué, Hla Myint, a également été inspiré par la contribution de Young de 1928 (une influence qu'il n'a reconnu lui-même que de manière oblique) à reconnecter le thème smithien de la division du travail et de l'étendue du marché à la question du commerce et du développement, alors le sujet d'un important débat

international. Le papier de Young n'est pas non plus tombé dans l'oubli après que la vague de l'économie du développement des années 1940-60s se soit estompée. Au cours des décennies plus récentes, les économistes associés à ce qui est devenu connu sous le nom de « nouvelle théorie de la croissance » et « nouvelles théories du commerce » (et la « nouvelle géographie économique »), tels Paul Krugman et Paul Romer, ont à nouveau connecté leur projet de recherche au nom de Young — et, parfois, à travers Young à Smith.

Kenneth Boulding (1971, p. 229) observa que « dans la théorie du développement économique, on doute parfois si tous les raffinements modernes et des modèles mathématiques sont beaucoup plus que des exercices talmudiques à propos de l'idée fondamentale d'Adam Smith sur la division du travail, l'étendue du marché, l'impact de l'accumulation et les effets de l'accroissement de la connaissance ». En effet, comme Santayana (1905, p. 284) l'écrit de manière célèbre : « Ceux qui ne peuvent se rappeler le passé sont condamnés à le répéter », et ce n'est pas différent pour l'histoire de la pensée. Il n'est pas surprenant, donc, que les économistes du 20<sup>e</sup> siècle, insuffisamment instruits dans l'histoire de leur discipline, aient continué à réinventer la roue — un processus qui n'a pas pris fin à la fin du siècle. Mais réinventer la roue sans réinventer aussi l'essieu et le palier laisse les véhicules difficiles à manier.

La question des rendements — leur caractère croissant ou décroissant — était depuis le début connecté à la population. C'est d'une population croissante et de la nécessité qui en découle de cultiver des terres agricoles d'une qualité décroissante que résultent les rendements décroissants dans la théorie de Ricardo sur la rente (et, avant celle-ci, dans celles identiques d'Anderson [1777] et de West [1815] (Schumpeter 1986 [1954], p. 252-4)). Et dans la conception de Smith des rendements croissants, c'est par une population croissante que le résultat opposé est obtenu : en augmentant les possibilités de division du travail, la croissance démographique occasionne une production et un revenu par habitant plus larges. Une plus grande offre de travail (soit une population plus importante), selon Smith, permet une plus grande division du travail, ce qui augmente le niveau général de la productivité.

Sans cette intégration dans le processus de peuplement, la théorie de Smith des rendements croissants obtenus par la division du travail reste incomplète. Young a fait allusion à ce lien entre la division du travail et de la population. Il a fait remarquer que « la doctrine positive de Senior est bien connue, et il y a eu d'autres qui ont pris acte de la circonstance selon laquelle avec la croissance de la population et des marchés de nouvelles opportunités pour la division du travail apparaissent et de nouveaux avantages en découlent » et que « Ils n'ont rien ajouté

au fameux théorème d'Adam Smith » (Young 1928, p. 529). Mais en écrivant ainsi de la « population *et* des marchés » (une distinction répétée à plusieurs reprises dans le document), et par la référence très périphérique au sujet de la population tout au long de son article célèbre, Young a en réalité davantage détourné la question de la division du travail et de l'étendue du marché du lien étroit avec les facteurs géographiques et démographiques qu'elle entretenait dans la théorie de Smith que d'attirer l'attention sur ce lien.

Les économistes du développement comme Rosenstein-Rodan et Nurkse qui ont construit leurs théories sur le réexamen par Young des idées de Smith sur la division du travail et l'étendue du marché ont encore davantage négligé le lien entre l'industrialisation et le processus de peuplement, ce qui est l'une des raisons pour lesquelles ils ont été amenés à considérer la dépendance de la division du travail de l'étendue du marché comme une contrainte plutôt qu'une opportunité. L'autre raison pour laquelle ils ont ainsi reconsidéré la question, raison à laquelle il a déjà été fait allusion, était leur croyance — caractéristique de l'économie du développement du milieu 20<sup>e</sup> siècle et diamétralement opposé à la pensée de Smith (et de Young) — que le développement économique est un processus qui devait être inauguré et soutenu par les gouvernements plutôt que de procéder graduellement et de manière autonome à partir de dynamiques présentes naturellement au sein des sociétés. Du point de vue smithien, Rosenstein-Rodan (1943) présente ainsi un faux dilemme en faisant remarquer que l'industrie lourde ne peut pas être lancée *ex nihilo* dans une économie essentiellement agricole et rurale. Sans parler de l'idée que des gens puissent continuer à travailler sur la terre s'ils n'y produisent rien — qui avait notamment été contestée par Schultz (1932), de sorte que le consensus des économistes agricoles mentionné par Rosenstein-Rodan (1944, p 160), selon lequel il y aurait eu une importante réserve de main-d'œuvre inexploitée en situation de chômage déguisé dans les zones rurales, n'existait pas de fait —, le point de vue de Rosenstein-Rodan semble équivaloir à la proposition selon laquelle, puisque, comme Young, inspiré de Smith, avait avancé, tout dans le processus de développement dépend de tout le reste, pour qu'il y ait une transformation de quoi que ce soit, tout doit changer à la fois, et cela pourrait être provoquée uniquement par une influence extérieure. Il n'y a pas de place dans ce point de vue pour le changement autonome, progressif, de type organique. Young, en revanche, avait remarqué, en phase avec Smith, que la conclusion « qu'aucun réel progrès économique puisse advenir par l'opération de forces générées au sein du système économique » était « répugnant au bon sens » (1928, p. 535). Pour Smith, l'urbanisation et l'industrialisation dépendaient l'une de l'autre et l'urbanisation était le résultat naturel du progrès de la société — un



processus qui pouvait être entravée par de mauvaises politiques, mais n'avait pas besoin d'être implanté ou assisté par le gouvernement pour voir le jour, comme il l'a développé notamment dans le livre III de la *Richesse des nations*. Le processus de peuplement (dont l'urbanisation n'est qu'un aspect) était considéré par Smith comme partie intégrante du progrès de la société, comme il ressort clairement de l'examen de l'histoire conjecturale de l'humanité développée dans ses *Leçons sur la jurisprudence*. Pour Smith, donc, l'industrialisation et l'urbanisation étaient les deux faces d'une même médaille : on ne construit pas une usine de chaussures dans un espace déconnecté (le dilemme de Rosenstein-Rodan), et pour de bonnes raisons. L'industrie (l'équivalent du siècle 18<sup>e</sup> étant désigné comme « les manufactures » par Smith) a besoin de l'épine dorsale que représente l'agglomération de la main-d'œuvre et de l'infrastructure, le développement de l'un de ces éléments nourrissant progressivement celui des autres, et vice-versa. Le processus de peuplement est donc un élément central de la transition d'une économie « arriérée » (dans le langage du 20<sup>e</sup> siècle) à une économie moderne, et les villes peuvent naturellement se développer dans une relation symbiotique avec leur arrière-pays seulement (ou des terres plus lointaines par le commerce extérieur) et ne sont pas créés ex-nihilo.

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Les deux idées fondamentales concernant la population et le développement contenues dans l'œuvre d'Adam Smith sont aujourd'hui, toutes deux, largement inconnues par les économistes comme par les démographes. Mettre au jour ces deux idées fondamentales et leur redonner une place appropriée dans le corpus académique sur Smith en les reconnectant au reste de son œuvre est le but principal du présent travail. Il est espéré, en outre, que cela contribuera à raviver l'intérêt pour ces idées de manière plus générale, et plus particulièrement dans le domaine des études aujourd'hui communément appelé « population et développement ». Ces deux idées sont conformes à ce qui est souvent appelé la position « populationniste ». Cependant, la première de ces deux idées pourrait être assimilée à la position « anti-populationniste » (à tort appelé « malthusienne ») si elle est lue de manière incomplète (et elle a en effet pu être lu de cette manière et inspirer ce point de vue).

La première de ces deux idées fondamentales est le plus souvent associée, aujourd'hui, avec le nom d'Ester Boserup (bien que, comme nous c'est illustré dans le premier chapitre, c'était une idée commune depuis des millénaires avant ses écrits) : à savoir que l'innovation technologique dépend en large partie (au niveau

de la société dans son ensemble) de la pression de la population. La croissance de la population, selon cette idée, a un effet perturbateur sur la relation entre l'homme et la nature. L'homme, au début — définie de diverses manières, soit (en termes religieux abrahamiques) comme avant « la chute », soit (avant l'avènement des religions abrahamiques et dans les récits profanes de l'existence humaine depuis) comme un « état de nature » ou « état sauvage » — vit en petits groupes, de la chasse et de la cueillette, de la main à la bouche, de la nature directement, tout comme les animaux qu'il chasse. Il n'y a pas de surplus de nourriture dans cet état des choses, ou seulement un très petit, mais pas nécessairement de pénurie non plus. Quand la population humaine croît, cependant, tout comme c'est le cas pour d'autres espèces animales, l'équilibre entre l'homme et son écosystème est perturbé. Les animaux et les plantes dont subsiste le groupe humain se feront de plus en plus rares et il y aura pénurie de nourriture. Cette pénurie de nourriture, à son tour, stimule l'homme (qui, à la différence des autres animaux a la capacité d'aller au-delà de son état naturel) à développer des technologies supérieures de procuration ou de production alimentaire, notamment, et d'évoluer ainsi vers un état plus avancé de la société.

Cette idée, qui peut être considérée comme une idée « population push » du développement technologique (Simon 1978), constitue le principal mécanisme de cause à effet de la progression des étapes socio-économiques dans la théorie des « quatre stades » du développement des sociétés d'Adam Smith, à laquelle est fait référence de manière implicite tout au long de la *Richesse des nations*, mais énoncé de la manière la plus complète dans ses leçons sur la jurisprudence, dont le contenu a été récupéré que récemment sous une forme plus complète grâce à la découverte d'un deuxième cahier de notes d'étudiants. Cette idée se rencontre dans les travaux de nombreux autres auteurs de l'époque, et même chez Malthus en effet (inspiré, ainsi qu'il l'était, par Smith et ses contemporains), bien que, en partie par le comportement de Malthus lui-même (comme cette idée n'apparaissait pas comme parfaitement compatible avec les conclusions qu'il voulait tirer de son travail à ses contemporains), et en partie par l'appropriation des travaux de Malthus par les néo-malthusiens, avec leur insistance sur les effets d'épuisement des ressources et de création de pénurie de la croissance de la population et leur négligence totale de l'aspect en question, à savoir l'effet stimulateur sur le développement technologique de la croissance démographique (qui est lui-même un effet du premier aspect), cette idée est tombée en grande partie dans l'oubli — aussi bien que le travail d'Ester Boserup au 20<sup>e</sup> siècle, dans lequel cette idée joue le rôle central, pouvait être considéré comme à la fois nouvelle et comme « prenant Malthus à contre-pied ».

La deuxième idée fondamentale sur la population et le développement qui se trouve dans l'œuvre de Smith pourrait, par analogie avec le terme « population push » être appelée une idée « population-pull ». (Simon (1978) appelait la théorie du développement technologique qu'il associait — à tort, ou en tout cas avec insuffisamment de justification — avec Malthus « invention-pull » par opposition à la théorie « population push » de Boserup.) L'idée d'Adam Smith est que ce qu'il a reconnu (après d'autres) être le principal moteur du développement économique, soit la division du travail, dépend de la taille de la population. Bien qu'elle en forme la base, comme il est expliqué dans le Chapitre 2, cette idée est aussi en partie occultée par la célèbre expression par Smith de cette idée avec la formule « la division du travail est limitée par l'étendue du marché ». L'étendue du marché, en effet, alors qu'elle dépend dès le départ, et le plus fondamentalement, de la taille de la population, vient intégrer de nombreux autres éléments au fur et à mesure que la société progresse : l'infrastructure physique, la technologie, la richesse, le capital. Ces éléments sont cependant largement liés les uns aux autres, et leurs définitions se chevauchent à un degré important, et ils sont inséparablement liés, en tout cas, avec la relation fondamentale décrite par Smith : que pour diviser le travail, plus d'une personne est nécessaire, et plus d'individus existent, plus le travail peut être divisé. L'étendue du marché, qui tient un rôle central dans l'explication de Smith à la fois du commerce et du développement économique, est définie au niveau de base par la taille et la concentration de la population. D'une certaine manière, bien sûr, le principe selon lequel la division du travail est limitée par l'étendue du marché est tout simplement une autre façon d'exprimer la proposition selon laquelle « la nécessité est la mère de l'invention ». Lorsque la nécessité et l'opportunité sont tenus comme équivalents (ou différentes manières de considérer la même réalité) les deux propositions expriment essentiellement la même idée. En d'autres termes, les deux points de vue de la population exerçant soit une force « pull » soit une force « push » sur le développement économique peuvent être conçus comme décrivant en réalité deux facettes d'un même processus, de manière analogue à ce que la description d'un verre rempli à moitié de sa capacité comme à moitié vide ou à moitié plein correspond simplement à deux manières différentes de décrire le même état.

## Grandes lignes du travail

Au cours des « quatre stades » caractéristiques de la théorie du développement socio-culturel des Lumières, utilisée par Smith, est contenu une théorie du développement technologique de type « population-push » (**chapitre 1**). Le développement technologique y est décrit comme un effet de la pénurie provoquée par la croissance de la population, conformément au principe selon lequel « la nécessité est la mère de invention ».

Mais non seulement la nécessité est-elle la mère de l'invention pour Smith, l'opportunité l'est également. La division du travail est limitée par l'étendue du marché, et l'étendue du marché décrit pour Smith le « pouvoir d'échanger », soit les opportunités d'échange qui se présentent à un producteur pour ses produits. Or cette étendue du marché est, elle aussi, déterminée en grande partie par la population. Ainsi, les possibilités de division du travail et donc d'avancement technologique sont augmentées à la fois par l'augmentation du nombre de personnes et par la concentration et la réduction des distances entre les individus que celle-ci occasionne (**chapitre 2**).

La population est donc à la fois ce qui crée des difficultés par un mécanisme de rendement décroissant et ce qui soulage ces difficultés grâce à un mécanisme de rendements croissants. Bien que cela puisse sembler contradictoire aux économistes des 20<sup>e</sup> et 21<sup>e</sup> siècle, conditionnés par une vision du système économique comme tendant perpétuellement vers l'équilibre (sans jamais l'atteindre forcément), vision dont l'idée de rétroaction négative est le fondement, la théorie de Smith, et plus généralement sa façon de concevoir la causalité, est principalement structurée par le mécanisme opposé de rétroaction positive, faisant que différents éléments se renforcent mutuellement de façon cumulative (**chapitre 3**).

De plus, le 18<sup>e</sup> siècle a vu un grand débat sur le rôle du luxe sur la société, et notamment sur la population. Comme Rousseau et Price, Smith pensait ainsi que le luxe était susceptible d'« affaiblir les pouvoirs de la procréation ». Cela peut sembler fort éloigné des conceptions du 20<sup>e</sup> siècle de la transition démographique, mais la façon dont l'interaction de la richesse, la fécondité et la « modernisation » a été théorisé au 20<sup>e</sup> siècle est en fait dans la lignée directe des conceptions du progrès du 18<sup>e</sup>. Alors que les idées de Smith sur la population ont jamais (à ma connaissance) été étudiées du point de vue de la théorie de la transition démographique, ses idées sur ce sujet, complétées par les développements de

Marx, peuvent donner une théorie plus compatible avec le bilan historique, il est avancé, que la théorie répandue néo-malthusienne (**chapitre 4**).

## **Chapitre 1**

### ***Ce qui a été fait?***

Dugald Stewart, le premier biographe de Smith, a souligné le rôle dans l'œuvre de Smith de ce que Stewart a nommé « l'histoire conjecturale » : une théorie du développement dérivé, tout comme la théorie économique moderne, d'une théorie particulière du comportement humain supposée universellement applicable. Étant donné que cette théorie, utilisée par de nombreux penseurs antérieurs et contemporains à Smith, comportait (la plupart du temps) quatre stades de progrès, Ronald Meek (1976b), l'appela la « théorie des quatre stades » dans les années 1970. Ni Stewart, ni Meek ont prêté une attention particulière au rôle de la population dans cette théorie. Plus récemment, Craig Smith (2006b) et Gavin Kennedy (2008) ont tous deux mentionné ce rôle de la population, mais sans le décrire comme un élément central de la théorie, cependant. Pourtant, la théorie des quatre stades est autant une théorie du peuplement qu'une théorie du développement économique. L'utilisation par Malthus des catégories de la théorie des quatre stades a récemment été remarquée, mais là aussi la connexion avec la population n'a pas été établie.

### ***Ce que je fais***

En établissant un lien entre le traitement par Smith du sujet celui de beaucoup de ses contemporains et prédécesseurs qui ont utilisé la théorie des quatre stades, avec une attention particulière portée à l'élément de la population, la fonction de cette théorie, y compris dans la *Richesse des nations*, peut davantage être illuminée. Bien que totalement ignoré au cours du 19<sup>e</sup> siècle, pour la simple raison que les leçons dans lesquelles elle a une place aussi importante ne sont devenus accessibles aux chercheurs, en partie, par les notes d'étudiants récupérés par Cannan à la fin du 19<sup>e</sup> siècle seulement, la présence et l'importance des quatre étapes de la théorie du développement de Smith dans la *Richesse des nations* a été contestée au 20<sup>e</sup> siècle, notamment par Hollander (1998 [1976]). Stewart et d'autres contemporains de Smith tels que Millar avaient insisté sur la connexion entre les cours de Smith et ses œuvres publiées en insistant, notamment, sur l'importance de l'histoire conjecturale comme élément de liaison. En analysant la théorie des quatre stades à travers le prisme de la théorie de la population, comme quoi elle a cessé d'être considérée au cours des 19<sup>e</sup> et 20<sup>e</sup>, davantage de

connexions peuvent être récupérés entre cette tradition théorique et les arguments présentés dans la *Richesse des nations*.

La pensée de Malthus, à travers sa réinterprétation par le néo-malthusianisme, a été associée principalement avec l'idée d'une influence négative de la croissance démographique sur la société et la nécessité de freiner cette croissance. Mais cela n'a jamais été la position de Malthus lui-même. La menace de la surpopulation a été invoquée par Malthus principalement pour réfuter la perspective d'une abolition des classes sociales présentée par Godwin et Condorcet, ce qui explique la colère qu'il récolta de la part de Marx. Il n'a jamais plaidé en faveur de la fin de la croissance démographique, qui dans sa perspective du 18<sup>e</sup> siècle marquait la fin du progrès lui-même. Au cours des décennies passées, une certaine attention a été accordée aux idées de Malthus en faveur de la croissance démographique formulées sous forme de théodicée dans les deux derniers chapitres de la première édition de son *Essai sur le principe de la population*. Bien que l'utilisation par Malthus des catégories de la théorie des quatre stades a été notée, le rôle de la population dans la théorie des quatre stades n'a cependant pas été lié à sa pensée. En comparant les arguments de Malthus avec les idées d'auteurs précédents dans le cadre de la théorie des quatre stades, on peut montrer que Malthus s'est inspiré significativement de cette tradition intellectuelle, ce qui jette plus de lumière sur la configuration théorique de son argumentation. Toute l'argumentation de l'*Essai*, y compris son élément anti-égalitaire, peut être démontré dériver de la théorie des quatre stades en effet, avec de légères déviations en des jonctions particulières (si même significatives) seulement.

## **Chapitre 2**

### ***Ce qui a été fait?***

Young (1928) a redécouvert l'importance du « théorème » de Smith selon lequel « la division du travail est limitée par l'étendue du marché ». Il a mentionné la population à cet égard, mais à travers son engagement distancié et furtif avec ce thème (dans l'article 1928 tout au moins), il a davantage détourné l'attention de la connexion démographique que de l'y attirer. Il a entièrement ignoré l'élément géographique. Les économistes du développement ultérieurs qui se sont inspirés de Young, tels Rosenstein-Rodan (1943) et Nurkse (1952), et plus récemment Krugman, ont accordé plus d'attention aux éléments géographiques, mais ont entièrement ignoré l'élément démographique. En dehors de la littérature qui traite spécifiquement du développement économique, on a donné aux idées de Smith sur la division du travail et l'étendue du marché, interprétées à travers Young et plus

tard à travers le prisme des théories keynésiennes, des significations entièrement différentes. Comme le marché est un concept qui au cours des siècles passés a évolué à partir d'une conception principalement géographique et matérielle du processus d'échange — les canaux physiques par lesquels le commerce est effectué — vers une désignation symbolique du processus d'échange lui-même et une synecdoque pour les institutions du système économique capitaliste, l'expression de Smith a été réinterprétée, anachroniquement, en accord avec cette nouvelle conception du marché. Bien que cela puisse avoir mieux convenu aux besoins de la macroéconomie moderne, soucieuse de la croissance économique dans les pays capitalistes avancés, c'est devenu largement hors de propos par rapport à la question du développement économique, et en tant que tel est devenu, aussi, largement déconnecté des idées originales de Smith, préoccupé comme il l'était, principalement, avec la question du progrès de la société (dans l'Ecosse d'avant la Révolution Industrielle).

### *Ce que je fais*

Pour récupérer le sens du mot « marché » qu'il avait pour Smith et ainsi de son idée que « la division du travail est limitée par l'étendue du marché », le **Chapitre 2** resitue la question dans le cadre de la théorie du développement de Smith, en reconnectant le marché avec sa dimension *autant* géographique que démographique. En déconnectant le concept des acceptions modernes d'« institution capitaliste » et de « demande globale » et en le reconnectant à ce que le marché décrivait pour Smith — un véhicule d'échange, essentiellement de nature physique —, l'idée d'une limitation de la division du travail par l'étendue du marché peut être reconnectée de manière plus pertinente à l'ensemble de la théorie du développement de Smith, telle qu'elle figure dans sa théorie des quatre stades, décrivant à la fois le processus de croissance économique que de peuplement. C'est par la croissance de la population, en effet, que l'étendue du marché est (et ne peut seulement être) augmentée à l'origine, dans le cadre des premières étapes de la société, où la technologie, le capital et les interventions politiques à grande échelle ne sont pas encore accessibles. Vu sous cet angle, reconnecté à sa dimension démographique et géographique, la théorie smithienne d'un progrès naturel de l'opulence — lui-même une partie de la théorie des quatre stades — s'intègre parfaitement avec ses idées sur la division du travail et de l'étendue du marché, sans aucun besoin d'invoquer la nécessité d'un « Big Push » (Rosenstein-Rodan 1961) ou d'un « effort minimum critique » (Leibenstein 1957) qui sont tout à fait étranger à la conception de Smith du processus de développement.

## Chapitre 3

### *Ce qui a été fait?*

Schumpeter (1986 [1954]) et Hollander (1973) ont fait l'éloge de Smith principalement pour sa théorie du prix d'équilibre, basé sur le mécanisme de rétroaction négative. Ce mécanisme allait sous-tendre, dans une large mesure, la manière dont les théories et modèles économiques ont été construits au 19<sup>e</sup> et 20<sup>e</sup> siècle, dont Smith peut ainsi être interprété comme un précurseur.

Une grande partie du débat sur Smith au 19<sup>e</sup> siècle a concerné les éléments responsables de la réalisation de changements au sein des relations entre les éléments théoriques du système décrit par Smith. Cela concerne notamment la relation entre la division du travail et l'accumulation du capital. L'accumulation du capital (Brewer 1989) et la division du travail (Loasby 1997) ont été diversement tenues comme le premier moteur, ou comme l'élément le plus important responsable de la croissance économique chez Smith. Les pensées de Smith sur l'accumulation primitive étaient, de manière célèbre, le point de départ de l'examen de Marx du sujet. Marx a parlé d'un « cercle défectueux », une formulation reprise par Nurkse dans ses réflexions sur la question, inspirées par Young. La relation division du travail – étendue du marché était ici essentiellement conçu comme une impasse de laquelle il s'agissait de sortir, et c'est ainsi qu'elle est entré dans l'économie du développement du 20<sup>e</sup> siècle.

De même, dans la théorie de l'interaction ville-campagne en jeu dans la théorie de Smith du « progrès naturel de la société » et de « l'ordre contre nature et rétrograde », les contributions récentes ont examiné le sens de la causalité et la direction de la causalité cumulative entre le développement rural et urbain, et si Smith peut être considéré comme ayant été en accord avec la façon dont son objectif dans le livre III de la *Richesse des nations* est interprété (Bowles 1986, Bell 1992, Pack 1995, Blecker 1997, Paganelli 2013, Schumacher 2013).

Enfin, beaucoup a été dit et écrit sur la possibilité d'un progrès continu dans la théorie du développement de Smith, avec des interprétations très divergentes entre ceux qui mettent l'accent principalement sur les limites à la croissance (Heilbroner 1975, Wrigley 1988, Alvey 2004) et ceux qui insistent sur les perspectives de croissance continue dans la théorie de Smith (Himmelfarb 1984 ; Winch 1992a , 1996).

### *Ce que je fais*

Le Chapitre 1 et le Chapitre 2 décrivent, respectivement, une action de poussée et de traction de la population sur le progrès économique et technologique. Ces deux, alors qu'ils sont les deux faces d'une même pièce, sont également intégrés par



Smith grâce à un mécanisme de rétroaction positive, ou ce que Gunnar Myrdal a appelé « le principe du cumul ».

Cette façon circulaire de concevoir la causalité (avec la population vu notamment comme effet et comme cause du développement économique) ne se limite pas à la population, mais concerne tous les éléments interconnectés dans la théorie de Smith du développement économique.

Ainsi, entre la division du travail et l'accumulation de capital comme éléments causaux fondamentaux, il n'y a pas besoin de choisir. Tout comme la population, et tout élément du système théorique de Smith, ils sont reliés entre eux et dépendent mutuellement l'une de l'autre. Cela peut être montré en connectant la question de la dépendance de la division du travail, de l'accumulation du capital et de l'étendue du marché les unes des autres au thème de la « lente progression de l'opulence » ainsi qu'elle est conceptualisée par Smith, plus clairement que dans la *Richesse des Nations*, dans ses cours de Glasgow et le « Early Draft » de la *Richesse des nations*. Ici aussi, donc, les travaux plus anciens de Smith sont une source importante. La science économique moderne occulte la question par sa dépendance du mécanisme de rétroaction négative. La « lente progression de l'opulence » ainsi que conceptualisé par Smith peut être mieux comprise en la concevant comme une boucle de rétroaction positive : dans les premiers stades de la société, le processus de développement est très lent et progressif, parce que tous les éléments nécessaires pour le développement (division du travail, capital, commerce, population, etc.) sont présents seulement en petite quantité et limitent ainsi la progression des autres. Lorsque tous ces éléments augmentent de concert, le processus prend de l'ampleur et « prend son envol ». Les économistes du développement du milieu du 20<sup>e</sup> siècle (et les économistes jusqu'à ce jour) ont mal interprété les premières étapes du développement comme stades de stagnation (comme dans le « piège de l'équilibre de bas niveau » de Nelson (1956)), au lieu de les voir comme étapes graduelles vers une progression accélérée.

## **Chapitre 4**

### ***Ce qui a été fait?***

Ni Smith, ni Malthus, ni Marx ont théorisé sur la transition démographique qui ne pouvait être discernée qu'après leur mort (elle a pour la première fois été conceptualisée dans les années 1920), bien que la baisse des taux de mortalité avait en effet commencé à baisser alors qu'ils étaient encore en vie. Tous les trois penseurs, cependant, ont théorisé sur l'interaction entre les salaires, la richesse, la mortalité et la fécondité. Les idées de Smith sur cette question n'ont jamais été analysées sous l'angle de la transition démographique.

Il y a eu un intérêt accru de la part des économistes, au cours des dernières décennies, pour la question de l'interaction de la transition démographique et de la révolution industrielle (Lucas 1996, Galor et Weil 2000, Galor 2005, Bar & Leukhina 2010). Un thème particulier a été celui du « dividende démographique » (Mason 1988, Kelley & Schmidt 1995, Higgins & Williamson 1997, Bloom et Williamson 1998, Bloom, Canning and Sevilla 2001) : quand le nombre de « personnes à charge » (les enfants et les personnes âgées) diminue dans une société, ce qui se produit lorsque le taux de croissance de la population a été élevé pendant un certain temps, en raison de la diminution des taux de mortalité, mais commence à diminuer en raison de la baisse des taux de natalité, ceci est censé ouvrir une fenêtre d'opportunité pour une société, une proportion particulièrement importante de la population étant en âge de travailler et pouvant ainsi contribuer à la formation de la richesse nationale. A l'inverse, avoir un grand nombre de personnes à charge en raison soit de naissances élevées par rapport au taux de décès (de nombreux enfants à charge par rapport aux adultes qui travaillent) ou à de faibles taux de natalité et de décès ayant été observés pendant un certain temps (beaucoup de personnes âgées par rapport aux adultes qui travaillent) est pensé offrir de mauvaises bases pour la croissance économique. Ce modèle est ensuite utilisé pour expliquer la révolution industrielle en Europe et le décollage plus récent de certains pays en développement. L'argument avait déjà été utilisé négativement par Coale et Hoover (1958).

La façon dont la question est formulée par la littérature autour du « dividende démographique » et la littérature connexe sur la question de la relation entre la transition démographique et la révolution industrielle repose sur l'« analyse économique » de la fertilité et du capital humain de Becker (1960, 1962), la première desquelles il prétendait avoir dérivé de Malthus. Dans cette théorie, les enfants sont considérés comme des « biens de consommation » pour les parents, mais ils peuvent être des « biens de production » grâce à des investissements par les parents dans la « qualité d'enfants » (capital humain) qu'ils substituent à la « quantité d'enfants », ce qui réduit les coûts et augmente les revenus des familles. Becker n'a pas divulgué pourquoi les familles s'engageraient (ou ne parviendraient pas à s'engager) dans une telle substitution. Dans la littérature récente sur l'interaction de la transition démographique et de la révolution industrielle, la théorie de Becker est reliée à la « nouvelle théorie de la croissance » de Lucas (1988) et Romer (1989) : les parents commencent à investir dans leurs enfants à cause des « économies externes » qui le rendent lucratif. Ceci est conjecturé avoir provoqué la transition démographique, où et quand elle a eu lieu. Le principal problème avec cette théorie est que la transition démographique

a été déclenchée non pas par une baisse du taux de natalité, mais par une chute antérieure des taux de mortalité, qui reste inexplicée et ne joue aucun rôle dans la théorie.

### ***Ce que je fais***

Alors que la pensée de Smith sur l'interaction des salaires, la richesse, la fécondité et la mortalité n'a jamais été analysé sous l'angle de la transition démographique, il semble que, surtout s'il est lu à travers l'interprétation de Marx plutôt que de Malthus (les deux étant possibles), une théorie de la transition démographique alternative à celle proposée par la « nouvelle économie domestique » au cours des dernières années peut être tiré des réflexions de Smith sur la question. Dans cette théorie, plutôt que la baisse de la fécondité étant occasionnée par des investissements dans le capital humain, qui occasionnent alors une hausse du niveau de vie, c'est au contraire l'élévation du niveau de vie, rendue possible par la plus grande division du travail dans les pays modernes plus peuplés, qui occasionne à la fois une baisse de la fécondité et rend possibles les investissements dans le capital humain, à l'échelle de la société entière plutôt qu'à l'échelle de la famille. À la différence de la théorie micro-économique qui a été dérivée de la « nouvelle économie domestique » et des « nouvelles théories de la croissance », cette théorie tient compte de l'évolution de l'environnement institutionnel qui à la fois occasionne et provient des changements associés au développement économique.

# References

- Adelman, Jeremy (2013). *Worldly Philosopher: The Odyssey of Albert O. Hirschman*. Princeton: Princeton University Press. 740 p.
- Ahmad, Syed (1996). Smith's Division of Labor and Rae's Invention: A Study of the Second Dichotomy, with an Evaluation of the First. *History of Political Economy*, 28 (3), Fall, 18.
- Al-Hamdi, Mohaned T (2006). Ibn Khaldun: The Father of the Division of Labor. Paper presented at *International Conference on Ibn Khaldun*, Madrid, Spain, November 3-5. 11 p.
- Alacevich, Michele (2011). Early Development Economics Debates Revisited. *Journal of the History of Economic Thought*, 33 (02), June, 145-171.
- Alvey, James E (2004). Adam Smith on Teleology and the Stationary State: A Rejoinder. *History of Economics Review* 40.
- Alvey, James E. (2003). Adam Smith's View of History: Consistent or Paradoxical? *History of the Human Sciences*, 16 (2), May, 1-25.
- Anspach, Ralph (1976). Smith's growth paradigm *History of Political Economy*, 8 (4), Winter, 21.
- Arthur, Brian W. (2010). Complexity, the Santa Fe Approach, and Non-Equilibrium Economics. *History of Economic Ideas*, 18 (2), 149-66.
- Aspromourgos, Tony (1986). On the origins of the term 'neoclassical'. *Cambridge Journal of Economics*, 10 (3), September, 265-270.
- (2010). 'Universal opulence': Adam Smith on technical progress and real wages *The European Journal of the History of Economic Thought* 17 (5), December, 1169-1182.
- Bar, Michael & Oksana Leukhina (2010). Demographic transition and industrial revolution: A macroeconomic investigation. *Review of Economic Dynamics*, 13 (2), April, 424-451.
- Barrett, Christopher B. (2008). 'spatial market integration'. in Durlauf, Steven N. & Lawrence E. Blume (eds.), *The New Palgrave Dictionary of Economics*.(2nd ed., Vol. 7): Palgrave Macmillan. 752-4
- Bashford, Alison & Joyce E. Chaplin (2016). *The New Worlds of Thomas Robert Malthus: Rereading the 'Principle of Population'*. Princeton University Press. p.
- Becker, Gary S. (1960). An Economic Analysis of Fertility. in Research, National Bureau of Economic (ed.), *Demographic and Economic Change in Developed Countries*. Princeton University Press. 209-240
- (1962). Investment in Human Capital: A Theoretical Analysis. *The Journal of Political Economy*, 5 (2), October, 9-49.
- (1991 (1981)). *A Treatise on the Family*. second, enlarged ed. Cambridge, Massachusetts: Harvard University Press. 424 p.
- Becker, Gary S. & William J. Baumol (1952). The Classical Monetary Theory: The Outcome of the Discussion. *Economica*, 19 (76), November, 355-376.
- Becker, Gary S., Edward L. Glaeser & Kevin M. Murphy (1999). Population and Economic Growth. *The American Economic Review* 89 (2, Papers and Proceedings of the One Hundred Eleventh Annual Meeting of the American Economic Association), May, 145-149.

- Becker, Gary S., Kevin M. Murphy & Robert Tamura (1990a). Human Capital, Fertility, and Economic Growth. *Journal of Political Economy*, 98 (5), October, S12-S37.
- (1990b). Human Capital, Fertility, and Economic Growth. *The Journal of Political Economy*, 98 (5), October, S12-S37.
- Beckmann, Martin J. (1981). Land Use Theory Then and Now: A Tribute to Sir James Steuart. *Papers in Regional Science*, 48 (1), 1-7.
- Bell, Joe A. (1992). Adam Smith's Theory of Economic Development: "Of the Natural Progress of Opulence". *Journal of Economics and Finance*, 16 (1), March, 137-145.
- Berger, Sebastian (ed.) (2009). *The Foundations of Non-Equilibrium Economics. The principle of circular and cumulative causation*. New York: Routledge. 198 p.
- Berry, Christopher J. (1974). Adam Smith's Considerations on Language. *Journal of the History of Ideas*, 35 (1), January - March, 130-138.
- Bianchini, Victor (2015). From the Laws of Human Nature to Capital Accumulation: James Mill's Analysis of the States of Society in the Elements of Political Economy. *The European Journal of the History of Economic Thought*, 22 (5), September, 852-871.
- Black, R. D. Collison (1985). Theories of Population in Britain and Ireland Before Malthus. *Quaderni di storia dell'economia politica*, 3 (1), 3-19.
- Blackstone, Sir William (1859) [1766]. *Commentaries on the Laws of England*. Vol. 1. Philadelphia: J. B. Lippincott Company. 2 volumes. 811 p.
- Blecker, Robert A. (1997). The 'Unnatural and Retrograde Order' Adam Smith's Theories of Trade and Development Reconsidered *Economica* 64 (255), August, 527-537.
- Blitch, Charles P. (1983). Allyn A. Young: a curious case of professional neglect. *History of Political Economy*, 15 (1), Spring, 24.
- (1990). Kaldor's lecture notes from Allyn Young's London School of Economics class, 1928-29. *History of Political Economy*, 22 (3), Fall, 21.
- Bloom, David E., David Canning & Jaypee Sevilla (2001). Economic Growth and the Demographic Transition. NBER Working Paper. 8685. 87 p.
- Bloom, David E., Jeffrey D. Sachs, Paul Collier & Christopher Udry (1998). Geography, Demography, and Economic Growth in Africa. *Brookings Papers on Economic Activity* (2), 207-295.
- Bloom, David E. & Jeffrey G. Williamson (1998). Demographic Transitions and Economic Miracles in Emerging Asia. *The World Bank Economic Review*, 12 (3), September, 419-455.
- Bonar, James (1894). *A Catalogue of the Library of Adam Smith. Author of the 'Moral Sentiments' and 'The Wealth of Nations'*. London and New York: Macmillan and co. 126 p.
- (1931). *Theories of Population from Raleigh to Arthur Young*. London: Allen & Unwin. 253 p.
- Borgetto, Michel (1997). *La devise "Liberté, Égalité, Fraternité"*. Que sais-je?, vol. 3196. Presses Universitaires de France. 128 p.
- Boserup, Ester (1965). *The conditions of agricultural growth: the economics of agrarian change under population pressure*. London: Allen & Unwin. 124 p.
- (1981). *Population and Technological Change: A Study of Long-Term Trends*. Chicago: University of Chicago Press. 255 p.

- Boulakia, Jean David C. (1971). Ibn Khaldûn: A Fourteenth-Century Economist. *Journal of Political Economy*, 79 (5), September - October, 1105-1118.
- Boulding, Kenneth E (1971). After Samuelson, Who Needs Adam Smith? *History of Political Economy*, 3 (2), Fall, 13.
- Bowen, Ian (1976). *Economics and demography*. London: Allen and Unwin. p.
- Bowles, Paul (1984). John Millar, the Four-Stages Theory, and Women's Position in Society. *History of Political Economy*, 16 (4), Winter, 619-638.
- (1986). Adam Smith and the 'Natural Progress of Opulence' *Economica* 53 (209), February, 109-118.
- Brakman, Steven & Charles van Marrewijk (2008). It's a big world after all: on the economic impact of location and distance. *Cambridge Journal of Regions, Economy and Society*, 1 (3), November, 411-437.
- Brennan, Geoffrey (2013). Adam Smith's Closet Demographics. Paper presented at *26th Conference of the History of Economic Thought Society of Australia*, Perth, 4-6 July. 13 p.
- Brewer, Anthony (1991). Economic Growth and Technical Change: John Rae's Critique of Adam Smith. *History of Political Economy*, 23 (1), Spring, 11.
- (1995a). The Concept of Growth in Eighteenth-Century Economics. *History of Political Economy*, 27 (4), 30.
- (1995b). Rent and Profit in the Wealth of Nations. *Scottish Journal of Political Economy*, 42 (2), May, 183-200.
- (1998). Luxury and Economic Development: David Hume and Adam Smith. *Scottish Journal of Political Economy*, 45 (1), February, 78-98.
- (1999). Adam Ferguson, Adam Smith, and the Concept of Economic Growth *History of Political Economy*, 31 (2), Summer, 18.
- (2008). Adam Smith's stages of history. Department of Economics University of Bristol Discussion Paper. 601. 25 p.
- Brezis, Elise S. & Warren Young (2003). The New Views on Demographic Transition: a reassessment of Malthus's and Marx's approach to population. *The European Journal of the History of Economic Thought*, 10 (1), Spring, 25-45.
- Brumberg, Richard & Franco Modigliani (1954). Utility Analysis and the Consumption Function: An Interpretation of Cross-Section Data. in Kurihara, Kenneth (ed.), *Post-Keynesian Economics*. New Brunswick: Rutgers University Press. 388-436
- Buchanan, James M. & Yong J. Yoon (2000). A Smithean Perspective on Increasing Returns. *Journal of the History of Economic Thought*, 22 (1), March, 43-48.
- Burkett, Paul (1998). A Critique of Neo-Malthusian Marxism: Society, Nature and Population. *Historical Materialism*, 2 (1), 118-142.
- Butterfield, Herbert (1931). *The Whig interpretation of history*. London: G. Bell and sons. 132 p.
- Cain, Lousi P. & Elyce J. Rotella (2001). Death and Spending: Urban Mortality and Municipal Expenditure on Sanitation. *Annales de Démographie Historique* (1), 139-54.
- Caldwell, John C. (1976). Toward A Restatement of Demographic Transition Theory. *Population and Development Review*, 2 (3/4), september - December, 321-366.

- Campbell, Roy H. & Andrew S. Skinner (1976). Introduction. in Campbell, Roy H. & Andrew S. Skinner (eds.), *An Inquiry into the Nature and Causes of the Wealth of Nations*. Vol. 1). Oxford: Oxford University Press. 1-66
- Caselli, Graziella, Jacques Vallin & Guillaume Wunsch (eds.) (2006). *Histoire des Idées et Politiques de Population*. Démographie : analyse et synthèse. vol. 7. INED. 920 p.
- Caton, Hiram (1985). The Preindustrial Economics of Adam Smith. *The Journal of Economic History*, 45 (4), December, 833-53.
- Chamley, Paul E. (1975). The Conflict between Montesquieu and Hume: A Study of the Origins of Adam Smith's Universalism. in Skinner, Andrew S & Thomas Wilson (eds.), *Essays on Adam Smith*. Vol. 1). Oxford: Oxford University Press. 274-312
- Chandra, Ramesh (2003). Allyn Young revisited *Journal of Economic Studies*, 30 (1), January, 46-65.
- (2004). Adam Smith, Allyn Young, and the Division of Labor *Journal of Economic Issues*, 38 (3), September, 19.
- (2006). Adam Smith, Allyn Young and the Division of Labour: A Misrepresentation. Strathclyde Discussion Papers in Economics. Department of Economics, University of Strathclyde, Glasgow. 10 p.
- Chandra, Ramesh & Roger J. Sandilands (2005). Does modern endogenous growth theory adequately represent Allyn Young? *Cambridge Journal of Economics*, 29 (3), May, 463-473.
- Chapman, Sidney J (1908). Laws of Increasing and Decreasing Returns in Production and Consumption *The Economic Journal*, 18 (69), March, 52-59.
- Chastellux, François Jean de (1772). *De la Félicité publique, ou Considérations sur le sort des hommes, dans les différentes époques de l'histoire*. Antoine-Augustin Renouard. 2 volumes. 682 p.
- Chesnais, Jean-Claude (1985). Progrès économique et transition démographique dans les pays pauvres : trente ans d'expérience (1950-1980). *Population*, 40 (1), January - February, 11-28.
- Christakis, Nicholas A. (2012). 'Holism'. in Brockman, John (ed.), *This Will Make You Smarter: New Scientific Concepts to Improve Your Thinking*. Harper Perennial. 81-3
- Christie, John (1993). The human sciences: origins and histories. *History of the Human Sciences*, 6 (1), February, 1-12.
- Clapham, J. H. (1922). Of Empty Economic Boxes. *The Economic Journal*, 32 (127), September, 305-314.
- Clark, Charles M (1990). Adam Smith and Society as an Evolutionary Process. *Journal of Economic Issues*, 24 (3), September, 20.
- Clark, Colin (1968) [1967]. *Population Growth and Land Use*. London: Macmillan. 406 p.
- (1984). Review of 'Population and the World Economy in the 21st Century' by Just Faaland. *Population Studies*, 38 (1), March, 176-177.
- Clark, Henry C. (2008). Montesquieu in Smith's method of 'theory and history'. *The Adam Smith Review*, 4, 132-57.
- Coale, Ansley J. & Edgar M. Hoover (1958). *Population Growth and Economic Development in Low-income Countries: A Case Study of India's Prospects*. Princeton University Press. 389 p.

- Coats, Alfred W. (1979). [rev] LJ & Winch, 'Adam Smith's Politics', 1978 (Beyond Adam Smith's Economics). *Kyklos*, 32 (3), September, 603-05.
- Colacchio, Giorgio (2009). Reconstructing Allyn A. Young's Theory of Increasing Returns *Journal of the History of Economic Thought*, 27 (3), September, 24.
- Colander, David (1995). Marshallian General Equilibrium Analysis. *Eastern Economic Journal*, 21 (3), Summer, 281-93.
- Coleman, William O. (2000). The Significance of John Locke's Medical Studies for His Economic Thought. *History of Political Economy*, 32 (4), Winter, 711-732.
- Commons, John R. (1931). Institutional Economics. *The American Economic Review*, 21 (4), December, 648-657.
- Cook, Alexandra (1994). *Rousseau's "moral Botany": Nature, Science, Politics and the Soul in Rousseau's Botanical Writings*. Cornell University. 720 p.
- Coontz, Sydney H. (1957). *Population theories and the economic interpretation*. London: Routledge & Kegan Paul. 200 p.
- Cour, Jean-Marie (2007). Peuplement, urbanisation et développement rural en Afrique subsaharienne : un cadre d'analyse démo-économique et spatial. *Afrique contemporaine*, 3-4 (223), 363-401.
- Cumming, Ian (1955). *Helvetius: His Life and Place in the History of Educational Thought*. London: Taylor & Francis. 272 p.
- Currie, Lauchlin B. (1981). Allyn Young and the Development of Growth Theory *Journal of Economic Studies*, 8 (1), 52-60.
- Dalrymple, John (1758). *An Essay Towards a General History of Feudal Property in Great Britain*. 3rd ed. London: printed for A. Millar, in the Strand. p.
- De Bandt, J., J-L. Ravix & Paul M. Romani (1990). Allyn Young: une approche de la dynamique industrielle *Revue française d'économie*, 5 (2), 111-138.
- Dellemotte, Jean & Benoît Walraevens (2015). Adam Smith on the Subordination of Wage-Earners in the Commercial Society. *The European Journal of the History of Economic Thought*, 22 (4), July, 692-727.
- Demeny, Paul (1986). Population and the Invisible Hand. *Demography*, 23 (4), November, 473-487.
- Demeny, Paul & Geoffrey McNicoll (2003). Preface. in Demeny, Paul & Geoffrey McNicoll (eds.), *Encyclopedia of Population*. Macmillan. vii-ix
- Denis, Andy (2006). Collective and Individual Rationality: Robert Malthus's Heterodox Theodicy. *History of Economic Ideas*, 14 (2), 9-31.
- Devèze, Jean-Claude (ed.) (2008). *Défis agricoles africains*. Paris: Karthala. 416 p.
- Diatkine, Daniel (2016). Foreign trade, International Trade and Say's Law. Unpublished manuscript. 10 p.
- Diemer, Arnaud (2003). Représentations du marché et démarches de l'économiste. Paper presented at *Xe colloque de l'Association Charles Gide pour l'étude de la pensée économique*, Grenoble, Switzerland, September. 30 p.
- Dimou, Michel & Bernard Pecqueur (2011). Some thoughts on William Petty's spatial paradigm Paper presented at *15<sup>th</sup> Annual Conference of the European Society of the History of Economic Thought (ESHET)*, Boğaziçi University, Istanbul, Turkey, May. 12 p.
- Dixon, William & David Wilson (2014). Political economy and the social disciplines: the modern life of Das Adam Smith Problem. *Cambridge Journal of Economics*, 38 (3), May, 623-641.



- Dow, Louis A. (1974). The Rise of the City: Adam Smith versus Henri Pirenne. *Review of Social Economy*, 32 (2), October, 170-85.
- Dzelzainis, Ella (2006). Reason vs Revelation: Feminism, Malthus, and the New Poor Law in Narratives by Harriet Martineau and Charlotte Elizabeth Tonna. *19: Interdisciplinary Studies in the Long Nineteenth Century*, 2.
- Eagly, Robert V. (1970). Adam Smith And The Specie-Flow Doctrine. *Scottish Journal of Political Economy*, 17 (1), February, 61-68.
- Ellerman, David (2004). Revisiting Hirschman on Development Assistance and Unbalanced Growth *Eastern Economic Journal*, 30 (2), Spring, 311-331.
- Elliott, Charles M. (1965). Review: 'The Conditions of Agricultural Growth: The Economics of Agrarian Change under Population Pressure' by Ester Boserup. *The Economic History Review*, 18 (3), 655-656.
- Elliott, John E. (2000). Adam Smith's Conceptualization of Power, Markets, and Politics. *Review of Social Economy*, 58 (4), December, 429-454.
- Elmslie, Bruce T (1994a). The Endogenous Nature of Technological Progress and Transfer in Adam Smith's Thought *History of Political Economy*, 26 (4), Winter, 15.
- Elmslie, Bruce T. (1994b). Positive feedback mechanisms in Adam Smith's theories of international trade *The European Journal of the History of Economic Thought* 1(2), Spring, 19.
- (2010). Did Smithian Economics Promote Slavery? *Real-World Economics Review*, 53, June 26, 150-55.
- Eltis, Walter A (2004). Emma Rothschild on economic sentiments: and the true Adam Smith. *The European Journal of the History of Economic Thought* 11 (1), Spring, 147-159.
- Eltis, Walter A. (1975). Adam Smith's Theory of Economic Growth. in Skinner, Andrew S & Thomas Wilson (eds.), *Essays on Adam Smith*. Vol. 2). Oxford: Oxford University Press. 426-54
- Emerson, Roger L. (1984). Conjectural History and Scottish Philosophers. *Historical Papers*, 19 (1), 63-90.
- Emmett, Ross (ed.) (2010). *The Elgar Companion to the Chicago School of Economics*. Cheltenham and Northampton: Edward Elgar. 350 p.
- Engels, Friedrich (1844). Umriss zu einer Kritik der Nationalökonomie. in Marx, Karl & Arnold Ruge (eds.), *Deutsch-Französische Jahrbücher*. Paris. 86-114
- Evensky, Jerry (2003). An Inquiry into the Nature and Causes of the Wealth of Nations, Book I: Its Relationship to Adam Smith's Full Moral Philosophical Vision. *Research in the History of Economic Thought and Methodology*, 21 (A), 1-47.
- (2005). "Chicago Smith" versus "Kirkaldy Smith" *History of Political Economy*, 37 (2), Summer, 7.
- Everett, Alexander H. (1823). *New Ideas on Population with Remarks on the Theories of Malthus and Godwin*. London: John Miller, 69, Fleet Street. 94 p.
- Feilbogen, Sigmund (1889). James Steuart und Adam Smith. *Zeitschrift für die gesamte Staatswissenschaft*, 45 (1/2), 218-260.
- Ferguson, Adam (1995) [1767]. *An Essay on the History of Civil Society*. Cambridge Texts in the History of Political Thought, vol. Geuss, Raymond & Quentin Skinner. Cambridge University Press. 280 p.
- Fiori, Stefano (1996). Order, Metaphors, and Equilibrium in Adam Smith's Thought. *History of Economic Ideas*, 4 (1-2), 175-203.

- Fisch, Max H. & Thomas G. Bergin (1944). Introduction Fisch, Max H. & Thomas G. Bergin (ed. & transl.) in *The Autobiography of Giambattista Vico*. Ithaca, New York Cornell University Press.
- Fleischacker, Samuel (2011). Adam Smith and cultural relativism. *Erasmus Journal for Philosophy and Economics*, 4 (2), Autumn, 20-41.
- Flint, Robert (1894). *History of the Philosophy of History*. C. Scribner's sons. 706 p.
- Forbes, Duncan (1954). 'Scientific' Whiggism: Adam Smith and John Millar. *The Cambridge Journal*, 7 (11), August, 643-70.
- Forman-Barzilai, Fonna (2005). Sympathy in Space(s): Adam Smith on Proximity. *Political Theory*, 33 (2), April, 189-217.
- (2010). *Adam Smith and the Circles of Sympathy : Cosmopolitanism and Moral Theory* Ideas in Context, vol. 96. Cambridge: Cambridge University Press. p.
- Foucault, Michel (1966). *Les mots et les choses*. Gallimard. 400 p.
- (2004) [1977-78]. *Sécurité, territoire, population. Cours au Collège de France (1977-1978)*. Hautes Études, vol. Gallimard / Le Seuil. p.
- Fox, Christopher (1995). Introduction: How to Prepare a Noble Savage: The Spectacle of Human Science. in Fox, Christopher, Roy Porter & Robert Wokler (eds.), *Inventing Human Science: Eighteenth-Century Domains*. Berkeley: University of California Press. 1-30
- Franklin, Benjamin (1755). *Observations Concerning the Increase of Mankind, Peopling of Countries, &c*. Boston: Printed and Sold by S. Kneeland in Queen Street. p.
- Franklin, Raymond S. (1976). Smithian Economics and Its Pernicious Legacy. *Review of Social Economy*, 34 (3), December, 379-389.
- Friedman, Milton (1957). *A Theory of the Consumption Function*. Princeton University Press. p.
- Galor, Oded (2005). The Demographic Transition and the Emergence of Sustained Economic Growth. *Journal of the European Economic Association*, 3 (2-3), April - May, 494-504.
- Galor, Oded & David N. Weil (1999). From Malthusian Stagnation to Modern Growth. *The American Economic Review*, 89 (2), May, 150-154.
- (2000). Population, Technology, and Growth: From Malthusian Stagnation to the Demographic Transition and Beyond. *American Economic Review*, 90 (4), September, 806-828.
- Ghazanfar, S. M. (ed.) (2003). *Medieval Islamic economic thought: filling the "Great Gap" in European economics*. London and New York: RoutledgeCurzon. 284 p.
- Girard, Alain (1982). Adolphe Landry et la démographie. *Revue française de sociologie*, 23 (1), January - March, 111-126.
- Goldsmith, Arthur A (1995). The State, The Market and Economic Development: A Second Look at Adam Smith in Theory and Practice. *Development and Change*, 26 (4), October, 633-650.
- Gonnard, René (1929a). Les doctrines de la population avant Malthus. *Revue d'histoire économique et sociale*, 17 (1), 58-84.
- (1929b). Les doctrines de la population avant Malthus. *Revue d'histoire économique et sociale*, 17 (2), 213-239.
- Gordon, Scott (1989). Darwin and political economy: The connection reconsidered. *Journal of the History of Biology*, 22 (3), January, 437-459.

- Gottfried, Paul (1977). Adam Smith and German Social Thought. *Modern Age*, 21 (2), Spring, 146-152.
- Grangeas, Geneviève, Jean-Didier Lecaillon, Jean-Marie Le Page & Christian Ottavj (1994). Les mécanismes de la croissance endogène chez Allyn Young *Revue française d'économie*, 9 (1), 3-39.
- Grieve, Roy H. (2006a). Putting the Record Straight: Adam Smith, Allyn Young and the Division of Labour Strathclyde Discussion Papers in Economics. Department of Economics, University of Strathclyde, Glasgow. 16 p.
- (2006b). Rejoinder to Dr Chandra. Strathclyde Discussion Papers in Economics. Department of Economics, University of Strathclyde, Glasgow. 3 p.
- Griliches, Zvi (1974). Household and Economy: Toward a New Theory of Population and Economic Growth: Comment. *The Journal of Political Economy*, 82 (2), March - April, S200-S218.
- Griswold, Charles L. (1999). *Adam Smith and the Virtues of Enlightenment*. Cambridge University Press. 412 p.
- Groenewegen, Peter (1977). Adam Smith and the Division of Labour: A Bicentenary Estimate. *Australian Economic Papers*, 16 (29), December, 161-174.
- (2008). 'division of labour'. in Durlauf, Steven N. & Lawrence E. Blume (eds.), *The New Palgrave Dictionary of Economics*.(2nd ed., Vol. 2): Palgrave Macmillan. 517-526
- Gusdorf, Georges (1973). *Les sciences humaines et la pensée occidentale. Tome VI: L'avènement des sciences humaines au siècle des Lumières. .* Bibliothèque scientifique, vol. Paris: Payot. 589 p.
- Haakonssen, Knud (2006). The Coherence of Smith's Thought. in Haakonssen, Knud (ed.), *The Cambridge Companion to Adam Smith*. Cambridge: Cambridge University Press. 1-21
- Haines, Michael R. & Richard H. Steckel (eds.) (2000). *A Population History of North America*. Cambridge: Cambridge University Press. 736 p.
- Haldane, Richard Burdon (1887). *Life of Adam Smith*. "Great Writers.", vol. Robertson, Eric S. London: Walter Scott, 24 Warwick Lane, Paternoster Row. 161 p.
- Hall, Edith (1989). *Inventing the Barbarian. Greek Self Definition through Tragedy*. Oxford Classical Monographs, vol. Oxford: Clarendon Press. 277 p.
- Hansen, Alvin H. (1939). Economic Progress and Declining Population Growth. *The American Economic Review*, 29 (1), March, 1-15.
- Hardin, Garret (1968). The Tragedy of the Commons *Science*, 162 (3859), 13 December, 1243-1248.
- Harris, Marvin (1968). *The Rise of Anthropological Theory: A History of Theories of Culture*. New York Thomas Y. Crowell. 806 p.
- Hart, Neil (2003). Marshall's Dilemma: Equilibrium versus Evolution. *Journal of Economic Issues*, 37 (4), December, 1139-60.
- Hartwell, R. Max (1961). The Rising Standard of Living in England, 1800-1850 *The Economic History Review* 13 (3), April, 397-416.
- Harvey-Phillips, M B (1984). Malthus' theodicy: the intellectual background of his contribution to political economy. *History of Political Economy*, 16 (4), Winter, 18.
- Hébert, Robert F. (1981). Richard Cantillon's Early Contributions to Spatial Economics. *Economica* 48 (189), February, 71-77.

- Hecht, Jacqueline (1986). Population theories before Malthus. in *International Population Conference, Florence, 1985, June 5-12*. Vol. 1). Liège: International Union for the Scientific Study of Population. 127-9
- Heilbroner, Robert L. (1975). The Paradox of Progress: Decline and Decay in *The Wealth of Nations*. in Skinner, Andrew S & Thomas Wilson (eds.), *Essays on Adam Smith*. Vol. 2). Oxford: Oxford University Press. 524-39
- (1999). *The Worldly Philosophers. The Lives, Times and Ideas of the Great Economic Thinkers*. 7th ed. New York: Simon & Schuster. 365 p.
- Heisel, Andrew (2014, October 21) Single Quotes or Double Quotes? It's Really Quite Simple. *Slate.com. Lexicon Valley: A Blog About Language*.
- Helvétius, Claude-Adrien (2009) [1758]. *De l'Esprit*. "Les classiques des sciences sociales", vol. Université du Québec à Chicoutimi. p.
- Higgins, Matthew & Jeffrey G. Williamson (1997). Age Structure Dynamics in Asia and Dependence on Foreign Capital. *Population and Development Review*, 23 (2), June, 261-293.
- Hildebrand, Bruno (1848). *Die Nationalökonomie der Gegenwart und Zukunft*. Vol. 1. Frankfurt am Main: Literarische Anstalt (J. Rütten). 329 p.
- Hill, Lisa (2001). The hidden theology of Adam Smith. *The European Journal of the History of Economic Thought* 8(1), Spring, 1-29.
- Himmelfarb, Gertrude (1984). *The Idea of Poverty. England In The Early Industrial Age*. New York: Alfred A. Knopf. p.
- Hirschman, Albert O. (1958). *The Strategy of Economic Development*. Yale studies in economics, vol. 10. Yale University Press. 217 p.
- (1977). *The Passions and the Interest: Political Arguments for Capitalism before its Triumph*. Princeton University Press. 153 p.
- (1998). *Crossing Boundaries: Selected Writings*. New York: Zone Books (MIT Press). 111 p.
- Hobsbawm, Eric J. (1957). The British Standard of Living 1790-1850. *The Economic History Review*, 10 (1), 46-68.
- (1963). The Standard of Living during the Industrial Revolution: A Discussion. *The Economic History Review* 16 (1), August, 119-134.
- Hodgen, Margaret T. (1964). *Early Anthropology in the Sixteenth and Seventeenth Centuries*. Philadelphia: University of Pennsylvania Press. 526 p.
- Hodgson, Geoffrey M. (2008). 'markets'. in Durlauf, Steven N. & Lawrence E. Blume (eds.), *The New Palgrave Dictionary of Economics*. (2nd ed., Vol. 5): Palgrave Macmillan. 324-31
- (2009). Foreword. in Berger, Sebastian (ed.), *The Foundations of Non-Equilibrium Economics. The principle of circular and cumulative causation*. New York: Routledge. vii-viii
- Hollander, Jacob H. (1927). Adam Smith 1776-1926. *The Journal of Political Economy*, 35 (2), April, 153-197.
- Hollander, Jacob H., John Maurice Clark, Paul H. Douglas, Jacob Viner, Glenn R. Morrow & Melchior Palyi (eds.) (1928). *Adam Smith 1776-1926: Lectures to Commemorate the Sesquicentennial of the Publication of "The Wealth of Nations"*. Chicago: University of Chicago Press
- Hollander, Samuel (1973). *The Economics of Adam Smith*. Vol. 1. Studies in Classical Political Economy, vol. University of Toronto Press. 351 p.

- (1997). *The Economics of Thomas Robert Malthus*. Studies in Comparative Political Economy and Public Policy, vol. 4. University of Toronto Press. 1054 p.
- (1998). The Historical Dimension of the Wealth Of Nations. in Hollander, Samuel (ed.), *The literature of political economy. Collected Essays II.*(2nd. ed. London: Routledge. 87-103
- Holt, Richard P. & Steven Pressman (2009). Nicholas Kaldor and cumulative causation: Public policy implications. in Berger, Sebastian (ed.), *The Foundations of Non-Equilibrium Economics. The principle of circular and cumulative causation*. New York: Routledge. 77-90
- Hont, Istvan (1987). The Language of Sociability and Commerce: Samuel Pufendorf and the Theoretical Foundations of the “Four-Stages Theory”. in Pagden, Anthony (ed.), *The Languages of Political Theory in Early-Modern Europe*. Cambridge: Cambridge University Press. 253-76
- (1989). The Political Economy of the ‘Unnatural and Retrograde’ Order: Adam Smith and Natural Liberty. *Schriften aus dem Karl-Marx-Haus*, 41, 122–149.
- (2010). *Jealousy of Trade: International Competition and the Nation-State in Historical Perspective*. Harvard University Press. p.
- Hont, Istvan & Michael Ignatieff (1983). Needs and justice in the Wealth of Nations: an introductory essay. in Hont, Istvan & Michael Ignatieff (eds.), *Wealth and Virtue. The Shaping of Political Economy in the Scottish Enlightenment*. Cambridge University Press. 1-44
- Houston, Alan C. (2008). *Benjamin Franklin and the Politics of Improvement*. Yale University Press. 321 p.
- Houthakker, Hendrik S. (1956). Economics and Biology: Specialization and Speciation. *Kyklos* 9(2), May, 181-189.
- Huck, Paul (1995). Infant Mortality and Living Standards of English Workers During the Industrial Revolution. *The Journal of Economic History*, 55 (3), September, 528-550.
- Hume, David (1888) [1739]. *A Treatise of Human Nature: Being an Attempt to Introduce the Experimental Method of Reasoning into Moral Subjects*. Oxford: Clarendon Press. 709 p.
- Hume, David. (1987) [1777]. *Essays, Moral, Political, and Literary*. Indianapolis: Liberty Fund. p.
- Immerwahr, John (1992). Hume's Revised Racism. *Journal of the History of Ideas*, 53 (3), September, 481-486.
- Jackson, Mark (2005). Liberty and Economic Growth in Adam Smith’s Possible World. *Constitutional Political Economy*, 16 (3), September, 277-284.
- Jacobs, Jane (1969). *The Economy of Cities*. New York: Random House. 268 p.
- Johnson, Roger D. (1990). Adam Smith's Radical Views on Property, Distributive Justice and the Market. *Review of Social Economy*, 48 (3), Fall, 247-271.
- Kafker, Frank A. & Jeff Loveland (2013). L’Admiration d’Adam Smith pour l’Encyclopédie. *Recherches sur Diderot et sur l’Encyclopédie*, 48, 191-202.
- Kaldor, Nicholas (1972). The Irrelevance of Equilibrium Economics. *The Economic Journal*, 82 (328), December, 19.
- Kalyvas, Andreas & Ira Katznelson (2001). The Rhetoric of the Market: Adam Smith on Recognition, Speech, and Exchange. *Review of Politics*, 63 (3), Summer, 549-579.

- Kames, Henry Home, Lord (2007) [1778]. *Sketches of the History of Man*. Natural Law and Enlightenment Classics, vol. Haakonssen, Knud. Liberty Fund. 1011 p.
- Kelley, Allen C. & Robert M. Schmidt (1995). Aggregate Population and Economic Growth Correlations: The Role of the Components of Demographic Change. *Demography* 32 (4), November, 543-555.
- Kelley, Donald R. (1980). The prehistory of sociology: Montesquieu, Vico, and the legal tradition. *Journal of the History of the Behavioral Sciences*, 16 (2), April, 133-144.
- Kennedy, Gavin (2008). *Adam Smith: A Moral Philosopher and His Political Economy*, . Great Thinkers in Economics, vol. Thirlwall, A. P. New York: Palgrave Macmillan 287 p.
- Kern, William S. (2009). McCulloch, Scrope, and Hodgskin: Nineteenth-Century Versions of Julian Simon *Journal of the History of Economic Thought*, 25 (03), September, 289-301.
- Kerr, Prue (1993). Adam Smith's Theory of Growth and Technological Change Revisited *Contributions to Political Economy*, 12 (1), 1-27.
- Keynes, John Maynard (1963) [1951]. *Essays in Biography*. New Edition with Three Additional Essays ed. The Norton Library, vol. New York: Norton & Company. p.
- Khan, Mohd. Shabbir (1954). Adam Smith's theory of economic development (in relation to underdeveloped economies). *The Indian journal of economics*, 34, April, 337-342.
- Kibrıtcıođlu, Aykut (2002). On the Smithian origins of "new" trade and growth theories. *Economics Bulletin*, 2 (1), 1-15.
- Kiekhofer, W. H., John Maurice Clark, Paul T. Homan, Hugh M. Fletcher, Max J. Wasserman, Willard E. Atkins, Francis D. Tyson, William W. Hewett & R. T. Ely (1932). Round Table: Institutional Economics. *The American Economic Review*, 22 (1: Supplement: Papers and Proceedings of the Forty-fourth Annual Meeting of the American Economic Association), March, 105-116.
- Kim, Kwangsu (2001). Adam Smith's Theory of Economic Growth and Its Demand Side. *Journal of the History of Economics and Economic Thought*, 4 (1), June, 98-123.
- Kirk, Dudley (1996). Demographic Transition Theory. *Population Studies*, 50 (3), November, 361-387.
- Knies, Karl (1853). *Die Politische Oekonomie vom Standpunkte der Geschichtlichen Methode*. Braunschweig: C. A. Schwetschke und Sohn. p.
- Knight, Richard Payne (1796). *The Progress of Civil Society. A Didactic Poem, in Six Books*. London: Printed by W. Bulmer and Co. For G. Nicol, Bookseller, Pall-Mall. p.
- Koerner, Lisbet (1999). *Linnaeus: nature and nation*. Cambridge and London: Harvard University Press. 298 p.
- Kreager, Philip (1991). Early Modern Population Theory: A Reassessment. *Population and Development Review*, 17 (2), June, 207-22.
- Kritsky, Gene (2017). Beekeeping from Antiquity Through the Middle Ages. *Annual Review of Entomology*, 62 (1), January, 249-264.
- Krugman, Paul (1990a). *Rethinking International Trade*. Cambridge, MA: MIT Press. 282 p.

- (1993). Towards a Counter-Counterrevolution in Development Theory. in Summers, Lawrence H. & Shekhar Shah (eds.), *Proceedings of the World Bank Annual Conference on Development Economics 1992*. World Bank. 15-38
- (1994). Increasing Returns and Economic Geography *The Journal of Political Economy*, 99 (3), June, 17.
- Krugman, Paul R. (1990b). *Rethinking International Trade* MIT Press. 282 p.
- Kurz, Heinz D. (2016). Adam Smith on markets, competition and violations of natural liberty. *Cambridge Journal of Economics*, 40 (2), March, 615-638.
- Kuznets, Simon (1954). Population, Income and Capital. *International Social Science Bulletin*, 6 (2), 165-70.
- (1955). Economic Growth and Income Inequality. *The American Economic Review*, 45 (1), March, 1-28.
- Lange, Oscar (1942). Say's Law : A Restatement and Criticism. in Lange, Oscar, Francis Mcintyre & Theodore O. Yntema (eds.), *Studies in Mathematical Economics and Econometrics. In Memory of Henry Schultz*. Chicago: Chicago University Press. 49-68
- Lapidus, André (2002). Le profit ou la domination : La figure de l'esclave dans l'économie d'Adam Smith. in Célimène, Fred & André Legris (eds.), *L'Économie de l'Esclavage Colonial*. Paris: CNRS. 47-72
- Lavezzi, Andrea (2003a). Division of Labor and Economic Growth: Paul Romer's Contribution in a Historical Perspective. in Salvadori, Neri (ed.), *The Theory of Economic Growth: A 'Classical' Perspective*. Cheltenham: Edward Elgar. 272-84
- (2003b). Smith, Marshall and Young on division of labour and economic growth. *The European Journal of the History of Economic Thought*, 10 (1), Spring, 81-108.
- Lawson, Tony (2005). The (Confused) State of Equilibrium Analysis in Modern Economics: An Explanation. *Journal of Post Keynesian Economics*, 27 (3), Spring, 423-444.
- Le Bras, Hervé (2000). Peuple et populations. in Le Bras, Hervé & Silvie Bertaux (eds.), *L'invention des populations: biologie, idéologie et politique*. Odile Jacob. 9-47
- Lehmann, William C. (1971). *Henry Home, Lord Kames, and the Scottish Enlightenment: A Study in National Character and in the History of Ideas*. Archives internationales d'histoire des idées, vol. 41. Dordrecht: Springer-Science+Business Media, B.V. . 358 p.
- Leibenstein, Harvey (1957). *Economic Backwardness and Economic Growth*. New York: John Wiley and Sons. p.
- Lewis, W. Arthur (1954). Economic Development with Unlimited Supply of Labour *The Manchester School*, 22 (2), May, 139-191.
- Lieberman, David (1988). Blackstone's Science of Legislation. *Journal of British Studies*, 27 (2), April, 117-149.
- List, Friedrich (1910) [1841]. *Das Nationale System der Politischen Oekonomie*. Jena: Gustav Fischer. 552 p.
- Loasby, Brian J. (1996). The Division of Labour. *History of Economic Ideas*, 4 (1-2), 299-323.
- Lowe, Adolph (1954). The Classical Theory of Economic Growth. *Social Research*, 21 (2), January, 127-158.

- (1975). Adam Smith's System of Equilibrium Growth. in Skinner, Andrew S & Thomas Wilson (eds.), *Essays on Adam Smith*. Vol. 2). Oxford: Oxford University Press. 415-25
- Lucas, Robert E. (1988). On the mechanics of economic development. *Journal of Monetary Economics*, 22 (1), July, 3-42.
- (1996). The Industrial Revolution: Past and Future. *Estudios Publicos*, 64, Spring, 1-15.
- Luehrs, Robert B. (1987). Population and Utopia in the Thought of Robert Wallace. *Eighteenth-Century Studies*, 20 (3), Spring, 313-335.
- Macfie, A. L. (1955). The Scottish Tradition in Economic Thought. *Scottish Journal of Political Economy*, 2 (1), February, 81-103.
- Machiavelli, Niccolo (1883) [1537]. *Discourses on the First Decade of Titus Livius*. Thomson, Ninian Hill, Trans. London: Kegan Paul, Trench & Co. 487 p.
- Malmberg, Bo (2006). Demography and the development potential of Sub-Saharan Africa. Department of Human geography, Stockholm University and Institute for Futures Studies. p.
- Malthus, Thomas Robert (1817). *Additions to the fourth and former editions of An essay on the Principle of Population, &c. &c.* London: John Murray, Albemarle-Street. 327 p.
- (1826a). *An Essay on the Principle of Population; Or, A View of its Past and Present Effects on Human Happiness; With an Inquiry into our Prospects Respecting the Future Removal or Mitigation of the Evils which it Occasions*. 6th ed. Vol. 1. London: John Murray, Albemarle Street. 2 volumes. 535 p.
- (1826b). *An Essay on the Principle of Population; Or, A View of its Past and Present Effects on Human Happiness; With an Inquiry into our Prospects Respecting the Future Removal or Mitigation of the Evils which it Occasions*. 6th ed. Vol. 2. London: John Murray, Albemarle Street. 2 volumes. 528 p.
- (1836). *Principles of Political Economy. Considered with a View to their Practical Application*. "Second edition with considerable additions from the author's own manuscript and an original memoir" ed. London: William Pickering. 446 p.
- (1998) [1798]. *An Essay on the Principle of Population, as it Affects the Future Improvement of Society, with Remarks on the Speculations of Mr. Godwin, M. Condorcet, and Other Writers*. London: Printed for J. Johnson, in St. Paul's Church-Yard. Electronic Scholarly Publishing Project. 125 p.
- Marciano, Alain & Maud Pelissier (2000). The Influence of Scottish Enlightenment on Darwin's Theory of Cultural Evolution. *Journal of the History of Economic Thought*, 22 (02), December, 239-249.
- Marouby, Christian (2004). *L'économie de la nature. Essai sur Adam Smith et l'anthropologie de la croissance*. Paris: Le Seuil. 256 p.
- Marshall, Alfred (1920) [1890]. *Principles of Economics. An introductory volume*. 8th ed. London: Macmillan. 871 p.
- Marx, Karl (1976) [1890]. *Capital. A Critique of Political Economy. Volume 1*. Fowkes, Ben, Trans. Penguin Classics, vol. London: Penguin Books in association with New Left Review. 1141 p.
- (1983). Einleitung zur Kritik der Politischen Ökonomie. in Verlag, Dietz (ed.), *Karl Marx Friedrich Engels Werke*. Vol. 42). Berlin. 19-45



- (1996) [1887]. *Capital, Volume I: The Process of Production of Capital*. Moore, Samuel & Edward Aveling, Trans. Marx-Engels Collected Works, vol. 35. London: Lawrence & Wishart. 852 p.
- Mason, Andrew (1987). National savings rates and population growth: A new model and new evidence. in Johnson, D. Gale & Ronald D. Lee (eds.), *Population Growth and Economic Development: Issues and Evidence*. Madison: University of Wisconsin Press. 523-560
- (1988). Saving, Economic Growth, and Demographic Change. *Population and Development Review*, 14 (1), March, 113-144.
- (ed.) (2001). *Population Change and Economic Development in East Asia: Challenges Met, Opportunities Seized*. Stanford: Stanford University Press. 503 p.
- Mathieu, Jon (2014). "Finding Out Is My Life": Conversations with Ester Boserup in the 1990s. in Fischer-Kowalski, Marina, Anette Reenberg, Anke Schaffartzik & Andreas Mayer (eds.), *Ester Boserup's Legacy on Sustainability: Orientations for Contemporary Research*. Dordrecht: Springer Netherlands. 13-22
- Matisoff, James A. (1986). The Languages and Dialects of Tibeto-Burman: An Alphabetic, Genetic Listing, with Some Prefatory Remarks on Ethnonymic and Glossonymic Complications. in McCoy, John & Timothy Light (eds.), *Contributions to Sino-Tibetan. Studies presented to Nicholas C. Bodman*. Leiden: E. J. Brill. 3-75
- Mauss, Marcel (1923-24). Essai sur le don: Forme et raison de l'échange dans les sociétés archaïques. *L'Année sociologique*, 1(Nouvelle série), 30-186.
- Mayr, Otto (1971). Adam Smith and the Concept of the Feedback System: Economic Thought and Technology in 18th-Century Britain *Technology and Culture*, 12 (1), January, 1-22.
- McNicoll, Geoffrey (2007). [rev] Foucault, 'Security, Territory, Population. Lectures at the Collège de France, 1977-78' 2007. *Population and Development Review*, 33 (4), December, 829-831.
- Meadows, Donella H. , Dennis L. Meadows, Jørgen Randers & William W. Behrens (1972). *The Limits to Growth. A Report for the Club of Rome's Project on the Predicament of Mankind*. New York: Universe Books. 205 p.
- Medema, Steve G. (2010). Adam Smith and the Chicago School. in Emmett, Ross (ed.), *The Elgar Companion to the Chicago School of Economics*. Cheltenham and Northampton: Edward Elgar. 40-51
- Meek, Ronald L. (1954a). The Scottish Contribution to Marxist Sociology. in Saville, John (ed.), *Democracy and the Labour Movement: Essays in Honor of Dona Torr*. London: Lawrence & Wishart. 84-102
- (1971). Smith, Turgot, and the 'Four Stages' Theory *History of Political Economy*, 3 (1), Spring, 9-27.
- (1976a). New Light on Adam Smith's Glasgow Lectures on Jurisprudence. *History of Political Economy*, 8 (4), Winter, 439-477.
- (1976b). *Social Science and the Ignoble Savage*. Cambridge University Press. 249 p.
- (1977). *Smith, Marx and After. Ten Essays in the Development of Economic Thought*. London: Chapman and Hall. 193 p.
- (ed.), Meek, Dorothea L. & Ronald L. Meek (trans.) (1954b). *Marx and Engels on Malthus. Selections from the writings of Marx and Engels dealing with the*

- theories of Robert Thomas Malthus*. New York: International Publishers. 190 p.
- Meek, Ronald L. (1954c). The Scottish contribution to Marxist sociology. in Wishart, Lawrence & (ed.), *Democracy and the Labour Movement : Essays in honour of Dona Torr*. London. 84-102
- Meek, Ronald L. & Andrew S. Skinner (1973). The Development of Adam Smith's Ideas on the Division of Labour *The Economic Journal*, 83 (332), December, 1094-1116.
- Mehrling, Perry G. & Roger J. Sandilands (eds.) (1999). *Money and Growth: Selected papers of Allyn Abbott Young*. Routledge Studies in the History of Economics. vol. 20. New York: Routledge. 430 p.
- Metcalfe, J. Stanley (2010). Complexity and Emergence in Economics: The Road from Smith to Hayek (via Marshall and Schumpeter). *History of Economic Ideas*, 18 (2), 45-75.
- Mikkelsen, Jon M. (ed. & transl.) (2013). *Kant and the Concept of Race: Late Eighteenth-Century Writings*. SUNY series, Philosophy and Race. Albany: State University of New York Press. 377 p.
- Milanović, Branko (2016). *Global Inequality: A New Approach for the Age of Globalization*. Cambridge, Massachusetts: Harvard University Press. 299 p.
- Mill, John Stuart (1965) [1848]. *Principles of Political Economy. With Some of Their Applications to Social Philosophy*. Collected Works of John Stuart Mill, vol. 2-3. Priestley, F. E. L. Toronto: University of Toronto Press. Routledge & Kegan Paul. p.
- Millar, John (1803) [1787]. *An Historical View of the English Government. From the Settlement of the Saxons in Britain to the Revolution in 1688. To Which are Subjoined, Some Dissertations Connected with the History of the Government, from the Revolution to the Present Time*. Vol. 2. London: Printed for J. Mawman, No 22 in the Poultry. By T. Gillet, Salisbury Square. 4 volumes. 487 p.
- Mirabeau, Victor Riquetti, marquis de (1756). *L'ami des hommes, ou traité de la population*. Avignon. 3 volumes. 603 p.
- Mirowski, Philip (1989). *More Heat than Light. Economics as Social Physics: Physics as Nature's Economics*. Historical Perspectives on Modern Economics, vol. Goodwin, Craufurd D. Cambridge: Cambridge University Press. 450 p.
- Mishra, Pankaj (2017). *Age of Anger: A History of the Present*. Farrar, Straus and Giroux. 416 p.
- Mizuta, Hiroshi (2006). The Japanese concept of civil society and Marx's bürgerliche Gesellschaft. in Uchida, Hiroshi (ed.), *Marx for the 21st Century*. New York: Routledge. 109-21
- Mokyr, Joel (2005). Long-Term Economic Growth and the History of Technology. in Philippe, Aghion & N. Durlauf Steven (eds.), *Handbook of Economic Growth*. Vol. Volume 1, Part B): Elsevier. 1113-1180
- Montes, Leonidas (2003a). Das Adam Smith Problem: Its Origins, the Stages of the Current Debate, and One Implication for Our Understanding of Sympathy. *Journal of the History of Economic Thought*, 25 (01), March, 63-90.
- (2003b). Smith and Newton: some methodological issues concerning general economic equilibrium theory. *Cambridge Journal of Economics*, 27 (5), September, 723-747.

- (2006). On Adam Smith's Newtonianism and general economic equilibrium theory. in Montes, Leonidas & Eric Schliesser (eds.), *New Voices on Adam Smith*. Routledge. 247-70
- (2008). Newton's real influence on Adam Smith and its context. *Cambridge Journal of Economics*, 32 (4), July, 555-576.
- (2013). Newtonianism and Adam Smith. in Berry, Christopher J, Maria Pia Paganelli & Craig Smith (eds.), *The Oxford Handbook of Adam Smith*. Oxford: Oxford University Press. 36-53
- Moravia, Sergio (1980). The enlightenment and the sciences of man. *History of Science*, 18, 247-268.
- Mortimore, Michael (2003). Technological Change and Population Growth. in Demeny, Paul & Geoffrey McNicoll (eds.), *Encyclopedia of Population*. Macmillan. 932-35
- Mouhammed, Adil H. (2004). Ibn Khaldun and the Neoliberal Model. *History of Economic Ideas*, 12 (3), 85-109.
- Müller-Wille, Staffan (2003). Nature as a Marketplace: The Political Economy of Linnaean Botany. *History of Political Economy*, 35 (Supplement 1: Oeconomies in the Age of Newton), 154-72.
- Müller, Adam (1809). *Die Elemente der Staatskunst*. Vol. 1. Berlin: Sander. 3 volumes. 298 p.
- (1983). Colbert, Adam Smith und die Physiokraten. in Klein, Albert Josef (ed.), *Nationalökonomische Schriften*. Lörach: Albert Kern. 1-13
- Mumy, Gene E. (1978/1979). Town and Country in Adam Smith's *The Wealth of Nations*. *Science & Society*, 42 (4), Winter, 458-77.
- Myers, M. L. (1976). Adam Smith's Concept of Equilibrium. *Journal of Economic Issues*, 10 (3), September, 16.
- Myint, Hla (1943). The Welfare Significance of Productive Labour. *The Review of Economic Studies*, 11 (1), Winter, 20-30.
- (1946). The Classical View of the Economic Problem *Economica* 13 (50), May, 119-30.
- (1954-55). The Gains from International Trade and the Backward Countries. *Review of Economic Studies*, 22 (2), 129-142.
- (1958). The "Classical Theory" of International Trade and the Underdeveloped Countries. *The Economic Journal*, 68 (270), June, 21.
- (1977). Adam Smith's Theory of International Trade in the Perspective of Economic Development *Economica* 44 (175), August, 231-48.
- Myrdal, Gunnar, with the Assistance of Richard Sterner and Arnold Rose (1944). *An American Dilemma. The Negro Problem and Modern Democracy*. New York: Harper & Brothers. 1483 p.
- Nath, S. K. (1962). The Theory of Balanced Growth *Oxford Economic Papers*, 14 (2), June, 138-153.
- Negishi, Takashi (2004). Adam Smith and disequilibrium economic theory. *The Adam Smith Review*, 1, 30-9.
- Nelson, Richard R (1956). A Theory of the Low-Level Equilibrium Trap in Underdeveloped Economies. *The American Economic Review*, 46 (5), December, 894-908.
- Nerlove, Marc (1974). Household and Economy: Toward a New Theory of Population and Economic Growth. *The Journal of Political Economy*, 82 (2), March - April, S200-S218.

- Nielsen, Torben H. (1986). The State, the Market and the Individual. Politics, Economy and the Idea of Man in the Works of Thomas Hobbes, Adam Smith and in Renaissance Humanism. *Acta Sociologica*, 29 (4), 283-302.
- Nilson, Sten S. (1952). La théorie de population d'Adam Smith. *Population (French Edition)*, 7 (3), July - September, 8.
- Nisbet, Robert A. (1969). *Social Change and History. Aspects of the Western Theory of Development*. New York: Oxford University Press. 342 p.
- Nohara, Shinji (2010). Adam Smith on the Cyclicity of the Rise and Fall of Civilization. *The Kyoto Economic Review*, 79 (1), 77-89.
- North, Douglass C. (1994). Economic Performance Through Time. *The American Economic Review*, 84 (3), June, 359-368.
- Nurkse, Ragnar (1952). Some International Aspects of the Problem of Economic Development *The American Economic Review* 42 (2), May, 571-583.
- (1959). Notes on 'Unbalanced Growth'. *Oxford Economic Papers*, 11 (3), October, 295-297.
- Okan, Ecem (2016). One fiction meets another: Adam Smith's early and rude state of society and the age of hunters. PHARE - Université Paris 1 Panthéon-Sorbonne Working Papers. 22 p.
- Olson, Richard (1998). Sex and status in Scottish Enlightenment social science: John Millar and the sociology of gender roles. *History of the Human Sciences*, 11 (1), February, 73-100.
- Oslington, Paul (2012). Jacob Viner on Adam Smith: Development and reception of a theological reading. *The European Journal of the History of Economic Thought*, 19 (2), April, 287-301.
- Östberg, Per (2003). 18th century cases of noun-verb dissociation: The contribution of Carl Linnaeus. *Brain and Language*, 84 (3), March, 448-450.
- Pack, Spencer J. (1995). Adam Smith's Unnaturally Natural (Yet Naturally Unnatural) Use of the Word Natural. in Rima, Ingrid H (ed.), *The Classical Tradition in Economic Thought*. 31-42
- (1996). Slavery, Adam Smith's Economic Vision and the Invisible Hand. *History of Economic Ideas*, 4 (1/2), 253-269.
- Paganelli, Maria Pia (2013). Adam Smith and Economic Development: theory and practice. Paper presented at *26th Annual Conference of the Eighteenth-Century Scottish Studies Society & The International Adam Smith Society: "Scotland, Europe and Empire in the Age of Adam Smith and Beyond"*, Sorbonne, Paris, France. p.
- (2015). Recent Engagements with Adam Smith and the Scottish Enlightenment. *History of Political Economy*, 47 (3), September, 363-394.
- Pagden, Anthony (1988a). The 'defence of civilization' in eighteenth-century social theory. *History of the Human Sciences*, 1 (1), May, 33-45.
- (1988b). The 'defence of civilization' in eighteenth-century social theory. *History of the Human Sciences*, 1 (1), May, 33-45.
- Pagliari, Harold E. (ed.) (1973). *Racism in the eighteenth century*. Vol. 3). Studies in eighteenth-century culture Cleveland: Press of Case Western Reserve University. 468 p.
- Pascal, Roy (1938). Property and Society: The Scottish Historical School of the Eighteenth Century. *The Modern Quarterly*, 1 (2), March, 167-79.
- Pauchant, Thierry C. (2016). Adam Smith's Socio-cultural Theory of Evolution: New insights from his 1749 lecture. *Adam Smith Review*, 9, 49-74.

- Pelkmans, Jacques (2011). 'European Union Single Market: design and development'. in Durlauf, Steven N. & Lawrence E. Blume (eds.), *The New Palgrave Dictionary of Economics*.(Online ed.: Palgrave Macmillan.
- Perälä, Maiju J. (2006). "Looking at the Other Side of the Coin": Allyn Young and the Early Development Theory *Journal of the History of Economic Thought*, 28 (4), December, 28.
- Pigou, Arthur C. (1912). *Wealth and Welfare*. London: Macmillan. 493 p.
- Pirgmaier, Elke (2017). The Neoclassical Trojan Horse of Steady-State Economics. *Ecological Economics*, 133, March, 52-61.
- Plato (1988). *The Laws of Plato*. Pangle, Thomas L., Trans. University of Chicago Press. 562 p.
- Plechanov, Georgij V. (1896). *Beiträge zur Geschichte des Materialismus: Holbach, Helvetius, Marx*. Internationale Bibliothek, vol. 29. Dietz. 264 p.
- Pocock, J. G. A. (1981). Virtues, Rights, and Manners: A Model for Historians of Political Thought. *Political Theory*, 9 (3), August, 353-368.
- (2005). *Barbarism and Religion*. Vol. 4. Barbarians, Savages and Empires. Cambridge: Cambridge University Press. 6 volumes. 372 p.
- Polanyi, Karl (2001) [1944]. *The Great Transformation: The Political and Economic Origins of Our Time*. Boston: Beacon Press. 317 p.
- Poliakov, Léon (1982). Racism from the Enlightenment to the Age of Imperialism. in Ross, Robert (ed.), *Racism and Colonialism. Essays on Ideology and Social Structure*. The Hague: Martinus Nijhoff Publishers for the Leiden University Press. 55-64
- Popkin, Richard (1978). Hume's Racism. *Philosophical Forum*, 9 (2), 211-26.
- Prebisch, Raúl (1949). El Desarrollo económico de la América Latina y algunos de sus principales problemas. *El Trimestre Económico*, 16 (63(3)), Julio-Septiembre, 347-431.
- Price, L. L. (1893). Adam Smith and His Relations to Recent Economics. *The Economic Journal*, 3 (10), June, 239-254.
- Pufendorf, Samuel (1729). *Of the Law of Nature and Nations. Eight books. Written in Latin by the Baron Pufendorf, Counsellor of State to his late Swedish Majesty and to the late King of Prussia, Done into English by Basil Kennett, D D., late President of Corpus Christi College in Oxford*. Kennett, Basil, Trans. London: Printed for J. Walthoe, R. Wilkin, J. and J. Bokwicke, S. Birt, T. Ward, and T. Osborne. 900 p.
- Pullen, John (1981). Malthus' theological ideas and their influence on his principle of population. *History of Political Economy*, 13 (1), Spring, 16.
- (2016). Malthus on causality. *The European Journal of the History of Economic Thought*, 23 (3), May, 349-377.
- Quesnay, François (2005) [1747-67]. *Oeuvres économiques complètes et autres textes*. population, Classiques de l'Économie et de la. Institut national d'études démographiques. 1622 p.
- Raphael, David D. & Andrew S. Skinner (1980). General Introduction. in Wightman, William P. D., John C. Bryce & Ian S. Ross (eds.), *Essays on Philosophical Subjects*. Oxford: Oxford University Press. 1-21
- Rashid, Salim (1984). Malthus' theology: an overlooked letter and some comments. *History of Political Economy*, 16 (1), Spring, 4.
- (1992). Adam Smith and the Market Mechanism *History of Political Economy*, 24 (1), Spring, 24.

- (1998). *The Myth of Adam Smith*. Cheltenham: Edward Elgar. 227 p.
- Rausing, Lisbet (2003). Underwriting the Oeconomy: Linnaeus on Nature and Mind. *History of Political Economy*, 35 (Supplement 1: Oeconomies in the Age of Newton), 173-202.
- Ravix, Jacques-Laurent (1997). Fondements critiques pour une analyse de la dynamique industrielle: La méthode de Allyn Young. *Revue économique*, 48 (4), July, 965-988.
- Reid, Gavin C. (1989). Adam Smith's Stadias Analysis as a Sequence of Societal Growth Trajectories. *Scottish Journal of Political Economy*, 36 (1), February, 59-70.
- Richter, Melvin (2006). The comparative study of regimes and societies. in Goldie, Mark & Robert Wokler (eds.), *The Cambridge History of Eighteenth-Century Political Thought*. Cambridge: Cambridge University Press. 147-71
- Rima, Ingrid H (2004). Increasing Returns, New Growth Theory, and the Classics. *Journal of Post Keynesian Economics*, 27 (1), Fall, 14.
- Robbins, Lionel (1930). On a Certain Ambiguity in the Conception of Stationary Equilibrium. *The Economic Journal*, 40 (158), June, 194-214.
- (1968). *The Theory of Economic Development in the History of Economic Thought*. MacMillan and Co. 185 p.
- Robertson, D. H. (1924). Those Empty Boxes. *The Economic Journal*, 34 (133), March, 16-31.
- Robinson, Warren & Wayne Schutjer (1984). Agricultural Development and Demographic Change: A Generalization of the Boserup Model. *Economic Development and Cultural Change* 32 (2), January, 355-366.
- Romer, Paul M. (1986a). Increasing Returns and Long-Run Growth. *The Journal of Political Economy*, 94 (5), October, 1002-1037.
- (1986b). Increasing Returns, Specialization, and External Economies: Growth as Described by Allyn Young. Rochester Center for Economic Research Working Papers. 64. Rochester. p.
- (1989). Human Capital and Growth: Theory and Evidence. NBER Working Paper. 3173. 51 p.
- Rosenstein-Rodan, Paul N. (1943). Problems of Industrialisation of Eastern and South-Eastern Europe *The Economic Journal*, 53 (210/211), June - September, 202-211.
- (1944). The International Development of Economically Backward Areas. *International Affairs*, 20 (2), April, 157-165.
- (1961). Notes on the Theory of the 'Big Push'. in Ellis, Howard S. & Henry C. Wallich (eds.), *Economic Development for Latin America*. London: Macmillan. 57-81
- Ross, Ian Simpson (2010). *The Life of Adam Smith*. Second edition ed. Oxford and New York: Oxford University Press. 589 p.
- Rostow, Walt W. (1956). The Take-Off Into Self-Sustained Growth. *The Economic Journal*, 66 (261), March, 25-48.
- (1980). *Why the Poor Get Richer and the Rich Slow Down. Essays in the Marshallian Long Period*. London and Basingstoke: The Macmillan Press. 376 p.
- Rothschild, Emma (1992). Adam Smith and Conservative Economics *The Economic History Review* 45 (1), February, 74-96.

- Rutherford, Donald (2007). Malthus and Three Approaches to Solving the Population Problem *Population (English Edition)*, 62 (2), 213-237.
- Rutherford, Malcolm (2000). Understanding Institutional Economics: 1918-1929. *Journal of the History of Economic Thought*, 22 (3), September, 277-308.
- Sadler, Michael Thomas (1830). *The Law of Population: A Treatise in Six Books. In Disproof of the Superfecundity of Human Beings, and Developing the Real Principle of their Increase*. London: John Murray. 2 volumes. 1329 p.
- Samuelson, Paul A. (1977). A Modern Theorist's Vindication of Adam Smith. *The American Economic Review* 67 (1, Papers and Proceedings of the Eighty-ninth Annual Meeting of the American Economic Association), February, 42-49.
- (1985). Modes of Thought in Economics and Biology. *The American Economic Review*, 75 (2, Papers and Proceedings of the Ninety-seventh Annual Meeting of the American Economic Association), May, 7.
- Sandilands, Roger J. (1990). Kaldor's Notes on Young's LSE lectures. *Journal of Economic Studies*, 17 (3/4), December, 168.
- (2000). Perspectives on Allyn Young in Theories of Endogenous Growth. *Journal of the History of Economic Thought*, 22 (3), September, 309-328.
- (2009). Solovian and New Growth Theory from the Perspective of Allyn Young on Macroeconomic Increasing Returns. *History of Political Economy*, 41 (Supplement 1), 285-303.
- Santayana, George (1905). *The Life of Reason or the Phases of Human Progress*. Vol. 1: Introduction and Reason in Common Sense. New York: Charles Scribner's Sons. 5 volumes. 291 p.
- Santurri, Edmund N. (1982). Theodicy and Social Policy in Malthus' Thought. *Journal of the History of Ideas*, 43 (2), April - June, 315-330.
- Sauvy, Alfred (1952, 14 août) Trois mondes, une planète. *L'Observateur politique, économique et littéraire*.
- Sauvy, Alfred & Robert Debré (1946). *Des Français pour la France (le problème de la population)*. Paris: Gallimard. 265 p.
- Say, Jean-Baptiste (1841) [1803]. *Traite d'économie politique, ou simple exposition de la manière dont se forment, se distribuent et se consomment les richesses*. Sixième édition entièrement revue par l'auteur, et publiée sur les manuscrits qu'il a laissés, par Horace Say, son fils ed. Collection des principaux économistes, vol. 9, Oeuvres de J. B. Say 1. Osnabrück: Otto Zeller. p.
- Schabas, Margareth (2003). Adam Smith's Debts to Nature. *History of Political Economy*, 35 (Special Issue (Supplement)), 262-281.
- Scherer, F.M. (1987). 'market structure'. in Durlauf, Steven N. & Lawrence E. Blume (eds.), *The New Palgrave Dictionary of Economics*. Palgrave Macmillan. 6287-93
- Schultz, T. Paul (1990). Introduction. in Schultz, T. Paul (ed.), *Economic and demographic relationships in development*. Johns Hopkins University Press.
- (2005). Demographic Determinants of Savings: Estimating and Interpreting the Aggregate Association in Asia. IZA Discussion Papers. 1479. 37 p.
- Schultz, Theodore W (1932). Diminishing Returns in View of Progress in Agricultural Production *Journal of Farm Economics*, 14 (4), October, 640-49.

- Schumacher, Reinhard (2012). Adam Smith's theory of absolute advantage and the use of doxography in the history of economics. *Erasmus Journal for Philosophy and Economics*, 5 (2), Autumn, 54-80.
- . (2013). Adam Smith and International Trade: Between the Division of Labour and the Natural Order of Progress.
- Schumpeter, J. A., A. H. Cole & E. S. Mason (1941). Frank William Taussig. *The Quarterly Journal of Economics*, 55 (3), May, 337-363.
- Schumpeter, Joseph A. (1986) [1954]. *History of Economic Analysis*. London: Allen & Unwin. 1260 p.
- (2003) [1943]. *Capitalism, Socialism and Democracy*. Taylor & Francis. 437 p.
- Schweber, Silvan S. (1977). The Origin of the "Origin" Revisited. *Journal of the History of Biology*, 10 (2), Autumn, 229-316.
- (1980). Darwin and the political economists: Divergence of character. *Journal of the History of Biology*, 13 (2), January, 195-289.
- Scrope, George Poulett (1833). *Principles of Political Economy. Deduced from the Natural Laws of Social Welfare, and Applied to the Present State of Britain*. London: Longman, Rees, Orme, Brown, Green, & Longman, Paternoster-Row. 457 p.
- Sebastiani, Silvia (2013). *The Scottish Enlightenment: Race, Gender, and the Limits of Progress*. Carden, Jeremy, Trans. Palgrave Studies in Cultural and Intellectual History vol. La Vopa, Anthony, Suzanne Marchand & Javed Majeed. New York: Palgrave Macmillan. 255 p.
- Sen, Amartya & Jean Drèze (1989). *Hunger and Public Action*. Oxford: Clarendon Press. 373 p.
- Sen, Amartya K. (1960). [Rev] Hirschman 'The Strategy of Economic Development' 1958. *The Economic Journal*, 70 (279), 590-594.
- Senior, Nassau W (1829). Two Lectures on Population
- Sewell, Keith C. (2005). *Herbert Butterfield and the Interpretation of History*. Studies in Modern History, vol. New York: Palgrave Macmillan. 280 p.
- Shearmur, Jeremy (2007) *Smith and the Materialist Theory of History*. Proceedings of the 20th Annual Conference of the History of Economic Thought Society of Australia (HETSA). University of Queensland, Brisbane, Australia. 11-13 July. 44-61 p.
- Simon, Julian L. (1978). An integration of the invention-pull and population-push theories of economic demographic history. *Research in Population Economics*, 1, 165-187.
- (1998) [1981]. *The Ultimate Resource 2*. second ed. Princeton University Press. 778 p.
- Singer, H. W. (1949). Economic Progress in Underdeveloped Countries. *Social Research*, 16 (1), March, 1-11.
- Singh, V. B. (1959). Adam Smith's Theory of Economic Development. *Science & Society*, 23 (2), Spring, 107-132.
- Skarziński, Witold von (1878). *Adam Smith als Moralphilosoph und Schoepfer der Nationaloekonomie. Ein Beitrag zur Geschichte der Nationaloekonomie*. Berlin: Theobald Grieben. p.
- Skinner, Andrew S. (1965). Economics and History: The Scottish Enlightenment. *Scottish Journal of Political Economy*, 12 (1), February, 1-22.



- (1975). Adam Smith: an Economic Interpretation of History. in Skinner, Andrew S & Thomas Wilson (eds.), *Essays on Adam Smith*. Vol. 1). Oxford: Oxford University Press. 154-78
- (1976). Adam Smith: The Development of a System. *Scottish Journal of Political Economy*, 23 (2), June, 111-132.
- (1982). A Scottish Contribution to Marxist Sociology ? in Bradley, Ian C. & M.C. Howard (eds.), *Classical and Marxian Political Economy: Essays in Honour of Ronald L. Meek*. Palgrave Macmillan UK. 79-114
- (1996) [1979]. *A System of Social Science: Papers relating to Adam Smith*. 2<sup>nd</sup> ed. Oxford: Oxford University Press. 293 p.
- Skinner, Andrew S. & Vivienne Brown (2008). Commemorating 30 years of The Glasgow Edition of the Works and Correspondence of Adam Smith. Interview with Andrew S. Skinner. *The Adam Smith Review*, 4, 210-14.
- Skinner, Andrew S. & Thomas Wilson (eds.) (1975). *Essays on Adam Smith*. Oxford: Oxford University Press
- Smith, Adam (1937) [1776]. *An Inquiry into the Nature and Causes of the Wealth of Nations*. Random House. 976 p.
- Smith, Craig (2006a). *Adam Smith's Political Philosophy: The invisible hand and spontaneous order*. Routledge studies in social and political thought, vol. 42. Routledge. p.
- (2006b). Adam Smith on progress and knowledge. in Montes, Leonidas & Eric Schliesser (eds.), *New Voices on Adam Smith*. Routledge. 293-312
- Smith, Michael E., Jason Ur & Gary M. Feinman (2014). Jane Jacobs' 'Cities First' Model and Archaeological Reality. *International Journal of Urban and Regional Research*, 38 (4), July, 1525-1535.
- Smuts, Jan C. (1927) [1926]. *Holism and Evolution*. London: Macmillan and Co. 368 p.
- Solow, Robert M. (1956). A Contribution to the Theory of Economic Growth. *The Quarterly Journal of Economics*, 70 (1), February, 65-94.
- Spengler, Joseph J. (1959a). Adam Smith's Theory of Economic Growth: Part I *Southern Economic Journal*, 25 (4), April, 397-415.
- (1959b). Adam Smith's Theory of Economic Growth: Part II *Southern Economic Journal*, 26 (1), April, 1-12.
- (1964). Economic Thought of Islam: Ibn Khaldun. *Comparative Studies in Society and History*, 6 (3), April, 268-306.
- (1970). Adam Smith on Population. *Population Studies*, 24 (3), November, 377-388.
- (1971). Alberuni: Eleventh-Century Iranian Malthusian? *History of Political Economy*, 3 (1), Spring, 92-104.
- (1972). *Population economics; selected essays of Joseph J. Spengler*. Durham: Duke University Press. 536 p.
- (1976). Adam Smith on Population Growth and Economic Development *Population and Development Review*, 2 (2), June, 167-180.
- Sraffa, Piero (1926). The Laws of Returns under Competitive Conditions. *The Economic Journal*, 36 (144), December, 535-550.
- (ed.) (2004a). *The Works and Correspondence of David Ricardo*. Vol. VIII) Indianapolis: Liberty Fund. 403 p.
- (ed.) (2004b). *The Works and Correspondence of David Ricardo*. Vol. VII) Indianapolis: Liberty Fund. 395 p.

- Stangeland, Charles Emil (1904). *Pre-Malthusian Doctrines of Population: A Study in the History of Economic Theory*. Studies in History, Economics and Public Law, vol. XXI, Number 3. University, Faculty of Political Science of Columbia. New York, London: New York: Columbia University Press, Macmillan Company, London: P. S. King & Son. 356 p.
- Stark, Werner (1944). *The History of Economics in its Relation to Social Development*. Kegan Paul, Trench, Trubner. p.
- Steuart, James (1767). *An Inquiry into the Principles of Political Economy. Being an Essay on the Science of Domestic Policy in Free Nations, in which are particularly considered Population, Agriculture, Trade, Industry, Money, Coin, Interest, Circulation, Banks, Exchange, Public Credit, and Taxes*. Printed for A. Millar, and T. Cadell, in the Strand. 2 volumes. 1285 p.
- Stigler, George J (1951). The Division of Labor is Limited by the Extent of the Market *The Journal of Political Economy*, 59 (3), June, 9.
- Stigler, George J. (1960). The Influence of Events and Policies on Economic Theory. *The American Economic Review*, 50 (2), May, 36-45.
- (1969). Does Economics Have a Useful Past? *History of Political Economy*, 1 (2), Fall, 217-230.
- Stone, Douglas, Bruce Patton & Sheila Heen (1999). *Difficult Conversations: how to discuss what matters most*. Penguin Books. 250 p.
- Streeten, Paul (1959). Unbalanced Growth *Oxford Economic Papers*, 11 (2), June, 167-190.
- Strulik, Holger (1997). Learning-by-doing, population pressure, and the theory of demographic transition. *Journal of Population Economics*, 10 (3), August, 285-298.
- Stull, William J. (1986). The Urban Economics of Adam Smith. *Journal of Urban Economics*, 20 (3), November, 291-311.
- Sunna, Claudia (forthcoming). *Population, Development and Welfare in the History of Economic Thought*. Routledge Studies in the History of Economics, vol. Routledge. 256 p.
- Süssmilch, Johann Peter (1765). *Die göttliche Ordnung in den Veränderungen des menschlichen Geschlechts, aus der Geburt, dem Tode und der Fortpflanzung desselben erwiesen*. Berlin: Verlag der Buchhandlung der Realschule. 706 p.
- Sylos-Labini, Paolo (1976). Competition : The Product Markets. in Wilson, Thomas & Andrew S Skinner (eds.), *The Market and the State. Essays in Honour of Adam Smith*. Oxford: Clarendon Press. 200-42
- Tamba, Irène (2002). Histoires de démographe et de linguiste : le couple population/dépopulation. *Linx*, 47, 159-168.
- Tassier, Troy L. (2010). Complexity and Economics. in Free, Rhona C. (ed.), *21st Century Economics. A Reference Handbook*. SAGE. 883-90
- Taylor, Timothy (1998). *Legacies of Great Economists: The Teaching Company*.
- Théré, Christine (1999). Women and Birth Control in Eighteenth-Century France. *Eighteenth-Century Studies*, 32 (4), Summer, 552-564.
- Théré, Christine & Loïc Charles (2009). Les textes économiques parlent-ils d'eux-mêmes ? Quelques réflexions sur le bilan et les enjeux de l'édition INED 2005 des œuvres de Quesnay. *Cahiers d'économie Politique*, 57 (2), 67-100.
- Théré, Christine, Loïc Charles & Frédéric Lefebvre (eds.) (2011). *Le cercle de Vincent de Gournay. Savoirs économiques et pratiques administratives en*

- France au milieu du XVIIIe siècle. Études et enquêtes historiques.* Paris: Institut national d'études démographiques. 396 p.
- Théré, Christine & Jean-Marc Rohrbasser (2011). L'entrée en usage du mot « population » au milieu du XVIIIe siècle. in Théré, Christine, Loïc Charles & Frédéric Lefebvre (eds.), *Le cercle de Vincent de Gournay. Savoirs économiques et pratiques administratives en France au milieu du XVIIIe siècle.* Paris: Institut national d'études démographiques. 133-59
- Thompson, Warren S. (1929). Population. *American Journal of Sociology*, 34 (6), May, 959-975.
- Thornton, Arland (2001). The Developmental Paradigm, Reading History Sideways, and Family Change *Demography*, 384 (4), November, 449-465.
- Thweatt, William O. (1957). A Diagrammatic Presentation of Adam Smith's Growth Model. *Social Research*, 24 (1), 1957 Jan 01, 227-30.
- Tiffen, Mary (2003). Transition in Sub-Saharan Africa: Agriculture, Urbanization and Income Growth. *World Development*, 31 (8), August, 1343-1366.
- Tomaselli, Sylvana (1988). Moral Philosophy and Population Questions in Eighteenth Century Europe. *Population and Development Review*, 14 (Supplement: Population and Resources in Western Intellectual Traditions), 7-29.
- (1995). Political Economy: The Desire and Needs of Present and Future Generations. in Fox, Christopher, Roy Porter & Robert Wokler (eds.), *Inventing Human Science: Eighteenth-Century Domains.* Berkeley: University of California Press. 292-322
- Townsend, Joseph (1817) [1786]. *A Dissertation on the Poor Laws. By a Well-Wisher to Mankind.* Printed for Ridgways, 170, Piccadilly. 108 p.
- Toye, John F. & Richard Toye (2003). The Origins and Interpretation of the Prebisch-Singer Thesis. *History of Political Economy*, 35 (3), Fall, 437-467.
- Tribe, Keith (1995). *Strategies of Economic Order. German economic discourse, 1750-1950.* Ideas in Context, vol. 33. Skinner, Quentin. Cambridge University Press. 285 p.
- United Nations Department of Economic and Social Affairs, Population Division (2015). *World Population Prospects, the 2015 revision.* <https://esa.un.org/unpd/wpp/dataquery>: UN DESA. p.
- United Nations Secretariat, Department of Economic and Social Affairs, Population Division (1999). The World at Six Billion. ESA/P/WP.154. 63 p.
- Van den Berg, Richard & Christophe Salvat (2001). Scottish subtlety: André Morellet's comments on the *Wealth of Nations*. *The European Journal of the History of Economic Thought*, 8 (2), Summer, 146-185.
- Vincent-Lancrin, Stéphan (2003). Adam Smith and the division of labour: is there a difference between organisation and market. *Cambridge Journal of Economics*, 27 (2), March, 209-224.
- Viner, Jacob (1927). Adam Smith and Laissez Faire. *The Journal of Political Economy*, 35 (2), April, 198-232.
- Von Sivers, P. (1980). Back to Nature: The Agrarian Foundations of Society according to Ibn Khaldūn. *Arabica*, 27 (1), February, 68-91.
- Wallace, Robert (1809) [1753]. *A Dissertation on the Numbers of Mankind: In Ancient and Modern Times.* 2nd, revised and corrected ed. Edinburgh: Archibald Constable and Co. 338 p.

- Wallerstein, Immanuel (1984). The Development of the Concept of Development. *Sociological Theory*, 2, 102-116.
- Waterman, Anthony M. C. (2014). Is there another, quite different, "Adam Smith Problem"? *Journal of the History of Economic Thought*, 36 (4), 401-420.
- Weiss, Dieter (1995). Ibn Khaldun on Economic Transformation. *International Journal of Middle East Studies*, 27 (1), February, 29-37.
- Welling, James C. (1888). The Law of Malthus. *American Anthropologist*, 1 (1), January, 1-24.
- Wells, Thomas (2010). Adam Smith's real views on slavery: a reply to Marvin Brown. *Real-World Economics Review*, 53, June 26, 156-160.
- West, Edwin G. (1964). Adam Smith's Two Views on the Division of Labour. *Economica* 31 (121), February, 23-32.
- (1978). Scotland's Resurgent Economist: A Survey of the New Literature on Adam Smith. *Southern Economic Journal*, 45 (2), October, 343-69.
- (1997). Review of Athol Fitzgibbons, 'Adam Smith's System of Liberty, Wealth and Virtue', Oxford, 1995. *Independent Review*, 1 (3), Winter, 432-34.
- Weyland, John (1816). *The Principles Of Population And Production, As They Are Affected By The Progress Of Society: With A View To Moral Political Consequences*. London: Printed for Baldwin, Cradock, And Joy. 493 p.
- Wheeler, Roxann (2000). *The Complexion of Race: Categories of Difference in Eighteenth-Century British Culture*. New Cultural Studies, vol. DeJean, Joan, Carroll Smith-Rosenberg, Peter Stallybrass & Gary A. Tomlinson. Philadelphia: University of Pennsylvania Press 371 p.
- Whelan, Frederick G. (1991). Population and Ideology in the Enlightenment. *History of Political Thought*, 12 (1), Spring, 35-72.
- White, Harrison C. & Robert G. Eccles (1987). 'producers' markets'. in Durlauf, Steven N. & Lawrence E. Blume (eds.), *The New Palgrave Dictionary of Economics*. Palgrave Macmillan. 8015-21
- Whitehead, Alfred North (1917). The Organisation of Thought. in *Report of the Eighty-Sixth Meeting of the British Association for the Advancement of Science. Newcastle-On-Tyne: September 5-9 1916*. London: John Murray, Albemarle Street. 355-63
- Wightman, William P. D. (1980). Introduction. in Wightman, William P. D., John C. Bryce & Ian S. Ross (eds.), *Essays on Philosophical Subjects*. Oxford: Oxford University Press. 133-4
- Wilczynski, Jan Z. (1959). On the Presumed Darwinism of Alberuni Eight Hundred Years before Darwin. *Isis* 50 (4), December, 459-466.
- Williams, John H. (1929). The Theory of International Trade Reconsidered. *The Economic Journal*, 39 (154), June, 195-209.
- Wilson, Thomas & Andrew S. Skinner (eds.) (1976). *The Market and the State. Essays in Honour of Adam Smith*. Oxford: Clarendon Press. 359 p.
- Winch, Donald (1983). Science and the Legislator: Adam Smith and After. *The Economic Journal*, 93 (371), September, 501-520.
- (1992a). Adam Smith: Scottish Moral Philosopher as Political Economist. *The Historical Journal*, 35 (1), March, 91-113.
- (1992b). Introduction. in Winch, Donald (ed.), *An Essay on the Principle of Population*. vii-xxx
- (1993). Robert Malthus: Christian Moral Scientist, Arch-Demoralizer or Implicit Secular Utilitarian? *Utilitas*, 5 (2), November, 15.

- (1995). Adam Smith's Theory of Economic Development: Our Problems and His. University of California at Los Angeles Center for Social Theory and Comparative History. 19 p.
- (1996). *Riches and Poverty: An Intellectual History of Political Economy in Britain, 1750-1834*. Ideas in Context, vol. 39. Cambridge University Press. 428 p.
- (1997). Adam Smith's Problems and Ours. *Scottish Journal of Political Economy*, 44 (4), September, 384-402.
- (1998). Poverty and Pauperism: From Smith to Malthus. *Kumamoto-Gakuen University Journal of Economics*, 4 (3/4), 1-15.
- Witztum, Amos (2010). Interdependence, the Invisible Hand, and Equilibrium in Adam Smith. *History of Political Economy*, 42 (1), Spring, 155-192.
- Wokler, Robert (1995). Anthropology and Conjectural History in the Enlightenment. in Fox, Christopher, Roy Porter & Robert Wokler (eds.), *Inventing Human Science: Eighteenth-Century Domains*. Berkeley: University of California Press. 31-52
- World Bank (2009). *World Development Report 2009: Reshaping Economic Geography*. p.
- Wrigley, E. Anthony (1988). The Limits to Growth: Malthus and the Classical Economists. *Population and Development Review*, 14 (Supplement: Population and Resources in Western Intellectual Traditions), 30-48.
- Young, Allyn A. (1928). Increasing Returns and Economic Progress *The Economic Journal*, 38 (152), December, 527-542.
- (1990). Contributions by Allyn Young to the Encyclopaedia Britannica, 1929. *Journal of Economic Studies*, 17 (3/4), December, 115-160.
- (1999). Big business: how the economic system grows and evolves like a living organism. in Mehrling, Perry G. & Roger J. Sandilands (eds.), *Money and Growth. Selected papers of Allyn Abbott Young*. London: Routledge. 411-20
- Young, Jeffrey T. (2001). Adam Smith's Two Views of the Market. in Porta, Pier Luigi, Roberto Scazzieri & Andrew S Skinner (eds.), *Knowledge, Social Institutions and the Division of Labour*. Edward Elgar. 95-110

# Thematic Bibliography

## Adam Smith in Historical Perspective

- Bell, J. F. (1960) Adam Smith, Clubman. *Scottish Journal of Political Economy*, 7 (1), February, 108-16.
- Béraud, Alain (1993) La contribution fondatrice. Origine et développement de la pensée économique d'Adam Smith. In Béraud, A. & G. Faccarello (Eds.), *Nouvelle Histoire De La Pensée Économique Vol.1* (Vol. 1, 309-64): La Découverte
- Berry, Christopher J (2013) Adam Smith and Early-Modern Thought. In Berry, C. J., M. P. Paganelli & C. Smith (Eds.), *The Oxford Handbook of Adam Smith* (77-104). Oxford: Oxford University Press.
- Berry, Christopher J (2013) Adam Smith: An Outline of Life, Times, and Legacy. In Berry, C. J., M. P. Paganelli & C. Smith (Eds.), *The Oxford Handbook of Adam Smith* (1-22). Oxford: Oxford University Press.
- Black, R D Collison (1976) Smith's Contribution in Historical Perspective. In Wilson, T. & A. S. Skinner (Eds.), *The Market and the State. Essays in Honour of Adam Smith* (42-72). Oxford: Clarendon Press.
- Bonar, James (1924, 30th January) The Revolutionary Element in Adam Smith. Proceedings of the Pioneers of Free Trade, National Liberal Club. Political and Economic Circle. London.
- Checkland, S. G. (1967) Adam Smith and the Biographer. *Scottish Journal of Political Economy*, 14 (1), February, 70-79.
- Clark, J. M. (1926) Adam Smith and the Currents of History. *University Journal of Business*, 4 (4), October, 348-69.
- Clark, J. M. (1928). Adam Smith and the Currents of History. In J. H. Hollander, J. M. Clark, P. H. Douglas, J. Viner, G. R. Morrow & M. Palyi (Eds.), *Adam Smith 1776-1926: Lectures to Commemorate the Sesquicentennial of the Publication of "The Wealth of Nations"* (pp. 53-74). Chicago: University of Chicago Press.
- Cropsey, J. (1975). Adam Smith and Political Philosophy. In A. S. Skinner & T. Wilson (Eds.), *Essays on Adam Smith* (Vol. 1, pp. 132-153). Oxford: Oxford University Press.
- Evensky Jerry (1989). The evolution of Adam Smith's views on political economy. *History of Political Economy*, 21(1), 23.
- Föllinger, S. (2008). Der Einfluß der stoischen Philosophie auf die Grundlagen der modernen Wirtschaftstheorie bei Adam Smith. In B. Neymeyr, J. Schmidt & B. Zimmermann (Eds.), *Stoizismus in der europäischen Philosophie, Literatur, Kunst und Politik. Eine Kulturgeschichte von der Antike bis zur Moderne* (pp. 1063-1079). Berlin: de Gruyter.
- Groenewegen, Peter D (1968) A New Catalogue of Adam Smith's Library. *Economic Record*, 44 (108), December, 498.
- Hosseini, Hamid (1995) Understanding the Market Mechanism before Adam Smith: Economic Thought in Medieval Islam. *History of Political Economy*, 27 (3), Fall, 23.
- Hosseini, Hamid (1998) Seeking the Roots of Adam Smith's Division of Labor in Medieval Persia. *History of Political Economy*, 30 (4), Winter, 653-681
- Jensen, H. E. (1976). Sources and Contours of Adam Smith's Conceptualized Reality in the Wealth of Nations. *Review of Social Economy*, 34(3: Social Economics of Adam Smith), 259-274.
- Lockwood, William W (1964) Adam Smith and Asia. *Journal of Asian Studies*, 23 (3), 345-55
- Lowry, Todd S. (2003). [Rev] Vivenza 'Adam Smith and the Classics: The Classical Heritage in Adam Smith's Thought' 2001. *History of Political Economy*, 35 (4), Winter, 788-89.
- Mann, Fritz Karl (1976) Adam Smith the Heir and the Ancestor. *Zeitschrift für die gesamte Staatswissenschaft / Journal of Institutional and Theoretical Economics*, 132 (4), Oktober, 683-90.

- O'Brien, D. P. (1976) The Longevity of Adam Smith's Vision: Paradigms, Research Programmes and Falsifiability in the History of Economic Thought. *Scottish Journal of Political Economy*, 23 (2), June, 133-51.
- O'Brien, John C (1991) Adam Smith by Gustav Von Schmoller. *Review of Social Economy*, 49 (2), Summer, 130-40.
- O'Brien, John C (1992) Adam Smith by Gustav Von Schmoller. *International Journal of Social Economics*, 49 (2), 130-40.
- Rashid, Salim (1992) Adam Smith and the Market Mechanism *History of Political Economy*, 24 (1), Spring, 24.
- Schmoller, Gustav von (1907) Adam Smith. *Internationale Wochenschrift für Wissenschaft Kunst und Technik*, 15. Juni & 22. Juni, 327-36 und 373-78.
- Vivenza, Gloria (2004) Reading Adam Smith in the Light of the Classics. *The Adam Smith Review*, 1, 107-24.
- Wightman, William P D (1975) Adam Smith and the History of Ideas. In Skinner, A. S. & T. Wilson (Eds.), *Essays on Adam Smith* (Vol. 1, 44-67). Oxford: Oxford University Press.
- Winch, Donald (1983) Science and the Legislator: Adam Smith and After. *The Economic Journal*, 93 (371), September, 501-20.

## Scottish Enlightenment

- Goodacre, Hugh (2010) Limited Liability and the Wealth of 'Uncivilised Nations': Adam Smith and the Limits to the European Enlightenment. *Cambridge Journal of Economics*, 34 (5), September, 857-67.
- Rostas, Véronique (1983) Adam Smith et le mouvement des lumières écossais. *Histoire, économie et société*, 2 (2), 337-52.
- Spiegel, H. W. (1976). Adam Smith's Heavenly City. *History of Political Economy*, 8(4), 478-493.
- Winch, Donald (2006) Scottish Political Economy In Goldie, M. & R. Wokler (Eds.), *The Cambridge History of Eighteenth-Century Political Thought* (443-64). Cambridge: Cambridge University Press.

## History of Population Theory

- Black, R. D. Collison (1985). Theories of Population in Britain and Ireland before Malthus. *Quaderni di storia dell'economia politica*, 3 (1), 3-19.
- Cannan, Edwin (1892) The Origin of the Law of Diminishing Returns, 1813-1815. *The Economic Journal*, 2 (5), March, 53-69.
- Cannan, Edwin (1931) The Changed Outlook in Regard to Population, 1831-1931. *The Economic Journal*, 41 (164), December, 519-33.
- Coontz, Sydney H. (1957) *Population theories and the economic interpretation*. London: Routledge & Kegan Paul. 200 p.
- Demeny, Paul (1988) Demography and the Limits to Growth. *Population and Development Review*, 14 (Supplement: Population and Resources in Western Intellectual Traditions), 213-44.
- Ferguson, Adam (2007) Adam Ferguson on Population and Wealth. *Population and Development Review*, 33 (1), March, 171-8.
- Glass, D. V. (1952). The Population Controversy in Eighteenth-Century England. Part I. The Background. *Population Studies*, 6 (1), July, 69-91.
- Hodgson, Dennis (1988). Orthodoxy and Revisionism in American Demography. *Population and Development Review*, 14 (4), December, 541-69.
- Kelley, Allen C (2000) Population and Economic Development. Duke Working Paper. 21p.
- Kelley, Allen C (2000) The Population Debate in Historical Perspective: Revisionism Revisited. Duke Working Paper. 37p.

- Kern, William S. (2009) Mcculloch, Scrope, and Hodgskin: Nineteenth-Century Versions of Julian Simon *Journal of the History of Economic Thought*, 25 (03), September, 289-301.
- Keyfitz, Nathan (1991) Population and Development within the Ecosphere: One View of the Literature. *Population Index*, 57 (1), Spring, 5-22.
- Kreager, Philip (1991). Early Modern Population Theory: A Reassessment. *Population and Development Review*, 17 (2), June, 207-22.
- Lenin (1901) Pages from the Agrarian Question and the "Critics of Marx": The 'Law' of Diminishing Returns.
- Luehrs, Robert B. (1987). Population and Utopia in the Thought of Robert Wallace. *Eighteenth-Century Studies*, 20 (3), Spring, 313-35.
- McNicoll, Geoffrey (1992) The Agenda of Population Studies: A Commentary and Complaint. *Population and Development Review*, 18 (3), September, 399-420.
- Moreau, Joseph (1949) Théories Démographiques Antiques. *Population (French Edition)*, 4 (4), October - December, 597-614.
- Paltrinieri, Luca (2012). L'émergence de la population : Mirabeau, Quesnay, Moheau. in Kiéfer, Audrey & David Risse (Eds.), *La biopolitique outre-atlantique après Foucault*. Harmattan.
- Robbins, Lionel (1968) *The Theory of Economic Development in the History of Economic Thought*. MacMillan and Co. Lecture II: "Population and Returns". 22-43
- Robinson, Warren C (1964) The Development of Modern Population Theory. *American Journal of Economics and Sociology* 23 (4), October, 375-92.
- Say, Jean-Baptiste (1993) Jean-Baptiste Say on the Effects of Production on Population. *Population and Development Review*, 19 (2), June, 349-63.
- Schumpeter, Joseph A. (1954) *History of Economic Analysis*. London: Allen & Unwin. Chapter 5: "Population, Returns, Wages, and Employment". 240-63
- Simon, Julian L (1993) Economic Thought About Population Consequences: Some Reflections. *Journal of Population Economics*, 6 (2), May, 137-52.
- Spengler, Joseph J (1947) Aspects of the Economics of Population Growth—Part I. *Southern Economic Journal*, 14 (2), October, 123-47.
- Spengler, Joseph J (1948) Aspects of the Economics of Population Growth—Part II. *Southern Economic Journal*, 14 (3), January, 233-65.
- Spengler, Joseph J (1956) The Population Problem: Dimensions, Potentialities, Limitations. *The American Economic Review* (2, Papers and Proceedings of the Sixty-eighth Annual Meeting of the American Economic Association), May, 337-51.
- Spengler, Joseph J (1997) History of Population Theories. In Simon, J. L. (Ed.), *The Economics of Population: Classic Writings* (3-16): Transaction Publishers.
- Teitelbaum, Michael S (2006) History of Population Policies up to 1940. In Caselli, G., J. Vallin & G. Wunsch (Eds.), *Demography : Analysis and Synthesis : A Treatise in Population Studies* (Vol. 4, 71-81): Elsevier Academic Press.
- Tomaselli, Sylvana (1988) Moral Philosophy and Population Questions in Eighteenth Century Europe. *Population and Development Review*, 14 (Supplement: Population and Resources in Western Intellectual Traditions), 7-29.
- Van Praag, Bernard M. (1988) The Notion of Population Economics. *Journal of Population Economics*, 1 (1), June, 5-16.
- Vilquin, Éric (2006) History of Population Thought. In Caselli, G., J. Vallin & G. Wunsch (Eds.), *Demography : Analysis and Synthesis : A Treatise in Population Studies* (Vol. 4, 5-26): Elsevier Academic Press.
- Vilquin, Éric (2006) The Origins of Demographic Science. In Caselli, G., J. Vallin & G. Wunsch (Eds.), *Demography : Analysis and Synthesis : A Treatise in Population Studies* (Vol. 4, 767-78): Elsevier Academic Press.
- Whelan, Frederick G. (1991). Population and Ideology in the Enlightenment. *History of Political Thought*, 12 (1), Spring, 35-72.



Young, David B (1975). Libertarian Demography: Montesquieu's Essay on Depopulation in the Lettres Persanes. *Journal of the History of Ideas*, 36 (4), October - December, 669-82.

### **Adam Smith on population**

Bowen, Ian (1976) *Economics and demography*. London: Allen and Unwin. Chapter 5: "Adam Smith's Growth and Population Theory". 61-76

Nilson, Sten S (1952) La théorie de population d'Adam Smith. *Population (French Edition)*, 7 (3), July - September, 8.

Spengler, Joseph J (1970) Adam Smith on Population. *Population Studies*, 24 (3), November, 377-88.

Spengler, Joseph J (1976) Adam Smith on Population Growth and Economic Development *Population and Development Review*, 2 (2), June, 167-80.

### **On Secondary literature**

Brewer, Anthony (2007). Let Us Now Praise Famous Men: Assessments of Adam Smith's Economics. *The Adam Smith Review*, 3, 161-86.

Bridel, Pascal, & Christophe Salvat (2004) Reason and Sentiments: Review of Emma Rothschild's "Economic Sentiments: Adam Smith, Condorcet and the Enlightenment". *The European Journal of the History of Economic Thought*, 11 (1), Spring, 131-45.

Brown, Vivienne (1997) 'Mere Inventions of the Imagination': A Survey of Recent Literature on Adam Smith. *Economics and Philosophy*, 13 (2), October, 281-312.

Eltis, Walter A (2004) Emma Rothschild on Economic Sentiments: And the True Adam Smith. *The European Journal of the History of Economic Thought* 11 (1), Spring, 147-59.

Faccarello, Gilbert (2005) A Tale of Two Traditions: Pierre Force's "Self-Interest before Adam Smith". *The European Journal of the History of Economic Thought*, 12 (4), December, 701-12.

Forman-Barzilai, Fonna, Lauren Brubaker, Maria Pia Paganelli & James R Otteson (2006) Is Life a Marketplace? Symposium on Otteson's "Adam Smith and the Marketplace of Life". *The Adam Smith Review*, 2, 195-222.

Labio, Catherine (2006) The Solution Is in the Text: A Survey of the Recent Literary Turn in Adam Smith Studies. *The Adam Smith Review*, 2, 151-78.

Pack, Spencer J. (2001) Unpacking 'Adam Smith: Critical Theorist?' in *Research in the History of Economic Thought and Methodology*. Vol. 19, part 1 (A Research Annual), Emerald, 33-46

Rashid, Salim (1988). Recent Literature on Malthus. Commentary by J. M. Pullen. in Thweatt, William O. (Ed.), *Classical Political Economy. A Survey of Recent Literature*. New York: Springer Science+Business Media. 53-102

Streissler, Monika (1976) Anmerkungen zu H.C. Recktenwalds Ausgabe des „Wohlstands der Nationen“. *Zeitschrift für die gesamte Staatswissenschaft*, 132 (4), Oktober, 710-17.

Recktenwald, Horst Claus (1977) Eine Erwiderung auf die Besprechung meiner Ausgabe des „Wohlstand der Nationen“ von Adam Smith. *Zeitschrift für die gesamte Staatswissenschaft*, 133 (4), Dezember, 737-45.

Tribe, Keith (1999) Adam Smith: Critical Theorist? *Journal of Economic Literature*, 37 (2), June, 609-32.

West, Edwin G (1978) Scotland's Resurgent Economist: A Survey of the New Literature on Adam Smith. *Southern Economic Journal*, 45 (2), October, 343-69.

West, Edwin G. (1988). Developments in the Literature on Adam Smith: An Evaluative Survey. Commentary by Donald Winch. in Thweatt, William O. (Ed.), *Classical Political Economy. A Survey of Recent Literature*. New York: Springer Science+Business Media. 13-52

Young, Jeffrey T (2012) A Review of Some Recent Smith Scholarship. *Webœconomia, The Œconomia Book Review Online*, December, 1-18.

### **Lectures on Jurisprudence, Correspondence, etc.**

- Gherity, James A (1971) A Quest for an Unrecognised Publication of Adam Smith. *Scottish Journal of Political Economy*, 18 (1), February, 113-16.
- Hasbach, Wilhelm (1897). Adam Smith's Lectures on Justice, Police, Revenue and Arms. *Political Science Quarterly*, 12 (4), December, 684-98.
- Meek, Ronald L (1976) New Light on Adam Smith's Glasgow Lectures on Jurisprudence. *History of Political Economy*, 8 (4), Winter, 439-77. Anderson Notes are here mentioned!
- Pesciarelli, Enzo (1986) On Adam Smith's Lectures on Jurisprudence. *Scottish Journal of Political Economy*, 33 (1), February, 74-85.
- Raynor, David R. (1996) Adam Smith: Two Letters to Henry Beaufoy, Mp. *Scottish Journal of Political Economy*, 43 (5), November, 579-89.
- Ross, Ian S., & A. M. Webster (1981) Adam Smith: Two Letters. *Scottish Journal of Political Economy*, 28 (2), June, 206-09.
- Scott, W. R. (1935) The Manuscript of an Early Draft of Part of the Wealth of Nations. *The Economic Journal*, 45 (179), September, 427-38.
- Smith, Adam. An Unpublished Letter of Adam Smith. *The Economic Journal*, 33 (131), September, 427-28.

### **Wealth of Nations**

- Coase, Ronald H (1977) The Wealth of Nations. *Economic Inquiry*, 15 (3), July, 309-25
- Fontanel, Jacques (1978) Présentation Thématique et formalisée de « La Richesse des Nations ». *Revue Économique*, 29 (3), 538-64.
- Helferich, Dr (1878) Adam Smith Und Sein Werk Über Die Natur Und Die Ursachen Des Reichthums Der Völker. *Zeitschrift für die gesamte Staatswissenschaft / Journal of Institutional and Theoretical Economics*, 34 (1/2), 277-95.
- Hutchison, Terence W (1976) Adam Smith and the Wealth of Nations. *Journal of Law and Economics*, 19 (3), October, 507-28.
- Weisz, B. (1877) Zu Smith's „Wealth of Nations“. *Zeitschrift für die gesamte Staatswissenschaft / Journal of Institutional and Theoretical Economics*, 33 (2), 271-95.

### **Smith's Economics**

- Cannan, Edwin (1926) Adam Smith as an Economist. *Economica* (17), June, 123-34.
- Grapp, William D. (1948) Adam Smith and the Economic Man. *Journal of Political Economy*, 56 (4), August, 315-36.
- Moss, Laurence S (1976) The Economics of Adam Smith: Professor Hollander's Reappraisal. *History of Political Economy*, 8 (4), Winter, 11.
- Rothschild, Emma, & Amartya Sen (2006) Adam Smith's Economics. In Haakonssen, K. (Ed.), *The Cambridge Companion to Adam Smith* (319-65). Cambridge: Cambridge University Press.
- Samuels, Warren J. (1977) The Political Economy of Adam Smith. *Ethics* 87 (3), April, 189-207.

### **Theory of Moral Sentiments and Wealth of Nations, moral philosophy (influence on economics)**

- Anspach, R. (1972). The Implications of the *Theory of Moral Sentiments* for Adam Smith's Economic Thought. *History of Political Economy*, 4(1), 176-206.
- Berry, Christopher J (2010) Adam Smith's Moral Economy. *The Kyoto Economic Review*, 79 (1), 2-15.
- Danner, Peter L. (1976) Sympathy and Exchangeable Value: Keys to Adam Smith's Social Philosophy. *Review of Social Economy*, 34 (3: Social Economics of Adam Smith), December, 317-31.

- Evensky, J. (1987). The two voices of Adam Smith: moral philosopher and social critic. *History of Political Economy*, 19(3), 22.
- Evensky, J. (1993). Adam Smith on the Human Foundation of a Successful Liberal Society. *History of Political Economy*, 25(3), 18.
- Macfie, A L (1959) Adam Smith's Moral Sentiments as Foundation for His Wealth of Nations. *Oxford Economic Papers*, 11 (3), October, 209-28.
- Macfie, A. L. (1961) Adam Smith's Theory of Moral Sentiments. *Scottish Journal of Political Economy*, 8 (1), February, 12-27.
- Mizuta, H. (1975). Moral Philosophy and Civil Society. In A. S. Skinner & T. Wilson (Eds.), *Essays on Adam Smith* (Vol. 1, pp. 114-131). Oxford: Oxford University Press.
- Monsalve, F. (2011). Adam Smith's System of Natural Liberty and the gravitational force of the Self-interest socially understood, *15<sup>th</sup> Annual Conference of the European Society of the History of Economic Thought (ESHET)* (pp. 20). Boğaziçi University, Istanbul, Turkey.
- Morrow, Glenn R (1923) The Significance of the Doctrine of Sympathy in Hume and Adam Smith. *The Philosophical Review*, 32 (1), January, 60-78.
- Paganelli, M. P. (2008). The Adam Smith Problem in Reverse: Self-Interest in *The Wealth of Nations* and *The Theory of Moral Sentiments*. *History of Political Economy*, 40(2), 365-382.
- Prasch, Robert E (1991) The Ethics of Growth in Adam Smith's Wealth of Nations. *History of Political Economy*, 23 (2), Summer, 15.
- Prévost, B. (2001). Adam Smith : vers la fin d'un malentendu ? *L'Économie Politique*, 9(1), 101-112.
- Rosenberg, Nathan (1990) Adam Smith and the Stock of Moral Capital. *History of Political Economy*, 22 (1), Spring, 17.
- Smith, V. L. (1998). The Two Faces of Adam Smith. *Southern Economic Journal*, 65(1), 2-19.
- Teichgraeber, Richard (1981) Rethinking Das Adam Smith Problem. *The Journal of British Studies*, 20 (2), Spring, 106-23.
- Wilson, Thomas (1976) Sympathy and Self-Interest. In Wilson, T. & A. S. Skinner (Eds.), *The Market and the State: Essays in Honour of Adam Smith* (73-112). Oxford: Clarendon Press.
- Winch, Donald (1992) Adam Smith: Scottish Moral Philosopher as Political Economist. *The Historical Journal*, 35 (1), March, 91-113.¥
- Young, J. T. (1986). The impartial spectator and natural jurisprudence: an interpretation of Adam Smith's theory of the natural price. *History of Political Economy*, 18(3), 365-382.

## His System and its coherence

- Coats, A. W. (1979) Beyond Adam Smith's Economics. *Kyklos*, 32 (3), September, 603.
- Endres, Anthony M (1991) Adam Smith's Rhetoric of Economics: An Illustration Using 'Smithian' Compositional Rules. *Scottish Journal of Political Economy*, 38 (1), February, 76-95.
- Evensky, Jerry (2003). An Inquiry into the Nature and Causes of the Wealth of Nations, Book I: Its Relationship to Adam Smith's Full Moral Philosophical Vision. *Research in the History of Economic Thought and Methodology*, 21 (A), 1-47.
- Frantz, R. (2000). Intuitive elements in Adam Smith. *Journal of Socio-Economics*, 29(1), 1-19.
- Freudenthal, G. (1981). Adam Smith's Analytic-Synthetic Method and the 'System of Natural Liberty'. *History of European Ideas*, 2(2), 135-154.
- Gramm, W. S. (1980). The Selective Interpretation of Adam Smith. *Journal of Economic Issues*, 14(1), 24.
- Griswold, Charles L (2006) On the Incompleteness of Adam Smith's System + Reply by Ross. *The Adam Smith Review*, 2, 181-86.
- Haakonssen, Knud (2006) The Coherence of Smith's Thought. In Haakonssen, K. (Ed.), *The Cambridge Companion to Adam Smith* (1-21). Cambridge: Cambridge University Press.
- Heilbrunner, Robert L (1982) The Socialization of the Individual in Adam Smith. *History of Political Economy*, 14 (3), Fall, 13.

- Henderson, J. P. (1954). The Macro and Micro Aspects of the Wealth of Nations. *Southern Economic Journal*, 21(1), 25-35.
- Hueckel, Glenn (2000) On the "Insurmountable Difficulties, Obscurity, and Embarrassment" of Smith's Fifth Chapter. *History of Political Economy*, 32 (2), Summer, 29.
- Jeck, Albert (1994) The Macrostructure of Adam Smith's Theoretical System: A Reconstruction. *The European Journal of the History of Economic Thought* 1(3), Autumn, 26.
- Lamb, Robert B (1974) Adam Smith's System: Sympathy Not Self-Interest. *Journal of the History of Ideas*, 35 (4), October - December, 671-82.
- Lockwood, William W (1964) Adam Smith and Asia. *Journal of Asian Studies*, 23 (3), 345-55
- Oncken, August (1897) The Consistency of Adam Smith. *The Economic Journal*, 7 (27), September, 443-50.
- Samuels, Warren J. (1973) Adam Smith and the Economy as a System of Power. *Review of Social Economy*, 31 (2), October, 123-37.
- Skinner, Andrew S. (1976) Adam Smith: The Development of a System. *Scottish Journal of Political Economy*, 23 (2), June, 111-32.
- Viner, Jacob (1927) Adam Smith and Laissez Faire. *The Journal of Political Economy*, 35 (2), April, 198-232.
- Viner, Jacob (1928) Adam Smith and Laissez Faire. In Hollander, J. H., J. M. Clark, P. H. Douglas, J. Viner, G. R. Morrow & M. Palyi (Eds.), *Adam Smith 1776-1926: Lectures to Commemorate the Sesquicentennial of the Publication of "The Wealth of Nations"* (pp. 116-155). Chicago: University of Chicago Press.
- Weinstein, Jack R. (2003) Emotion, Context and Rhetoric: Adam Smith's Informal Argumentation.

## **His Universalism**

- Chamley, Paul E (1975) The Conflict between Montesquieu and Hume: A Study of the Origins of Adam Smith's Universalism. In Skinner, A. S. & T. Wilson (Eds.), *Essays on Adam Smith* (Vol. 1, 274-312). Oxford: Oxford University Press.
- Fleischacker, Samuel (2011) Adam Smith and Cultural Relativism. *Erasmus Journal for Philosophy and Economics*, 4 (2), Autumn, 20-41.
- Forbes, Duncan (1975). Sceptical Whiggism, Commerce, and Liberty In A. S. Skinner & T. Wilson (Eds.), *Essays on Adam Smith* (Vol. 1, pp. 179-201). Oxford: Oxford University Press.
- Frank, André Gunder (1975). Development and Underdevelopment in the New World: Smith and Marx vs. the Weberians. *Theory and Society*, 2(4), 431-466.
- Skinner, Andrew S (2001) Adam Smith, the Philosopher and the Porter. In Porta, P. L., R. Scazzieri & A. S. Skinner (Eds.), *Knowledge, Social Institutions and the Division of Labour* (35-52): Edward Elgar.

## **Natural liberty / law/ rights**

- Bittermann, Henry J. (1940) Adam Smith's Empiricism and the Law of Nature: I. *Journal of Political Economy*, 48 (4), August, 487-520.
- Bittermann, Henry J. (1940) Adam Smith's Empiricism and the Law of Nature II. *Journal of Political Economy*, 48 (5), October, 703-34.
- Buchanan, James M (1976) Public Goods and Natural Liberty. In Wilson, T. & A. S. Skinner (Eds.), *The Market and the State. Essays in Honour of Adam Smith* (271-95). Oxford: Clarendon Press.
- Levy, David (1978) Adam Smith's "Natural Law" and Contractual Society. *Journal of the History of Ideas*, 39 (4), October - December, 665-74.
- Lewis, T. J. (1971). Adam Smith: The Labor Market as the Basis of Natural Right. *Journal of Economic Issues*, 11(1), 21-50.

Moore, James (2006) Natural Rights in the Scottish Enlightenment. In Goldie, M. & R. Wokler (Eds.), *The Cambridge History of Eighteenth-Century Political Thought* (291-316). Cambridge: Cambridge University Press.

## **On Slavery**

- Salter, John (1996). Adam Smith on Slavery. *History of Economic Ideas*, 4 (1/2), 225-51.
- Pack, Spencer J. (1996). Slavery, Adam Smith's Economic Vision and the Invisible Hand. *History of Economic Ideas*, 4 (1/2), 253-69.
- Brown, Marvin (2010). Free enterprise and the economics of slavery. *Real-World Economics Review*, 52, March 7, 28-39.
- Elmslie, Bruce (2010). Did Smithian Economics Promote Slavery? *Real-World Economics Review*, 53, June 26, 150-55.
- Wells, Thomas (2010). Adam Smith's real views on slavery: a reply to Marvin Brown. *Real-World Economics Review*, 53, June 26, 156-60.
- Brown, Marvin T. (2010). Adam Smith's views of Slaves as Property: A response to Thomas Wells and Bruce Elmslie. *Real-World Economics Review*, 55, December, 124-25.
- Matsumoto, Akihito (2011). Priestley and Smith Against Slavery. *The Kyoto Economic Review*, 80 (1), 119-31.
- Harman, Oren (2011). The Myth of Disinterested Science. [rev] Desmond and Moore, 'Darwin's Sacred Cause: How a Hatred of Slavery Shaped Darwin's Views on Human Evolution', 2009. *Journal of the History of Biology*, 44 (2), May, 345-55.

## **& Hume**

- Ballestrem, K. G. (2005). David Hume und Adam Smith. Zur philosophischen Dimension einer Freundschaft. In C. Fricke & H.-P. Schütt (Eds.), *Adam Smith als Moralphilosoph* (pp. 331-346). Berlin: Walter de Gruyter GmbH & Co.
- Brewer, Anthony (1998) Luxury and Economic Development: David Hume and Adam Smith. *Scottish Journal of Political Economy*, 45 (1), February, 78-98.
- Davis, G. F. (2003). Philosophical Psychology and Economic Psychology in David Hume and Adam Smith. *History of Political Economy*, 35(2), 36.
- Feilbogen, Sigmund (1890). Smith und Hume. *Zeitschrift für die gesamte Staatswissenschaft*, 46(4), 695-716.
- Morrow, G. R. (1923). The Significance of the Doctrine of Sympathy in Hume and Adam Smith. *The Philosophical Review*, 32(1), 60-78.
- Omori, I. (2003). The 'Scottish Triangle' in the Shaping of Political Economy: David Hume, Sir James Steuart, and Adam Smith. In T. Sakamoto & H. Tanaka (Eds.), *The Rise of Political Economy in the Scottish Enlightenment* (pp. 103-118). London and New York: Routledge.

## **& Steuart**

- Grossman, H. (1943) (IN DARWIN & EVOLUTION)
- Feilbogen, Sigmund (1889) James Steuart und Adam Smith. *Zeitschrift für die gesamte Staatswissenschaft*, 45 (1/2), 218-60.

## **& Rousseau**

- Rasmussen, D. C. (2013). Adam Smith and Rousseau: Enlightenment and Counter-Enlightenment. In C. J. Berry, M. P. Paganelli & C. Smith (Eds.), *The Oxford Handbook of Adam Smith* (pp. 54-76). Oxford: Oxford University Press.
- West, Edwin G (1971) Adam Smith and Rousseau's *Discourse on Inequality*: Inspiration or Provocation? *Journal of Economic Issues*, 5 (2), June, 56-70.

Hurtado Prieto, Jimena (2004) Bernard Mandeville's Heir: Adam Smith or Jean Jacques Rousseau on the Possibility of Economic Analysis. *The European Journal of the History of Economic Thought*, 11 (1), Spring, 1-31.

## **& Marshal**

Groenewegen, Peter (2007) Alfred Marshall's Use of Adam Smith: Coming to Grips with an Aspect of Alfred Marshall's Citation Practice. *The European Journal of the History of Economic Thought*, 14 (2), June, 273-89.

Reisman, David A (1991) Alfred Marshall and Adam Smith. *European Economic Review*, 35 (2-3), April, 323-32.

## **& Ricardo**

Diatkine, D. (2011). A critique of Smith by Ricardo: "Say's law" versus the "Vent for Surplus" argument, International Conference on "Money, Finance and Ricardo", The Ricardo Society (pp. 22). Meiji University, Tokyo, Japan.

Dobb, M. H. (1975). Ricardo and Adam Smith. In A. S. Skinner & T. Wilson (Eds.), *Essays on Adam Smith* (Vol. 2, pp. 324-335). Oxford: Oxford University Press.

MacDonald, R. A. (1912). Ricardo's Criticisms of Adam Smith. *The Quarterly Journal of Economics*, 26(4), 549-592.

## **& other thinkers**

Boulding, Kenneth E (1971) After Samuelson, Who Needs Adam Smith? *History of Political Economy*, 3 (2), Fall, 13.

Christensen, Paul P. (1979) Sraffian Themes in Adam Smith's Theory. *Journal of Post Keynesian Economics*, 2 (1), Autumn, 94-109.

Kurz, Heinz D. (1980) Smithian Themes in Piero Sraffa's Theory. *Journal of Post Keynesian Economics*, 3 (2), Winter, 271-80.

Forget, E. (1993). J.-B. Say and Adam Smith: An Essay in the Transmission of Ideas *The Canadian Journal of Economics / Revue Canadienne d'Economie*, 26(1), 121-133.

Groenewegen, Peter D (1968) Turgot and Adam Smith. *Scottish Journal of Political Economy*, 15 (3), November, 271-87.

Hollander, Samuel (1980) On Professor Samuelson's Canonical Classical Model of Political Economy. *Journal of Economic Literature*, 18 (2), June, 559-74.

Jaffé, William A (1977) A Centenarian on a Bicentennial: Léon Walras's *Eléments* on Adam Smith's Wealth of Nations. *The Canadian Journal of Economics / Revue canadienne d'Economie*, 10 (1), February, 19-33.

Kurz, Heinz D. (2010) Technical Progress, Capital Accumulation and Income Distribution in Classical Economics: Adam Smith, David Ricardo and Karl Marx. *The European Journal of the History of Economic Thought*, 17 (5), December, 1183-222.

Law, James T (1830) The Poor Man's Garden: Or, a Few Brief Rules for Regulating Allotments of Land to the Poor for Potatoe Gardens: With Remarks, Addressed to Mr. Malthus, Mr. Sadler, and the Political Economists : And a Reference to the Opinions of Dr. Adam Smith, in His "Wealth of Nations". *Hume Tracts*.

Pack, Spencer (2013) Adam Smith and Marx. In Berry, C. J., M. P. Paganelli & C. Smith (Eds.), *The Oxford Handbook of Adam Smith* (523-38). Oxford: Oxford University Press.

Pavitt, Keith (1998) Technologies, Products and Organization in the Innovating Firm: What Adam Smith Tells Us and Joseph Schumpeter Doesn't. *Industrial and Corporate Change*, 7 (3), September, 433-52.

Petrella, Frank (1984) Henry George's Theory of State's Agenda: The Origins of His Ideas on Economic Policy in Adam Smith's Moral Theory. *American Journal of Economics and Sociology*, 43 (3), July, 269-86.

- Skinner, Andrew S. (1995) Pufendorf, Hutcheson and Adam Smith: Some Principles of Political Economy. *Scottish Journal of Political Economy*, 42 (2), May, 165-82.
- Van den Berg, Richard, & Christophe Salvat (2001) Scottish Subtlety: André Morellet's Comments on the *Wealth of Nations*. *The European Journal of the History of Economic Thought*, 8 (2), Summer, 146-85.
- Wrigley, E Anthony (1988) The Limits to Growth: Malthus and the Classical Economists. *Population and Development Review*, 14 (Supplement: Population and Resources in Western Intellectual Traditions), 30-48.

## His Legacy

- Amonn, Alfred (1925) Adam Smith und die Grundprobleme der Nationalökonomie. Zum Erinnerungsjahr des *Wealth of Nations*. *Zeitschrift für die gesamte Staatswissenschaft / Journal of Institutional and Theoretical Economics*, 80 (4), 575-648.
- Blaug, Mark (1975) Kuhn Versus Lakatos, or Paradigms Versus Research Programmes in the History of Economics. *History of Political Economy*, 7 (4), Winter, 399-433.
- Bonar, James (1923) Adam Smith, 1723 and 1923. *Economica* (8), June, 89-92.
- Evensky, Jerry (2001) Adam Smith's Lost Legacy. *Southern Economic Journal*, 67 (3), January, 497-517.
- Franklin, Raymond S. (1976) Smithian Economics and its Pernicious Legacy. *Review of Social Economy*, 34 (3), December, 379-89.
- Haakonssen, Knud, & Donald Winch (2006) The Legacy of Adam Smith. In Haakonssen, K. (Ed.), *The Cambridge Companion to Adam Smith* (366-94). Cambridge: Cambridge University Press.
- Harcourt, Geoffrey C. (1984) Reflections on the Development of Economics as a Discipline. *History of Political Economy*, 16 (4), Winter, 489-517.
- Hollander, Jacob H (1927) Adam Smith 1776-1926. *The Journal of Political Economy*, 35 (2), April, 153-97.
- Hollander, Jacob H (1928) The Dawn of a Science. In Hollander, J. H., J. M. Clark, P. H. Douglas, J. Viner, G. R. Morrow & M. Palyi (Eds.), *Adam Smith 1776-1926. Lectures to Commemorate the Sesquicentennial of the Publication of "the Wealth of Nations"* (1-21). Chicago: University of Chicago Press.
- Hollander, Jacob H (1928) The Founder of a School. In Hollander, J. H., J. M. Clark, P. H. Douglas, J. Viner, G. R. Morrow & M. Palyi (Eds.), *Adam Smith 1776-1926: Lectures to Commemorate the Sesquicentennial of the Publication of "the Wealth of Nations"* (22-52). Chicago: University of Chicago Press.
- Hutchison, Terence W (1976) The Bicentenary of Adam Smith. *The Economic Journal* 86 (343), September, 481-92.
- Milgate, Murray, & Shannon C Stimson (1996) The Figure of Smith: Dugald Stewart and the Propagation of Smithian Economics. *The European Journal of the History of Economic Thought* 3(2), Summer, 225-53.
- Mizuta, Hiroshi (2003) Adam Smith in Japan. In Sakamoto, T. & H. Tanaka (Eds.), *The Rise of Political Economy in the Scottish Enlightenment* (194-208). London and New York: Routledge.
- Moos, S (1951) Is Adam Smith out of Date? *Oxford Economic Papers*, 3 (2), June, 187-201.
- Myint, Hla (1946) The Classical View of the Economic Problem *Economica* 13 (50), May, 119-30.
- Peil, J (1989) A New Look at Adam Smith. *International Journal of Social Economics*, 16 (1), 52-72.
- Price, L L (1893) Adam Smith and His Relations to Recent Economics. *The Economic Journal*, 3 (10), June, 239-54.
- Recktenwald, Horst C (1975) Adam Smith Heute und Morgen. *Kyklos*, 28 (1), January, 5-22.
- Recktenwald, Horst C (1978) An Adam Smith Renaissance Anno 1976? The Bicentenary Output—a Reappraisal of His Scholarship. *Journal of Economic Literature*, 16 (1), March, 56-83.
- Rothfels, H. (1927) C. W. Hasek, The Introduction of Adam Smith's Doctrines into Germany. *Zeitschrift für die gesamte Staatswissenschaft*, 83 (3), 615-16.

- Rothschild, Emma (1992) Adam Smith and Conservative Economics *The Economic History Review* 45 (1), February, 74-96.
- Samuelson, Paul A (1977) A Modern Theorist's Vindication of Adam Smith. *The American Economic Review* 67 (1, Papers and Proceedings of the Eighty-ninth Annual Meeting of the American Economic Association), February, 42-49.
- Samuelson, Paul A (1978) The Canonical Classical Model of Political Economy. *Journal of Economic Literature*, 16 (4), December, 1415-34.
- Scott, W R (1936) New Light on Adam Smith. *The Economic Journal*, 46 (183), September, 401-11.
- Sen, Amartya (2010) Adam Smith and the Contemporary World. *Erasmus Journal for Philosophy and Economics*, 3 (1), Spring, 50-67.
- Sen, Amartya (2013) The Contemporary Relevance of Adam Smith. In Berry, C. J., M. P. Paganelli & C. Smith (Eds.), *The Oxford Handbook of Adam Smith* (581-92). Oxford: Oxford University Press.
- Skinner, Andrew S. (1979) Adam Smith: An Aspect of Modern Economics? *Scottish Journal of Political Economy*, 26 (2), June, 109-25.
- Smith, Craig (2013) Adam Smith and the New Right. In Berry, C. J., M. P. Paganelli & C. Smith (Eds.), *The Oxford Handbook of Adam Smith* (539-58). Oxford: Oxford University Press.
- Stigler, George J (1976) The Successes and Failures of Professor Smith. *Journal of Political Economy*, 84 (6), December, 1199-213.
- Wight, Jonathan B (2002) The Rise of Adam Smith: Articles and Citations, 1970–1997. *History of Political Economy*, 34 (1), Spring, 55-82.
- Winch, Donald (1997) Adam Smith's Problems and Ours. *Scottish Journal of Political Economy*, 44 (4), September, 19.

### **His view of Science**

- Becker, J. F. (1961). Adam Smith's Theory of Social Science. *Southern Economic Journal*, 28(1), 13-21.
- Berry, Christopher J (2006) Smith and Science. In Haakonssen, K. (Ed.), *The Cambridge Companion to Adam Smith* (112-35). Cambridge: Cambridge University Press.
- Berry, Christopher J. (2012) Adam Smith's "Science of Human Nature". *History of Political Economy*, 44 (3), Fall, 471-92.
- Lindgren, J. R. (1969). Adam Smith's Theory of Inquiry. *Journal of Political Economy*, 77(6), 897.
- Pokorny, D. (1978). Smith and Walras: Two Theories of Science. *The Canadian Journal of Economics / Revue canadienne d'Economie*, 11(3), 387-403.
- Skinner, Andrew S. (1972) Adam Smith: Philosophy and Science. *Scottish Journal of Political Economy*, 19 (3), November, 307-19.
- Thomson, H. F. (1965). Adam Smith's Philosophy of Science. *The Quarterly Journal of Economics*, 79(2), 212-233

### **Distributive justice**

- Davis, Joseph S. (1954) Adam Smith and the Human Stomach. *The Quarterly Journal of Economics*, 68 (2), May, 275-86.
- Gee, J. M. A. (1968). Adam Smith's Social Welfare Function. *Scottish Journal of Political Economy*, 15(1), 283-299.
- Gilbert, Geoffrey (1997) Adam Smith on the Nature and Causes of Poverty. *Review of Social Economy*, 55 (3), Fall, 273-91.
- Johnson, R. D. (1990). Adam Smith's Radical Views on Property, Distributive Justice and the Market. *Review of Social Economy*, 48(3), 247-271.
- Marshall, M. G. (2000). Luxury, Economic Development, and Work Motivation: David Hume, Adam Smith, and J. R. McCulloch. *History of Political Economy*, 32(2), 18.



- Salter, J. (1994). Adam Smith on Justice and Distribution in Commercial Societies. *Scottish Journal of Political Economy*, 41(3), 299-313.
- Song, H.-H. (1997). Adam Smith's conception of the social relations of production *The European Journal of the History of Economic Thought* 4(1), 23-42.
- Verburg, Rudi (2000) Adam Smith's Growing Concern on the Issue of Distributive Justice. *The European Journal of the History of Economic Thought* 7(1), Spring, 23-44.
- Waters, William R (1976) Social Economics of Adam Smith: Introduction. *Review of Social Economy*, 34 (3: Social Economics of Adam Smith), December, 239-43.
- West, Edwin G (1969) Adam Smith's Philosophy of Riches. *Philosophy* 44 (168), April, 101-15.

## Politics

- Grampp, William D. (1979) Adam Smith and the American Revolutionists. *History of Political Economy*, 11 (2), Summer, 179-91.
- West, Edwin G (1976) Adam Smith's Economics of Politics. *History of Political Economy*, 8 (4), Winter, 515-39.
- Whatmore, Richard (2002) Adam Smith's Role in the French Revolution. *Past & Present* (175), May, 65-89.
- Willis, Kirk (1979) The Role in Parliament of the Economic Ideas of Adam Smith, 1776-1800. *History of Political Economy*, 11 (4), Winter, 505-44.
- Winch, Donald (2011) Review Essay: Politics and Political Economy after Smith. *Journal of the History of Economic Thought*, 33 (1), March, 119-30.

## Institutions/institutionalism

- Elsner, W. (1989). Adam Smith's Model of the Origins and Emergence of Institutions: The Modern Findings of the Classical Approach. *Journal of Economic Issues*, 23(1), 25.
- Rosenberg, Nathan (1960) Some Institutional Aspects of the Wealth of Nations. *Journal of Political Economy*, 68 (6), December, 557-70.
- Sobel, I. (1979). Adam Smith: What Kind of Institutional Was He? *Journal of Economic Issues*, 13(2), 347-368.
- Song, H.-H. (1995). Adam Smith as an Early Pioneer of Institutional Individualism. *History of Political Economy*, 27(3), 24.

## Value Analysis

- Fries, Eric (1978) Le paradoxe de la valeur chez Adam Smith: Un mythe. *Revue économique*, 29 (4), July, 713-29.
- Kaushil, S (1973) The Case of Adam Smith's Value Analysis. *Oxford Economic Papers*, 25 (1), March, 60-71.
- Kurz, H. D. (1976). Adam Smiths Komponententheorie der relativen Preise und ihre Kritik: Zur Genesis der objektivistischen Wert- und Preistheorie. *Zeitschrift für die gesamte Staatswissenschaft / Journal of Institutional and Theoretical Economics*, 132(4), 691-709.
- Meacci, F. (2011). From bounties on exportation to the natural and market price of labour: Smith versus Ricardo 15th Annual Conference of the European Society of the History of Economic Thought (ESHET) (pp. 28). Boğaziçi University, Istanbul, Turkey.
- Meacci, F. (2012). On Adam Smith's Ambiguities on Value and Wealth. *History of Political Economy*, 44(4), 663-689.
- Meacci, F. (2013). Ricardo's Reaction to Smith's "Original Error" Respecting Value, 17th Annual Conference of the European Society of the History of Economic Thought (ESHET) (pp. 21). Kingston University, London, United Kingdom.
- Peach, T. (2009). Adam Smith and the Labor Theory of (Real) Value: A Reconsideration. *History of Political Economy*, 41(2), 383-406.

- Peach, Terry (2010) Measuring “the Happiness of Nations”: The Conundrum of Adam Smith's “Real Measure of Exchangeable Value”. *History of Political Economy*, 42 (3), Fall, 403-24.
- White, Michael V (2002) Doctoring Adam Smith: The Fable of the Diamonds and Water Paradox. *History of Political Economy*, 34 (4), Winter, 659-83.

## Malthus

- Behar, Cem L (1987) Malthus and the Development of Demographic Analysis. *Population Studies*, 41 (2), July, 269-81.
- Brentano, L (1910) The Doctrine of Malthus and the Increase of Population During the Last Decades. *The Economic Journal*, 20 (79), September, 371-93.
- Cady, George J (1931) The Early American Reaction to the Theory of Malthus. *The Journal of Political Economy*, 39 (5), October, 601-32.
- Cain, Stanley A (1951) Food and People: A Second Look at Malthus' Principle of Population. *The Journal of Politics*, 13 (3), August, 315-24.
- Caire, Guy (1984) Un Ou Deux Malthus? *Revue économique*, 35 (4), July, 623-33.
- Charbit, Yves (1998) Malthus Populationniste : Une Lecture Transdisciplinaire *Population (French Edition)*, 53 (1/2), January - April, 113-37.
- Constabile, L., & Rowthorn, B. (1985). Malthus's Theory of Wages and Growth. *The Economic Journal*, 95(378), 418-437.
- De Marchi, Neil (1998) Introduction to Minisymposium: Malthus at 200. *History of Political Economy*, 30 (2), Summer, 289-91
- Eltis, Walter A (1980) Malthus's Theory of Effective Demand and Growth. *Oxford Economic Papers*, 32 (1), March, 19-56.
- Engels, Friedrich On Malthus. In.
- Foster, John Bellamy (1998). Malthus' Essay On Population at age 200: A Marxian view. *Monthly Review*, 50 (7), December, 1-18.
- Gilbert, G. (1980). Economic growth and the poor in Malthus' "Essay on Population". *History of Political Economy*, 12(1), 14.
- Gilbert, Geoffrey (1980) Economic Growth and the Poor in Malthus' "Essay on Population". *History of Political Economy*, 12 (1), Spring, 14.
- Golub, Robert, & Joe Townsend (1977) Malthus, Multinationals and the Club of Rome. *Social Studies of Science*, 7 (2), May, 201-22.
- Hammond, Daniel J (2013) The Evolving Context of Malthus' Population Principle: Malthus, Utopians, and Economists.
- Hollander, Samuel (1998) An Invited Comment on “Reappraisal of ‘Malthus the Economist’, 1933 - 97” by A. M. C. Waterman. *History of Political Economy*, 30 (2), Summer, 7.
- Horner, Jim (1997 ) Henry George on Thomas Robert Malthus: Abundance Vs. Scarcity. *American Journal of Economics and Sociology*, 56 (4), October, 595-607.
- Jefferson, Mark (1925) Looking Back at Malthus. *Geographical Review*, 15 (2), April, 177-89.
- Khalatbari, Parviz (1999) “An Essay on the Principle of Population” – Zweihundert Jahre Kontroverse Um Ein Pamphlet. *Utopie Kreativ*, 99, Januar, 20-31.
- Levin, Samuel M (1966) Malthus and the Idea of Progress. *Journal of the History of Ideas*, 27 (1), January - March, 92-108.
- Loudon, Charles (1836) The Equilibrium of Population and Sustenance Demonstrated: Showing, on Physiological and Statistical Grounds, the Means of Obviating the Fears of the Late Mr. Malthus and His Followers. *Hume Tracts*.
- O'Leary, J. J. (1943). Malthus's General Theory of Employment and the Post-Napoleonic Depressions. *The Journal of Economic History*, 3(2), 185-200.

- Penrose, E F (1957) Malthus and the Underdeveloped Areas. *The Economic Journal* 67 (266), June, 219-39.
- Petersen, William (1971) The Malthus-Godwin Debate, Then and Now. *Demography*, 8 (1), February, 13-26.
- Pullen, John (1998) The Last Sixty-Five Years of Malthus Scholarship. *History of Political Economy*, 30 (2), Summer, 343-352.
- Spengler, Joseph J (1971). Malthus on Godwin's *Of Population*. *Demography* 8(1), February, 1-12.
- Spengler, Joseph J (1945). Malthus's Total Population Theory: A Restatement and Reappraisal (Part 1) *The Canadian Journal of Economics and Political Science / Revue canadienne d'Economique et de Science politique*, 11 (1), February, 83-110.
- Spengler, Joseph J (1945). Malthus's Total Population Theory: A Restatement and Reappraisal (Part 2). *The Canadian Journal of Economics and Political Science / Revue canadienne d'Economique et de Science politique*, 11 (2), May, 234-64.
- Spengler, Joseph J (1949) The World's Hunger: Malthus, 1948. *Proceedings of the Academy of Political Science*, 23 (2), January, 53-72.
- Spengler, Joseph J (1966) Was Malthus Right? *Southern Economic Journal*, 33 (1), July, 17-34.
- Waterman, Anthony M C (1998). Reappraisal of "Malthus the Economist," 1933- 97. *History of Political Economy*, 30 (2), Summer, 293-334.
- Welling, James C (1888) The Law of Malthus. *American Anthropologist*, 1 (1), January, 1-24.
- Winch, Donald (1998). The Reappraisal of Malthus: A Comment. *History of Political Economy*, 30 (2), Summer, 353-63.

## Cantillon

- Aspromourgos, A. (1989). The Theory of Production and Distribution in Cantillon's *Essai*. *Oxford Economic Papers*, 41(2), 356-373.
- Brewer, Anthony (1992). Petty and Cantillon. *History of Political Economy*, 24 (3), Fall, 711-29.
- Cantillon, Richard (1984) Cantillon on Tastes and Population Growth. *Population and Development Review*, 10 (4), December, 725-31.
- Grieve, Roy H (1993) A Course between Scylla and Charybdis?: Cantillon's Theory of Distribution and Value. *Journal of Economic Studies*, 20 (6), October, 41-56.
- Hébert, Robert F (1981) Richard Cantillon's Early Contributions to Spatial Economics. *Economica* 48 (189), February, 71-77
- Higgs, Henry (1891) Richard Cantillon. *The Economic Journal* 1(2), June, 262-91.
- Higgs, Henry (1892) Cantillon's Place in Economics. *The Quarterly Journal of Economics*, 6 (4), July, 436-56.
- Higgs, Henry (1932) A Note on Cantillon. *The Economic Journal* 42 (166), June, 329-31.
- Hone, Joseph (1944) Richard Cantillon, Economist: Biographical Note. *The Economic Journal*, 54 (213), April, 96-100.
- Kuroki, Ryuzo (2007) Political Economy of Reproduction and Surplus: Cantillon and Quesnay.
- Maucourant, Jérôme (2011, May) The Ambiguous Birth of Political Economy: Montchrestien Vs. Cantillon. 15<sup>th</sup> Annual Conference of the European Society of the History of Economic Thought (ESHET), Boğaziçi University, Istanbul, Turkey, 23p.
- Spengler, Joseph J (1954) Richard Cantillon: First of the Moderns. I. *The Journal of Political Economy*, 62 (4), August, 281-95.
- Spengler, Joseph J (1954) Richard Cantillon: First of the Moderns. II. *The Journal of Political Economy*, 62 (5), October, 406-24.
- Tarascio, Vincent J (1981) Cantillon's Theory of Population Size and Distribution. *Atlantic Economic Journal*, 9 (2), July, 7.

## Ibn Khaldun

- Al-Hamdi, Mohaned T (2006, November 3-5) Ibn Khaldun: The Father of the Division of Labor. International Conference on Ibn Khaldun, Madrid, Spain, 11p.
- Soofi, Abdol (1995) Economics of Ibn Khaldun Revisited. *History of Political Economy*, 27 (2), Summer, 18.
- Gates, Warren E. (1967). The Spread of Ibn Khaldūn's Ideas on Climate and Culture. *Journal of the History of Ideas*, 28 (3), July - September, 415-22.
- Spengler, Joseph J (1964) Economic Thought of Islam: Ibn Khaldun. *Comparative Studies in Society and History*, 6 (3), April, 268-306.
- Von Sivers, P (1980) Back to Nature: The Agrarian Foundations of Society According to Ibn Khaldūn. *Arabica*, 27 (1), February, 68-91.
- Weiss, Dieter (1995) Ibn Khaldun on Economic Transformation. *International Journal of Middle East Studies*, 27 (1), February, 29-37.

## Other thinkers

- Ahlburg, Dennis A (1998) Julian Simon and the Population Growth Debate. *Population and Development Review*, 24 (2), June, 317-27.
- Beach, E. F. (1982). Marshall's Theory of Industrial Progress. *Eastern Economic Journal*, 8(1), 7.
- Bejin, André (1988) Condorcet, précurseur du néo-malthusianisme et de l'eugénisme républicain. *Histoire, économie & société*, 7 (3), 347-54.
- Bowman, Rhead S (2009) Population and Policy in Marshall's Economics. *Journal of the History of Economic Thought*, 28 (02), June, 199-219.
- Carey, Henry C (1997) Principles of Political Economy, Vol. 1. In Simon, J. L. (Ed.), *The Economics of Population: Classic Writings*. New Brunswick: Transaction Publishers.
- Charbit, Yves (2002) L'échec Politique D'une Théorie Économique : La Physiocratie. *Population (French Edition)*, 57 (6), November - December, 849-78.
- Dimou, Michel, & Bernard Pecqueur (2011) Some Thoughts on William Petty's Spatial Paradigm Paper presented at 15<sup>th</sup> Annual Conference of the European Society of the History of Economic Thought (ESHET), Boğaziçi University, Istanbul, Turkey, May. 12p.
- George, Henry Progress and Poverty.
- Groenewegen, P. (1972). Three Notes on Ricardo's Theory of Value and Distribution. *Australian Economic Papers*, 11(18), 53-64.
- Guha, Amalendu (1977) Lenin on the Agrarian Question. *Social Scientist*, 5 (9), April, 61-80.
- Hart, Neil (2003) Marshall's Dilemma: Equilibrium Versus Evolution. *Journal of Economic Issues*, 37 (4), December, 1139-60.
- Himes, Norman E (1928) The Place of John Stuart Mill and of Robert Owen in the History of English Neo-Malthusianism. *The Quarterly Journal of Economics*, 42 (4), August, 627-40.
- Hochstrasser, T J (2006) Physiocracy and the Politics of Laissez-Faire. In Goldie, M. & R. Wokler (Eds.), *The Cambridge History of Eighteenth-Century Political Thought* (419-42). Cambridge: Cambridge University Press.
- Hollander, S. (1991). Why Marshall was Right about Ricardo. *European Economic Review*, 35(2-3), 313-322.
- Kurz, Heinz D., & Neri Salvadori (1993) Von Neumann's Growth Model and the 'Classical' Tradition. *The European Journal of the History of Economic Thought*, 1 (1), Autumn, 32.
- Levermore, Charles H (1890) Henry C. Carey and His Social System. *Political Science Quarterly*, 5 (4), December, 553-82.
- McCulloch, John R (1821) The Opinions of Messrs Say, Sismondi, and Malthus, on the Effects of Machinery and Accumulation, Stated and Examined. *Edinburg Review*, 35, March - July, 102-23.

- Mill, J. S. (1986). John Stuart Mill on the Stationary State *Population and Development Review*, 12(2), 317-322.
- Murphy, Kevin M, & Gary S Becker (1992) Division of Labor, Coordination Costs and Knowledge *The Quarterly Journal of Economics*, 107 (4), November, 1137-60.
- Myrdal, Gunnar (1987) Gunnar Myrdal on Population Policy in the Underdeveloped World. *Population and Development Review*, 13 (3), September, 531-40.
- Nowlan, David M (1997) Jane Jacobs among the Economists.
- Perälä, Maiju J (2006) "Looking at the Other Side of the Coin": Allyn Young and the Early Development Theory *Journal of the History of Economic Thought*, 28 (4), December, 28.
- Ranis, Gustav (2004) Arthur Lewis Contribution to Development Thinking and Policy. *The Manchester School*, 72 (6), December, 712-23. ¥
- Ricoy, Carlos J (2003) Marx on Division of Labour, Mechanization and Technical Progress *The European Journal of the History of Economic Thought* 10 (1), Spring, 47-79.
- Rosenberg, Nathan (1974) Karl Marx on the Economic Role of Science *The Journal of Political Economy*, 82 (4), July - August, 713-28.
- Rostow, Walt W (1956) The Take-Off into Self-Sustained Growth. *The Economic Journal*, 66 (261), March, 25-48.
- Rueschemeyer, Dietrich (1982) On Durkheim's Explanation of Division of Labor. *The American Journal of Sociology*, 88 (3), November, 579-89.
- Seligman, E. R., & Hollander, J. H. (1911). Ricardo and Torrens. *The Economic Journal* 21(83), 448-468.
- Seligman, Edwin R, & Jacob H Hollander (1911) Ricardo and Torrens. *The Economic Journal* 21 (83), September, 448-68.
- Spengler, Joseph J (1944) Pareto on Population, I. *The Quarterly Journal of Economics*, 58 (4), August, 571-601.
- Spengler, Joseph J (1944) Pareto on Population, II. *The Quarterly Journal of Economics*, 59 (1), November, 107-33.
- Spengler, Joseph J (1955) Marshall on the Population Question. Part I. *Population Studies*, 8 (3), March, 264-87.
- Spengler, Joseph J (1955) Marshall on the Population Question. Part II. *Population Studies*, 9 (1), July, 56-66.
- Steenge, Albert E., & Richard van den Berg (2009) Transcribing the Tableau Économique: Input-Output Analysis À La Quesnay. *Journal of the History of Economic Thought*, 29 (03), September, 28.
- Sun, Guang-Zhen (2008) Nasir Ad-Din Tusi on Social Cooperation and the Division of Labor: Fragment from the Nasirean Ethics. *Journal of Institutional Economics*, 4 (3), December, 403-13.
- Waterman, Anthony M. C. (1998). David Hume on Technology and Culture. *History of Economics Review*, 28, 16.
- Waterman, Anthony M. C. (1988) Hume, Malthus, and the Stability of Equilibrium. *History of Political Economy*, 20 (1), Spring, 10.
- Waterman, Anthony M. C. (2003) Romantic Political Economy. Donald Winch and David Levy on Victorian Literature and Economics. *Journal of the History of Economic Thought*, 25 (1), March, 91-102.
- Winch, Donald (2012) Andrew Skinner, 1935-2011. *The European Journal of the History of Economic Thought*, 19 (3), June, 481-84.

## Demography - population

- Astone, N. M., Nathanson, C. A., Schoen, R., & Kim, Y. J. (1999). Family Demography, Social Theory, and Investment in Social Capital. *Population and Development Review*, 25(1), 1-31.

- Behar, Cem L. (1974). Surpopulation relative et reproduction de la force de travail: Pour une problématique matérialiste en démographie. *La Pensée, Revue du Rationalisme moderne*, 176, 9-29.
- Behar, Cem L. (1976). Loi de population et science démographique: Pour une problématique matérialiste en démographie (II). *La Pensée, Revue du Rationalisme moderne*, 186, 3-26.
- Billari, Francesco (2006) Bridging the Gap between Microdemography and Macro-Demography. In Caselli, G., J. Vallin & G. Wunsch (Eds.), *Demography : Analysis and Synthesis : A Treatise in Population Studies* (Vol. 4, 695-709): Elsevier Academic Press.
- Biraben, Jean-Noël (2006) The History of the Human Population from the First Beginnings to the Present In Caselli, G., J. Vallin & G. Wunsch (Eds.), *Demography : Analysis and Synthesis : A Treatise in Population Studies* (Vol. 3, 5-18): Elsevier Academic Press.
- Boserup, Ester (1975) The Impact of Population Growth on Agricultural Output. *The Quarterly Journal of Economics*, 89 (2), May, 257-70.
- Brandt, Loren, & Barbara Sands (1990) Beyond Malthus and Ricardo: Economic Growth, Land Concentration, and Income Distribution in Early Twentieth-Century Rural China. *The Journal of Economic History*, 50 (4), December, 807-27.
- Davis, Joseph S (1953) The Population Upsurge and the American Economy, 1945-80. *The Journal of Political Economy*, 61 (5), October, 369-88.
- Davis, Kingsley (1963) The Theory of Change and Response in Modern Demographic History. *Population Index*, 29 (4), October, 345-66.
- Demeny, Paul (1989) Rural Development, Population Growth, and the International System. *Population and Development Review*, 15 (Supplement: Rural Development and Population: Institutions and Policy), 345-65.
- Dyson, Tim (2001) World Food Trends: A Neo-Malthusian Prospect? *Proceedings of the American Philosophical Society*, 145 (5), December, 438-55.
- Easterlin, Richard A (1967) Effects of Population Growth on the Economic Development of Developing Countries. *Annals of the American Academy of Political and Social Science* (369: World Population), January, 98-108.
- George, Dorothy M (1922) Some Causes of the Increase of Population in the Eighteenth Century as Illustrated by London. *The Economic Journal*, 32 (127), September, 325-52.
- Gérard, Hubert (2006) Theory Building in Demography In Caselli, G., J. Vallin & G. Wunsch (Eds.), *Demography : Analysis and Synthesis : A Treatise in Population Studies* (Vol. 4, 647-60): Elsevier Academic Press.
- Goodfriend, Marvin, & John McDermott (1995) Early Development. *American Economic Review*, 85 (1), March, 116-33.
- Hodgson, Dennis (1988) Orthodoxy and Revisionism in American Demography. *Population and Development Review*, 14 (4), December, 541-69.
- Kamerschen, David R (1965) On an Operational Index of "Overpopulation". *Economic Development and Cultural Change*, 13 (2), January, 169-87.
- Kelley, Allen C (1988) Economic Consequences of Population Change in the Third World. *Journal of Economic Literature*, 26 (4), December, 1685-728.
- Levine, A L (1965) Economic Science and Population Theory. *Population Studies*, 19 (2), November, 139-54.
- Lipton, Miachael (1989) Responses to Rural Population Growth: Malthus and the Moderns. *Population and Development Review*, 15 (Supplement: Rural Development and Population: Institutions and Policy), 215-42.
- Loriaux, Michel, & Tania Vishnievskaja (2006) Demography Viewed by Demographers In Caselli, G., J. Vallin & G. Wunsch (Eds.), *Demography : Analysis and Synthesis : A Treatise in Population Studies* (Vol. 4, 871-92): Elsevier Academic Press.
- Marshall, Alfred (1999) Alfred Marshall on the Growth of Population *Population and Development Review*, 25 (4), December, 779-87.

- McGregor, Patrick P (1989) Demographic Pressure and the Irish Famine: Malthus after Mokyr. *Land Economics*, 65 (3), August, 228-38.
- McNicoll, Geoffrey (1995) On Population Growth and Revisionism: Further Questions. *Population and Development Review*, 21 (2), June, 307-40.
- Mill, John Stuart (1986) John Stuart Mill on the Stationary State *Population and Development Review*, 12 (2), June, 317-22.
- Morrison, Kathleen D (1996) Typological Schemes and Agricultural Change: Beyond Boserup in Precolonial South India (+ Comments & Reply). *Current Anthropology*, 37 (4), August - October, 583-608.
- Myrdal, Gunnar (1938) Population Problems and Policies. *Annals of the American Academy of Political and Social Science* (197: Social Problems and Policies in Sweden), May, 200-15.
- Preston, Samuel H (1987) The Social Sciences and the Population Problem. *Sociological Forum*, 2 (4), Autumn, 619-44.
- Ramsden, Edmund (2002) Carving up Population Science: Eugenics, Demography and the Controversy over the 'Biological Law' of Population Growth. *Social Studies of Science*, 32 (5/6), October - December, 857-99.
- Ramsden, Edmund (2003) Social Demography and Eugenics in the Interwar United States *Population and Development Review*, 29 (4), December, 547-93.
- Ricardo, David (1988) Ricardo on Population *Population and Development Review*, 14 (2), June, 339-46.
- Robinson, Warren, & Wayne Schutjer (1984) Agricultural Development and Demographic Change: A Generalization of the Boserup Model. *Economic Development and Cultural Change* 32 (2), January, 355-66.
- Simon, Julian L (1989) Lebensraum: Paradoxically, Population Growth May Eventually End Wars. *The Journal of Conflict Resolution*, 33 (1), March, 164-80.
- Spengler, Joseph J (1955) Socioeconomic Theory and Population Policy. *The American Journal of Sociology* 61 (2), September, 129-33.
- Spengler, Joseph J (1991) Joseph J. Spengler on Regulating the Birth Rate. *Population and Development Review*, 17 (1), March, 157-69.
- Turner, B L, & A M Shajaat Ali (1996) Induced Intensification: Agricultural Change in Bangladesh with Implications for Malthus and Boserup. *Proceedings of the National Academy of Science*, 93 (25), December, 14984-91.
- Urdal, Henrik (2005) People Vs. Malthus: Population Pressure, Environmental Degradation, and Armed Conflict Revisited. *Journal of Peace Research*, 42 (4), July, 417-34.
- Wiles, Richard C. (1968). The Theory of Wages in Later English Mercantilism. *Economic History Review*, 21 (1), April, 113-26.
- Woolston, Howard B (1924) The Dynamics of Population: A Criticism of Malthus. *Journal of Social Forces*, 2 (2), January, 169-77.

## **Population Economics**

- Clark, Colin (1949) Theory of Economic Growth. *Econometrica* 17 (Supplement: Report of the Washington Meeting), July, 112-16.
- Jones, Charles I (2003) Population and Ideas: A Theory of Endogenous Growth. In Aghion, P., R. Frydman, J. Stiglitz & M. Woodford (Eds.), *Knowledge, Information, and Expectations in Modern Macroeconomics: In Honor of Edmund S. Phelps*: Princeton University Press.
- Klasen, Stephan (2005) Population Growth, Economic Growth, and Poverty Reduction in Uganda: Theory and Evidence. University of Göttingen Department of Economics Discussion Paper Series. 125, 20p.
- Klasen, Stephan, & David Lawson (2007) The Impact of Population Growth on Economic Growth and Poverty Reduction in Uganda. University of Göttingen Department of Economics Discussion Paper Series, 21p.

- Klasen, Stephan, & Silke Woltermann (2005) The Impact of Demographic Dynamics on Economic Development, Poverty and Inequality in Mozambique. University of Göttingen Department of Economics Discussion Paper Series, 126, 26p.
- Kremer, Michael (1993) Population Growth and Technological Change One Million B.C. To 1990. *The Quarterly Journal of Economics*, 108 (3), August, 681-716.
- Simon, Julian L (1989) On Aggregate Empirical Studies Relating Population Variables to Economic Development. *Population and Development Review*, 15 (2), June, 323-32.
- Spengler, Joseph J (1966) The Economist and the Population Question. *The American Economic Review* 56 (1/2), March, 1-24.
- Spengler, Joseph J (1968) Demographic Factors and Early Modern Economic Development. *Daedalus* 97 (2), Spring, 433-46.

## **On Economic Theory in general**

- Bowles, Samuel, & Herbert Gintis (2000) Walrasian Economics in Retrospect. *The Quarterly Journal of Economics*, 115 (4), November, 1411-39.
- Claeys, Gregory, & Prue Kerr (1981) Mechanical Political Economy. *Cambridge Journal of Economics*, 5 (3), September, 251-72.
- Dixon, Robert (2006) Carlyle, Malthus and Sismondi: The Origins of Carlyle's Dismal View of Political Economy. *History of Economics Review* 44, Summer, 7.
- Grieve, Roy H (1976) Perspectives on the Classics: A Review Article. *Journal of Economic Studies*, 3 (2), 141-56.
- Hicks, John R (1989) The Assumption of Constant Returns to Scale. *Cambridge Journal of Economics*, 13 (1), March, 9-17.
- Hirschman, Albert O (1994) The on-and-Off Connection between Political and Economic Progress. *The American Economic Review*, 84 (2, Papers and Proceedings of the Hundred and Sixth Annual Meeting of the American Economic Association), May, 343-48.
- Lawson, Tony (2005) The (Confused) State of Equilibrium Analysis in Modern Economics: An Explanation. *Journal of Post Keynesian Economics*, 27 (3), Spring, 423-44.
- Leijonhufvud, Axel (1986) Time in Theory and History or Why I Am Not a Historian. *Agricultural History*, 60 (1, Special Issue on Linkages between Policy, Research, and Small Farmers Conference), Winter, 84-8.
- Pigou, Arthur C. (1907) Social Improvement in the Light of Modern Biology. *The Economic Journal*, 17 (67), September, 358-69.
- Robinson, Joan (1972) The Second Crisis of Economic Theory. *The American Economic Review*, 62 (1/2), March, 1-10.
- Salvadori, Neri (2003) Introduction. *The European Journal of the History of Economic Thought*, 10 (1), Spring, 1-3.
- Sandbach, Francis (1978) The Rise and Fall of the Limits to Growth Debate. *Social Studies of Science*, 8 (4), November, 495-520.
- Winch, Donald (1972) Marginalism and the Boundaries of Economic Science. *History of Political Economy*, 4 (2), Fall, 325-43.
- Winch, Donald (2010) The Old Generation of Economists and the New: An Intellectual Historian's Approach to a Significant Transition. *Journal of the History of Economic Thought*, 32 (1), March, 15.

## **Smith on Economic Growth / Development**

- Anspach, R. (1976). Smith's growth paradigm *History of Political Economy*, 8(4), 21.
- Avila, Manuel (1976) Smith and Undeveloped Nations. *Review of Social Economy*, 34 (3: Social Economics of Adam Smith), December, 345-58. *Uninteresting bla bla*
- Boserup, Ester (1996) Development Theory: An Analytical Framework and Selected Application. *Population and Development Review*, 22 (3), September, 505-15.



- Brewer, Anthony (1995) The Concept of Growth in Eighteenth-Century Economics. *History of Political Economy*, 27 (4), 30.
- Brewer, Anthony (1999) Adam Ferguson, Adam Smith, and the Concept of Economic Growth. *History of Political Economy*, 31 (2), Summer, 18.
- Chandra, Ramesh (2004). Saving, Investment and Growth: A Smithian Perspective. Unpublished manuscript.
- Dow, Alexander, & Sheila Dow (2007) Theories of Economic Development in the Scottish Enlightenment. *Proceedings of the 20th Annual Conference of the History of Economic Thought Society of Australia* (HETSA), University of Queensland, Brisbane, Australia. 9-24p.
- Eltis, W. A. (1975). Adam Smith's Theory of Economic Growth. In A. S. Skinner & T. Wilson (Eds.), *Essays on Adam Smith* (Vol. 2, pp. 426-454). Oxford: Oxford University Press.
- Fay, C R (1930) Adam Smith and the Dynamic State *The Economic Journal* 40 (157), March, 25-34.
- Fiaschi, Davide, & Rodolfo Signorino (2003) Consumption Patterns, Development and Growth: Adam Smith, David Ricardo and Thomas Robert Malthus. *The European Journal of the History of Economic Thought*, 10 (1), Spring, 5-24.
- Kim, Kwangsu (2011) Demand and Sectoral Shifts in Adam Smith's View of Economic Growth. Paper presented at 15<sup>th</sup> Annual Conference of the European Society of the History of Economic Thought (ESHET), Boğaziçi University, Istanbul, Turkey, May. 27p.
- Kim, Kwangsu (2014). Adam Smith on a Better Theory of Economic Development, 11<sup>th</sup> International Conference on Developments in Economic Theory and Policy (pp. 28). Bilbao, Spain.
- Lowe, Adolph (1975). Adam Smith's System of Equilibrium Growth. In A. S. Skinner & T. Wilson (Eds.), *Essays on Adam Smith* (Vol. 2, pp. 415-425). Oxford: Oxford University Press.
- Platteau, Jean-Philippe (1978) *Les Économistes Classiques Et Le Sous-Développement* (Adam Smith) (Vol. 1). Namur Presses Universitaires de Namur.
- Singh, V B (1959) Adam Smith's Theory of Economic Development. *Science & Society*, 23 (2), Spring, 107-32.
- Skaggs, N. T. (1999). Adam Smith on growth and credit – Too weak a connection? *Journal of Economic Studies*, 26(6), 481-496.
- Spengler, Joseph J (1959) Adam Smith's Theory of Economic Growth: Part I. *Southern Economic Journal*, 25 (4), April, 397-415.
- Spengler, Joseph J (1959) Adam Smith's Theory of Economic Growth: Part II. *Southern Economic Journal*, 26 (1), April, 1-12.
- Winch, Donald (1995) Smith's Theory of Economic Development. University of California at Los Angeles Center for Social Theory and Comparative History. 19p.

## Stadial theory

- Alvey, James E. (2003). Adam Smith's View of History: Consistent or Paradoxical? Unpublished manuscript, Massey University, Palmerston North, New Zealand.
- Baloglou, Christos P. (2010). On technological change and stage evolution in the works of Seneca and Adam Smith. *The Journal of Philosophical Economics*, 3(2), 153-163
- Berry, Christopher J. (2003). Sociality and Socialisation. In Broadie, Alexander (Ed.), *The Cambridge Companion to the Scottish Enlightenment* (Cambridge University Press. 384
- Brewer, Anthony (2008). Adam Smith's stages of history. Unpublished manuscript.
- Clark, Henry C. (2008). Montesquieu in Smith's Method of 'Theory and History'. *The Adam Smith Review*, 4, 132-57.
- Cook, Simon J. (2013). From Ancients and Moderns to Geography and Anthropology: The Meaning of History in the Thought of Adam Smith, Karl Marx, and Alfred Marshall. *History of Political Economy*, 45 (2), Summer, 311-43.
- Emerson, Roger L. (1984). Conjectural History and Scottish Philosophers. *Historical Papers*, 19 (1), 63-90.

- Fiori, Stefano (2014). Adam Smith and the unintended consequences of history. *History of Economic Ideas*, 22 (2), 55-74.
- Fiori, Stefano, & Enzo Pesciarelli (1999). Adam Smith on Relations of Subordination, Personal Incentives and the Division of Labour. *Scottish Journal of Political Economy*, 46 (1), February, 91-117.
- Forbes, Duncan (1954). 'Scientific' Whiggism: Adam Smith and John Millar. *The Cambridge Journal*, 7 (11), August, 643-70.
- Forbes, Duncan (1975). Sceptical Whiggism, Commerce, and Liberty in Skinner, Andrew S & Thomas Wilson (Eds.), *Essays on Adam Smith*. Vol. 1). Oxford: Oxford University Press. 179-201
- Fox, Christopher (1995). How to Prepare a Noble Savage: The Spectacle of Human Science. In Christopher Fox, Roy Porter, and Robert Wolder (eds.) *Inventing Human Science: Eighteenth-Century Domains*, Berkeley and Los Angeles: University of California Press.1-30
- Garrett, Aaron (2003). Anthropology: The 'Original' of Human Nature. In Broadie, Alexander (Ed.), *The Cambridge Companion to the Scottish Enlightenment* (Cambridge University Press. 384
- Granovetter, M. (1979). The Idea of "Advancement" in Theories of Social Evolution and Development. *The American Journal of Sociology*, 85(3), 489-515.
- Groenewegen, Peter (1982). History and Political Economy: Smith, Marx and Marshall. *Australian Economic Papers*, 21(38), 1-17.
- Hayden, B., Bowdler, S., Butzer, K. W., Cohen, M. N., & Druss, M. (1981). Research and Development in the Stone Age: Technological Transitions among Hunter-Gatherers. *Current Anthropology*, 22(5), 519-548.
- Heilbroner, Robert. L. (1975). The Paradox of Progress: Decline and Decay in *The Wealth of Nations*. In A. S. University Press.
- Ho, Jun S, James B Lewis, & Kang Han-Rog (2008) Korean Expansion and Decline from the 17th to the 19th Century: A View Suggested by Adam Smith. *The Journal of Economic History*, 68 (1), March, 244-82.
- Hollander, Samuel (1995). The Historical Dimension of the Wealth Of Nations. in Hollander, Samuel (Ed.), *The literature of political economy. Collected Essays II*. London: Routledge. 87-103
- Hont, Istvan (1987). The Language of Sociability and Commerce: Samuel Pufendorf and the Theoretical Foundations of the "Four-Stages Theory". In Pagden, Anthony (Ed.), *The Languages of Political Theory in Early-Modern Europe*. Cambridge: Cambridge University Press. 253-76
- Höpfl, Harro M. (1978). From Savage to Scotsman: Conjectural History in the Scottish Enlightenment. *Journal of British Studies*. 17 (2). Spring. 19-40.
- Kennedy, Gavin (2005) *Adam Smith's Lost Legacy*. New York: Palgrave Macmillan. Chapters 18-20. 84-94
- Kennedy, Gavin (2008) *Adam Smith: A Moral Philosopher and His Political Economy*, . Great Thinkers in Economics, Thirlwall, A. P. New York: Palgrave Macmillan. Chapters 2 and 4: "'in the first ages of society'" and "'in the beginning all the world was America'". 27-46 & 62-78.
- Kim, Kwangsu (2009). Adam Smith's theory of economic history and economic development. *The European Journal of the History of Economic Thought*, 16(1), 41-64.
- Kubo, Shin (2013) George Pryme, Dugald Stewart, and Political Economy at Cambridge. *History of Political Economy*, 45 (1), Spring, 61-97. Pp. 75-82
- Lieberman, David (1988). Blackstone's Science of Legislation. *Journal of British Studies*, 27 (2), April, 117-49.
- Lopez, M. F. (1997). Adam Smith's 'early and rude state of society': the missing factual instance. Paper presented at Reunión Anual de la Asociación Argentina de Economía Política (pp. 15). Bahía Blanca, Argentina.
- Manioudis, Manolis (2013). Adam Smith's Wealth of Nations: Setting the Scene of Economic History? Paper presented at the 16<sup>th</sup> Summer School in History of Economic Thought, Economic Philosophy and Economic History, Ankara, 2-8 September.

- Mason, Haydn (2006). Optimism, progress, and philosophical history in Goldie, Mark & Robert Wokler (Eds.), *The Cambridge History of Eighteenth-Century Political Thought*. Cambridge: Cambridge University Press. 195-217
- Meek, R. L. (1971). Smith, Turgot, and the 'Four Stages' Theory *History of Political Economy*, 3(1), 19.
- Meek, Ronald L. (1976). *Social science and the ignoble savage*. Cambridge University Press. 249p.
- Nohara, S. (2010). Adam Smith on the Cyclicity of the Rise and Fall of Civilization. *The Kyoto Economic Review*, 79(1), 77-89.
- O'Neill, Daniel I. (2007). *The Burke-Wollstonecraft Debate: Savagery, Civilization, and Democracy*. Pennsylvania State University Press, Chapter 1: The Scottish Enlightenment, the Moral Sense, and the Civilizing Process, 21-49
- Otteson, James R. (2008). Shaftesbury's evolutionary morality and its influence on Adam Smith. *Adam Smith Review*, 4, 106-31.
- Perinetti, Dario (2006). Philosophical Reflection on History. In Haakonssen, Knud (Ed.), *The Cambridge History of Eighteenth-Century Philosophy*. Cambridge University Press. 1107-40
- Pesciarelli, Enzo (1978). The Italian Contribution to the Four-Stages Theory. *History of Political Economy*, 10 (4), Winter, 597-607.
- Phillips, Mark Salber (2000) *Society and Sentiment: Genres of Historical Writing in Britain, 1740-1820*. Princeton: Princeton University Press. Chapter 7: "Conjectural History: A History of Manners and of Mind". 171-189
- Pittock, Murray G. H. (2003). Historiography. In Broadie, Alexander (Ed.), *The Cambridge Companion to the Scottish Enlightenment*. Cambridge University Press. 384
- Pocock, J. G. A. (2006). Adam Smith and History. In K. Haakonssen (Ed.), *The Cambridge Companion to Adam Smith* (pp. 270-287). Cambridge: Cambridge University Press.
- Reid, G. C. (1989). Adam Smith's Stadias Analysis as a Sequence of Societal Growth Trajectories. *Scottish Journal of Political Economy*, 36(1), 59-70.
- Richter, M. (2006). The comparative study of regimes and societies. In M. Goldie & R. Wokler (Eds.), *The Cambridge History of Eighteenth-Century Political Thought* (pp. 147-171). Cambridge: Cambridge University Press.
- Shearmur, Jeremy (2007). Smith and the Materialist Theory of History. Paper presented at the 20th Annual Conference of the History of Economic Thought Society of Australia (HETSA), University of Queensland, Brisbane, Australia. 11-13 July.
- Simon, L. H. (1981). Vico and Marx: Perspectives on Historical Development. *Journal of the History of Ideas*, 42(2), 317-331.
- Singer, Brian C. J. (2004). Montesquieu, Adam Smith and the Discovery of the Social. *Journal of Classical Sociology*, 4 (1), March, 31-57.
- Skinner, Andrew S (1965). Economics and History: The Scottish Enlightenment. *Scottish Journal of Political Economy*, 12 (1), February, 1-22.
- Skinner, A. S. (1975). Adam Smith: an Economic Interpretation of History. In A. S. Skinner & T. Wilson (Eds.), *Essays on Adam Smith* (Vol. 1, pp. 154-178). Oxford: Oxford University Press.
- Skinner, Andrew S (1996) *A System of Social Science: Papers relating to Adam Smith*, (2<sup>nd</sup> ed.) Oxford: Oxford University Press. Chapter 4: "Historical Theory". 76-105
- Smith, Craig (2006). Adam Smith on progress and knowledge. In L. Montes & E. Schliesser (Eds.), *New Voices on Adam Smith* (pp. 293-312): Routledge ¥\$
- Tomaselli, Sylvana (1995). Political Economy: The Desire and Needs of Present and Future Generations. In Christopher Fox, Roy Porter, and Robert Wolder (eds.) *Inventing Human Science: Eighteenth-Century Domains*, Berkeley and Los Angeles: University of California Press. 292-322
- Udehn, Lars (2001) *Methodological Individualism: Background, history and meaning*. New York: Routledge. 1-19; 38-40
- Wokler, Robert (1995). Anthropology and Conjectural History in the Enlightenment. In Christopher Fox, Roy Porter, and Robert Wolder (eds.) *Inventing Human Science: Eighteenth-Century Domains*, Berkeley and Los Angeles: University of California Press. 31-52

## **Anthropological Considerations on (early) development**

- Algaze, Guillermo (2005) The Sumerian Takeoff. *Structure and Dynamics: eJournal of Anthropological and Related Sciences*, 1 (1), 1-41.
- Austin, Gareth (2007) Reciprocal Comparisons and African History: Tackling Conceptual Eurocentrism in the Study of Africa's Economic Past. *African Studies Review*, 50 (3), December, 1-28.
- Boone, James L (2002) Subsistence Strategies and Early Human Population History: An Evolutionary Ecological Perspective. *World Archaeology*, 34 (1), June, 6-25.
- Stokes, Gale (2001) The Fates of Human Societies: A Review of Recent Macrohistories. *The American Historical Review*, 106 (2), April, 508-25.
- Voth, Donald E (2004) An Overview of International Development Perspectives in History: Focus on Agricultural and Rural Development
- Winch, Donald (2000) Does Progress Matter? *The European Journal of the History of Economic Thought*, 7 (4), Winter, 465-84.

## **Smith's wage / labour market theory**

- Aspromourgos, A. (2010). 'Universal opulence': Adam Smith on technical progress and real wages *The European Journal of the History of Economic Thought* 17(5), 1169–1182.
- Aspromourgos, A. (2013). Adam Smith on Labour and Capital. In C. J. Berry, M. P. Paganelli & C. Smith (Eds.), *The Oxford Handbook of Adam Smith* (pp. 267-289). Oxford: Oxford University Press.
- Gordon, S. (1973). The Wage-Fund Controversy: The Second Round. *History of Political Economy*, 5(1), 14-35.
- Marshall, M. G. (1998). Scottish Economic Thought and the High Wage Economy: Hume, Smith and McCulloch on Wages and Work Motivation. *Scottish Journal of Political Economy*, 45(3), 309-328.
- McNulty, P. J. (1973). Adam Smith's Concept of Labor. *Journal of the History of Ideas*, 34(3), 345-366.
- Phelps-Brown, E. H. (1976). The Labour Market. In T. Wilson & A. S. Skinner (Eds.), *The Market and the State: Essays in Honour of Adam Smith* (pp. 243-270). Oxford: Clarendon Press.
- Rees, A. (1975). Compensating Wage Differentials. In A. S. Skinner & T. Wilson (Eds.), *Essays on Adam Smith* (Vol. 2, pp. 336-349). Oxford: Oxford University Press.
- Rosenbluth, G. (1969). A Note on Labour, Wages, and Rent in Smith's Theory of Value. *The Canadian Journal of Economics / Revue canadienne d'Economique*, 2(2), 308-314.
- Schneider, M. (1995). [rev art] Wages and Employment in Classical Economic Theory. *History of Economics Review*, 24, 10.
- Stabile, D. R. (1997). Adam Smith and the Natural Wage: Sympathy, Subsistence and Social Distance. *Review of Social Economy*, 55(3), 292-311.
- Stirati, A. (2010). Interpretations of the Classics: The Theory of Wages. Unpublished manuscript.
- Stirati, Antonella (1994) *The theory of wages in classical economics: a study of Adam Smith, David Ricardo, and their contemporaries*. Edward Elgar. 221 p.
- Waterman, Anthony M C (2009) Adam Smith's Macrodynamic Conception of the Natural Wage. *History of Economics Review* 49, Winter, 45-60.
- Waterman, Anthony M C (2012) Adam Smith and Malthus on High Wages. *European Journal of the History of Economic Thought*, 19 (3), June, 409-29.
- Wiles, Richard C. (1968). The Theory of Wages in Later English Mercantilism. *Economic History Review*, 21 (1), April, 113-26.

## **(Un)productive Labour**

- Bladen, V. W. (1975). Command over Labour: A Study in Misinterpretation. *The Canadian Journal of Economics / Revue canadienne d'Economie*, 8(4), 504-519. Contains useful stuff on Ricardo's misinterpretation of Smith.
- Bladen, Vincent W (1960) Adam Smith on Productive and Unproductive Labour: A Theory of Full Development. *The Canadian Journal of Economics and Political Science / Revue canadienne d'Economie et de Science politique*, 26 (4), November, 625-30.¥
- Grieve, Roy H (2008) Adam Smith's Concept of Productive and Unproductive Labour: An Interpretation. *Strathclyde Discussion Papers in Economics*. 05, 05. 29p.
- Myint, Hla (1943) The Welfare Significance of Productive Labour. *The Review of Economic Studies*, 11 (1), Winter, 20-30.

## **Human capital**

- Bowman, Rhead S (1990) Smith, Mill, and Marshall on Human Capital Formation *History of Political Economy*, 22 (2), Summer, 21.
- Spengler, Joseph J (1977) Adam Smith on Human Capital. *The American Economic Review* 67 (1, Papers and Proceedings of the Eighty-ninth Annual Meeting of the American Economic Association), February, 32-36.

## **Labour theory**

- Ardant, G. (1950). Les diables de Malthus: Remarques sur les aspects démographiques de la théorie de l'emploi. *Population (French Edition)*, 5(2), 229-250.
- Teal, F. (2011). The price of labour and understanding the causes of poverty. *Labour Economics*, 18 (Supplement 1), S7-S15.

## **Gender**

- Blum, Carlo, Jacqueline Hecht, Christine Théré, & Rudolph Binion (1999) Forum: Demographic Thought and Reproductive Realities: From Montesquieu to Malthus. *Eighteenth-Century Studies*, 32 (4), Summer, 535-69.
- Boserup, Ester (1996). Development Theory: An Analytical Framework and Selected Application. *Population and Development Review*, 22 (3), September, 505-15.
- Bowles, Paul (1984) John Millar, the Four-Stages Theory, and Women's Position in Society. *History of Political Economy*, 16 (4), Winter, 619-38.
- Clark, Henry C. (1993). Women and Humanity in Scottish Enlightenment Social Thought: The Case of Adam Smith. *Historical Reflections / Réflexions Historiques*, 19 (3), Fall, 335-61.
- Goss, Barry A (1980) Adam Smith on Abstinence. *Australian Economic Papers*, 19 (34), June, 16.
- Harkin, Maureen (2013) Adam Smith on Women. In Berry, C. J., M. P. Paganelli & C. Smith (Eds.), *The Oxford Handbook of Adam Smith* (Oxford: Oxford University Press. 501-22
- McNicoll, Geoffrey (1998) Malthus for the Twenty-First Century. *Population and Development Review*, 24 (2), June, 309-16. HAS THE SMITH QUOTE IN IT I THINK
- Michalitsch, Gabriele (2010). Geschlechterregierung und politische Ökonomie: Was Adam Smith damit zu tun hat, dass Frauen heute weniger als Männer verdienen. *L'Homme. Europäische Zeitschrift für Feministische Geschichtswissenschaft*. 21 (2). 119-33.
- Neruzzi, Sebastiano & Pierluigi Nuti (2011). Adam Smith and the Family. *History of Economic Ideas*, 19 (2), 11-41.
- Nyland, Chris (1993) Adam Smith, Stage Theory, and the Status of Women. *History of Political Economy*, 25 (4), Winter, 24.
- Nyland, Chris (1997). Biology and Environment: Montesquieu's Relativist Analysis of Gender Behavior. *History of Political Economy*, 29 (3), Fall, 391-412.

- Rendall, Jane (1987) Virtue and commerce : women in the making of Adam Smith's political economy. in Ellen Kennedy and Susan Mendus, *Women in western political philosophy : Kant to Nietzsche*. Brighton: Wheatsheaf. 44-77
- Shah, Sumitra (2009) Sexual Division of Labor in Adam Smith's Work. *Journal of the History of Economic Thought*, 28 (02), June, 21.
- Sutherland, Kathryn (1995) Adam Smith's master narrative: women and the Wealth of Nations. in Stephen Copley and Kathryn Sutherland (eds.), *Adam Smith's Wealth of Nations: New Interdisciplinary Essays*, Manchester University Press, 97-121
- Tomaselli, Sylvania (1985). The Enlightenment Debate on Women. *History Workshop Journal*, 20 (1), September, 101-24.
- Zweig, Konrad (1979) Smith, Malthus, Ricardo, and Mill: The Forerunners of Limits to Growth. *Futures*, 11 (6), December, 510-23.

### **Demographic transition (Marx & Malthus)**

- Abeysinghe, T. (1986). Rising Needs and Falling Family Size: Implications from Marx on Demographic Transition *Review of Social Economy* 44(3), 281-293.
- Brezis, Elise S, & Warren Young (2003) The New Views on Demographic Transition: A Reassessment of Malthus's and Marx's Approach to Population. *The European Journal of the History of Economic Thought*, 10 (1), Spring, 25-45.
- Brezis, Elise S, & Warren Young (2003) The New Views on Demographic Transition: A Reassessment of Malthus' and Marx's Views on Population. Paper presented at *Old and New Growth Theories: An Assessment*, Pisa. 23p.
- Davis, Kingsley (1945) The World Demographic Transition. *Annals of the American Academy of Political and Social Science*, 237 (World Population in Transition), January, 1-11.
- De Bruijn, Bart (2006) Fertility: Theories, Frameworks, Models, Concepts In Caselli, G., J. Vallin & G. Wunsch (Eds.), *Demography : Analysis and Synthesis : A Treatise in Population Studies* (Vol. 1): Elsevier Academic Press. 549-70
- Engels, Friedrich (1988) Engels on the Origin and Evolution of the Family. *Population and Development Review*, 14 (4), December, 705-29.
- Landry, Adolphe (1987) Adolphe Landry on the Demographic Revolution. *Population and Development Review*, 13 (4), December, 731-40.
- Leasure, J William (1963) Malthus, Marriage and Multiplication. *The Milbank Memorial Fund Quarterly*, 41 (4), October, 419-35.
- Loschky, David J (1976) Economic Change, Mortality and Malthusian Theory. *Population Studies*, 30 (3), November, 439-52.
- Senior, Nassau W (1829) Two Lectures on Population
- Vallin, Jacques (2006) Europe's Demographic Transition, 1740-1940 In Caselli, G., J. Vallin & G. Wunsch (Eds.), *Demography : Analysis and Synthesis : A Treatise in Population Studies* (Vol. 3): Elsevier Academic Press. 41-68
- Vallin, Jacques, & Graziella Caselli (2006) The Future of Mankind: Looking Ahead after the Transition. In Caselli, G., J. Vallin & G. Wunsch (Eds.), *Demography : Analysis and Synthesis : A Treatise in Population Studies* (Vol. 3): Elsevier Academic Press. 235-58

### **Demographic dividend/ New home economics**

- Bar, M., & Leukhina, O. (2008). Demographic Transition and Industrial Revolution: A Macroeconomic Investigation.
- Becker, G. S. (1962). Investment in Human Capital: A Theoretical Analysis. *The Journal of Political Economy*, 5(2), 9-49.

- Becker, G. S. (1985). Human Capital, Effort, and the Sexual Division of Labor. *Journal of Labor Economics*, 3(1), S33-S58.
- Becker, G. S. (1993). Nobel Lecture: The Economic Way of Looking at Behavior. *The Journal of Political Economy*, 101(3), 385-409.
- Becker, G. S., & Barro, R. J. (1988). A Reformulation of the Economic Theory of Fertility. *The Quarterly Journal of Economics*, 103(1), 1-25.
- Becker, G. S., Glaeser, E. L., & Murphy, K. M. (1999). Population and Economic Growth. *The American Economic Review* 89(2, Papers and Proceedings of the One Hundred Eleventh Annual Meeting of the American Economic Association), 145-149.
- Becker, G. S., Murphy, K. M., & Tamura, R. (1990). Human Capital, Fertility, and Economic Growth. *The Journal of Political Economy*, 98(5), S12-S37.
- Bloom, David E, David Canning, & Jaypee Sevilla (2001) Economic Growth & the Demographic Transition. NBER Working Paper. 8685. 87p.
- Galor, Oded (2005) The Demographic Transition and the Emergence of Sustained Economic Growth. *Journal of the European Economic Association*, 3 (2-3), April - May, 494-504.
- Hanushek, Eric A (1992) The Trade-Off between Child Quantity and Quality. *The Journal of Political Economy*, 100 (1), February, 84-117.
- Lee, Ronald D, & Shelley Lapkoff (1988) Intergenerational Flows of Time and Goods: Consequences of Slowing Population Growth. *The Journal of Political Economy*, 96 (3), June, 618-51.
- Loschky, D. J. (1976). Economic Change, Mortality and Malthusian Theory. *Population Studies*, 30(3), 439-452.
- Lucas, Robert E (1996) The Industrial Revolution: Past and Future. *Estudios Publicos*, 64, Spring, 1-15.
- Manfredi, Piero, & Luciano Fanti (2003) The Demographic Transition and Neo-Classical Models of Balanced Growth. In Salvadori, N. (Ed.), *The Theory of Economic Growth: A 'Classical' Perspective* (Edward Elgar. 161-85
- Mason, Andrew (1988) Saving, Economic Growth, and Demographic Change. *Population and Development Review*, 14 (1), March, 113-44.
- Mincer, Jacob (1997) The Production of Human Capital and the Life Cycle of Earnings: Variations on a Theme. *Journal of Labor Economics*, 15 (1), January, S26-S47.
- Mincer, Jacob, & Solomon Polachek (1974) Family Investments in Human Capital: Earnings of Women. *The Journal of Political Economy*, 82 (2), March - April, S76-S108.
- Mulligan, Casey B (1999) Galton Versus the Human Capital Approach to Inheritance. *The Journal of Political Economy*, 107 (6), December, S184-S224.
- Nerlove, Marc (1974) Household and Economy: Toward a New Theory of Population and Economic Growth + Comment by Griliches. *The Journal of Political Economy*, 82 (2), March - April, S200-S18.
- Phelps, Charlotte D (1972) Is the Household Obsolete. *The American Economic Review*, 62 (1/2), March, 167-74.
- Sah, Raaj K (1991) The Effects of Child Mortality Changes on Fertility Choice and Parental Welfare. *The Journal of Political Economy*, 99 (3), June, 582-606.
- Schultz, T Paul (1973) Explanation of Birth Rate Changes over Space and Time: A Study of Taiwan. *The Journal of Political Economy*, 81 (2), March - April, S238-S74.
- Schultz, Theodore W (1973) The Value of Children: An Economic Perspective. *The Journal of Political Economy*, 81 (2), March - April, S2-S13.
- Schultz, Theodore W (1974) The High Value of Human Time Population Equilibrium. *The Journal of Political Economy*, 82 (2), March - April, S2-S10.
- Schultz, Theodore W (1980) The Economics of Being Poor (Nobel Lecture). *The Journal of Political Economy*, 88 (4), August, 639-51.

- Schultz, Theodore W (1986) The Changing Economy and the Family. *Journal of Labor Economics*, 4 (3), July, S278-S87.
- Simon, Julian L (1969) The Value of Avoided Births to Underdeveloped Countries. *Population Studies*, 23 (1), March, 61-68.
- Simon, Julian L (1975) The Mixed Effects of Income Upon Successive Births May Explain the Convergence Phenomenon. *Population Studies*, 29 (1), March, 109-22.
- Simon, Julian L (1975) The Welfare Effect on an Additional Child Cannot Be Stated Simply and Unequivocally. *Demography* 12 (1), February, 89-105.
- Simon, Julian L (1988) Re-Linking Fertility Behavior and Economic Security in Old Age: Comment on Demeny. *Population and Development Review*, 14 (2), June, 327-31.
- Willis, Kirk (1973) A New Approach to the Economic Theory of Fertility Behavior. *The Journal of Political Economy*, 81 (2: Part 2: New Economic Approaches to Fertility), March - April, 14-64.

## **Industrial revolution**

- Berger, Maxine, & Pat Hudson (1992) Rehabilitating the Industrial Revolution. *The Economic History Review* 45 (1), February, 24-50.
- De Vries, Jan (1994) The Industrial Revolution and the Industrious Revolution. *The Journal of Economic History*, 54 (2), June, 249-70.
- Jones, Charles I (2001) Was an Industrial Revolution Inevitable? Economic Growth over the Very Long Run. *Advances in Macroeconomics*, 1 (2), November, 1-43.
- O'Brien, P K (1977) Agriculture and the Industrial Revolution. *The Economic History Review*, 30 (1), February, 166-

## **Smith and the Industrial Revolution**

- Caton, H. (1985). The Preindustrial Economics of Adam Smith. *The Journal of Economic History*, 45(4), 833-853.
- Eltis, W. A. (1988). The Contrasting Theories of Industrialization of François Quesnay and Adam Smith. *Oxford Economic Papers*, 40(2), 269-288.
- Hartwell, R. Max (1978). Adam Smith and the Industrial Revolution. In Glahe, Fred R. (Ed.), *Adam Smith and the Wealth of Nations: Bicentennial Essays 1776-1976* (Boulder, Colorado: Colorado Associated University Press. 123-47 Not very interesting. Says he couldn't know about it, but all but anticipated it.
- Kindleberger, Charles P. (1976). The Historical Background : Adam Smith and the Industrial Revolution. In T. Wilson & A. S. Skinner (Eds.), *The Market and the State: Essays in Honour of Adam Smith* (pp. 1-41). Oxford: Clarendon Press.
- Koebner, R. (1959). Adam Smith and the Industrial Revolution *The Economic History Review* 11(3), 381-391.
- Peach, Terry (2014) Adam Smith's "Optimistic Deism," the Invisible Hand of Providence, and the Unhappiness of Nations. *History of Political Economy*, 46 (1), Spring, 55-83.
- Perelman, Michael (2010) Adam Smith: Class, Labor, and the Industrial Revolution. *Journal of Economic Behavior & Organization*, 76 (3), December, 481-96.

## **Standard of living during the industrial revolution debate**

- Boyer, George R (1989) Malthus Was Right after All: Poor Relief and Birth Rates in Southeastern England. *The Journal of Political Economy*, 97 (1), February, 93-114.



- Brown, J. C. (1990). The Condition of England and the Standard of Living: Cotton Textiles in the Northwest, 1806-1850. *The Journal of Economic History*, 50(3), 591-614.
- Brown, John C (1990) The Condition of England and the Standard of Living: Cotton Textiles in the Northwest, 1806-1850. *The Journal of Economic History*, 50 (3), September, 591-614.
- Feinstein, C. H. (1998). Pessimism Perpetuated: Real Wages and the Standard of Living in Britain during and after the Industrial Revolution. *The Journal of Economic History*, 58(3), 625-658.
- Hartwell, R M (1961) The Rising Standard of Living in England, 1800-1850 *The Economic History Review* 13 (3), April, 20.
- Hobsbawm, Eric J (1963) The Standard of Living During the Industrial Revolution: A Discussion. *The Economic History Review* 16 (1), August, 119-34.
- Huck, Paul (1993). Infant Mortality and the Standard of Living During the British Industrial Revolution. *The Journal of Economic History*, 53(2), 399-401.
- Huck, Paul (1995) Infant Mortality and Living Standards of English Workers During the Industrial Revolution. *The Journal of Economic History*, 55 (3), September, 528-50.
- Komlos, J. (1990). Nutrition, Population Growth, and the Industrial Revolution in England. *Social Science History*, 14(1), 69-91.
- Komlos, John (1990) Nutrition, Population Growth, and the Industrial Revolution in England. *Social Science History*, 14 (1), Spring, 69-91.
- Millward, Robert, & Frances Bell (2001) Infant Mortality in Victorian Britain: The Mother as Medium. *The Economic History Review* 54 (4), November, 699-733.
- Olney, Martha L (1983) Fertility and the Standard of Living in Early Modern England: In Consideration of Wrigley and Schofield. *The Journal of Economic History*, 43 (1), March, 71-77.
- Schwarz, L D (1985) The Standard of Living in the Long Run: London, 1700-1860. *The Economic History Review* 38 (1), February, 24-41.
- Schwarz, L. D. (1985). The Standard of Living in the Long Run: London, 1700-1860. *The Economic History Review* 38(1), 24-41.
- Szreter, Simon, & Graham Mooney (1998) Urbanization, Mortality, and the Standard of Living Debate: New Estimates of the Expectation of Life at Birth in Nineteenth-Century British Cities.
- Wrigley, E Anthony (1983) The Growth of Population in Eighteenth-Century England: A Conundrum Resolved. *Past & Present* (98), February, 121-50.

### **Smith & Darwin/Evolution**

- Bluemle, G. (2009). 200 Jahre Darwin und 250 Jahre Theory of Moral Sentiments. Zur Aktualität eines vergessenen Werkes. *International Journal of Economic Sciences and Applied Research*, 2(1), 89-110.
- Clark, C. M. (1990). Adam Smith and Society as an Evolutionary Process. *Journal of Economic Issues*, 24(3), 20.
- Gordon, S. (1989). Darwin and political economy: The connection reconsidered. *Journal of the History of Biology*, 22(3), 437-459.
- Grossman, H. (1943). The Evolutionist Revolt against Classical Economics: II. in England—James Steuart, Richard Jones, Karl Marx. *The Journal of Political Economy*, 51(6), 506-522.
- Houthakker, H. S. (1956). Economics and Biology: Specialization and Speciation. *Kyklos* 9(2), 181-189.
- Marciano, A., & Pelissier, M. (2000). The Influence of Scottish Enlightenment on Darwin's Theory of Cultural Evolution. *Journal of the History of Economic Thought*, 22(02), 239-249.
- Pack, Spencer J. & Eric Schliesser (2006) Smith's Humean criticism of Hume's account of the origin of justice. *Journal of the History of Philosophy*, 44 (1), 47-63
- Schabas, Margaret (2003). Adam Smith's Debts to Nature (spec. iss). *History of Political Economy*, 35(Supplement), 20.

- Schabas, Margaret (2013). The oeconomy of nature: an interview with Margaret Schabas. *Erasmus Journal for Philosophy and Economics*, 6(2), 66-77.
- Schliesser, Eric (2011). Reading Adam Smith after Darwin: On the evolution of propensities, institutions, and sentiments. *Journal of Economic Behavior & Organization*, 77(1), 14-22.
- Schweber, Silvan S. (1977). The Origin of the "Origin" Revisited. *Journal of the History of Biology*, 10 (2), 229-316.
- Schweber, Silvan S. (1980). Darwin and the political economists: Divergence of character. *Journal of the History of Biology*, 13(2), 195-289.
- Simpson, C. (2012). The evolutionary history of division of labour. *Proceedings of the Royal Society B*, 279(1726), 116-121.
- Taka, Tetsuo (2011). Instinct as a Foundational Concept in Adam Smith's Social Theory. *The History of Economic Thought*, 53 (2), 1-20.

## Linneaus

- Engler, A. (1907). Die Linné-Feiern in Schweden und Linné's Werk. *Internationale Wochenschrift für Wissenschaft Kunst und Technik*.
- Müller-Wille, S. (2003). Nature as a Marketplace: The Political Economy of Linnaean Botany. *History of Political Economy*, 35(Supplement 1: Oeconomies in the Age of Newton), 154-172.
- Rausing, L. (2003). Underwriting the Oeconomy: Linnaeus on Nature and Mind. *History of Political Economy*, 35(Supplement 1: Oeconomies in the Age of Newton), 173-202.

## General evolutionary economics

- Andersen, E. S. (2004). Knowledges, specialisation and economic evolution: modelling the evolving division of human time. In J. Foster & J. S. Metcalfe (Eds.), *Evolution and Economic Complexity* (pp. 108-147). Cheltenham and Northampton, Massachusetts: Edward Elgar.
- Andersen, E. S. (2004). Population thinking and evolutionary economic analysis: Exploring Marshall's fable of the trees. Unpublished manuscript.
- Dosi, Giovanni, & Richard R Nelson (1994) An Introduction to Evolutionary Theories in Economics. *Journal of Evolutionary Economics*, 4 (3), September, 153-72.
- Foster, J., & Metcalfe, J. S. (2001). Modern evolutionary economic perspectives: an overview. In J. Foster & J. S. Metcalfe (Eds.), *Frontiers of evolutionary economics : competition, self-organization, and innovation policy* (pp. 1-18). Cheltenham, UK and Northampton, USA: Edward Elgar.
- Frank, R. H. (2011). *The Darwin economy : liberty, competition, and the common good*. Princeton: Princeton University Press.
- Gowdy, J. M. (2001). Commentary: institutions, macroevolution and economic selection. In J. Foster & J. S. Metcalfe (Eds.), *Frontiers of evolutionary economics : competition, self-organization, and innovation policy* (pp. 31-40). Cheltenham, UK and Northampton, USA: Edward Elgar.
- Metcalfe, J. S. (2003). Industrial Growth and the Theory of Retardation: Precursors of an Adaptive Evolutionary Theory of Economic Change. *Revue économique*, 54(2), 407-431.
- Mokyr, Joel (2000) Natural History and Economic History: Is Technological Change an Evolutionary Process?
- Myrdal, Gunnar (1979) Underdevelopment and the Evolutionary Imperative. *Third World Quarterly*, 1 (2), April, 24-42.
- Nelson, R. R. (2001). The coevolution of technology and institutions as the driver of economic growth. In J. Foster & J. S. Metcalfe (Eds.), *Frontiers of evolutionary economics : competition, self-organization, and innovation policy* (pp. 19-30). Cheltenham, UK and Northampton, USA: Edward Elgar.
- Nelson, Richard (1995) Recent Evolutionary Theorizing About Economic Change. *Journal of Economic Literature*, 33 (1), March, 48-90.

- Nelson, Richard (2006) Economic Development from the Perspective of Evolutionary Economic Theory. Working Papers in Technology Governance and Economic Dynamics. 2, 17p.
- Nelson, Richard R (2002) Thoughts Stimulated by Reading Geoffrey Hodgson's Economics and Utopia. *Review of Social Economy*, 60 (1), March, 109-13.
- Nelson, Richard R., & Sidney G. Winter (1975) Growth Theory from an Evolutionary Perspective: The Differential Productivity Puzzle. *The American Economic Review*, 65 (2, Papers and Proceedings of the 87<sup>th</sup> Annual Meeting of the American Economic Association), May, 338-44.
- Santangelo, G. D. (2003). The evolutionary perspective on growth. In N. Salvadori (Ed.), *The Theory of Economic Growth: A 'classical' Perspective*: Edward Elgar.
- Schabas, M., & De Marchi, N. (2003). Introduction to "Oeconomies in the Age of Newton". *History of Political Economy*, 35(Supplement 1: Oeconomies in the Age of Newton), 1-13.

## Darwin & others

- Berlin, I. (1978). Marx's "Kapital" and Darwin. *Journal of the History of Ideas*, 39(3), 1.
- Bowler, P. J. (1976). Malthus, Darwin, and the Concept of Struggle. *Journal of the History of Ideas*, 37(4), 631-650.
- Colp, R. (1982). The myth of the Darwin-Marx letter. *History of Political Economy*, 14(4), 22.
- Cowles, T. (1937). Malthus, Darwin, and Bagehot: A Study in the Transference of a Concept. *Isis*, 26(2), 341-348.
- Dawson, D. (2002). The Marriage of Marx and Darwin? *History and Theory*, 41(1), 43-59.
- Fishburn, G. (2004). *Natura non facit saltum* in Alfred Marshall (and Charles Darwin). *History of Economics Review* 40, 10.
- Freeman, D., & al., e. (1974). The Evolutionary Theories of Charles Darwin and Herbert Spencer (+ Comments & Replies). *Current Anthropology*, 15(3), 211-237.
- Harris, A. L. (1934). Economic Evolution: Dialectical and Darwinian. *The Journal of Political Economy*, 42(1), 34-79.
- Hart, N. (2003). Marshall's Dilemma: Equilibrium versus Evolution. *Journal of Economic Issues*, 37(4), 1139-1160.
- Hodge, J. (2009). The notebook programmes and projects of Darwin's London years. In J. Hodge & G. Radick (Eds.), *The Cambridge Companion to Darwin* (Second ed., pp. 44-72). Cambridge: Cambridge University Press.
- Hodge, J., & Radick, G. (2009). The place of Darwin's theories in the intellectual long run. In J. Hodge & G. Radick (Eds.), *The Cambridge Companion to Darwin* (Second ed., pp. 246-274). Cambridge: Cambridge University Press.
- Jones, L. B. (1989). Schumpeter versus Darwin: In re Malthus. *Southern Economic Journal*, 56(2), 410-422.
- Kingsland, S. (1988). Evolution and Debates over Human Progress from Darwin to Sociobiology. *Population and Development Review*, 14(Supplement: Population and Resources in the Western Intellectual Traditions), 167-198.
- Laurent, J. (1998). Keynes and Darwin. *History of Economics Review* 27, 18.
- Rosenberg, A. (2009). Darwinism in moral philosophy and social theory. In J. Hodge & G. Radick (Eds.), *The Cambridge Companion to Darwin* (Second ed., pp. 345-367). Cambridge: Cambridge University Press.
- Ureña, E. M. (1977). Marx and Darwin. *History of Political Economy*, 9(4), 12.
- Vorzimmer, P. (1969). Darwin, Malthus, and the Theory of Natural Selection. *Journal of the History of Ideas*, 30(4), 527-542.
- Wilczynski, J. Z. (1959). On the Presumed Darwinism of Alberuni Eight Hundred Years before Darwin. *Isis* 50(4), 459-466.

## **Smith: Theology / Teleology**

- Alvey, J. E. (2004). Adam Smith on Teleology and the Stationary State: A Rejoinder. *History of Economics Review* 40.
- Alvey, J. E. (2004). The hidden theology of Adam Smith: A belated reply to Hill. *The European Journal of the History of Economic Thought* 11(4), 623-628.
- Alvey, J. E. (2004). The Role of Teleology in Adam Smith's *Wealth of Nations*: A Belated Comment on Kleer. *History of Economics Review*, 40, 8.
- Hill, Lisa (2001). The hidden theology of Adam Smith. *The European Journal of the History of Economic Thought* 8(1), 1-29.
- Hill, Lisa (2004). Further reflections on the 'Hidden Theology' of Adam Smith. *The European Journal of the History of Economic Thought* 11(4), 629-635.
- Kennedy, Gavin (2011). The Hidden Adam Smith in His Alleged Theology. *Journal of the History of Economic Thought*, 33(03), 385-402.
- Kleer, R. A. (2000). The role of teleology in Adam Smith's "Wealth of Nations". *History of Economics Review* 31, 16.
- Kleer, R. A. (2004). Smith on Teleology: A Reply to Alvey. *History of Economics Review* 40, 5.
- Pack, Spencer (1995). Theological (and Hence Economic) Implications of Adam Smith's "Principles which Lead and Direct Philosophical Enquiries". *History of Political Economy*, 27(2), 19.
- Waterman, Anthony M. C. (2002). Economics as Theology: Adam Smith's Wealth of Nations. *Southern Economic Journal*, 68(4), 907-921.

## **Smith and Division of labour**

### **General**

- Amsden, A. H. (1977). The Division of Labour is Limited by the Type of Market: The Case of the Taiwanese Machine Tool Industry. *World Development*, 5(3), 217-233.
- Amsden, A. H. (1985). The division of labour is limited by the rate of growth of the market: the Taiwan machine tool industry in the 1970s. *Cambridge Journal of Economics* 9(3), 271-284.
- Boyer, Robert, & Geneviève Schméder (1990) Division du travail, changement technique et croissance. Un retour à Adam Smith. *Revue française d'économie*, 5 (1), 125-94.
- Buchanan, James M (2008) Let Us Understand Adam Smith. *Journal of the History of Economic Thought*, 30 (1), March, 8.
- Groenewegen, Peter (1977) Adam Smith and the Division of Labour: A Bicentenary Estimate. *Australian Economic Papers*, 16 (29), December, 161-74.
- Negishi, Takashi (2000) Adam Smith's Division of Labor and Structural Change. *Structural Change and Economic Dynamics*, 11 (1-2), July, 5-11.
- Negishi, Takashi (1994). Smith's Numerical Examples of the Division of Labour. *Annals of the Japanese Society for the History of Economic Thought*, 32, 40-47.
- Peaucelle, Jean-Louis (2005) Raisonner Sur Les Épingles. L'exemple d'Adam Smith Sur la Division du Travail *Revue d'économie politique*, 115 (4), 499-519.
- Peaucelle, Jean-Louis (2006) Adam Smith's Use of Multiple References for His Pin Making Example. *The European Journal of the History of Economic Thought*, 13 (4), December, 489-512.
- Rashid, Salim (1986) Adam Smith and the Division of Labour: A Historical View. *Scottish Journal of Political Economy*, 33 (3), August, 292-97.

### **Plato and Smith**

- Foley, Vernard (1974) The Division of Labor in Plato and Smith. *History of Political Economy*, 6 (2), Summer, 23.
- Foley, Vernard (1975) Smith and the Greeks: A Reply to Professor McNulty's Comments. *History of Political Economy*, 7 (3), Fall, 379-89.

McNulty, Paul J (1975) A Note on the Division of Labor in Plato and Smith. *History of Political Economy*, 7 (3), Fall, 372-78.

### **Young, Marshall and Smith**

Chandra, Ramesh (2004). Adam Smith, Allyn Young, and the Division of Labor. *Journal of Economic Issues*, 38(3), 19.

Chandra, Ramesh, & Grieve, Roy H. (2006). Putting the Record Straight: Adam Smith, Allyn Young and the Division of Labour. Unpublished manuscript.

He, Yong, & Olivier Boissin (2006) Spécialisation individuelle et division sociale du travail : Une lecture dynamique d'A. Smith, A. Marshall et A. Young. *Cahiers d'économie Politique*, 50 (1), 124-35.

Lavezzi, Andrea (2001) Division of Labor and Economic Growth: From Adam Smith to Paul Romer and Beyond. Paper prepared for the conference "Old and New Growth Theories: an Assessment", Pisa, October 5-7.

Lavezzi, Andrea (2003) Smith, Marshall and Young on Division of Labour and Economic Growth. *The European Journal of the History of Economic Thought*, 10 (1), Spring, 81-108.

### **Others & Smith**

Hamowy, Ronald (1968) Adam Smith, Adam Ferguson, and the Division of Labour. *Economica* 35 (139), August, 249-59.

Tinel, Bruno (2013) Why and How Do Capitalists Divide Labour? From Marglin and Back Again through Babbage and Marx. *Review of Political Economy*, 25 (2), 254-72.

### **Two views or one/ alienation**

Lamb, Robert B (1973) Adam Smith's Concept of Alienation. *Oxford Economic Papers*, 25 (2), July, 275-85.

Rosenberg, Nathan (1965) Adam Smith on the Division of Labour : Two Views or One? *Economica* 32 (126), May, 127-39.

Rosenberg, Nathan (1976) Another Advantage of the Division of Labor. *The Journal of Political Economy*, 84 (4), August, 861-68.

West, Edwin G (1964) Adam Smith's Two Views on the Division of Labour. *Economica* 31 (121), February, 23-32.

West, Edwin G (1969) The Political Economy of Alienation: Karl Marx and Adam Smith. *Oxford Economic Papers*, 21 (1), March, 1-23.

West, Edwin G (1975) Adam Smith and Alienation: A Rejoinder. *Oxford Economic Papers*, 27 (2), July, 295-301.

West, Edwin G (1996) Adam Smith on the Cultural Effects of Specialization: Splenetics Versus Economics. *History of Political Economy*, 28 (1), Spring, 83-105.

### **Division of Labour in economics**

Arcaute, E., Christensen, K., Sendova-Franks, A., Dahl, T., Espinosa, A., & Jensen, H. J. (2009). Division of labour in ant colonies in terms of attractive fields. *Ecological Complexity*, 6(4), 396-402.

Arora, A., Vogt, W. B., & Yoon, J. W. (2009). Is the division of labor limited by the extent of the market?: evidence from the chemical industry. *Industrial and Corporate Change*, 18(5), 785-806.

Becker, G. S., & Murphy, K. M. (1992). The Division of Labor, Coordination Costs, and Knowledge *The Quarterly Journal of Economics*, 107(4), 24.

Benetti, C., & Cartelier, J. (1999). Market and Division of Labour: a Critical Reformulation of Marx's View. *Rivista di Politica Economica*, 89(4-5), 117-139.

- Browning, Harley L, & Jack P Gibbs (1971) Intraindustry Division of Labor: The States of Mexico. *Demography* 8(2), May, 233-45.
- Cheng, W., & Yang, X. (2004). Inframarginal analysis of division of labor: A survey. *Journal of Economic Behavior & Organization*, 55(2), 137-174.
- Diamond, Charles A, & Curtis J Simon (1990) Industrial Specialization and the Returns to Labor. *Journal of Labor Economics*, 8 (2), April, 175-201.
- Duarte, A., Pen, I., Keller, L., & Weissing, F. J. (2012). Evolution of self-organized division of labor in a response threshold model. *Behavioural Ecological Sociobiology*, 66(6), 947-957.
- Freidson, E. (1976). The Division of Labor as Social Interaction. *Social Problems*, 23(3), 304-313.
- Garnsey, E. (1982). Capital accumulation and the division of labour in the Soviet Union. *Cambridge Journal of Economics* 6(1), 15-31.
- Gibbs, J. P. (1968). Change in Industry Structure: International Comparisons. *The Pacific Sociological Review*, 11(1), 38-48.
- Gibbs, Jack P, & Dudley L Poston (1975) The Division of Labor: Conceptualization and Related Measure. *Social Forces*, 53 (3), March, 468-76.
- Ippolito, R. A. (1977). The Division of Labor in the Firm. *Economic Inquiry*, 15(4), 24.
- Leijonhufvud, Axel (2007) The Individual, the Market and the Division of Labor in Society. *Capitalism and Society*, 2 (2), November, 20.
- Müller, Alberto (no date) Capitalism, Factory System and Microeconomics: A Note on Leijonhufvud.
- Panter-Brick, Catherine (2002) Sexual Division of Labor: Energetic and Evolutionary Scenarios. *American Journal of Human Biology*, 14 (5), September, 627-40.
- Stigler, G. J. (1951). The Division of Labor is Limited by the Extent of the Market *The Journal of Political Economy*, 59(3), 9.
- Sun, Guang-Zhen (2005). The Economics of Division of Labor from Xenophon to Hayek (1945): A Review of Selected Literature. in Sun, Guang-Zhen (Ed.), *Readings In The Economics Of The Division Of Labor: The Classical Tradition*. Singapore: World Scientific Publishing. 3-31
- Swanson, C. E. (1999). The division of labor and the extent of the market. *Economics Letters*, 62(1), 135-138.
- Wahl, Lindi M (2002) Evolving the Division of Labour: Generalists, Specialists and Task Allocation. *Journal of Theoretical Biology*, 219 (3), December, 371-88.
- Webb, Stephen D (1972) Crime and the Division of Labor: Testing a Durkheimian Model. *The American Journal of Sociology*, 78 (3), November, 643-56.
- Yang, Xiaokai, & Siang Ng (1998) Specialization and Division of Labour: A Survey In Arrow, K. J. (Ed.), *Increasing Returns and Economic Analysis*. London: McMillan.
- Zhou, H. (2009). Evolutionary Dynamics of the Market Equilibrium with Division of Labor. Unpublished manuscript.

### **Positive feedback/cumulative causation**

- Elmslie, B. T. (1994). Positive feedback mechanisms in Adam Smith's theories of international trade *The European Journal of the History of Economic Thought* 1(2), 19.
- Forstater, M., & Murray, M. J. (2009). Circular and cumulative causation in the classics: Anticipations, family resemblances, and the influence on Post Keynesian economics. In S. Berger (Ed.), *The Foundations of Non-Equilibrium Economics. The principle of circular and cumulative causation* (pp. 154-171). New York: Routledge.
- Kerr, Prue. (1993). Adam Smith's Theory of Growth and Technological Change Revisited *Contributions to Political Economy*, 12(1), 1-27.
- Kleer, R. A. (1995). Final Causes in Adam Smith's "Theory of Moral Sentiments". *Journal of the History of Philosophy*, 33(2), 26.
- Mayr, O. (1971). Adam Smith and the Concept of the Feedback System: Economic Thought and Technology in 18th-Century Britain *Technology and Culture*, 12(1), 1-22.

- Perelman, M. (1983). Classical political economy and primitive accumulation: the case of Smith and Steuart. *History of Political Economy*, 15(3), 44.
- Thweatt, W. O. (1957). A Diagrammatic Presentation of Adam Smith's Growth Model. *Social Research*, 24(1), 227-230.
- Young, J. T. (2005). Unintended Order and Intervention: Adam Smith's Theory of the Role of the State. *History of Political Economy*, 37(Supplement), 91-119.

## Circular cumulative causation

### Classics

- Berdell, J. F. (2009). Interdependence and independence in Cantillon's Essai. *The European Journal of the History of Economic Thought*, 16(2), 221-249.
- Berdell, J. F. (2010). Retrospectives: An Early Supply-Side–Demand-Side Controversy: Petty, Law, Cantillon. *The Journal of Economic Perspectives*, 24(4), 207-217.
- Sherman, H. J. (1971). Marxist Models of Cyclical Growth. *History of Political Economy*, 3(1), 28-55.

### Demography

- Bhrolcháin, M. N., & Dyson, T. (2007). On Causation in Demography: Issues and Illustrations. *Population and Development Review*, 33(1), 1-36.
- Davis, K. (1963). The Theory of Change and Response in Modern Demographic History. *Population Index*, 29(4), 345-366.
- Duchêne, J., & Wunsch, G. (2006). Causality and Causal Models In G. Caselli, J. Vallin & G. Wunsch (Eds.), *Demography : analysis and synthesis : a treatise in population studies* (Vol. 4, pp. 661-670): Elsevier Academic Press.
- Ferrand, A., & De La Rúa, F. (2006). Methods of Social Network Analysis. In G. Caselli, J. Vallin & G. Wunsch (Eds.), *Demography : analysis and synthesis : a treatise in population studies* (Vol. 4, pp. 745-764): Elsevier Academic Press.

### Modern

- Araujo, R. (2011). Cumulative Causation in a Structural Economic Dynamic Approach to Economic Growth and Uneven Development. Unpublished manuscript.
- Argyrous, G. (1996). Cumulative Causation and Industrial Evolution: Kaldor's Four Stages of Industrialization as an Evolutionary Model. *Journal of Economic Issues*, 30(1), 97-119.
- Berger, S. (2005). The Role of the Theoretical Modules "Open Systems" and "Cumulative Causation", *17th Annual EAEPE Conference* (pp. 39). Bremen, Germany.
- Berger, S. (2008). Circular Cumulative Causation (CCC) à la Myrdal and Kapp—*Political Institutionalism for Minimizing Social Costs*. *Journal of Economic Issues*, 42(2), 1-9.
- Berger, S., & Elsner, W. (2007). European Contributions to Evolutionary Institutional Economics: The Cases of 'Cumulative Circular Causation' (CCC) and 'Open Systems Approach' (OSA). Some Methodological and Policy Implications. *Journal of Economic Issues*, 41(2), 529-537.
- Cassata, F., & Marchionatti, R. (2011). A transdisciplinary perspective on economic complexity. Marshall's problem revisited. *Journal of Economic Behavior & Organization*, 80(1), 122-136.
- Douglas, P. H. (1948). Are There Laws of Production? *The American Economic Review* 38(1), i-41.
- Durlauf, S. N. (1997). What Should Policymakers Know About Economic Complexity? Unpublished manuscript, Department of Economics, University of Wisconsin and Santa Fe Institute.
- Fujita, N. (2007). Myrdal on Underdevelopment: An Investigation into the Theory of Cumulative Causation. *The History of Economic Thought*, 49(1), 1.
- Fujita, N. (2007). Myrdal's Theory of Cumulative Causation. *Evolutionary Institutional Economics Review*, 3(2), 275-283.

- Hunter, B. (2007). Cumulative Causation and the Productivity Commission's Framework for Overcoming Indigenous Disadvantage. *Australian Journal Labour Economics*, 10(3), 185-202.
- Kapp, W. K. (1961). *Towards a Science of Man in Society: A Positive Approach to the Integration of Social Knowledge*. The Hague: Martinus Nijhoff.
- O'Hara, P. A. (2009). The Principle of Circular and Cumulative Causation: Myrdal, Kaldor and Contemporary Heterodox Political Economy. In S. Berger (Ed.), *The Foundations of Non-Equilibrium Economics: The Principle of Circular and Cumulative Causation* (pp. 91-105). Oxon and New York: Routledge.
- Skott, P., & Auerbach, P. (1995). Cumulative Causation and the "New" Theories of Economic Growth *Journal of Post Keynesian Economics*, 17(3), 381-402.
- Yeager, L. B. (1994). Tautologies in Economics and the Natural Sciences. *Eastern Economic Journal*, 20(2), 157-169.
- Zhang, W.-B. (2002). Theory of Complex Systems and Economic Dynamics. *Nonlinear Dynamics, Psychology, and Life Sciences*, 6(2), 19.

### Say's Law

- Balassa, B. A. (1959). John Stuart Mill and the Law of Markets. *The Quarterly Journal of Economics*, 73(2), 263-274.
- Baumol, W. J. (1977, 1980). Say's (at Least) Eight Laws, or What Say and James Mill May Really Have Meant + comment by Thweatt. *Economica*, 44(174), 145-161.
- Baumol, W. J. (1999). Retrospectives: Say's Law. *The Journal of Economic Perspectives*, 13(1), 195-204.
- Cottrel, A. (1998). Keynes, Ricardo, Malthus and Say's Law. In J. C. Ahiakpor (Ed.), *Keynes and the Classics Reconsidered* (pp. 19).
- Davis, R. J., & Casey, F. J. (1977, '78). Keynes's Misquotation of Mill + comment by Patinkin. *The Economic Journal*, 87(346), 329-330.
- Eltis, W. A. (2005). Money and General Gluts: The Analysis of Say, Malthus, and Ricardo. *History of Political Economy*, 37(4), 28.
- Gordon, B. J. (1965). Say's Law, Effective Demand, and the Contemporary British Periodicals, 1820-1850. *Economica*, 32(128), 438-446.
- Henry, J. F. (2003). Say's Economy. In *Two Hundred Years of Say's Law*.
- Hopp, S. (2004). J.-B. Say's 1803 Treatise and the Coordination of Economic Activity. Unpublished manuscript.
- Jonsson. (1995). On the Economics of Say and Keynes' Interpretation of Say's Law. *Eastern Economic Journal*, 21(2), 9.
- Kates, S. (1994). The Malthusian Origins of the *General Theory*, or How Keynes Came to Write a Book About Say's Law and Effective Demand. *History of Economics Review* 21, 11.
- Kates, S. (2005). 'Supply Creates its Own Demand': A Discussion of the Origins of the Phrase and of its Adequacy as an Interpretation of Say's Law of Markets *History of Economics Review* 41, 12.
- Keen, S. (2003). Nudge Nudge, Wink Wink, Say No More. In S. Kates (Ed.), *Two Hundred Years Of Say's Law: Essays on Economic Theory's Most Controversial Principle* (pp. 199-209): Edward Elgar.
- Kuenne, R. E. (1964). Say's Law and Walras' Law Once More: Comment. *The Quarterly Journal of Economics*, 78(3), 478-483.
- Lydall, H. F. (1961). Say's Law and Anti-Say's Law: The Danger of Closed Circuits. *Oxford Economic Papers*, 13(1), 72-83.
- Macedo e Silva, A. C. (2002). From Say's law to Keynes, from Keynes to Walras' law: some ironies in the history of economic thought, *Post Keynesian Conference* (pp. 25). Missouri.
- Mishan, E. J. (1963-64). Say's Law and Walras' Law Once More + Reply. *The Quarterly Journal of Economics*, 77(4), 617-625.



- Skinner, A. S. (1967). Say's Law: Origins and Content. *Economica*, 34(134), 153-166.
- Spengler, J. J. (1945). The Physiocrats and Say's Law of Markets. I. *The Journal of Political Economy*, 53(3), 193-211.
- Spengler, J. J. (1945). The Physiocrats and Say's Law of Markets. II. *The Journal of Political Economy*, 53(4), 317-347.
- Thweatt, W. O. (1980). Baumol and James Mill on Say's Law of Markets. *Economica*, 47(188), 467-469.

## **& Newton/equilibrium**

- Montes, L. (2013). Newtonianism and Adam Smith. In C. J. Berry, M. P. Paganelli & C. Smith (Eds.), *The Oxford Handbook of Adam Smith* (pp. 36-53). Oxford: Oxford University Press.
- Montes, L. (2003). Smith and Newton: some methodological issues concerning general economic equilibrium theory. *Cambridge Journal of Economics*, 27(5), 723-747.
- Montes, L. (2006). On Adam Smith's Newtonianism and general economic equilibrium theory. In L. Montes & E. Schliesser (Eds.), *New Voices on Adam Smith* (pp. 247-270): Routledge.
- Montes, L. (2008). Newton's real influence on Adam Smith and its context. *Cambridge Journal of Economics*, 32(4), 555-576.
- Myers, M. L. (1976). Adam Smith's Concept of Equilibrium. *Journal of Economic Issues*, 10(3), 16.
- Negishi, Takashi (2004). Adam Smith and disequilibrium economic theory. *The Adam Smith Review*, 1, 30-39. (in trade)
- Redman, D. A. (1993). Adam Smith and Isaac Newton. *Scottish Journal of Political Economy*, 40(2), 22.
- Schliesser, Eric (2005). Some Principles of Adam Smith's Newtonian Methods in the "Wealth of Nations". *Research in the History of Economic Thought and Methodology*, 23(1), 33-74.

## **Capital**

- Aspromourgos, A. (2013). Adam Smith on Labour and Capital. In C. J. Berry, M. P. Paganelli & C. Smith (Eds.), *The Oxford Handbook of Adam Smith* (pp. 267-289). Oxford: Oxford University Press.
- Bowley, Marian (1975) Some Aspects of the Treatment of Capital in the Wealth of Nations. In Skinner, A. S. & T. Wilson (Eds.), *Essays on Adam Smith* (Vol. 2). Oxford: Oxford University Press.
- Meacci, Ferdinando (1989) Different Divisions of Capital in Smith, Ricardo and Marx. *Atlantic Economic Journal*, 17 (4), December, 13-21.
- Meacci, Ferdinando (2008) Different Employment of Capitals in Vertically Integrated Sectors: Smith after the Austrians. Munich Personal RePEc Archive. 11702,, 19p.

## **Profit**

- Rosenberg, N. (1975). Adam Smith on Profits-Paradox Lost and Regained. In A. S. Skinner & T. Wilson (Eds.), *Essays on Adam Smith* (Vol. 2, pp. 377-389). Oxford: Oxford University Press.
- Verdera, F. (1992). Adam Smith on the falling rate of profit: A reappraisal. *Scottish Journal of Political Economy*, 39(1), 12.

## **Technical progress, technical metaphors**

- Aspromourgos, A. (2010). 'Universal opulence': Adam Smith on technical progress and real wages *The European Journal of the History of Economic Thought* 17(5), 1169-1182.
- Aspromourgos, A. (2011). The Machine in Adam Smith's Economic and Wider Thought *24th Conference of the History of Economic Thought Society of Australia (HETSA)* (pp. 13). RMIT University, Melbourne, Australia.

- Brewer, A. (1991). Economic Growth and Technical Change: John Rae's Critique of Adam Smith. *History of Political Economy*, 23(1), 11. Related to Prendergast below. Strong claim: CA sole driver of growth.
- Ahmad, S. (1996). Smith's Division of Labor and Rae's Invention: A Study of the Second Dichotomy, with an Evaluation of the First. *History of Political Economy*, 28(3), 18. *Disputes* Brewer's strong claim of CA being sole driver of growth.
- Elmslie, B. T. (1994). The Endogenous Nature of Technological Progress and Transfer in Adam Smith's Thought *History of Political Economy*, 26(4), 15.
- Eltis, W. A. (1963). Investment, Technical Progress, and Economic Growth. *Oxford Economic Papers*, 15(1), 32-52.
- Goodacre, Hugh (2010) Technological Progress and Economic Analysis from Petty to Smith *The European Journal of the History of Economic Thought*, 17 (5), December, 1149-68.
- Hollander, S. (1966). Some Technological Relationships in the Wealth of Nations and Ricardo's Principles. *The Canadian Journal of Economics and Political Science / Revue canadienne d'Economie et de Science politique*, 32(2), 184-201.
- Prendergast, Renée (2009) Accumulation of Knowledge and Accumulation of Capital in Early 'Theories' of Growth and Development. *Cambridge Journal of Economics*, 34 (3), May, 413-31.

### **Increasing returns, external economies**

- Brown, V. (1991). Hirshleifer on Smith. *History of Economics Review*, 16, 3.
- Buchanan, J. M., & Yoon, Y. J. (2000). A Smithian Perspective on Increasing Returns. *Journal of the History of Economic Thought*, 22(1), 43-48.
- Chandra, R. (2003). Adam Smith and Competitive Equilibrium. Unpublished manuscript.
- Chandra, R., & Sandilands, R. J. (2006 & 2010). The Role of Pecuniary External Economies and Economies of Scale in the Theory of Increasing Returns + reply by Grieve + rejoinder *Review of Political Economy*, 18(2), 193-208 ¥.
- Fay, C. R. (1930). Adam Smith and the Dynamic State *The Economic Journal* 40(157), 25-34.
- Kaldor, N. (1972). The Irrelevance of Equilibrium Economics. *The Economic Journal*, 82(328), 19.
- Kaldor, N. (1981). The role of increasing returns, technical progress and cumulative causation in the theory of international trade and economic growth *Economie appliquée : archives de l'Institut de Sciences Mathématiques et Économiques Appliquées; an international journal of economic analysis*, 34(4), 593-617.
- Reid, G. C. (1987). Disequilibrium and increasing returns in Adam Smith's analysis of growth and accumulation *History of Political Economy*, 19(1), 20.
- Richardson, G. B. (1975). Adam Smith on Competition and Increasing Returns. In A. S. Skinner & T. Wilson (Eds.), *Essays on Adam Smith* (Vol. 2, pp. 350-360). Oxford: Oxford University Press.
- Rosier, Michel (2001) La "Théorie de la Valeur" de Hicks et le multiplicateur d'A. Smith. *Cahiers d'économie Politique*, 39 (1), 53-71.
- Young, Allyn A. (1928). Increasing Returns and Economic Progress *The Economic Journal*, 38(152), 527-542. ¥

### **Endogenous/New Growth Theory, Increasing Returns, 'High Development Theory'**

- Alacevich, Michele (2011) Early Development Economics Debates Revisited. *Journal of the History of Economic Thought*, 33 (02), June, 145-71.
- Arndt, H W (1981) Economic Development: A Semantic History. *Economic Development and Cultural Change* 29 (3), April, 457-66.
- Arndt, H. W. (1955). External Economies in Economic Growth. *Economic Record*, 31(1-2), 192-214.

- Arrow, K. J. (1962). The Economic Implications of Learning by Doing. *The Review of Economic Studies*, 29(3), 155-173.
- Arrow, K. J. (2000). Increasing returns: historiographic issues and path dependence. *The European Journal of the History of Economic Thought*, 7(2), 171-180.
- Arthur, B. W. (1996). Increasing Returns and the New World of Business *Harvard Business Review*.
- Bardhan, P. (2004). Review Article: A Powerful, but Limited, Theory of Development (Lucas 88). *Economic Development and Cultural Change*, 52(2), 475-486.
- Boserup, Ester (1996) Development Theory: An Analytical Framework and Selected Application. *Population and Development Review*, 22 (3), September, 505-15.
- Easterly, William (2005) Reliving the 50s: The Big Push, Poverty Traps, and Takeoffs in Economic Development. May.
- Ehrlich, Isaac (1990) The Problem of Development: Introduction. *The Journal of Political Economy*, 98 (5), October, S1-S11.
- Fine, Ben (2000) Critical Survey: Endogenous Growth Theory: A Critical Assessment *Cambridge Journal of Economics* 24 (2), March, 245-65.
- Foss, N. J. (1997). The New Growth Theory: Some Intellectual Growth Accounting, *DRUID Conference* (pp. 19). Snekkersten, Denmark.
- Foster, John (2004) Why Is Economics Not a Complex Systems Science? *Journal of Economic Issues*, 40 (4), December, 1069-91.
- Hart, N. (1991). Returns to Scale and Marshallian Economics *History of Economics Review* 16, 49.
- Kaldor, N. (1961). Increasing Returns and Technical Progress—A Comment on Professor Hicks's Article *Oxford Economic Papers*, 13(1), 1-4.
- Kurz, Heinz D, & Neri Salvadori (1998) 'Endogeneous' Growth Models and the 'Classical' Tradition. In Kurz, H. D. & N. Salvadori (Eds.), *Understanding 'Classical' Economics* (66-89). London: Routledge.
- Metcalfe, J Stanley (1999) Restless Capitalism: Increasing Returns and Growth in Enterprise Economies.
- Mookherjee, Dilip, Pranab Bardhan, Kaushik Basu, Abhjit V Banerjee, & Ravi Kanbur (2005) Symposium: Is There Too Little Theory in Development Economics Today?. *Economic and Political Weekly*, 40 (40), October 1-7, 4328-46.
- Nelson, R. R., & Pack, H. (1999). Asian Miracle and Modern Growth Theory. *The Economic Journal*, 109(457), 416-436.
- Pack, Howard (1994) Endogenous Growth Theory: Intellectual Appeal and Empirical Shortcomings. *The Journal of Economic Perspectives*, 8 (1), Winter, 55-72.
- Rima, Ingrid H (2004) Increasing Returns, New Growth Theory, and the Classics. *Journal of Post Keynesian Economics*, 27 (1), Fall, 14.
- Romer, Paul M (1986) Increasing Returns and Long-Run Growth. *The Journal of Political Economy*, 94 (5), October, 1002-37.
- Romer, Paul M (1987) Growth Based on Increasing Returns Due to Specialization. *The American Economic Review* 77 (2), May, 56-62.
- Romer, Paul M (1989) Increasing Returns and New Developments in the Theory of Growth. NBER Working Paper. 3098, 40p.
- Romer, Paul M (1990) Endogenous Technological Change. *The Journal of Political Economy*, 98 (5), October, S71-S102.
- Romer, Paul M (1994) The Origins of Endogenous Growth. *The Journal of Economic Perspectives*, 8 (1), Winter, 3-22.
- Samuelson, Paul A (1985) Modes of Thought in Economics and Biology. *The American Economic Review*, 75 (2, Papers and Proceedings of the Ninety-seventh Annual Meeting of the American Economic Association), May, 7.
- Schmitz, Hubert (1999) Collective Efficiency and Increasing Returns. *Cambridge Journal of Economics* 23 (4), July, 465-83.

- Schultz, Theodore W (1932) Diminishing Returns in View of Progress in Agricultural Production *Journal of Farm Economics*, 14 (4), October, 640-49.
- Sendova-Franks, Ana (1983) Development: Which Way Now? *The Economic Journal* 93 (372), December, 745-62.
- Stern, Nicholas (1989) The Economics of Development: A Survey *The Economic Journal* 99 (397), September, 597-685.
- Thornton, Arland (2001) The Developmental Paradigm, Reading History Sideways, and Family Change *Demography*, 384 (4), November, 449-65.
- Winfrey, W., & Darity, W. (1997). Increasing Returns and Intensification: A Reprise of Boserup *Metroeconomica*, 48(1), 60-80.

### **Invisible hand, spontaneous order**

- Ahmad, Syed (1990). Adam Smith's four invisible hands. *History of Political Economy*, 22(1), 8.
- Bishop, J. D. (1995). Adam Smith's Invisible Hand Argument. *Journal of Business Ethics*, 14(3), 165-180.
- Davis, J. R. (1990). Adam Smith on the providential reconciliation of individual and social interests: is man led by an invisible hand or misled by a sleight of hand? *History of Political Economy*, 22(2), 341-353.
- Dellemotte, Jean (2009). La « main invisible » d'Adam Smith : pour en finir avec les idées reçues. *L'Économie politique*, 44(4), 28-41.
- Demeny, P. (1986). Population and the Invisible Hand. *Demography*, 23(4), 473-487.
- Fiori, S. (2001). Visible and invisible order. The theoretical duality of Smith's political economy. *The European Journal of the History of Economic Thought*, 8(4), 429-448.
- Harrison, Peter (2011). Adam Smith and the History of the Invisible Hand. *Journal of the History of Ideas*, 72 (1), January, 29-49.
- Kochugovindan, Sreekala & Nicolaas J. Vriend (1998). Is the Study of Complex Adaptive Systems Going to Solve the Mystery of Adam Smith's "Invisible Hand"? *The Independent Review*, 111 (1), Summer.
- Macfie, Alec (1971). The Invisible Hand of Jupiter. *Journal of the History of Ideas*, 32 (4), October - December, 595-99.
- Offer, A. (2012). Self-interest, Sympathy and the Invisible Hand: From Adam Smith to Market Liberalism. *Economic Thought*, 1(2), 1-14.
- Persky, Joe (1989). Retrospectives: Adam Smith's Invisible Hands. *The Journal of Economic Perspectives*, 3(4), 195-201.
- Rullière, J.-L. (2003). D'Adam Smith à Vernon L. Smith : la main invisible observée à travers les comportements expérimentaux. *Revue d'économie politique*, 113(3), 309-321.
- Smith, Craig (2006). *Adam Smith's Political Philosophy: The invisible hand and spontaneous order*: Routledge.
- Witztum, Amos (2010). Interdependence, the Invisible Hand, and Equilibrium in Adam Smith. *History of Political Economy*, 42(1), 155-192.

### **On language**

- Berry, Christopher J. (1974). Adam Smith's Considerations on Language. *Journal of the History of Ideas*, 35(1), 130-138.
- Christie, John R. (1987) Adam Smith's Metaphysics of Language. in Andrew E. Benjamin, N. Cantor & John R. Christie (eds.) *The Figural and the Literal: Problems of Language in the History of Science and Philosophy, 1630-1800* (202-29). Manchester University Press
- Dascal, M. (2006). Adam Smith's Theory of Language. In K. Haakonssen (Ed.), *The Cambridge Companion to Adam Smith* (pp. 79-111). Cambridge: Cambridge University Press.

- Eddy, Matthew D. (2011). The Line of Reason: Hugh Blair, Spatiality and the Progressive Structure of Language. *Notes and Records of the Royal Society*, 65 (1), March, 9-24. *Interesting parallel between language and the four-stages theory in Smith*
- Land, Stephen K. (1977). Adam Smith's "Considerations Concerning the First Formation of Languages". *Journal of the History of Ideas*, 38(4), 677-690.
- Plank, Frans (1992). Adam Smith: grammatical economist. in Jones, Peter & Andrew S. Skinner (eds.), *Adam Smith Reviewed*. Edinburgh: Edinburgh University Press. 21-53
- Yeager, Leland B. (1998). Are markets like language? *The Quarterly Journal of Austrian Economics*, 1 (3), Fall, 15-27.

## **The Market (and the State)**

- Buchanan, James (1992). The Supply of Labour and the Extent of the Market. in Fry, Michael (Ed.), *Adam Smith's legacy: his place in the development of modern economics*. Vol. Proceedings of a conference held in the Usher Hall, Edinburgh, on July 16-17, 1990, to mark the bicentenary of the death of Adam Smith). London: Routledge, Institute of Economic Affairs. 212
- Cairncross, Alexander (1976) The Market and the State. In Wilson, T. & A. S. Skinner (Eds.), *The Market and the State. Essays in Honour of Adam Smith* (113-34). Oxford: Clarendon Press.
- Coase, R. H. (1976) Adam Smith's View of Man. *Journal of Law and Economics*, 19 (3), October, 529-46.
- Gray, Sir Alexander (1976) Adam Smith. *Scottish Journal of Political Economy*, 23 (2), June, 153-69.
- Meek, Ronald L & Andrew Skinner (1973). The Development of Adam Smith's Ideas on the Division of Labour *The Economic Journal*, 83 (332), December, 1094-116.
- Nielsen, Torben H (1986) The State, the Market and the Individual. Politics, Economy and the Idea of Man in the Works of Thomas Hobbes, Adam Smith and in Renaissance Humanism. *Acta Sociologica*, 29 (4), 283-302.
- Riley, P. (2006). Social contract theory and its critics. In M. Goldie & R. Wokler (Eds.), *The Cambridge History of Eighteenth-Century Political Thought* (pp. 347-378). Cambridge: Cambridge University Press.
- Sonenscher, M. (2006). Property, community, and citizenship. In M. Goldie & R. Wokler (Eds.), *The Cambridge History of Eighteenth-Century Political Thought* (pp. 465-496). Cambridge: Cambridge University Press.
- Yeager, Leland B. (1998). Are markets like language? *The Quarterly Journal of Austrian Economics*, 1 (3), Fall, 15-27.
- Young, Jeffrey T (2001). Adam Smith's Two Views of the Market. In Porta, P. L., R. Scazzieri & A. S. Skinner (Eds.), *Knowledge, Social Institutions and the Division of Labour* (Edward Elgar. 95-110
- Worland, S. T. (1976). Mechanistic Analogy and Smith on Exchange. *Review of Social Economy*, 34(3: Social Economics of Adam Smith), 245-257.

## **Smith: Urbanisation/spatial matters**

- Dow, Louis A (1974) The Rise of the City: Adam Smith Versus Henri Pirenne. *Review of Social Economy*, 32 (2), October, 170-85.
- Forman-Barzilai, Fonna (2001). Adam Smith as Globalization Theorist. *Critical Review*, 14(4), 29.
- Forman-Barzilai, Fonna (2005) Sympathy in Space(S): Adam Smith on Proximity. *Political Theory*, 33 (2), April, 189-217. Interesting stuff on social nature of humans vs universalism (see my 'notes on Forman')
- Forman-Barzilai, Fonna (2010) *Adam Smith and the Circles of Sympathy : Cosmopolitanism and Moral Theory* Cambridge: Cambridge University Press.
- Lewis, W Arthur (1976) The Diffusion of Development. In Wilson, T. & A. S. Skinner (Eds.), *The Market and the State. Essays in Honour of Adam Smith* (Oxford: Clarendon Press. 135-63
- Mumy, Gene E (1978/1979) Town and Country in Adam Smith's the Wealth of Nations. *Science & Society*, 42 (4), Winter, 458-77.

- Paganelli, Maria Pia (2010) The Moralizing Role of Distance in Adam Smith: "The Theory of Moral Sentiments" as Possible Praise of Commerce. *History of Political Economy*, 42 (3), Fall, 425-41.
- Platteau, Jean-Philippe (1978) *Les Économistes Classiques et le Sous-Développement (Adam Smith)* (Vol. 1). Namur Presses Universitaires de Namur.
- Sinha, Ajit (1997) Productive/Unproductive Labour: A Note on Marx's Critique of Adam Smith *History of Economics Review* 26, Summer, 6.
- Stull, William J. (1986) The Urban Economics of Adam Smith. *Journal of Urban Economics*, 20 (3),
- Sun, Guang-Zhen (2012) *The Division of Labour in Economics: A History*. Routledge Studies in the History of Economics, vol.142. Routledge. Chapter 7: "Urbanization and Industrialization". 151-76
- Ehnts, Dirk & Trautwein, Hans-Michael (2011) From New Trade Theory to New Economic Geography: A Space Odyssey May.
- World Bank (2009) *World Development Report 2009: Reshaping Economic Geography*.

### **Natural Progress of Opulence**

- Bell, Joe A (1992) Adam Smith's Theory of Economic Development: "Of the Natural Progress of Opulence". *Journal of Economics and Finance*, 16 (1), March, 137-45.
- Blecker, Robert A (1997) The 'Unnatural and Retrograde Order' Adam Smith's Theories of Trade and Development Reconsidered. *Economica* 64 (255), August, 527-37.
- Bowles, Paul (1986) Adam Smith and the 'Natural Progress of Opulence' *Economica* 53 (209), February, 109-18.
- Hollander, Samuel (1971) Some Implications of Adam Smith's Analysis of Investment Priorities. *History of Political Economy*, 3 (2), Fall, 238-64.
- Khan, Mohd. Shabbir (1954) Adam Smith's Theory of Economic Development (in Relation to Underdeveloped Economies). *The Indian journal of economics*, 34, April, 337-42. In relation to balanced growth!
- Miller, William L. (1980). Primogeniture, Entails, and Endowments in English Classical Economics. *History of Political Economy*, 12 (4), Winter, 558-81.
- Pack, Spencer (1995) Adam Smith's Unnaturally Natural (nonetheless Naturally Unnatural) use of the Word Natural. in Ingrid H. Rima (ed.), *The Classical Tradition in Economic Thought: Perspectives on the History of Economic Thought: Vol. XI*, 31-42 Smith did not necessarily approve of the natural!

### **Urbanisation**

- Bacaini, Brigitte (2006) Internal Migration: Observation and Concepts. In Caselli, G., J. Vallin & G. Wunsch (Eds.), *Demography : Analysis and Synthesis : A Treatise in Population Studies* (Vol. 4): Elsevier Academic Press. 523-36
- Bairoch, Paul (1993) Croissance démographique et urbanisation: Une perspective historique et internationale. In AIDELF (Ed.), *Croissance démographique et urbanisation. Politique de peuplement et aménagement du territoire. Séminaire international de Rabat (15-17 Mai 1990)*. Paris: Presses Universitaires de France. 3-13
- Beauchemin, Cris, & Philippe Bocquier (2004) Migration and Urbanisation in Francophone West Africa: An Overview of the Recent Empirical Evidence. *Urban Studies*, 41 (11), October, 2245-72.
- Blayo, Yves (1993) Concepts Et Définitions De L'urbain. In AIDELF (Ed.), *Croissance démographique et urbanisation. Politique de peuplement et aménagement du territoire. Séminaire international de Rabat (15-17 Mai 1990)* (Paris. 95-103
- Coquery-Vidrovich, Catherine (1991) The Process of Urbanization in Africa (from the Origins to the Beginning of Independence). *African Studies Review*, 34 (1), April, 1-98.

- Cour, Jean-Marie (2007) Peuplement, Urbanisation et Développement Rural en Afrique Subsaharienne : Un Cadre d'Analyse Démo-Économique et Spatial. *Afrique contemporaine*, 3-4 (223), 363-401.
- Davis, Kingsley , & Hilda H Golden (1954) Urbanization and the Development of Pre-Industrial Areas. *Economic Development and Cultural Change*, 3 (1), October, 6-26.
- Decroly, Jean-Michel (2006) Distribution of the World Population. In Caselli, G., J. Vallin & G. Wunsch (Eds.), *Demography : Analysis and Synthesis : A Treatise in Population Studies* (Vol. 3): Elsevier Academic Press. 101-22
- Dos Santos, Manon Domingues (2006) The Economic Consequences of Migration. In Caselli, G., J. Vallin & G. Wunsch (Eds.), *Demography : Analysis and Synthesis : A Treatise in Population Studies* (Vol. 3): Elsevier Academic Press. 337-48
- Fernandes-Santos, Ana, & Marie-Françoise Royer-Cruz (1993) Dynamique de Population et Croissance Urbaine. Analyse de la Ville de Lisbonne. In AIDELF (Ed.), *Croissance démographique et urbanisation. Politique de peuplement et aménagement du territoire. Séminaire international de Rabat (15-17 Mai 1990)* (Paris. 229-38
- Gibb, Matthew (2007) Cape Town, a Secondary Global City in a Developing Country. *Environment and Planning C: Government and Policy*, 25, 537-52.
- Guérin-Pace, France (1993) Dynamique Lente et Dynamique Rapide dans le Développement d'un Système de Villes. In AIDELF (Ed.), *Croissance démographique et urbanisation. Politique de peuplement et aménagement du territoire. Séminaire international de Rabat (15-17 Mai 1990)*. Paris. 263-72
- Gulyani, Sumila, & Ellen M Basset (2007) Retrieving the Baby from the Bathwater: Slum Upgrading in Sub-Saharan Africa. *Environment and Planning C: Government and Policy*, 25 (4), 486-515.
- Kessides, Christine (2007) The Urban Transition in Sub-Saharan Africa: Challenges and Opportunities. *Environment and Planning C: Government and Policy*, 25 (4), 466-85
- Korzibsky, Stanislas (1952) Le Peuplement des Grandes Agglomérations Urbaines. Londres et Paris aux XIXe et XXe. *Population (French Edition)*, 7 (3), July - September, 485-520.
- Kundu, Abanti (1983) Urbanisation in India: A Contrast with Western Experience. *Social Scientist* 11 (4), April, 37-49.
- Leboutte, René (1993) Le Phénomène Urbain: Genèse Et Évolution. In AIDELF (Ed.), *Croissance démographique et urbanisation. Politique de peuplement et aménagement du territoire. Séminaire international de Rabat (15-17 Mai 1990)* (Paris: AIDELF. 17-26
- Ledent, Jacques (1993) Théories et Modèles de l'Urbanisation : Un Survol. In AIDELF (Ed.), *Croissance démographique et urbanisation. Politique de peuplement et aménagement du territoire. Séminaire international de Rabat (15-17 Mai 1990)* (Paris: AIDELF. 265-73
- Lfarakh, Abdellatif (1993) Croissance Démographique et Dynamique Urbaine Au Maroc (1960-1982). In AIDELF (Ed.), *Croissance démographique et urbanisation. Politique de peuplement et aménagement du territoire. Séminaire international de Rabat (15-17 Mai 1990)* (Paris: AIDELF. 167-76
- Morse, Richard M (1975) The Development of Urban Systems in the Americas in the Nineteenth Century. *Journal of Interamerican Studies and World Affairs*, 17 (1), February, 4-26.
- Peixoto, Joao (1993) La croissance urbaine au Portugal. Démographie et Mécanismes Sociétaux au XXe Siècle. In AIDELF (Ed.), *Croissance démographique et urbanisation. Politique de peuplement et aménagement du territoire. Séminaire international de Rabat (15-17 Mai 1990)* (Paris: AIDELF. 75-82
- Pumain, Denise (2006) The Urbanization Process. In Caselli, G., J. Vallin & G. Wunsch (Eds.), *Demography : Analysis and Synthesis : A Treatise in Population Studies* (Vol. 2): Elsevier Academic Press. 319-32
- Rallu, Jean-Louis (1993) Les interactions entre croissance démographique et urbanisation. In AIDELF (Ed.), *Croissance démographique et urbanisation. Politique de peuplement et aménagement du territoire. Séminaire international de Rabat (15-17 Mai 1990)* (Paris: AIDELF. 27-38
- Redfield, Robert, & Milton B Singer (1954) The Cultural Role of Cities. *Economic Development and Cultural Change*, 3 (1), October, 53-73.

- Roberts, Bryan R (1989) Urbanization, Migration, and Development. *Sociological Forum*, 4 (4), December, 665-91.
- Rogers, Andrei (1982) Sources of Urban Population Growth and Urbanization, 1950-2000: A Demographic Accounting. *Economic Development and Cultural Change*, 30 (3), April, 483-506.
- Sabatello, Eitan F. (1993) Croissance Démographique et Urbanisation Au Maghreb et dans la Péninsule Arabique. In AIDELF (Ed.), *Croissance démographique et urbanisation. Politique de peuplement et aménagement du territoire. Séminaire international de Rabat (15-17 Mai 1990)* (Paris: AIDELF. 160-66
- Sanders, Lena, & Denise Pumain (1993) Un Modèle Dynamique de Révolution du Système Urbain Français. In AIDELF (Ed.), *Croissance démographique et urbanisation. Politique de peuplement et aménagement du territoire. Séminaire international de Rabat (15-17 Mai 1990)* (Paris: AIDELF. 313-22
- Smith, Michael E., Jason Ur, & Gary M. Feinman (2014). Jane Jacobs' 'Cities First' Model and Archaeological Reality. *International Journal of Urban and Regional Research*, 38 (4), July, 1525-35.
- Stobart, Jon (2000) In Search of Causality: A Regional Approach to Urban Growth in Eighteenth-Century England. *Geografiska Annaler. Series B, Human Geography*, 82 (3), 149-63.
- Tadili Fariss, Mostafa (1993) Avant-Propos. In AIDELF (Ed.), *Croissance démographique et urbanisation. Politique de peuplement et aménagement du territoire. Séminaire international de Rabat (15-17 Mai 1990)* (Paris. 1-2
- Termote, Marc (2006) The Economic Determinants of Migration. In Caselli, G., J. Vallin & G. Wunsch (Eds.), *Demography : Analysis and Synthesis : A Treatise in Population Studies* (Vol. 2): Elsevier Academic Press. 309-18
- Tiffen, Mary (1994) Malthus Controverted: The Role of Capital and Technology in Growth and Environment Recovery in Kenya. *World Development*, 22 (7), July, 997-1010.
- Tiffen, Mary (2003) Transition in Sub-Saharan Africa: Agriculture, Urbanization and Income Growth. *World Development*, 31 (8), August, 1343-66.
- Tiffen, Mary (2004) Population Pressure, Migration and Urbanisation: Impacts on Crop-Livestock Systems Development in West Africa.
- Todaro, Michael P (1971) Income Expectations, Rural-Urban Migration and Employment in Africa. *International Labour Review*, 104 (5), November, 421-44.
- Ulack, Richard (1978) The Role of Urban Squatter Settlements. *Annals of the Association of American Geographers*, 68 (4), December, 535-50.
- Zlotnik, Hania (2006) Theories of International Migration In Caselli, G., J. Vallin & G. Wunsch (Eds.), *Demography : Analysis and Synthesis : A Treatise in Population Studies* (Vol. 2): Elsevier Academic Press. 293-306

## **Dualism, balanced growth**

- Arndt, H. W. (1962). The Balance of Payments Argument for Priority to Heavy Industry. *Sankhyā: The Indian Journal of Statistics*, 24(3/4), 265-276.
- Currie, Lauchlin B (1974) The "Leading Sector" Model of Growth in Developing Countries. *Journal of Economic Studies*, 1 (1), May, 1-16.
- Dagnino-Pastore, Jose Maria (1963) Balanced Growth: An Interpretation *Oxford Economic Papers*, 15 (2), July, 164-76.
- Hirschman, Albert O (1957) Investment Policies and "Dualism" in Underdeveloped Countries. *The American Economic Review*, 47 (5), September, 550-70.
- Hoselitz, Bert F (1960) Balanced Growth, Destabilizers, and the Big Push (Review Article of Coale & Hoover, Hirschman, Leibenstein & Myrdal) *World Politics* 12 (3), April, 468-77.
- Lewis, W Arthur (1954) Economic Development with Unlimited Supply of Labour *The Manchester School*, 22 (2), May, 139-91.
- McKee, David, & William H Leahy (1974) Le Dualisme et l'Intégration Économique Régionale Et Urbaine. *Tiers-Monde*, 15 (58), 315-25.



- McKee, David L, & William H Leahy (1970) Urbanization, Dualism and Disparities in Regional Economic Development *Land Economics*, 46 (1), February, 82-85.
- Nath, S K (1962) The Theory of Balanced Growth *Oxford Economic Papers*, 14 (2), June, 138-53.
- Nurkse, R. (1952). Some International Aspects of the Problem of Economic Development *The American Economic Review* 42(2), 571-583.
- Nurkse, Ragnar (1959) Notes on 'Unbalanced Growth'. *Oxford Economic Papers*, 11 (3), October, 295-97.
- Nurske, Ragnar (1956) Balanced Growth on Static Assumptions. *The Economic Journal* 66 (262), June, 246-48.
- Rosenstein-Rodan, Paul N (1943) Problems of Industrialisation of Eastern and South-Eastern Europe *The Economic Journal*, 53 (210/211), June - September, 202-11.
- Rosenstein-Rodan, Paul N (1944) The International Development of Economically Backward Areas. *International Affairs*, 20 (2), April, 157-65.
- Sheahan, John (1958) International Specialization and the Concept of Balanced Growth. *The Quarterly Journal of Economics*, 72 (2), May, 183-97.
- Spaventa, Luigi (1959) Dualism in Economic Growth. *Banca Nazionale del Lavoro Quarterly Review*, 12 (51), December, 386-434.
- Streeten, Paul (1959) Unbalanced Growth *Oxford Economic Papers*, 11 (2), June, 167-90.
- Streeten, Paul (1963) Unbalanced Growth: A Reply *Oxford Economic Papers*, 15 (1), March, 66-73.
- Sunna, Claudia (2013) Dual Development Models in Historical Perspective. Paper presented at 17<sup>th</sup> Annual Conference of the European Society of the History of Economic Thought (ESHET), Kingston University, London, United Kingdom, May. 12p.
- Sutcliffe, Robert B. (1964) Balanced and Unbalanced Growth. *The Quarterly Journal of Economics*, 78 (4), November, 621-40.
- Tignor, Robert (2004) Unlimited Supplies of Labor. *The Manchester School*, 72 (6), December, 691-711.

### **Spatial economics (urbanisation & division of labour)**

- Arbia, Giuseppe (2011) A Lustrum of Sea: Recent Research Trends Following the Creation of the Spatial Econometrics Association (2007–2011). *Spatial Economic Analysis*, 6 (4), December, 377-95.
- Artle, R, C Humes, & P Varaiya (1977) Division of Labor – Simon Revisited. *Regional Science and Urban Economics*, 9 (1), February, 61-70.
- Belussi, Fiorenza, & Katia Caldari (2008) At the Origin of the Industrial District: Alfred Marshall and the Cambridge School. *Cambridge Journal of Economics*, 33 (2), March, 335-55.
- Black, Duncan, & Vernon Henderson (1999) A Theory of Urban Growth. *The Journal of Political Economy*, 107 (2), April, 252-84.
- Bloom, David E, David Canning, & Günther Fink (2008) Urbanization and the Wealth of Nations. Program on the Global Demography of Aging Working Paper Series. 30. 14p.
- Bloom, David E, Jeffrey D Sachs, Paul Collier, & Christopher Udry (1998) Geography, Demography, and Economic Growth in Africa. *Brookings Papers on Economic Activity* (2), 207-95.
- Brakman, Steven, & Charles van Marrewijk (2008) It's a Big World after All: On the Economic Impact of Location and Distance. *Cambridge Journal of Regions, Economy and Society*, 1 (3), November, 411-37.
- Brückner, Markus (2012) Economic Growth, Size of the Agricultural Sector, and Urbanization in Africa. *Journal of Urban Economics*, 71 (1), January, 26-36.
- Brunelle, Cédric (2008) *De la Structure Spatiale des Organisations à la Spécialisation Fonctionnelle Régionale*. Mémoire présenté pour obtenir le grade de Maître ès. Science (M.Sc) Études Urbaines. Programme offert conjointement par l'INRS Centre Urbanisation, Culture et Société, Université du Québec.
- Carlino, Gerald A (1979) Increasing Returns to Scale in Metropolitan Manufacturing. *Journal of Regional Science*, 19 (3), August, 363-72.

- Ciccone, Antonio, & Robert E Hall (1996) Productivity and the Density of Economic Activity. *The American Economic Review* 86 (1), March, 54-70.
- Clark, Colin (1945) The Economic Functions of a City in Relation to Its Size. *Econometrica* 13 (2), April, 97-113.
- Clark, Colin (1950) The Distribution of Labour between Industries and between Locations. *Land Economics*, 26 (2), May, 136-44.
- Clark, Colin (1951) Urban Population Densities. *Journal of the Royal Statistical Society. Series A (General)*, 114 (4), 490-6.
- Clark, Colin (1967) Von Thünen's Isolated State *Oxford Economic Papers*, 19 (3), November, 370-77.
- Clark, Gordon L (1981) The Employment Relation and Spatial Division of Labor: A Hypothesis. *Annals of the Association of American Geographers*, 71 (3), September, 412-24.
- Collier, Paul (2006) Africa: Geography and Growth. Centre for the Study of African Economies, Department of Economics, Oxford University.
- Collier, Paul (2006) African Growth: Why a 'Big Push'? *Journal of African Economies*, 15 (AERC Supplement 2), October, 188-211.
- Collier, Paul, & Anthony J Venables (2008) Trade and Economic Performance: Does Africa's Fragmentation Matter?
- Doan, Peter L (1995) Population Density, Urban Centrality, and Agricultural Intensification in Jordan *Population Research and Policy Review*, 14 (1), March, 29-44.
- Ellerman, David (2004) Jane Jacobs on Development.
- Ellerman, David (2004) Revisiting Hirschman on Development Assistance and Unbalanced Growth *Eastern Economic Journal*, 30 (2), Spring, 311-31.
- Ellerman, David (2005) How Do We Grow? Jane Jacobs on Diversification and Specialization *Challenge* May - June.
- Enke, Stephen (1942) Space and Value *The Quarterly Journal of Economics*, 56 (4), August, 627-37.
- Enke, Stephen (1960) Western Development of a Sparsely Populated Country: The Rhodesias. *The American Economic Review* 50 (3), June, 387-400.
- Enke, Stephen (1963) Population and Development: A General Model. *The Quarterly Journal of Economics*, 77 (1), February, 55-70. OMG ! What a big bunch of BS. "Overpopulation" is an obvious threat to per capita incomes in many countries ... so economists are again examining one of the oldest subjects of their profession. On the one hand, there are the gloomy Malthusian expectations ... On the other, there is Nelson's comparatively hopeful analysis of how nations can evade ... low ... income "traps" Enough said!
- Gibbs, Jack P (1963) The Evolution of Population Concentration. *Economic Geography*, 39 (2), April, 119-29.
- Gibbs, Jack P (1964) A Note on Industry Changes and Migration. *American Sociological Review*, 29 (2), April, 266-70.
- Gibbs, Jack P (1966) Measures of Urbanization. *Social Forces*, 45 (2), December, 170-77.
- Gibbs, Jack P (1968) Change in Industry Structure: International Comparisons. *The Pacific Sociological Review*, 11 (1), Spring, 38-48.
- Gibbs, Jack P (1974) Intraindustry Division of Labor and the Growth of Industries. *The Pacific Sociological Review*, 17 (4), October, 457-77.
- Gibbs, Jack P, & Harley L Browning (1966) The Division of Labor, Technology, and the Organization of Production in Twelve Countries. *American Sociological Review*, 31 (1), February, 81-92.
- Gibbs, Jack P, & Leo F Schnore (1960) Metropolitan Growth: An International Study. *The American Journal of Sociology*, 66 (2), September, 160-70.
- Gibbs, Jack P, & Sanford Labovitz (1964) Urbanization, Technology, and the Division of Labor: Further Evidence. *The Pacific Sociological Review*, 7 (1), Spring, 3-9.
- Gibbs, Jack P, & Walter T Martin (1962) Urbanization, Technology, and the Division of Labor: International Patterns *American Sociological Review*, 27 (5), October, 667-77.
- Gillen, William, & Antonio Guccione (1988) Simon's Model of Rural-Urban Migration: A Proof of Johansen's Conjecture. *Regional Science and Urban Economics*, 18 (3), August, 447-50.

- Glaeser, Edward L, & David C Mare (2001) Cities and Skills. *Journal of Labor Economics*, 19 (2), April, 316-42.
- Glaeser, Edward L. (1999) Learning in Cities. *Journal of Urban Economics*, 46 (2), September, 254-77.
- Goldstein, G S, & T J Gronberg (1984) Economies of Scope and Economies of Agglomeration. *Journal of Urban Economics*, 16 (1), July, 91-104.
- Gualerzi, Davide (2012) Local Development: From Regional Science to Industrial Districts. Paper presented at 3rd ESHET-JSHET meeting: Crises and Space in the History of Economic Thought, Corte, Corsica. 19p.
- Henderson, Vernon J, Zmarak Shalizi, & Anthony J Venables (2001) Geography and Development *Journal of Economic Geography*, 1 (1), January, 81-105.
- Hoover, Edgar M (1955) The Concept of a System of Cities: A Comment on Rutledge Vining's Paper. *Economic Development and Cultural Change*, 3 (2), January, 196-98.
- Hoselitz, Bert F (1954) Introduction. *Economic Development and Cultural Change*, 3 (1), October, 4-5.
- Hoselitz, Bert F (1955) Generative and Parasitic Cities. *Economic Development and Cultural Change*, 3 (3), April, 278-94.
- Hughes, Everett C (1954) Robert E. Park's Views on Urban Society: A Comment on William L. Kolb's Paper. *Economic Development and Cultural Change*, 3 (1), October, 47-49.
- Huybrechts, André (1971) Le Rôle Du Progrès Des Transports Dans Les Économies Sous-Développées. *Revue économique*, 22 (1), January, 140-62.
- Isard, Walter (1949) The General Theory of Location and Space-Economy *The Quarterly Journal of Economics*, 63 (4), November, 476-506.
- Isard, Walter (1951) Distance Inputs and the Space-Economy 1 Part I: The Conceptual Framework *The Quarterly Journal of Economics*, 65 (2), May, 181-98.
- Iyigun, Murat (2005) Geography, Demography, and Early Development. *Journal of Population Economics*, 18 (2), June, 301-21.
- Jenks, Leland H (1944) Railroads as an Economic Force in American Development. *The Journal of Economic History*, 4 (1), May, 1-20.
- Katzman, Martin T (1974) The Von Thuenen Paradigm, the Industrial-Urban Hypothesis, and the Spatial Structure of Agriculture. *American Journal of Agricultural Economics*, 56 (4), November, 683-96.
- Kiker, B F (1969) Von Thünen on Human Capital. *Oxford Economic Papers*, 21 (3), November, 339-43.
- Klasen, Stephan, & Thorsten Nestmann (2005) Population, Population Density and Technological Change. *Journal of Population Economics*, 19 (3), July, 611-26.
- Klasen, Stephan, & Thorsten Nestmann (2004) Population, Population Density, and Technological Change. CESifo Working Paper. 1209. 23p.
- Klasen, Stephan (2004) Population, Population Density, and Technological Change. Ibero America Institute for Economic Research (IAI) Discussion Papers 100. 20p.
- Kolb, William L (1954) The Social Structure and Functions of Cities. *Economic Development and Cultural Change*, 3 (1), October, 30-46.
- Krugman, Paul (1994) Increasing Returns and Economic Geography *The Journal of Political Economy*, 99 (3), June, 17.
- Lampard, Eric E (1955) The History of Cities in the Economically Advanced Areas. *Economic Development and Cultural Change*, 3 (2), January, 81-136.
- Larson, Janelle M, Jill L Findeis, & Stephen M Smith (2001) Agricultural Adaptation to Urbanization in Southeastern Pennsylvania. *Agricultural and Resource Economics Review*, 30 (1), April, 32-43.
- Ledent, Jacques (1982) Rural-Urban Migration, Urbanization, and Economic Development. *Economic Development and Cultural Change*, 30 (3: Third World Migration and Urbanization: A Symposium), April, 507-38.

- Leff, Nathaniel H (1972) Economic Development and Regional Inequality: Origins of the Brazilian Case. *The Quarterly Journal of Economics*, 86 (2), May, 243-62.
- Mabogunje, Akin L (1981) Geography and the Dilemma of Rural Development in Africa. *Geografiska Annaler. Series B, Human Geography*, 63 (2), 73-86.
- Marriott, McKimm (1954) Some Comments on William L. Kolb's "The Structure and Functions of Cities" in the Light of India's Urbanization. *Economic Development and Cultural Change*, 3 (1), October, 50-52.
- Martin, Ron (1999) The New 'Geographical Turn' in Economics: Some Critical Reflections *Cambridge Journal of Economics*, 23 (1), January, 65-91.
- McCombie, John S, & Mark Roberts (2007) Returns to Scale and Regional Growth: The Static-Dynamic Verdoorn Law Paradox Revisited. *Journal of Regional Science*, 47 (2), May, 179-208.
- Murphy, Kevin M, & Gary S Becker (1992) Division of Labor, Coordination Costs and Knowledge. *The Quarterly Journal of Economics*, 107 (4), November, 1137-60.
- Murphy, Kevin M, Andrei Shleifer, & Robert W Vishny (1989) Industrialization and the Big Push. *The Journal of Political Economy*, 97 (5), October, 1003-26.
- Murton, John (1999) Population Growth and Poverty in Machakos District, Kenya. *The Geographical Journal*, 165 (1), March, 37-46.
- Parent, Olivier, & Abdallah Zouache (2012) Geography Versus Institutions: New Perspectives on the Growth of Africa and the Middle East. *Journal of Institutional and Theoretical Economics (JITE) / Zeitschrift für die gesamte Staatswissenschaft*, 168 (3), September, 488-518.
- Perroux, François (1950) Economic Space: Theory and Applications *The Quarterly Journal of Economics*, 64 (1), February, 89-104.
- Prager, Jean-Claude, & Jean-François Thisse (2009) Les Enjeux Géographiques Du Développement Économique. AFD.
- Pred, Allan (1965) Industrialization, Initial Advantage, and American Metropolitan Growth *Geographical Review*, 55 (2), April, 158-85. ¥
- Reiss, Albert J (1954) Economic Growth and the Rate of Urbanization: A Comment on the Paper by Davis and Golden. *Economic Development and Cultural Change*, 3 (1), October, 27-29.
- Renaud, Bertrand (1974) Regional Policy and Industrial Location in South Korea. *Asian Survey*, 14 (5), May, 456-77.
- Rogers, Andrei, & Jeffrey G Williamson (1982) Migration, Urbanization, and Third World Development: An Overview. *Economic Development and Cultural Change*, 30 (3), April, 463-82.
- Rosenthal, Stuart, & William C Strange (2002) Evidence on the Nature and Sources of Agglomeration Economies.
- Sahota, Gian S. (1968) An Economic Analysis of Internal Migration in Brazil. *The Journal of Political Economy*, 76 (2), March - April, 218-45.
- Sandilands, Roger J (2007) China: The Role of Rural-Urban Migration in Economic Development under Capitalism Paper presented at *Centre for Research into Post-Communist Economies (CRCE) Colloquium*, Kranj, Slovenia, September. 13p.
- Scott, Allen J (1982) Production System Dynamics and Metropolitan Development. *Annals of the Association of American Geographers*, 72 (2), June, 185-200.
- Scott, Allen J (1986) Industrial Organization and Location: Division of Labor, the Firm, and Spatial Process. *Economic Geography*, 62 (3), July, 215-31.
- Scott, Allen J (1986) Industrialization and Urbanization: A Geographical Agenda. *Annals of the Association of American Geographers*, 76 (1), March, 25-37.
- Scott, Allen J (2002) Regional Push: Towards a Geography of Development and Growth in Low-and Middle-Income Countries. *Third World Quarterly*, 23 (1), February, 137-61.
- Spengler, Joseph J (1938) Population Movements, Employment, and Income. *Southern Economic Journal*, 5 (2), October, 129-57.
- Stolper, Wolfgang (1955) Spatial Order and the Economic Growth of Cities: A Comment on Eric Lampard's Paper. *Economic Development and Cultural Change*, 3 (2), January, 137-46.

- Todaro, Michael P (1988) [Rev] Allen J. Scott, *Metropolis: From Division of Labor to Urban Form*, 1988.
- Vining, Rutledge (1955) A Description of Certain Spatial Aspects of an Economic System. *Economic Development and Cultural Change*, 3 (2), January, 147-95.
- Vining, Rutledge (1959) The Location of Economic Activity: On Describing the Structure and Development of a Human Population System. *Journal of Farm Economics* 41 (5), December, 922-42.
- Williamson, Jeffrey G (1965) Regional Inequality and the Process of National Development: A Description of the Patterns *Economic Development and Cultural Change* 13 (4), July, 1-84.
- Williamson, Jeffrey G (1981) Some Myths Die Hard—Urban Disamenities One More Time: A Reply. *The Journal of Economic History*, 41 (4), December, 905-07.
- Williamson, Jeffrey G (1981) Urban Disamenities, Dark Satanic Mills, and the British Standard of Living Debate. *The Journal of Economic History*, 41 (1), March, 75-83.
- Williamson, Jeffrey G (1988) Migrant Selectivity, Urbanization, and Industrial Revolutions *Population and Development Review*, 14 (2), June, 287-314.
- Wilson, John A , G E von Grunebaum, & Chauncy D Harris (1954) Three Comments on Orthogenetic and Heterogenetic Urban Environments. *Economic Development and Cultural Change*, 3 (1), October, 74-78.

## Smith on Trade

- Berdell, J. F. (1998). Adam Smith and the Ambiguity of Nations. *Review of Social Economy*, 56(2), 175-189.
- Bloomfield, A. I. (1975). 'Adam Smith and the Theory of International Trade'. In A. S. Skinner & T. Wilson (Eds.), *Essays on Adam Smith* (Vol. 2, pp. 455-481). Oxford: Oxford University Press.
- Brown, V. (2013). Agency, classical liberalism and the discovery of exchange, specialisation and property, *17<sup>th</sup> Annual Conference of the European Society of the History of Economic Thought (ESHET)* (pp. 16). Kingston University, London, United Kingdom.
- Coats, A. W. (1975). Adam Smith and the Mercantile System. In A. S. Skinner & T. Wilson (Eds.), *Essays on Adam Smith* (Vol. 1, pp. 218-236). Oxford: Oxford University Press.
- Creedy, J. (1998). The Development of the Theory of Exchange. *History of Economics Review* 28, 45.
- Cunningham, W. (1884). Adam Smith und die Mercantilisten. *Zeitschrift für die gesamte Staatswissenschaft / Journal of Institutional and Theoretical Economics*, 40(1), 41-64.
- Darity, W., & Davis, L. S. (2005). Growth, trade and uneven development: Critical Survey. *Cambridge Journal of Economics*, 29(1), 141-170.
- Eagly, R. V. (1970). Adam Smith and the Specie-Flow Doctrine. *Scottish Journal of Political Economy*, 17(1), 61-68.
- Elmslie, B. T. (1994). Positive feedback mechanisms in Adam Smith's theories of international trade. *The European Journal of the History of Economic Thought* 1(2), 19.
- Elmslie, B. T. (1996). The Role of Joint Products in Adam Smith's Explanation of the "Vent-for-Surplus" Doctrine. *History of Political Economy*, 28(3), 11.
- Elmslie, B. T. (2004). Adam Smith's Analysis of Bounties as an Early Example of the Concept of Noneconomic Objectives. *American Journal of Economics and Sociology* 63(4), 899-910.
- Elmslie, B. T., & Sedgley, N. (2002). Vent for Surplus: A Case of Mistaken Identity. *Southern Economic Journal*, 68(3), 712-720.
- Fay, C. R. (1934). Adam Smith, America, and the Doctrinal Defeat of the Mercantile System. *Quarterly Journal of Economics*, 48(2), 304-316.
- Fleming, J. M. (1976). Mercantilism and Free Trade Today. In T. Wilson & A. S. Skinner (Eds.), *The Market and the State: Essays in Honour of Adam Smith* (pp. 164-199). Oxford: Clarendon Press.
- Hong, W. (1984). A Note on Adam Smith and International Trade. *경제논집*, 23(2), 195-202.

- Hont, Istvan (2006). The early Enlightenment debate on commerce and luxury. In M. Goldie & R. Wokler (Eds.), *The Cambridge History of Eighteenth-Century Political Thought* (pp. 379-418). Cambridge: Cambridge University Press.
- Jonsson, F. A. (2010). Rival Ecologies of Global Commerce: Adam Smith and the Natural Historians. *The American Historical Review*, 115(5), 1342-1363.
- Kibritcioglu, A. (2002). On the Smithian origins of "new" trade and growth theories. *Economics Bulletin*, 2(1), 1-15.
- Kurz, Heinz D. (1992). Adam Smith on Foreign Trade: A Note on the 'Vent-for-Surplus' Argument. *Economica* 59(236), 475-481.
- La Nauze, J. A. (1937). The Substance of Adam Smith's Attack on Mercantilism. *Economic Record*, 13(1-2), 90-93.
- Meeropol, M. (2004). Distorting Adam Smith on Trade. *Challenge*, 47(4), 78-90.
- Morales Meoqui, J. (2010). Reconciling Ricardo's Comparative Advantage with Smith's Productivity Theory. Unpublished manuscript.
- Myint, Hla (1958). The "Classical Theory" of International Trade and the Underdeveloped Countries. *The Economic Journal*, 68(270), 21.
- Myint, Hla (1977). Adam Smith's Theory of International Trade in the Perspective of Economic Development. *Economica* 44(175), 231-248.
- Negishi, Takashi (2004). Adam Smith and disequilibrium economic theory. *The Adam Smith Review*, 1, 30-39.
- Petrella, F. (1968). Adam Smith's Rejection of Hume's Price-Specie-Flow Mechanism: A Minor Mystery Resolved. *Southern Economic Journal*, 34(3), 365-374.
- Power, Simon (1987) The Origins of the Heckscher-Ohlin Concept. *History of Political Economy*, 19 (2), Summer 1987, 289-98.
- Rassekh, Farhad (2015). Comparative advantage in Smith's wealth of nations and Ricardo's principles : a brief history of its early development. *History of Economic Ideas*, 23 (1), 59-75.
- Schumacher, Reinhard (2012). Adam Smith's theory of absolute advantage and the use of doxography in the history of economics. *Erasmus Journal for Philosophy and Economics*, 5(2), 54-80.
- Schumacher, Reinhard (2013). Adam Smith and International Trade: Between the Division of Labour and the Natural Order of Progress.
- Schumacher, Reinhard (2015). Adam Smith's "Two Distinct Benefits" from Trade: The Dead End of "Vent-for-Surplus" Interpretations. *History of Political Economy*, 47 (4), December, 577-603.
- Schumacher, Reinhard (forthcoming). Adam Smith and the "rich country-poor country" debate: eighteenth-century views on economic progress and international trade. *European Journal of the History of Economic Thought*.
- Staley, C. E. (1973). A Note on Adam Smith's Version of the Vent for Surplus Model. *History of Political Economy*, 5(2), 438-448
- Tribe, Keith (2006). Reading trade in the wealth of nations. *History of European Ideas*, 32(1), 58-79.
- Vajda, Imre (1966) Wirtschaftswachstum und Internationale Arbeitsteilung. *Kyklos*, 19 (4), November, 670-90.
- Villanueva, J. (1977). Elementos de la concepción del comercio internacional en Adam Smith. *Desarrollo Económico*, 16(64), 571-579.
- Walter, A. (1994). Adam Smith and the Liberal Tradition in International Relations. Unpublished manuscript.

## Theories of Trade

- Bobulescu, R. (2002). The 'paradox' of F. Graham (1890-1949): a study in the theory of international trade. *The European Journal of the History of Economic Thought*, 9(3), 402-429.

- Creedy, J. (1992). Cournot on Trade between Regions and the Transition from Partial to General Equilibrium Modelling. *History of Economics Review* 18, 9.
- Deraniyagala, S., & Fine, B. (2001). New trade theory versus old trade policy: a continuing enigma, *Cambridge Journal of Economics*, 25(6), 809–825.
- Helpman, E. (1988). Growth, Technological Progress, and Trade. Unpublished manuscript.
- Maneschi, A. (1992). Ricardo's international trade theory: beyond the comparative cost example. *Cambridge Journal of Economics* 16(4), 421-437.
- Roesler, Prof (1864) Zur Lehre Von Der Internationalen Arbeitstheilung. *Zeitschrift für die gesamte Staatswissenschaft / Journal of Institutional and Theoretical Economics*, 20 (2), 276-319.
- Yu, Z. (2003). IT, Production Specialization, and Division of Labor: A Smith-Ricardo Model of International Trade. Unpublished manuscript.

## **Population Growth, the Settlement Process and Economic Progress — Adam Smith's Theory of Demo-Economic Development**

Population — in its original sense of the process of peopling — is a topic surprisingly absent from the huge volume of scholarship on Adam Smith. This topic was central to 18th century moral philosophy and political economy, the two fields Smith most famously contributed to. Its importance in Smith's work was obscured in the 20th century by a narrow focus on economic matters in the secondary literature. For an undivided analysis of Smith's oeuvre it is crucial that the central position of the peopling process be brought to light. Three topics that are today recognised as essential to Smith's project are thus intimately connected to population: the relation between the division of labour and the extent of the market; the stadial theory of progress; and the link between the development of town and country, itself central to Smith's advocacy of the freedom of trade. The market is a concept read today through an institutional lens linking it to the functioning of the capitalist economic system; Smith conceived of it as facility for trade, with essentially demographic and geographic vectors. The progress of society is both cause and effect of the growth of population. At its core is the symbiotic interrelationship between rural and urban development that Smith called the "natural progress of opulence". In turn, looking at dynamics of population and development — including the analysis of the demographic transition — through a Smithian rather than a neo-Malthusian lens leads to a fundamental reconsideration of causal interactions between mortality, fertility, wealth and institutional variables.

### **Keywords**

Adam Smith; population and development; conjectural history (four stages theory); lectures on jurisprudence; division of labour - extent of the market; cumulative causation; rural-urban linkages; demographic transition theory

## **Progrès et peuplement — la théorie démo-économique d'Adam Smith**

La population — en son sens originel de processus de peuplement — est un sujet étonnamment absent de l'énorme volume d'études sur Adam Smith. Ce thème était au centre de la philosophie morale et de l'économie politique du 18<sup>e</sup> siècle, les deux domaines auxquels les contributions de Smith sont les plus connues. Son importance dans l'œuvre de Smith a été obscurcie au 20<sup>e</sup> siècle par une focalisation étroite sur les questions économiques dans la littérature secondaire. Pour une analyse intégrale de son œuvre, il est essentiel que la place centrale du peuplement soit révélée. Trois thèmes aujourd'hui considérés comme essentiels au projet de Smith sont ainsi intimement liés à la population : le lien entre division du travail et étendue du marché ; la théorie des quatre stades du progrès de la société ; et le lien entre développement rural et urbain, lui-même au centre du plaidoyer de Smith pour la liberté du commerce. Le marché est un concept aujourd'hui assimilé au fonctionnement du système économique capitaliste ; pour Smith, il décrivait la faculté de commercer, aux vecteurs essentiellement démographiques et géographiques. Le progrès de la société est à la fois cause et effet de la croissance de la population. En son sein se trouve l'interrelation symbiotique entre le développement rural et urbain que Smith appelait le « progrès naturel de l'opulence ». Adopter l'optique smithienne plutôt que néo-malthusienne dans l'examen des dynamiques de population et de développement — y compris l'analyse de la transition démographique — conduit alors à une reconsidération fondamentale des interactions causales entre mortalité, fécondité, richesse et variables institutionnelles.

### **Mots-clés**

Adam Smith; population et développement; histoire conjecturale (théorie des quatre stades); leçons de jurisprudence; division du travail - étendue du marché; causalité cumulative; liens ville-campagne; théorie de la transition démographique