

Cultural and creative clusters in the spatiotemporal continuum: an evolutionary perspective: Dubai art and design districts as a case study

Damien Nouvel

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DAMIEN DIAA NOUVEL

Cultural and Creative Clusters in the Spatiotemporal Continuum: An Evolutionary Perspective

Dubai Art and Design Districts as a Case Study

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Damien Nouvel

CULTURAL AND CREATIVE CLUSTERS IN THE SPATIO-TEMPORAL CONTINUUM : AN EVOLUTIONARY PERSPECTIVE

DUBAI ART & DESIGN DISTRICTS AS A CASE STUDY

D'un village côtier du désert à une ville globale en seulement quelques décennies, et cela grâce à un mélange de politiques utopistes néolibérales favorisant les développements économiques et urbains superlatifs, Dubaï doit/devrait encore rivaliser pour son positionnement culturel régional courant les années 2000. À cette époque-là, les activités culturelles et artistiques, fortement liées et nourries par une installation culturelle institutionnelle fertile dans la ville voisine de Charjah, étaient déjà en plein essor à Dubaï. En 2006/2007 Les entreprises créatives et artistiques (galeries d'art et de design) ont connu une accélération soudaine menant à l'émergence de plusieurs quartiers artistiques et créatifs, dont certaines résultent d'initiatives top-down menées par le gouvernement. Les dynamiques d'agglomération des entreprises d'art et de culture à Dubaï ne sont pas seulement ancrées dans les dynamiques néo-classiques du district Marshallien mais bénéficient également de forces institutionnelles, commerciales et personnelles à multiples facettes qui s'inscrivent dans les théories des clusters Porteriens et post-Porteriens. Voir l'émergence de ces districts au travers d'événements historiques appelle des concepts évolutionnistes tels que la dépendance du sentier, la coévolution et l'auto-renforcement. Enfin, les réseaux multi-scalaires qui conduisent à une telle évolution imposent de considérer la complexité de ces réseaux et le rôle des agents dans la formation de l'image globale. En nous référant aux concepts de la complexité et de la géographie économique évolutionniste, nous introduisons un cadre d'analyse qui étudie l'émergence de clusters créatives dans un deuxième temps. Compte tenu du contexte historique particulier de notre cas d'étude, nous rechercherons ensuite des indices et des exemples issus qui représentent les principaux facteurs de changement pour l'émergence et l'évolution des districts d'art et de design.

mots-clés : Clusters Culturels et Créatifs, Géographie Économique Évolutionniste, Complexité, Dépendance au sentier, Districts d'art, Dubaï.

ABSTRACT

Rising from a desert coastal village towards a global city in only a few decades thanks partially to a mix of utopian-led, neo-liberal policies that favoured speed superlative economic and urban developments, Dubai was still to compete for its regional cultural positioning through culture-led projects in the early 2000's. Cultural and art business activities, strongly linked and nurtured by a fertile institutional, cultural setup in the nearby Sharjah, were already on the rise in Dubai. By mid-2000's, the creative and art businesses (i.e. art and design studios and galleries) saw an abrupt acceleration leading to the emergence of a few clusters that continued to grow to form art and creative districts, namely Alserkal Avenue in Al Quoz Industrial Area, Al Fahidi Historical District, Gate Village at the Dubai International Financial Centre DIFC and later the Dubai Design District, some of which being the result of top-down government-led initiatives. The dynamics of agglomeration of art and culture businesses in Dubai are not only inscribed into neo-classical Marshallian district dynamics but have also profited from multi-facet institutional, business and personal network forces that fit into Porterian and post-Porterian cluster theories. Seeing the emergence of these districts through the lens of historical events calls for evolutionary concepts such as path dependency, co-evolution and selfreinforcement among others. Similarly, the multi-scalar networks leading to such an evolution pronounces a need to examine the complexity of these networks and the role of agents in shaping the overall picture in the space-time continuum. Using complexity theory and evolutionary economic geography concepts we introduce an analytical framework to study the emergence of these clusters. Finally, we search for evidence and examples from our case study considering its particular historical context and the key game changers for the emergence and evolution of art and design districts.

keywords : Cultural and Creative Clusters, Evolutionary Economic Geography, Complexity, Path Dependency, Art Districts, Design Districts, Dubai



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GENERAL INTRODUCTION: CONTEXT, SUBTEXT AND PRETEXT

Since the mid-nineties of the last century, cultural and creative industries (CCl's) came to a hiatus of interest from academics as well as policymakers around the globe. A trend that started in Australia around 1994 and adopted in the UK in 1998 continued to spread around Europe and slowly in the world. The growing evidence of the economic contribution of the CCl's has led to a policy shift that not only focused on cultural initiatives but also towards territorial development policies that sought initially to enhance tourism and education but later enlarged to attract incoming cultural investments and to nurture and incubate the local cultural scenes (Chapain & Stryjakiewicz 2017¹). Notions such as Cultural Districts, Cultural Quarters, Creative Milieus and Cultural and Creative Clusters have almost always been part of the academic and the political hype on the creative industries ever since. Such political hype also tended to capitalise on organic concentrations of creative and cultural industries which meant boosting not only the economy of the district in which these concentrations existed or only the concerned economic sector but that was extended 'horizontally' to other industries and 'vertically' to other urban scales such as the city, the region or even beyond.

Examples of cities or regions that have revived their economy through investments in culture (e.g. Lille in France, the Ruhr Region in Germany, Bilbao in Spain, to name but a few) are widely covered in academic literature and policy reports. Many case studies in Europe, America and more recently in Asia document the rise of cultural developments as a means of investment and diversification.

Emerging cities, particularly in Asia, the Middle East and Latin America have recently embraced this trend and incorporated creative cluster / creative city policies within their

¹ Chapain, C. & Stryjakiewicz T. (2017) Introduction – Creative Industries in Europe: Drivers of (New) Sectoral and Spatial Dynamics. In Caroline Chapain, Tadeusz Stryjakiewicz (eds.) (2017) Creative Industries in Europe: Drivers of New Sectoral and Spatial Dynamics. Springer International Publishing

economic development policy that is usually combined with a Global City approach. In a particular example, the city of Dubai, in the United Arab Emirates, and its neighbouring Gulf City-States, have witnessed a surge in the creative economy seen as part of a series of economic, urban and social mutations. Such mutations enabled Dubai (and other Gulf city-states) to evolve from marginal desert coastal villages to competitive global cities in a matter of few decades. Though such urban and economic evolution has been covered in a number of academic studies, the rise of the creative economy in this part of the world, let alone the rise of creative clusters, is rarely put to any scientific enquiry.

As such, the mere idea of contrasting the emergence of cultural and creative clusters in the emergent - *turning global* - city of Dubai to the mainstream scientific thought in urban economy is no doubt an alluring research orientation. However, it is not only the particularity of case study that gave an urge for this study, but it is also the theoretical world of cultural and creative clusters with all its complexities that meant such a research journey is certainly challenging and undoubtedly, under scientific scrutiny, fruitful.

The complexity of studying the cultural and creative clusters stems, in one viewpoint, from the complexity of the notion of the industrial cluster itself as it is founded at the crossroads of a number of disciplines. While the cluster was studied initially as a purely economic phenomenon by economists and economic geographers, the concept has developed with time to integrating the disciplines of economics, sociology, public management and urban planning. This study, hence, follows not only an economic approach to the theory of creative clusters, but it also calls for contextual theoretical input from geographical, social / cultural and urban planning points of view.

The thicket of literature on industrial clusters, and by extension on cultural and creative clusters, has held numerous theoretical positions towards analysing such a phenomenon. The academic interest was driven towards highlighting the dynamics of such concentration (a trend that started with the seminal work of Marshall on the industrial agglomeration back in the beginning of the 20th century), the typology of these concentrations, its key components and their relational positioning (the network structure) and forces, its economic and social footprint (impact studies), its emergence and evolution (life-cycle), and many more theoretical and consequently practical aspects.

Adopting a complexity / evolutionary approach to tackle the question of the emergence of cultural and creative clusters mirrors the recent academic research on the same topic (and on the larger question of industrial clusters) and provides a rather useful means to understanding the phenomenon in different phases of formation at different scales, in an honest approximation of the real-life case. The short history of the emergence of the city of Dubai adds potential, not only to the strength of the case study, but also to the chosen approach as capturing data on the historical instants leading to the formation and the evolution of the cultural and creative districts in the city, including the role of different actors in different urban scale, presumably gives a better close-up of the elements of the evolutionary approach.

Tackling the question of cultural and creative clusters is as a start an exploratory mission that requires a surefooted grounding. Starting from the notion of the cluster itself, to exploring the different ideas around industrial clusters and then highlighting the particularities of cultural and creative industries (and clusters, of course), and the role of culture in the transformation of capitalism, governmental strategies towards cultural developments and the notion of the creative city and ending the exploratory grounding mission by presenting the theoretical approach.

1. The Question of Industrial Agglomeration

*The Rise of the Industrial Clusters: From Marshall to Porter*²

The concept of industrial district is attributed to the work of Marshall (1920)³ who basically explained that specialised industries gather together in specific localities: 'an industry concentrated in certain localities' (Marshall, 1920: p. 222). Marshall studied the causes that might lead and the benefit that might result from such geographical concentration. He distinguished mainly by two types of growth mechanism, the internal economies are related only to "the organisation of an individual firm" while the external economies 'depend on the general organisation of the trade, on the growth of the knowledge and appliances common

² For a historical overview of the emergence of the concept of clusters see: Vicente J. (2016) *Économie des clusters*. Éditions La Découverte, Paris.

³ Marshall, A. (1920) *Principles of Economics: Eighth edition*. Reprinted by Palgrave Macmillan in 2013. [First edition 1890, Fourth Edition 1898]

to the trade, on the development of subsidiary industries, and so on' (Marshall, 1898: p. 50)⁴. While, large size companies are driven by internal economies, small and medium companies, are according to Marshall, brought together in a district to compete with larger companies by means of external economies.

Marshall's depiction of these external economies that led to the formation of specialized industrial districts was a three-entry formula, or what is usually referred to as Marshall's triad: 1) the availability of skilled labour, 2) the growth of supporting subsidiary industries, and 3) the development of division of labour in different stages and branches of production, within a *'local industrial atmosphere'* which is understood as the shared industrial knowledge and the social and institutional environment (Asheim et al. 2006). Marshall's externalities were enhanced and complemented later by Arrow (1962) and Romer (1986), both of whom emphasized the role of knowledge in nurturing endogenous growth. The new externalities have come to be known as Marshall-Arrow-Romer externalities (MAR) or the knowledge spillover.

The Marshallian industrial district concept has seen a hiatus in academic literature in the early nineties especially in Italian studies on the many rising industrial district of the so-called "Third Italy" (covering the regions of Veneto, Emilia-Romagna, Toscana, and the Marche). This Italian school, led by such pioneers as Becattini, Brusco, and Bagnasco, have theorised a "Neo-Marshallian industrial district" (as per Asheim et al. 2006 and Amin and Thrift 1992, for example) or a "New Industrial District" (as per Park and Markusen 1995; Park 1996; Markusen 1996) by stressing the socio-cultural environment of the industrial district together with its economic environment. For Becattini (1990)⁵ it is 'a socio-economic territory which is characterised by the active presence of both a community of people and a population of firms in one naturally and historically bounded area' (: p. 39). Such reconceptualization of the Marsallian district added important insights as per the role of trust and co-operation and collective governance in the success of local firms. Emphasis to the importance of the

⁴ Marshall, A. (1898) *Distribution and exchange*. Economic Journal, 1898, vol. vol. 8 no. 29 (: p. 37-59)

⁵ Becattini, G. (1990) The Marshallian industrial district as a socio-economic notion. In Pyke, F., Becattini, G. and Sengenberger, W. (eds) *Industrial Districts and Inter-Firm Co-operation in Italy*. Geneva, International Institute for Labour Studies, 37–51

specialisation of industries, as well as networks and embeddedness within socio-cultural context are highlighted in the new industrial district concept (Park 1996).

In 1990, Porter published his highly influential book "The Competitive Advantage of Nations," which introduced his industrial cluster concept broadly to business and policy officials, and he rapidly propelled awareness of the concept well beyond the previous academic audience in a subsequent outpouring of books and articles. Clusters for Porter are defined as ". . . *geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (for example, universities, standards agencies, and trade associations) in particular fields that compete but also cooperate"* (Porter 1998: p. 197)⁶.

Porter viewed the concentration of firms as a result of essentially corporate strategies to remain competitive and productive enterprises in the corporate value chain (headquarters, distribution, production, etc.), which means forming a 'cluster' comprised of similar or related firm components. Thus, the cluster is emphasised by the links between its components and the cluster is further defined as: 'a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities' (1998: p. 199; 2000: p. 16). The concept is rather flexible as regards the types of firms involved. Some clusters are made up of small firms only, while other host both small and larger ones (Porter 1990).

Porter argues that competitive advantage is strongly localized; and that clusters are a dominant feature of the landscape, that is, they could be found in virtually all countries and industries. The determinants for such a competitive advantage are: (a) factor conditions (human capital, natural resources, infrastructure, etc.), (b) demand conditions (local market demand and customer preferences), (c) related and supporting industries (availability of competitive intermediate suppliers and related industries), and (c) firm strategy, structure, and competition (Trippl and Bergman 2013⁷).

⁶ Porter M.E. (1998) *On competition*. Boston: Harvard Business School Press.

⁷ Trippl, M. and Bergman E. (2013) *Clusters, local districts, and innovative milieu*. In M. Fischer and P. Nijkamp (Eds.) *A Handbook of Regional Science*, (pp. 439–456). Berlin: Springer Reference.

Theories of clustering dynamics: From Externalities to Spillover

In general, two distinct schools in current academic circles have substantially tackled the question of agglomeration of businesses (He 2014)⁸. The first is the Neo-classical economic school and the newly conceptualised '*new geographical economy*' pioneered by Krugman (1991) and supported later by industrial cluster theorists such as Porter. The second comprises multidisciplinary scholars in geography, sociology, culture, and political sciences, basing their analysis on "*Knowledge-based*" economy (such as Meusburger 2000; Maskell 2001 etc.), the "*Cultural Turn*" (Amin and Thrift 2000, Zukin 1996), or the "Institutional Turn" (Martin 2000). According to Boschma and Frenken (2006)⁹, the conversation between the two has been scarcely fruitful as the first school continued to add geographical factors while the second kept moving away from economics.

Neo-classical economics pursued micro and macro-economic indicators to reason the agglomeration forces between businesses. Such factors included returns and transportation costs, economies of scale, thick labour markets, market size effects and pure external economies (Krugman 1998). Porter (2000) considers that clustering is attributed to better access specialized inputs and employees, information, complementarities of market and other participants, institutions and public goods, as well as the incentives and performance measurement. Though such a 'pure' economic model explains the agglomeration process of industries where economic activities are either centralizing or decentralising, it fails to predict cost-light industries that continue to centralise. Later application of the industrial cluster theory on a regional level sought to adapt to the phenomenon of business concentration in global cities. Thus, a regional competitive model places more interest on the importance of the knowledge-based innovation, no-trade behaviours, as well as policy incentives (Porter 1990, 1998, 2000). Still, new economic approaches to the cluster theory ignored questions related to the effect of sociocultural context and knowledge input (He 2014).

⁸ He J. (2014) *Creative Industry Districts: An Analysis of Dynamics, Networks and Implications on Creative Clusters in Shanghai*. Springer.

⁹ Boschma RA, Frenken K (2006) *Why is economic geography not an evolutionary science? Towards an evolutionary economic geography*. J Econ Geogr 6(3):273–302

On the other hand, the knowledge-based or the "cultural turn" acknowledge the clustering process as a "complex" phenomenon compared to the rather "simplistic" economic approach. Authors such as Storper (1991), Audretsch and Feldman (1996), Feldman (1999), among others, rather regarded clusters as systems that were able to enhance regional and local competitiveness and affect economic performance through evolving paths of knowledge spillover, innovation, and collective and individual learning. Other authors relied on the network analysis in a socioeconomic and sociocultural context (innovative milieus) in their analysis of agglomeration dynamics in a path dependency approach (Park 1996; lammarino and McCann 2006).

While neo-classical economy theorists focused on the uneven distribution of resources in their analysis of agglomeration in the territory, the knowledge-based scholars emphasised uneven distribution of knowledge (professional skills, creativity, and technological innovations) over space (Meusburger 2000). They differentiate between two types of knowledge; tacit - personal experience, practice, and imitation which is inarticulate and not easily transferable, and codified - knowledge that is possible to be converted into symbol and thus possible to be demonstrated and transferred geographically and historically through various materials and mediums (Polany, 1966). Thus, economic activity is enhanced through face-to-face interactions of individuals, firms, and institutions, which in turn requires co-location and sharing of territory. This has led to emphasising the importance of concepts such as "social networks" and "learning by doing" (Pinch et al. 2003) locally and globally.

A comprehensive framework to study the dynamics of clustering was suggested by **Gordon and McCann (2000)¹⁰.** They proposed a three-model theory to clustering dynamics that takes into consideration in addition to the overall economic factors (Marshallian and neo-Marshallian externalities), the social network embeddedness. The three-model framework, namely the pure agglomeration model, the industrial complex model, and the social network model, is by far the most acknowledged for explaining the basic forms of clustering (Bilien

¹⁰ Gordon, I.R. and McCann P. (2000) *Industrial clusters: Complexes, agglomeration and/or social networks?* Urban Studies, 37(3): 513 532.

and Maier, 2008)¹¹ and it is praised for understanding the possible micro-foundations of industrial clusters and agglomerations (McCann 2008: 30). However, as Martin and Sunley (2003)¹² state, the proposed triple model framework *'fails to specify the particular circumstances, economic and spatial, under which one theoretical model should be more applicable than another'*. A French group of researchers (Chesnel et al. 2013) proposed a more comprehensive **reformulation of this framework**, but such reformulation was short of rigorous justification – for which this thesis is undertaking efforts to reformulate the Gordon and McCann theory to a more comprehensive framework to clustering dynamics (**Chapter I**).

Further discussion of the agglomeration dynamics of businesses had a particular interest into the phases of evolution of the industrial clusters, in what is called the '**life-cycle' model**. This model having several limitations, Martin and Sunley (2011)¹³ explored a different conception of cluster evolution drawing on the **'adaptive cycle'** which is relying on concepts from recent 'exploratory' theories and domains such as the **Evolutionary Economic Geography** EEG (which incorporates principles of Evolutionary Economics into spatial dynamics), and **Complex Adaptive Systems** CAS (which relies on the theory of systems and the complexity theory). Nevertheless, the novelty of this research orientation calls for further theoretical and empirical contribution to the question of the emergence and the evolution of clusters from evolutionary and complexity perspectives. This thesis also takes a specific scientific interest in contributing to such debate and proposes a number of theoretical inputs in this perspective (**Chapter II**).

¹¹ Bilien, U., and Maier, G. (2008) *The economics of regional clusters: Networks, technology and policy*. Cheltenham, UK: Edward Elgar Publishing.

¹² Martin, R. and Sunley P. (2003) *Deconstructing clusters: chaotic concept or policy panacea?* Journal of Economic Geography, 3(1): 5 35.

¹³ Martin, R. and Sunley P. (2011) *Conceptualizing Cluster Evolution: Beyond the Life Cycle Model?* Regional Studies, Vol. 45.10: p. 1299–1318, November 2011

2. From Industrial Clusters to Cultural and Creative Clusters

The rise of culture in the post-Fordist capitalism

"The cultural economy is coming to the fore as one of the most dynamic frontiers of capitalism at the dawn of the twenty-first century." ~ Allen J. Scott (2000:3)

With the dawn of the 21st century, culture has become increasingly important in the transformation of the world contemporary capitalism. Even before, since the early twentieth century, the **commercialisation of cultural production** was witnessed in societies that made the transition from feudalism to capitalism (Pratt 2005)¹⁴. This commercialisation intensified in advanced industrial societies from the early twentieth century onwards (Bourdieu 1996). Theodor Adorno and Max Horkheimer (1947)¹⁵ developed the idea of 'culture industry' in their critique to the commodification of art as they saw it as a misleading democratic connotation to the 'mass culture'.

With the gradual fall of industries around the world, cultural industries played an important role in the post-Fordist capitalism around the world, after the 1970's. Such transformation, what Thrift (1999)¹⁶ call 'the cultural turn', not only manifested by the restructuring the division of labour (Jameson 1991¹⁷), but also in the rise and the emphasis on information and knowledge leading to innovation and creativity as the new engines to the economy and the competitive edge of companies (ibid.). The **rising significance of cultural products industries** in national output and employment in the post-Fordist production system saw the gradual replacement of mass production as the leading edge of economic expansion in the advanced capitalist societies by cultural industries. Such industries include as per Scott (2001)¹⁸: "the media (e.g. film, television, music, publishing), fashion-intensive consumer goods sectors (eg

¹⁴ Hesmondhalgh, D. and Pratt, A. C. (2005) *Cultural Industries and Cultural Policy*. International journal of cultural policy, 11 (1).: p. 1-14.

¹⁵ Adorno, T. and Horkheimer, M. (1947) *Dialectic of Enlightenment*. Verso, London.

¹⁶ Thrift N. (1999) *Capitalism's Cultural Turn*. In L. Ray and A. Sayer (Eds.) *Culture and Economy After the Cultural Turn*. SAGE Publications Ltd (1999)

¹⁷ Jameson F. (1991) *Postmodernism, or, The cultural logic of late capitalism*. Duke University Press.

¹⁸ Scott A.J. (2001) *Capitalism, cities, and the production of symbolic forms*. Royal Geographical Society (with The Institute of British Geographers).

clothing, furniture, jewelry, and so on), many different types of services, (eg advertising, tourist facilities, or places of entertainment), and a wide assortment of creative professions (eg architecture, graphic arts, or web-page design)" (:p. 16). Scott also include "facilities for collective cultural consumption like museums, art galleries, or libraries, whether privately or publicly controlled." The creative industries are those commercial sectors which provide 'goods and services that serve as instruments of entertainment, communication, selfcultivation, ornamentation, social positionality, and so on' (idem: p. 12).

By the early 1980s, cultural industries were no longer ignored by cultural policy-makers, first on the international level (by UNESCO who tackled the unequal cultural resources of the North and the South), then on local levels as policy makers recognised the economic dimension to culture and its development potential (Pratt 2005). While UNESCO provided practical definitions and framework entries for the cultural economy, local governments introduced varied versions and new perspectives on the **role of culture in city development**. Starting with the cultural policies of the Greater London Council in the early 1980's (cited as the most influential in terms of cultural policy at the time), more cities, most prominently in Western Europe, followed suit and introduced cultural policy as part of their local economic strategies (Pratt 2005). Bianchini and Parkinson (1993)¹⁹ provided case studies where **cultural policy**, centred not only on museums and other facilities, but also around cultural industries, was **linked to urban regeneration**.

In the late 90's, the cultural policies witness a '**creative' turn**, when the UK's Department for Culture, Media and Sport (DCMS) took over mapping and developing industries related to the arts, media, culture and digital technologies, by which the term "**creative industries**" was born. The DCMS's work opened the door for a number of economic and policy studies internationally in Europe, Asia, Australia, New Zealand and Latin America (for an overview, see Flew, 2012²⁰). There is increasing evidence that creative industries are not only a growth component of the world economy, but also have developed their own dynamics, and can

¹⁹ Bianchini, F. and Parkinson, M. (Eds.). (1993) *Cultural Policy and Urban Regeneration*. Manchester UP, Manchester.

²⁰ Flew T. (2012) *The Creative Industries: Culture and Policy*. SAGE Publications

therefore be referred to as the creative economy (UNCTAD, 2010²¹). Defining creative industries in a way to distinguish them from cultural industries is rather an ambiguous and sometimes a futile task and academics such as David Throsby (2008: 219)²² have argued that there one cannot draw a fast line between cultural and other 'creative' goods and services, instead there is a continuum over the full range of goods and services. As such, many academics and policy makers usually refer to such continuum of goods and services as the **cultural and creative industries**. In this thesis, we chose to use the term cultural and creative (CC) industries (or clusters) without going into the details of differentiating the two subsets.

The Rise of Cultural and Creative Clusters

The tendency of cultural industries to agglomerate is well documented in academic literature (e.g. Becattini 1987; Scott 1988, 2000; Storper and Christopherson 1987). However, literature doesn't provide much on the transition from industrial clusters to creative clusters as creative industries are usually considered a subset or a category of industries in general terms and the agglomeration dynamics are applicable. Pratt (2004) for example, states that creative clusters are a subset of industrial clusters. He argues that cultural and creative industry and cultural and creative clusters are actually quite similar to all other industry clusters regarding the economic forces and policy responses. The most striking difference is that activities taking place within the cultural and creative clusters are not purely economic, compared to other industry clusters. The differences emanate mainly from the objective end product of cluster actors.

The main **differences between industrial products and cultural and creative** (C&C for a shortcut) products can be summed up to four factors as per Davel and Fashen (2010). These factors apply to a varying degree from one C&C activity to another: a) creative products cannot 'always' be produced by a **production line** in an industrial production model, b) creative products bear high **non-economic values**: an aesthetic value that depends on taste rather than a practical 'use' value that depends on consumers' need and the product functionality; c) production and consumption might happen simultaneously, as such the

 ²¹ United Nations Conference on Trade and Development., & United Nations Development Programme. (2010).
 Creative economy report 2010: Creative economy: a feasible development option. Geneva: United Nations.
 ²² Thorsby D. (2008) *Economics of Culture*. Cambridge University

consumption is described as '**experiential'**; and d) **labour dynamics** and entrepreneurship are quite different: C&C workers are labelled "creative workers," "freelancers," and "footloose" with a *"fluid boundary between work-time and playtime*" (Neff et al. 2005) and these creative workers can become entrepreneurs, evolving their careers both as artists and managers. It is essential that these factors play a focal role in the clustering dynamics of C&C industries and also in the related planning policies.

Furthermore, Stern and Seifert (2010)²³ differentiated between **clusters** "that focus on production – the grouping of producers in one place in order to improve the flow of information and the pooling of specialized services" and **districts or quarters** "that focus on the development of consumption-oriented entertainment destinations as a means of stimulating tourism and the hospitality industries" (pp. 263). They argue that changes in the nature of art- and place-making challenge the distinction between production and consumption. As such, it is evident that in order to **make a cultural cluster more successful**, **planning interventions** or policy makers can build upon and enhance existing resources by integrating cultural consumption and production to generate more economic and social benefits (Evans 2005). This thesis is taking the position that C&C clusters are **mixed production-consumption places** and therefore the terms cluster, district and quarter are used interchangeably with less precaution (unless explicitly highlighted). However, discussion of such terminology is undertaken later from **Chapter 4** onwards.

Finally, C&C clusters are differentiated from the above industrial clusters in what is related to the locational distribution of cultural activities that benefit largely from 'urban' forces or what is framed by **urban economies** - also referred to as the '**Jacobian externalities'** after the anecdotal work of Jane Jacobs on urban diversity. For example, clusters of creative industries profit from a diverse population (families, entrepreneurs, artists, migrants, old people, students) who possess varied set of skills and demands (Jacobs, 1969)²⁴.

²³ Stern J. S. and Seifert S. C. (2010) *Cultural Clusters: The Implications of Cultural Assets Agglomeration for Neighborhood Revitalization*. Journal of Planning Education and Research 29(3) 262–279. Association of Collegiate Schools of Planning. SAGE Publications.

²⁴ Jacobs, J. (1969) *The Economy of Cities*. New York: Random House.

Creative clusters as defined by Scott (2006) are "creative fields," "a constellation of workers, firms, institutions, infrastructures and communications channels and other active ingredients stretched out at varying distances across geographic spaces."

Clusters and the Creative City: New Urban Development Strategies

"Culture is the right tool for urban revival because it flourishes in the new urban reality of the 21st century." ~ M. J. Stern and S. C. Seifert (2007)

As elaborated above, the role of cultural industries in urban strategies has gained momentum since the early 1980s and was seen pivotal in urban regeneration and in the enhancement of economic activity (Miles 2005). The urban and economic effects subsequent to the realisation of projects associated with naming Glasgow as the European Capital of Culture in 1990, have provided an exemplary case for policy makers and academics alike in how cultural projects contribute to the transformation of cities in the post-industrial era. Urban and economic revitalisation associated with flagship institutions (e.g. Tate Modern or the Guggenheim in Bilbao) has been a milestone in the cultural turn in urban policy and provided grounds for policy-makers around the world to follow suit. As such, it is argued that the dominant capitalist economy has *"undergone a cultural turn"* (Zukin, 1996: p. 226).

Whatever may be the meaning of creativity and creative clusters, an accumulating literature points to the importance of creative / cultural activities and clusters in urban development policy and strategic decisions. This thicket of literature introduced cultural clusters as an alternative tool for policy makers around the globe to develop city economy (Evans, 2001, 2009; Hesmondhalgh & Pratt, 2005; Hutton, 2004; Pratt, 2004, 2005). This trend has become clearer in light of the world financial crisis that took place in 2008 (Pratt and Huton 2013).

In many West European cities, urban cultural policy has become an increasingly noteworthy element of economic and physical regeneration strategies. Some common trends in the evolution of urban cultural policies can be identified (Bianchini 1993b), such as the decline in working time and the increase of disposable income spent on leisure activities. City governments thus started to increase expenditure on culture and to create designated bodies

and policymaking positions to boost the provision of cultural services to meet the growing, sophisticated and varied public demand (Bianchini 1993b, Lavanga 2006).

In this trend, the '**Creative City'** campaign has for objective to reposition the post-industrial city into a creative knowledge economy (Landry, 2000), where the cultural and social capitals are being transformed into productive activities. Coined by Bianchini and Landry (1994) and developed by Landry (2000) in his seminal work '*The Creative City*', the concept calls for a city that a city that is attractive to, and populated by creative workers, through policy enhancement that focus on upgrading the cultural milieu of the city and providing amenities that are highly valued by creative workers. The concept "*describes a new method of strategic urban planning and examines how people can think, plan and act creatively in the city*" (Landry 2000: p. 4). Creativity can thus be fostered by a series of urban policies and by the provision of soft and hard infrastructure.

Landry (2000) argues that the most critical resource a city has is its people: "Human cleverness, desires, motivations, imagination and creativity are replacing location, natural resources and market access as urban resources. The creativity of those who live in and run cities will determine future success" (p.51). In order for cities to compete for a global positioning, they should aim to develop an environment that nurture creativity through policy incentives, regulatory enhancements and better conditions for highly skilled and flexible work force.

Florida (2000) calls for cities to shift their focus on professionals who practice creativity as their mode of life – **the creative class**. He describes the emergence of a new socio-economic class that is creating ideas and innovations rather than production thus leading the post-industrial, information-based, and knowledge-based economy and society. According to this theory, the creative class comprises two categories; the super creative class and the creative professionals. First, the super creative class include "scientists and engineers, university professors, poets and novelists, artists, entertainers, actors, designers and architects, as well as the thought leadership of modern society: nonfiction writers, editors, cultural figures, think-tank researchers, analysts and other opinion-makers" (Florida 2002: p. 69). This category is then divided into a) **the creative bohemians**: all artistic professionals such as painters, street artists, performers, journalists and writers, music and film artists, etc. and b) **the creative core**: are innovators and holders of creative ideas that are immediately transferrable and

largely applicable. Second, the **creative professionals** those who "work in a wide range of knowledge-intensive industries such as high-tech sectors, financial services, the legal and healthcare professions, and business management". Both categories form together an economic class that "both underpins and informs its members' social, cultural and lifestyle choices" (: p. 68).

Florida claims that creative people provide cities with liveliness and diversity and therefore more productivity and a higher level of well-being. He argues that the main elements that make a city 'Creative' are his famous 3Ts- Talents, Tolerance and Technology. As such cities should commit '*to attract and retain top creative talents*' (Florida, 2003: p. 10) to attain their competitive position.

Though the concept of the creative class is highly criticised as it is loosely defined and it's not easily distinguishable from one city to another (Peck, 2005; Wilson and Keil, 2008, Markusen 2004, 2006, Ambrosino 2009), the ideas of Florida have received wide acceptance by city planners around the world for their clarity and simplicity, their straight forward logic.

It is increasingly accepted around the world that one of the fastest ways to grow the creative economy is to import the necessary talent and expertise from elsewhere. This is mostly obvious in the developing world and the nascent global cities, such as Singapore and Dubai (Kong 2012). In the same time, these cities are investing on their local human capital to create their locally-grown 'creative class'. Kong (2012) suggest that this logic is intrinsic to the global city logic as *"all global cities require cultural legitimacy from the international community of transnational professionals, supporting and boosting the creative class becomes inevitable strategy"* (: p. 290 cf. Chong 2005).

Nevertheless, the substantial body of academic work in economics that exists today on the creative city concept is founded on three bodies of literature: the classic economy of culture, the economy of creative clusters and the creative economy (Sagot-Duvauroux 2013). However, Pratt (2010) considers the concept of creative city "a field of policy rather than one particular policy as the ideas have been fragmented and recombined many times in different places". Hansen, Anderson, and Clark (2001: p. 852) consider the concept as the newest placemarketing tool to attract investors and visitors and to promote competitiveness among cities.

In such a policy trend, cities have focused on "the agglomeration of cultural assets to increase tourism or lure wary suburbanites downtown" Stern and Seifert (2010: p. 262). Cultural clusters play a focal role in the emergence of the creative city as they contribute to the economic and social life of cities and their neighbourhoods. It is evident that cultural and creative cluster are inscribed in wider city development objectives: city branding strategies; upgrading cultural infrastructure; promoting cultural diversity; regenerating brownfield lands to post-industrial uses such as residential apartments, arts centres, and business incubators (Mommaas 2009). Creative clusters in this sense is the framework that links creative industries to cities and policies tend to enhance the cultural infrastructure (the hard and the soft infrastructure) through focusing on profiting from the advantages of clusters. As Flew (2010) notes, the notion of creative clusters "lends itself well to strategies of culture-led urban regeneration that have been a feature of post-industrial cities" (: p. 87).

3. The Case Study: Between Misconception and Lack of Empirical Inquiry

As stated above, the concept of cultural and creative clusters was adopted by many city development policy makers in all four corners of the globe and particular academic interest is drawn to the topic in **the emergent cities of Asia** (Among which we can mention Lily Kong, Michael Keane and Justin O'Connor to name but a few). Hong Kong, Singapore, Seoul and many Chinese cities are only few examples. Yet, Dubai and the other emerging city-states of the Gulf (Doha and Abu Dhabi for example) constitute an exception due to a lack of academic literature on the subject in these cities. Using Google Scholar as a preliminary sensory exercise, searching the term "Dubai Creative Clusters" results in only 7 results²⁵, all referring to the Dubai Creative Cluster Authority in a diversified context but **none in the creative cluster / creative industry context** in the widest sense²⁶. On the other hand, searching for "Shanghai Creative Cluster" results in 11 academic works all of which are tackling the creative economy/cluster/city subjects including certain dedicated research books. Similarly, a scan of available literature on the cultural district or creative city reveals a severe lack of scientific knowledge in this emerging city. Despite this, reference to the city adopting the creative city

²⁵ As of May 2018

²⁶ Two results were discussing only the media cluster.

approach in its cultural and economic policy appears relatively frequently (e.g. Landry 2006²⁷, Kong 2012²⁸, Muold 2016²⁹, etc.) Many studies on creative city approach in Asian cities also provide reference to Dubai as a 'similar' case study without providing a concrete literature reference (one example is Bharne 2012³⁰).

Scanning the literature on Dubai cultural and creative industries results mostly in the context of tourism, urban planning (Elsheshtawy 2004, 2010, 2012, Brones and Mogaddam 2017³¹, Farah & Aoun 2014³²), museum and cultural heritage studies (Wakefield 2015³³, Exell and Rico 2013³⁴, Exell and Rico 2014³⁵), art education (Derdarian 2018³⁶), contemporary art (Kluijver 2013³⁷, Wakefield 2017³⁸), cultural geography (Smith 2010³⁹). Further evidence of the lack of literature on the cultural and creative clusters in Dubai can be observed when scanning the literature for the most important art district in the city 'Alserkal Avenue'; only a few works appear, most of them published recently: (e.g. Brones and Mogaddam 2017, Wakefield 2015, Derdarian 2018 and Kluijver 2013).

So far, none of the academic works has dealt with the dynamics of emergence or evolution of cultural and creative districts in Dubai, let alone touching on the notion of clusters in the

²⁷ Landry, C. (2006) *The art of city-making*. Earthscan

²⁸ Kong, L., (2012) *Ambitions of a Global City: Arts, Culture and Creative Economy in "Post-Crisis" Singapore.* International Journal of Cultural Policy, 18, no.3: 279-294

²⁹ Mould A. (2016) *Mediating the City: The Role of Planned Media Cities in the Geographies of Creative Industry Activity*. GaWC Research Bulletin 397. In S. Conventz, B. Derudder, A. Thierstein and F. Witlox (eds) (2014) *Hub Cities in the Knowledge Economy: Seaports, Airports, Brainports*. Farnham: Ashgate, pp. 163-180.

³⁰ Bharne V. (Ed.) (2012) The Emerging Asian City: Concomitant Urbanities & Urbanisms. Routledge.

³¹ Brones and Mogaddam (2017) *Translocal dynamics and the shaping of urban art districts*. In L. Vegnal (Ed.) *The Transnational Middle East: People, Places, Borders*. Routledge.

³² Aoun, O. & Farah, J. (2014). *La "Dubaïsation", une métropolisation du zéro politique*. In J. Dubois (Ed.). *Aménager les métropoles : la réponse des urbanistes*. La Tour d'Aigues : Editions de l'Aube.

³³ Wakefield, S. (2015). *Museum Development in the Gulf: Narrative and Architecture*. Architectural Design, 85(1), 20–27

³⁴ Exell K. and Rico T. (2013) 'There is no heritage in Qatar': Orientalism, colonialism and other problematic histories. World Archaeology, 45:4, 670-685.

³⁵ Exell K. and Rico T. (Ed.) (2014) *Cultural Heritage in the Arabian Peninsula: Debates, Discourses and Practices*. Routledge (2014)

³⁶ Derderian, E. (2018) *Arts Education: Resources and Options for the UAE and Ras Al Khaimah*. Al Qasimi Foundation Policy Paper Series, 2018. Policy Paper No. 22. Sheikh Sultan bin Saqr Al Qassimi Foundation for Policy Research.

³⁷ Kluijver R. (2013) *Introduction to the Gulf Art World.* Self-Published. The Gulf Art Guide. Available from: http://gulfartguide.com/essay/

³⁸ Wakefield S. (2017) *Contemporary art and migrant identity "construction" in UAE and Qatar.* Journal of Arabian Studies: Arabia, the Gulf, and the Red Sea. Volume 7, 2017 - Issue sup1: CIRS Special Issue. (99-111)

³⁹ Smith B. (2010) *Scared by, of, in, and for Dubai*. Social & Cultural Geography, 11:3, 263-283.

context of cultural and creative industries (apart from a couple of papers on the media cluster).

Such lack of knowledge is worsened by not only by an apparent low level of interest by academics so far, but also by what appears to be a misunderstanding of the complexity of the urban-economic-cultural scene in the city. An interesting entry to this point lies in how Landry (2006) saw Dubai as not able to be a creative city by comparing its 'tone' of public policy to that of Singapore. "In the Singapore way this vision of a culturally vibrant society 'whose people are well-informed, creative, sensitive and gracious' was to be achieved by 1999. Note here the tone, in contrast to Dubai: the word 'gracious' appears, whereas in Dubai 'decisive advantages ... will neutralize, marginalize and even punish rivals'" (: p. 351). Landry draws on negative aspects of Dubai cultural and political ambience where creativity will be circumscribed in a non-democratic place where "we have no idea what women could contribute to making the city state a better place" (: p. 395). He also draws comments on Dubai's limited tolerance, limited participation and exclusion (gated communities) as a justification of his pessimism (: p. 348). Landry answers the question he posited: 'Is Dubai Creative?' by stating: "Courageous, strategic, a place of visions, determined, motivated and focused are words one might use, but creative? That is doubtful." (: p. 341). Nevertheless, almost 10 years after publishing this book, Landry acknowledged that in light of the cultural development in Dubai his views of Dubai cultural and creative policies might need revision⁴⁰.

Landry is not alone in demeaning the potential of cultural evolution in Dubai, and the similar Gulf city-states. In a couple of his books, Elsheshtawy (2004⁴¹, 2011⁴²) refers to the epic novel of Abdel Rahman Munif "Cities of Salt" shedding a pessimist view on the mushroom emergence of these cities with no strong roots into history or culture. However, Elsheshtawy himself in the same works (and elsewhere such as in Elsheshtawy 2012⁴³) opposes this pessimism by stating that culture is being revived, borrowed and invented to create a rich and

- ⁴¹ Elsheshtawy Y. (2004) *Planning Middle Eastern Cities: An urban kaleidoscope in a globalizing world*. Routledge.
- ⁴² Elsheshtawy Y. (Ed.) (2011) *The Evolving Arab City: Tradition, Modernity and Urban Development*. Routledge.

⁴⁰ From a conversation between me and Charles Landry during the Forum d'Avignon Ruhr 2016 "Creativity: Raw Material, Resource, Future" held in Essen, Germany on 25th August 2016

⁴³ Elsheshtawy Y. (2012) *Myths, Monuments, and Museums: Museums in Arabia and the Myth of Cultural Enlightenment.* 'The Myth of Tradition', the Biennial Conference of the International Association for the Study of Traditional Environments, Portland, Oregon, USA, 4-7 October 2012

unique cultural scene, leading some to predict it will help these cities replace the classical capitals of the Arabic culture (Obeid 2012, Al Qassimi 2012). Other authors such as Kanna (2010⁴⁴) highlight that *tabula rasa* setting has positive pro-development advantages: "...unburdened by tradition, determinedly future-looking" (: p. 123, cf. Shehab 2009).

As such, the choice of Dubai as a case study to cultural and creative clusters is not a mere chance nor a coincidence, but the result of a combination of personal experience of the city and a lengthy assessment of the existing literature on the topic in this part of the world. Hence, this study fits within the growing body of literature on this topic and seeks answers to a set of alternative questions that complement existing knowledge and fill a persistent gap.

4. Research Questions and Hypotheses

As stated above, the first interest of this thesis is **theoretical** as the intention is to add to the scientific debate on a) the dynamics of industrial clusters b) the evolutionary / complexity approach to study industrial clusters and c) analysing the cultural and creative clusters using the developed theoretical framework. The recently emerging **evolutionary / complexity approach** to the dynamics of clusters is still **highly controversial** in the scientific circles (Martin and Sunley 2016, Boshma and Frenken 2018). On the other hand, applying this approach on the clustering of cultural and creative industries is **highly limited** (e.g. Cumonian 2011, He 2014, Berg and Hassink 2013, Berg 2016, Lazzeretti et al. 2015, Cooke 2012). Furthermore, there is not sufficient evidence on **the inter-scalar interactions** between the creative industries and the other activities, as a clustering factor. As such, this thesis is at first hand an enquiry into the theoretical debate.

On the empirical side, the thesis seeks to understand the complex dynamics that led to the rise of the significant concentration of cultural activities in the UAE. Understanding the trajectory that started from initial conditions in the early 1970s (dependence on oil wealth) to an economic/urban strategy that raises the flag of diversification and a raised interest in

⁴⁴ Kanna A. (2010) *Flexible Citizenship in Dubai: Neoliberal Subjectivity in the Emerging "City-Corporation"*. Cultural Anthropology, Vol. 25, Issue 1: p. 100–129. The American Anthropological Association

top-down cultural developments. How can path dependency explain the rise of Dubai as a city of culture, in its own way?

The application of the theoretical questions on an 'untrodden' terrain, the emerging city of Dubai, gives immediately rise to a series of questions: In a part of the world where there is hardly a cultural heritage (the hypothesis of a *tabula rasa* where the Path Dependency is relatively unorthodox to the western mind), **how can we build a strategy around cultural industries from scratch**?

In this 'untrodden' terrain, beyond **documenting the evolution** of the cultural and the creative industry (specifically art industry), this text serves as **exploratory path** on the ups and downs of cultural development in this area. Even more, from a theoretical point of view, the thesis seeks to **test the hypothesis** and to reflect on the conditions of strategic development around cultural industries in a territory where *a priori* its initial conditions didn't include a strong past (monuments, cultural sites, or cultural developments). Finally, it is worth looking at whether it is possible **to build a strategy around cultural industries** avoiding relying on the initial 'unhelpful' territorial attributions.

By working on Dubai using the evolutionary approach, we will identify a number of evolutionary factors, beyond the city scale, we shall witness that the evolutionary trajectory of each district is substantially different. This brings into action to integrate one of the most important elements of the evolutionary approach which is the organizational diversity⁴⁵. According to the way by which different elements/actors of the evolutionary path interact, (notably the policy makers, the individual gatekeepers, the territorial attributes, the interorganisation networks, etc.), we can study each of these districts. All these elements interact no doubt in the formation and the evolution of any of the districts, but it is important to highlight the weight of these elements along the trajectory or in separate instances of this trajectory. For example, individuals in one district were at the origin of a decisive action that triggered an evolutionary path diversion, or it might be the weight of governmental policies that helped shaping the evolution of the districts, or else it could be a set of territorial attributes that led to the emergence of one district rather than another. It is always attributed

⁴⁵ Such as those in the Third Italy, exhibit considerable diversity in their evolutionary trajectories (see Belussi and Sedita, 2009).

to mechanisms of path dependency that are combined into different trajectories. It is argued that even if the evolutionary factors are almost the same in a particular geography, the resulting structures are not necessarily the same.

As such we can hypothesize:

Hypothesis 1- The Temporal Continuum: The initial conditions 'clause' proposed by neoclassical agglomeration theorists (e.g. Krugman 1991) emphasises the characteristics of the territory at the emergence point in time as a decisive factor in the path creation, however it doesn't fully account for past events. We are not challenging the initial conditions principle but rather complement it to account for the intrinsic continuity of time where past events are considered rather than a mere T0 point state of the territory, such a point that might be chosen subjectively.

In this conceptualisation, building the current scene could also be started from scratch - the hypothesis of *tabula rasa* deserves to be discussed. In theoretical terms: the hypothesis of initial conditions (initial territory attributions) in path dependency can be challenged when initial conditions can indirectly (and probably reversely) lead the evolutionary trajectory: While we expect that weak cultural foundations might be a stagnant factor in the cultural evolution of a city, it is the same weak cultural foundation that pushed the ambition for an exceptional leading regional cultural positioning.

Hypothesis 2- The spatial continuum: The dynamics by which has emerged the present situation results from a regional combination between government-led top-down cultural strategies (embedded into economy and urban diversification strategies in the case of Dubai) and a complex bottom-up individual and inter-organisation interactions. In other words, the evolutionary trajectory of clusters benefits from nonstop inter-scalar interactions that involve a matrix of different levels of actors.

Specific emphasis is drawn into the **spatio-temporal variation** of such combination that depends on **small events**, the existence of **gatekeepers**, and **differential territorial attributes**. In looking at the geography of the cultural activities in the Dubai (particularly in what is related to art and design activities) we can define four 'districts' that can be labelled cultural districts. However, it is presumed that each of them has adapted to a differentiated trajectory with time due to evolutionary singularities over this trajectory.

5. Methodology

The research design of this study relies on a case study approach which relies on interviews with individuals from firms, institutions, and organisation in the field, incorporating and adding to examining the exiting literature (Yin, 2003)⁴⁶. As per John Gerring (2007), the case study is best defined as an intensive study of a single case (or a small set of cases, as in this thesis) with the aim of generalising results across a larger set of cases of the same general type. The case studies in this project are both intrinsic and instrumental. An intrinsic case study means that the case itself is of interest — a 'valued particular: — and the study aims to discover what is important using 'thick description' (Geertz 1973). An instrumental case study provides an insight into an issue or interrogates a generalisation - The case itself plays a secondary, supportive role to facilitate our understudying of something else and interpret the issues identified (Stake: 2003).

This thesis follows a qualitative approach. Beside in-depth- study of the literature on the emergence of the cultural clusters and their dynamics, the empirical evidence is based upon more than 50 interviews with experts either living in the city under study (Dubai), working in one of the four districts analysed in this thesis or have knowledge on the histriy of these districts. The creation of an art and cultural cluster is interpreted as a process inscribed in specific conditions of time and space in a regional context. Thus, a general overview of these regional conditions provides an indispensable introduction to applying the event-trigger theoretical framework introduced in the first part. The focus of this thesis is on the origins (but not on the later growth) of emerging art clusters.

The overall design of the research is **longitudinal** (as introduced by Pettigrew, 1979), from the beginning of the rise of the city-state of Dubai (and the region), and the establishment of the country (UAE), for it provides a transparent look at the formation and development of the cultural cluster over time. This study relies upon extensive, qualitative research of **the historical evolution of culture, cultural policies, urban policies and the development of cultural attractions**

⁴⁶ Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: SAGE Publications Inc.

but essentially in what is related to visual arts. The **data collection** began in 2013 and ended in 2018. **Retrospective data** collection (from early 1970's to date) was based on primary resources (mainly interviews) and secondary resources that include previous studies, reports from local associations and institutions, governmnetal industry reports, and press archives of local, national and international newspapers (from 2000 onwards). **Real-time data collection** was based on, first, **in-depth semi-structured interviews** with local clusters' actors and experts, representatives from the public sector and the private sector, and, second, participant observations of several events and gatherings hosted by Alserkal Avenue and Dubai Design District in addition to **secondary sources** (web-sites and archive, official press release, public reports).

To obtain more **robust evidence**, we checked for **triangulation** of different data sources in order (Jick, 1979). Focused initially on secondary data, we used interviews and the existing literation to ensure external validity. To this regard, archival data were collected from the field, mainly documents from public and private instituitons such as Alserkal Avenue, the Dubai Chamber of Commerce, UAE Art Society, Dubai Art, Tashkeel as well as documents and reports on the general history of cultural industry in Dubai, Abu Dhabi and UAE in general. Additionally, **electronic databases** and archives of some local and international industry-specific **newspapers and magazines** were used. This resulted in a database of almost 100 articles. These articles are analysed through **text-mining techniques** to test the historical development of culture in the city and the region and to discover events that helped form the clusters under study. As such a qualitative approach has been applied into the analysis of the collected data as this type of research inquiry is generally not well served by quantitative data in the existing cultural cluster literature (Chapain and Roberta, 2010; Hesmondhalgh and Pratt, 2005; Martin and Sunley, 2003).

Semi-structured Interviews

Over the period of the study, 2014-2018, a number of face-to-face, telephonic and online interviews have been made with different types of actors for the purpose of collecting data and information related to our study.

Selecting interviewees did not follow a methodological process by itself but rather was left to roll organically. The starting point was listing main interesting profiles in the art and culture

industries from private and public organisations and targeting to interview them. However, due to time constraints and to financial constraints I preferred to interview

Defining the case study elements

Telling the story of the growth of the city from three perspectives, one at a time, the general and political history of the region, the economic development of the city and the social and cultural evolution. Again, writing the historical discourse of the city would follow a longitudinal line and the main source of information would be the secondary resource: history books, scientific and press articles with input from interviews whenever required.

- 1- A historical context of the region: a brief introduction into the region, the political and economic history of the region and its main development milestones giving rise to the its current status and how these milestones affected the development of the case study in hand.
- 2- An Economic Context: the focus on the economic strategies the city has adopted and is adopting currently would provide the economic mesh the cultural industries are embedded in.
- 3- A Social / Cultural Context: the societal characteristics that form the cultural market in which cultural demand is formed.

For defining the elements of the Cultural districts:

- 1- The space elements: not only the geographical description of the place, its physical components but also its attributes in a three-dimensional perspective urban, economic and social. The scale dilemma: to respect the spatial continuum, we have to consider a multi-scalar perspective into the cluster.
- 2- The cluster actors: a review of actors would mean delicate scrutinising of cluster's industrial players, related industry players, institutional players, and key individuals affecting the evolutionary path of the cluster. Defining cluster actors is tricky as it depends on the definition of the cluster's boundaries, the cluster's scale, the definition of the related and unrelated industries and the research objectives (research question).
 - a. Cultural businesses: Art galleries, event organisers,

- b.Cultural organisations: Private and Public Museums, NGO's, art facilities, art education centres and universities
- c. Public institutions: government entities, legal environment
- d.Individuals: key people whose actions are decisive for the formation and the development of the cluster. In the cultural domain, we can identify art sponsors, collectors and artists, and also key public actors whose decisions make a difference for cultural, urban and economic policies.

Defining the historical context of the city and defining its cultural districts would allow us to define a certain point of time that our study would build upon as **the initial conditions** of the space, where a potential path appears.

A scrutiny routine, using methodological tools would allow us to define **events** that are either considered triggers to the development of the cluster, its institutional setup, its networks or to the general city / regional environment that is potentially affecting the cluster in the future.

Using the above-mentioned steps, relying on a number of secondary resources but mainly Art Guides of the city (such as ArtMap published by Art in the City - JAMJAR, and MyArtGuide) we are putting art galleries on a temporal map. According to the available resources we are able to track the movement of Dubai art businesses and events from year 2007 up till 2017.

6. Announcing the Research Plan

The organisation of this work is planned over two parts, the theoretical frame and the case study and a concluding chapter. The theoretical framework is divided into 5 chapters beginning with a general overview of existing literature on creative clusters beginning with the conceptual foundation of industrial clusters ending with current models of clusters and how different disciplines are employing the concept especially in Urban Planning emphasising the role of government. In the second chapter, we are trying to shed light on formulating a three-model theory to industrial clusters arriving at a simplified yet solid approach that can be considered a first step to our proposed theoretical framework. The third chapter discusses the industrial clusters with a complexity theory context and within the principles of evolutionary economy with geography (Evolutionary Economic Geography). While the resulting conclusion of Chapter 2 is formulated into a proposed approach to study industrial

clusters in general, Chapter 3 suggests a more profound assessment of the cultural and creative clusters applying the proposed framework of the previous two chapters specifically on creative and cultural clusters. Though the question on the role of government is particularly raised in this chapter, the focus remains on the dynamics of genesis of cultural and creative clusters. The theoretical part of this study is then concluded with the theoretical framework, the main hypotheses and the underlying questions.

General Introduction						
CH II Revisiting the Dynamics of Industrial Clusters						
Pure Agglomeration	Industrial Complex	Social Networks				
Territory-based dynamics	Network of Firms	Interpersonal Network				
Marshal's Triad	Porter's Diamond	Granovetter's Social Ties				
Geographical Proximity	Stretching the Network: Geographic and Organised					
	Proximity					
Key Questions						
The Role of Government						
Conflict as an Entry						
The Role of Chance						
Scale of Clusters						
CH III The Complexity-Evolutionary Touch						
Complexity & EEG in a nutshell	Clusters as CAS	Evolutionary Attributes				
Theoretical Framework						

The following chart illustrates our theoretical approach flow followed in this part:

CH IV - Rethinking Cultural and Creative Clusters in a Complexity / Evolutionary Context

The second part, The Case Study, starts with a chapter on the methodological approach, which outlines the scrutiny approach to the case study. The remaining three chapters detail the case study, first on the emergence of the city and its policies, second on the emergence of the art and cultural developments, and third on explaining the genesis of art and cultural districts in the city in an evolutionary approach.

The following diagram illustrates the field research design:

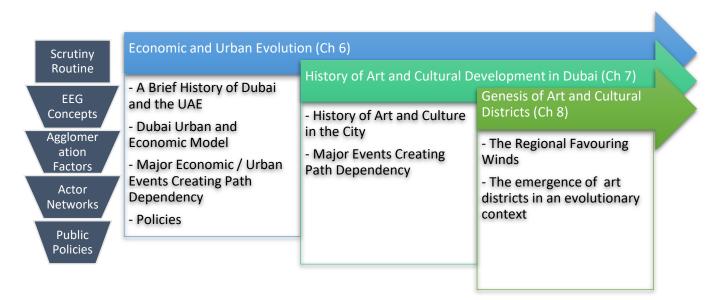


Figure 1 - Stage 1 – Scrutiny Inquiry using Primary and Secondary Resources

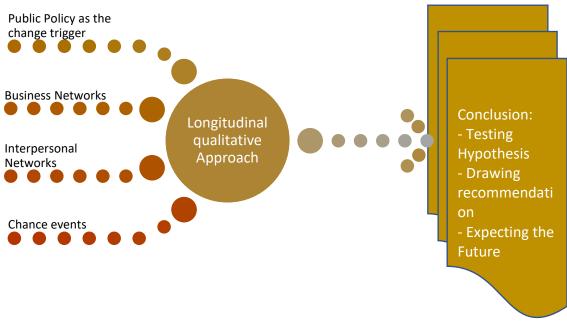


Figure 2 - Stage 2 – Rewriting the Evolution of Cultural Districts Ch 9 (Interviews as the main source)

PART ONE: THEORETICAL BACKGROUND AND

FORMULATION

CH I – REVISITING THE DYNAMICS OF INDUSTRIAL CLUSTERS: TOWARDS A BETTER UNDERSTANDING

Cluster n. A group of the same or similar elements gathered or occurring closely together; a bunch.
 (The American Heritage Dictionary of the English Language, third edition 1992 Houghton Mifflin Company)

As described in the introductory chapter, the idea of industrial agglomeration has gone through a journey of mutations from the Martiallian district, first introduced by Marshall (1920) to the Porterian cluster, first introduced by Porter (1998). The concept of industrial clusters proved to be popular as a policy tool to economic development around the globe in both policy initiatives and academic research. Yet, As Martin and Sunley (2003) pointed out, one should be cautious and circumspect when using this term whether in academic literature or within policy-making circles due to a number of weaknesses hampering it. Though proved to be the most influential in the newly emerged global interest in local industrial agglomeration and specialisation, for them the 'seductive' concept is opaque, fuzzy, lacking profundity and problematic. The so many definitions of the concept proposed so far, prove, to some point, how yet '**undefined'** the concept is. Steiner (1998) states that the concept of clusters, being undefined and influential in the same time, has '*the discreet charm of obscure objects of desire*' (: p. 1).

Though Porter proclaims the link between firm competitiveness and Marshallian-type localization economies on the one hand, and with local social networks and institutional arrangements on the other, *"Porter's cluster theory does not really tell us much about either"* (Asheim, Cooke and Martin 2009, p. 14)⁴⁷. Similarly, Porter work doesn't provide much about how geographic proximity enhances the competitive performance of companies, or about

⁴⁷ Asheim, B. Cooke P. and Martin R. (2006) *The rise of the cluster concept in regional analysis and policy: A critical assessment*. In B. Asheim, P. Cooke and R. Martin (Eds.) *Cluster and Regional Development: Critical reflections and explorations*. Routledge

how local knowledge spillovers occur. The concept remains "a curiously eclectic and synthetic approach, certainly highly suggestive and seductively pedagogic, but ultimately lacking in theoretical rigour" (ibid.). Nevertheless, even for the severest critics of his thoughts, they mostly admit that such lenience has helped the notion find tremendous echo among policy makers and business theorists.

Part of the confusion around the concept is the many notions in regional economy that have been assimilated to the cluster (or vice versa). Of these notions we can observe: 'industrial district', 'local production system', 'innovative milieu', 'regional system of innovation', 'new industrial space', 'scientific/technological park' and 'pôle de compétitivité' - or the 'French touch', etc. (Hamdouch 2010). Nevertheless, over the too many definitions proposed for the clustering phenomenon, two points are essentially the common start of these definitions: the synergy of local companies and the organisational network that is based on the circulation of knowledge. The cluster is thus assimilated to a space of agglomeration of economic units, to a space of inter-organisation relations and a space for social relations and social embeddedness in a socio-economic texture. This distinction is partly consistent with what **Gordon and McCann** (2000) proposed for analysing industrial clusters.

Since classification is an essential part of theory and analysis, as it lays in the core of the need to empirical and comparative sustenance, aligning with a cluster typology is essential to our theoretical inductive approach. Porter's wide application of cluster theory brought into analysis a combination of different perspectives - economic, social, and urban – leading some authors, such as Gordon and McCain (2000) to try to distinguish different models of clusters, or as Martin and Sunley (2003) hint: different "**theories" of clusters** (: p. 16).

The typology proposed by Gordon and McCann (2000) basically classify the dynamics of clustering processes into three models based on the relation between concentration forces and different forms of linkages:

a) Pure agglomeration: geographical approximation dynamics rising primarily from application of modern trade theory (e.g. Krugman 1991) that emphasises external economics of a specific industrial sector, the spatial distribution of resources and the resulting trading linkages. Locational behaviour of companies is linked to their internal returns to scale, localisation economies and urbanisation economies.

- b) Industrial Complex Model: geographical concentrations characterised primarily by a set of identifiable and stable inter-firm trading links, focusing primarily on firm's strategies to minimizing transaction costs, which in turn govern their locational behaviour.
- c) **The Social-network Model**: follows the (Granovetter, 1985, 1991, 1992) social model which is based on inter-personal links that are built on trust and institutionalised practices.

This theoretical framework was later reproduced and reshaped over many articles in different contexts (Gordon & McCann, 2005a; McCann, 2004; McCann & Sheppard, 2003; McCann & Shefer, 2004; McCann & Mudambi, 2004, 2005; Iammarino and McCann, 2006). It is by far the most acknowledged for explaining the basic forms of clustering (Bilien and Maier, 2008) and it is praised for "understanding the possible micro-foundations of industrial clusters and agglomerations" (McCann 2008: 30)⁴⁸.

For Gordon and McCain, 'Defining analytically which of these types is the dominant structural characteristic of a particular cluster (or set of clusters) is essential, in order to be able to discuss their performance empirically, and to determine what more general lessons may be drawn from that.' (2000: p. 515). However, as Martin and Sunley (2003) state, the proposed triple model framework 'fails to specify the particular circumstances, economic and spatial, under which one theoretical model should be more applicable than another'.

As such, in a research report (Chesnel et al., 2013 – under the direction of D. Sagot-Duvauroux) prepared by researchers from two research units (ESO and GRANEM) at the University of Angers (France) and submitted to the French Ministry of Culture, a similar approach to the typology of clusters has been proposed. It adopts this tripartite classification but with a pronounced theoretical twist that enhances the methodology and opens it for new empirical application (as seen in Molho, 2016; Morteau, 2016; and Chesnel 2015). Their threeentry framework proposed to explain the dynamics of clustering forces are:

⁴⁸ McCann P. (2008) *Agglomeration Economics*. In Karlsson C. (Ed.) *Handbook of Research on Cluster Theory*. Edward Elgar Publishing.

- Pure agglomeration model: is concerned with the mechanics of agglomeration of firms in a territory by suggesting opposing centrifugal and centripetal forces: what forces pull the economic activities to concentrate in space? The firm is here an abstract unit attracted by the characteristics of a given territory. This framework builds on the idea that a cluster is a single agglomeration space.
- 2) The industrial complex model: analyses inter-organisation relations within a cluster: to what extent do these relationships favour the efficiency of the cluster and the organizations that constitute it? This entry is similar to cluster analysis in industrial economics. The role that public authorities can play in the dynamics of this organization is accentuated: what role do the public authorities play in the regrouping of economic activities?
- The social network model: focuses on the inter-personal relationships within the cluster and the phenomena of social embeddedness: what roles do individual networks play in the collective dynamics? How are networks organized between individuals? This entry is based on the socio-economic current that studies these inter-personal relationships. (p: 2).

However, the provided discussion of these entries, supported with academic literature and policy report references, provided little to distinguish itself from the Gordon and McCann (G&M) approach. One important point is that their 'industrial complex' has parted from the second model Gordon and McCann (2000) have originally proposed. However, their industrial complex model overlooks a number of points without sufficient clarification. G&M's industrial complex is static, predictable, enjoys closed membership with less emphasis on government intervention required are ignored in Chesnel *et al.* (2013). On the other hand, they added valuable complementary elements to each of the three models based on a clear and a straight-forward logic. As such, a pronounced distinction between the two works is required.

The advantage of the topology provided by Chesnel et al. (2013) is that it is based on a different conception of territory or urban space for each of the three models. The first model relies on territory "resources" where the territory natural resources and its historical events are leading to centripetal and centrifugal forces resulting in an agglomeration effect. The second category is based on a territory that is constructed and modelled by strategies and coordination of actors (organizations) of which the public authorities can act to improve the

competitiveness of the territory. Finally, the third category relies on a socially constructed territory in which inter-individual relations play a focal role in bringing firms close in the space.

The following sections provide a simplified approach to Classical and neo-classical industrial location theories through the Gordon and McCann clustering three models. We will discuss in detail each model with further interpretations and applications introducing the basic concepts that we will eventually use to introduce the evolutionary approach as analytical tools. The application of this approach on cultural clusters will be introduced thereafter in a subsequent chapter.

1. Pure Agglomeration – Territory attributes as the source of agglomeration

External Economics

The economics of agglomeration and the ideas of industrial clustering can be traced back to the seminal works of Marshall (Principles of Economics 1890/1920) and Weber (Theory of the Location of Industries 1909/1929) where both acknowledged the existence of this phenomenon and its effects. Weber (1909) emphasized the inherent features of landscape in shaping spatial development patterns, such as unique natural resources, immobile production factors, transportation costs and proximity to customer markets. Marshall (1890)⁴⁹ proposed the first attempt to a formal classification to the dynamics leading to the phenomenon of firm concentration in spaces. His theory revolves around three points: **local pool of specialised labour; local provision of non-traded input; and the flow of knowledge and ideas** (Krugman, 1991)⁵⁰.

The advantage of **specialised local labour** means maximised matching opportunities between workers and firms and consequently more efficient human resources search costs. As such, geographically proximate companies can utilise a larger pool of specialised labour (labour market pooling) more efficiently than remote or isolated companies. Overman and Puga (2010)⁵¹ extended this point to include multiple sectors and multiple locations. Similarly,

⁴⁹ Marshall, A. (1890) *Principles of Economics*. London: Macmillan.

⁵⁰Krugman P. (1991) *Geography and Trade*. Cambridge, MA: MIT Press.

⁵¹ Overman H.G. and Puga D. (2010) *Labor Pooling as a Source of Agglomeration: An Empirical Investigation*. In Glaeser E. L. (Ed.) *Agglomeration Economics*. (p. 133 - 150). University of Chicago Press.

concentrated location of firms would utilise shared non-traded input in form of **capital infrastructure**, **specialised intermediate input and common facilities and services** at a reduced cost (benefitting of course from economies of scale) while dispersed companies have to incur higher costs for such inputs necessary for their vital functionality. Also, **the flow of knowledge between market agents** is easier and more straight forward and thus more advantageous when these agents are geographically close to each other (Gordon and McCann, 2000) or as Krugman (1991b)⁵² puts it: *"informational spillovers can give clustered firms a better production function than isolated producers"*. As such, Marshal's reasoning of **agglomeration dynamics is attributed to factors external to firm own characteristics** and thus are grouped under the heading of **'external economics'** of clustering.

Hoover (1948)⁵³ introduced another point of view to explain external economics leading firms to cluster. His view on agglomeration is based on defining external economics according to the industrial sector of the clustered companies using internal economics of scale as the only observable variable (Gordon and McCann 2000). As such, the production cost efficiencies are realised by serving a larger market which is, in this case, achieved when more companies in the same sector are located next to each other, or if the firm size is large enough to cover the large market. With the idea of **economics of scale** in mind, two factors are adding to the advantages of clustering: external economics developed due to an extensive pool of local factor employment in the specific sector (called *localisation economics*); and external economics emanating from local infrastructure, facilities and other input unrelated to the company's sector (called *urbanisation economics*).

Ohlin (1935)⁵⁴ proposed a tweak to the agglomeration dynamics of industries, compared to those proposed by Marshall, using a resource-based narrative. Resource-based approach emphasises the **resource endowments**: broadly defined as inputs (natural resources) and infrastructure, and the average level of utilization of these resources at a given location. Infrastructure includes most notably transportation infrastructure, but also supporting

⁵² Krugman P. (1991b) *Increasing Returns and Economic Geography*. Journal of Political Economy. Vol. 99, no. 3. (483-499). The University of Chicago.

⁵³ Hoover, E. M. (1948) *The Location of Economic Activity*. New York: McGraw-Hill.

⁵⁴ Ohlin B. (1935) Interregional and International Trade. Harvard University Press.

facilities: existing production facilities, R&D organisations, specific technologies, and the intangible intra-regional and inter-regional links in addition to the local policies that influence both the 'soft and hard infrastructure' in the form of resources critical for direct and indirect knowledge flows and knowledge spillovers and immobile production factors (Johansson and Forslund, 2008⁵⁵). Such resource-based approach clearly attributes clustering dynamics to territory characteristics on which Ohlin (1935) proposes the example of food production districts in California: Climatic conditions that favours fruit and vegetable production, good transportation networks, the existence of consumption markets at feasible distances and the provision of enhanced transportation facilities tailored for these products. He doesn't forget to mention a 'deglomeration' factor in this example, which is the high rents and high transportation costs (: p. 208).

In this perspective, little is mentioned on the same-industry or related-industry linkages as a source of clustering, but the focus is rather on the characteristics of the location in terms of resources and infrastructure. As such, the pure agglomeration dynamics become territory-based rather than inter-firm relational-based. Hence, we tend to relabel it as the **territorial dynamics or the territory attributes approach**.

History Matters: Territory Initial Conditions and Path Dependency

In addition to the 'classical' Marshall three entries to agglomeration, Krugman (1991) adds the role of 'history and accident' to the agglomeration dynamics. Such an idea implies that the process of industrial clustering can emerge in unexpected places due to individual decisions and actions taken by key economic agents and / or due to random factors (Chesnel et al. 2013). As such, economic locational behaviour of industries is 'path dependent'. Such an idea has long confused economists but recently is becoming a dominant trend especially in literature in Evolutionary Economic Geography (EEG)⁵⁶. Krugman contrasts what he calls the TTFE style of economic thinking: economy is determined by its 'exogenous given' Tastes, Technology, and Factor Endowments (hence the shortcut TTFE), with the QWERTY style (David 1985) (after the arbitrary layout of typewriter keyboard) indicating the importance of

⁵⁵ Johansson B. and Forslund U. (2008) *The analysis of location, colocation and urbanization economies*. In Karlsson C. (Ed.) *Handbook of Research on Cluster Theory*. Edward Elgar.

 $^{^{\}rm 56}$ We will elaborate the different concepts of EEG in the next chapter.

randomly generated historical accidents. He confirms in a sort of a conclusion to his (1991) book that 'the idea that an economy's form is largely shaped by historical contingency is not a metaphysical hypothesis; it is simply the obvious truth' (: p. 91).

In this sense, the emergence of cluster can be understood in the light of its **initial territorial conditions shaped by historical incidents**. The fact that **initial conditions** of the place or the market can have significant impact on the trajectory followed by the firm was the core idea of path dependency (Dosi 1982)⁵⁷. Favourable initial conditions, including territorial 'endowments' such as natural resources⁵⁸ available, can be a force of attraction for firms leading to their agglomeration. These resources (and infrastructure) can therefore be at the origin of a process of clustering; as such a temporal dimension is added to the territory attributes in the process of understanding the emergence of an industrial cluster.

This temporal dimension and the idea of path dependency doesn't only explain the emergence of a cluster but also its eventual evolution. As per Krugman (1991), any coreperiphery pattern tends to be **locked-in** due to *"the circular relation in which the location of demand determines the location of production, and vice versa"* (: p. 26). He highlights the role of sudden changes that might be catastrophic even if the core-periphery pattern is stable for long periods of time.

Furthermore, change can be influenced by expectations that may be self-fulfilling rather than objective conditions. The circular process that leads to **regional differentiation can also lead to self-fulfilling** prophecies. This idea relies on the history and the initial conditions as the source of change (and the sudden change) rather than the slow cumulative linear logic of economic change which can be described as ad-hoc and natural (: p. 115). As such, **non-linear change** is brought into the agglomeration dynamics. The role of expectations here is to reinforce the role of history. Rather than restricting oneself to '**deterministic paths'**, high expectations leads to **stochastic paths** of labour migration for example which leads to changing concentration patterns.

⁵⁷ Dosi, G. (1982) Technological paradigms and technological trajectories: a suggested interpretation of the determinants and directions of technical change, Res. Pol. 11 (3) (1982) 147–162.

⁵⁸ The existence of external pecuniary economies is able to endogenously explain firms' agglomeration independently on the exogenous natural and physical characteristics of the location (Krugman and Venables, 1990; Ottaviano and Puga, 1998; Rosenthal and Strange, 2004; Ottaviano and Thisse, 2001, 2004).

Scale of agglomeration

Different mechanisms of external economics may vary by type, sector, area and the scale on which the firm is operating. Jacobs (1960) suggested that a complex combination of agglomeration economics is happening on different scales in any city-region. Glaeser et al. (1992) explain that external economics are achieved in these different mechanisms simultaneously, often indirectly and cumulatively but not individually.

Furthermore, assuming that decisions by businesses about where to locate are **interdependent**, where the desirability of any one site as a business location depends on where all of the other businesses are located, Krugman (1996)⁵⁹ differentiates between two types of agglomeration forces. '**Centrifugal'** forces promote dispersion of businesses while '**Centripetal'** forces tend to make businesses cluster together. In other words, centripetal forces tend to keep a manufacturing core in existence, and centrifugal force tend to pull it apart. '*If only centrifugal forces existed'*, *he notes*, '*businesses would spread themselves evenly across the landscape. If there were only centripetal forces, they would rush together into one big clump'* (: p. 26). Thus, the agglomeration of business **on a metropolitan level** is happening in a polycentric, plum-pudding pattern when 1) **centrifugal and centripetal forces are in a state of tension** 2) the range of centrifugal forces is shorter than that of centripetal forces (: p. 26).

On a regional scale, or nationwide scale, Krugman's model of 'Core-periphery' or 'Centerperiphery' agglomeration (1991a) shows that industries choose their location by arbitrating between increasing yields (favouring concentration) and transportation costs (favouring dispersion). Krugman shows that economic activities cluster in space when transportation costs 'of intermediate inputs compared to transportation costs of final goods' are low enough (: p. 50). These costs are therefore the strategic variable of the model; 'core-periphery pattern depends negatively on transportation costs'. Furthermore, Krugman notes that the model depends 'positively on the share of 'foot-loose" demand, and positively on the importance of economies of scale' (: p. 52). Consequently, the market size plays a focal role in locational behaviours of companies. Sites that have easy access to a large market benefit

⁵⁹ Krugman P. (1996) *The Self-Organising Economy*. Blackwell Publishers.

from larger economies of scale that favours the agglomeration process of firms. And that also on the other hand puts large markets where producers concentrate in a circular process. Krugman notes also that *'there is no particular reason to think that national boundaries define a relevant region'* (: p. 71, *emphasis added*).

Government Role – Upgrading the Space

As per Krugman, the government play a focal role in shaping the location of production and the movement of products. For example, the regulations and policies that discriminate the production in favour of national products may affect the location decisions of international companies. In addition, government-related production companies that are relocated (closer to natural resources for example) might affect the locational behaviour of other companies without a direct production relation between them. Krugman (1999)⁶⁰ states that 'regional inequality may also be strongly influenced by government policy— including trade policy'. Central to urban externalities (as explained by Hoover 1984) including facilitated access to territory's common services and amenities is within government policy scope. Furthermore, Krugman notes that "the direct demand and employment created by the government apparatus and the more subtle advantages of access to government officials" is an obvious evidence to the role of political centralization in primacy. As such 'access to officials' is a keyword when assessing the role of government for population and business concentration as per Krugman - (Krugman cited the example of executives in Tokyo willing to pay high cost of keeping their headquarters in central Tokyo to keep close to officials). However, 'access to officials' lies within the inter-individual relationships and will be further discussed under the social network model further below.

The increasing popularity of clusters around the world has seen non-democratic governments applying the concepts widely as a means of development growth policies. China remains one of the best examples of governmental intervention to adopt industrial district (pure agglomeration) policies. Even in rural areas turning industrial in the mid 90's, high levels of product specialisation and geographical concentration of companies were following a specific

⁶⁰ Krugman P. (1999) *The Role of Geography in Development*. International Regional Science Review 1999; 22; 142

pattern dictated by the policy: 'one product per village and one sector per region' (Shi and Ganne 2009⁶¹: p. 261).

Table 1 Agglomeration	Economics	Explained
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Marshall (1925)	Hoover (1937, 1948)	Examples: (Gordon & McCann 2000)	Inter-actor Linkage in a Complexity / Evolutionary Perspective	
- Specialised Labour		 Efficient search and job-matching 	- Combination of chance, law of large	
- Non-traded input	 Localisation economics (sectorial) Urbanisation Economics (trans- sectorial) 	 Efficiency and availability of local services (e.g. capital finance, property services) 	 chance, law of large numbers and natural selection. Inter-firm and other relations are non-static and non-identifiable System with no inter-agent loyalty (Openness of the system to outer members) 	
- Flow of knowledge	- Internal returns of scale (a-spatial)	 Inter-firm labour migration, informal individual contacts, restructuring local companies 	Learning environment	

Source: Developed from Gordon & McCann 2000

⁶¹ Shi L. and Ganne B. (2009) *Understanding the Zhejiang industrial clusters: Questions and re-evaluations*. Asian Industrial Clusters, Global Competitiveness and New Policy Initiatives, World Scientific, p.239-266, 2009.

Conclusion

The first typological entry to the agglomeration dynamics is relying on the classical Marshallian theory that originates from the effect of external economics on the locational behaviours of microeconomic entities. In addition, the New Economic Geography adds notions such as the role of history, initial conditions and path dependency as additional agglomeration factors. In all, pure agglomeration forces assume that there is locational interdependency among firms but without emphasis on inter-organisational cooperation. As such, inter-organisational linkages are hereby assumed purely spatial without considering any strategic cooperation or competitive behaviour between firms. In other words, the model considers the exogenous locational factors in the form of external economics and territory-specific attributes such as territory resources and territory initial conditions. Porter's (1990) competitive advantage theory and the subsequent inter-organisational clustering model give rise to another clustering logic that takes into account the relations between firms and other spatially related organisations into the dynamics of clusters.

2. The 'New' Industrial Complex - Inter-organisation linkages as the source of clustering

The classic Industrial Complex

The clustering dynamics of the second type as per Gordon & McCann (2000) is stemming from companies' endeavour to stabilising trading links among them as a basis for their growth thus affecting their locational behaviour. Originally coined by Isard et al. (1957) within **Isard's input-output model of local economy**, the industrial complex is originated from the idea that trading links are manifested through spatial transactions of products and services and the related logistics costs incurred. Minimizing these costs may require the relocation of a company closer to other related industries which are 'within the input-output production and consumption hierarchy (2000: p. 519)' in a clustering behaviour. This model (lammarino and

McCann 2006) is typically discussed by classical (Weber 1909) and neo-classical (Moses 1958) location-production models, representing a fusion of locational analysis with input-output analysis (Isard and Kuenne 1953). However, as Gordon and McCann note, where their viability depends on co-location, **concerted planning** of locational decisions is necessary. Such viability might represent **long term contracting** arrangement between these firms. State intervention in this model of linkages is seen as of less importance.

This outcome may emerge incrementally, but where there are strategic interactions among the locational decisions of a few firms, and/or where viability depends on co-location, concerted planning of these decisions by the firms concerned (and long-term production/contracting arrangements) is necessary, with or without state encouragement.

Gordon and McCann consider the industrial complex model as **static and predictable while inter-agent linkages are pre-planned and identifiable** given that profits emanating from such linkages are internal to the co-located companies only. System membership in this sense is closed, while new entries are governed by the same long-term strategies linking co-located firms. Examples of the G&M industrial complex include pharmaceutical complexes, petrochemical complexes and Auto industry complexes.

Thus, it differs from the first approach as it is not territory resource-based approach, but it is mainly related **to maximising profits by minimising distance costs**. While we can assume the 'Pure Agglomeration' model considers the territory-linked economic attributes as the main triggers to the clustering phenomenon, the industrial complex model only considers endogenous cost-profit factors related to spatial transactions. Iammarino and McCann (2006) claim that while the pure agglomeration model only exists within individual cities, the industrial complex model may extend across a sub-national regional level.

The costs generated by various interactions between different points in the value chain encourage firms to co-locate. Several costs have been studied: the basic transport costs (as per the Weber model), telecommunication costs (Salomon and Schofer, 1990), and logistics costs (McCann, 1998).

Tracing this model to an earlier work of McCann (1998⁶²), the logistic cost model was developed as a response to the general Marshall's original description of the sources of agglomeration and the Weber model of transport costs that ignores other spatial transaction costs. His logistic-cost approach is linked to a then popular phenomenon Western firms adopted from the Japanese purchasing and production philosophy known as Just-In-Time (J-I-T). Basically, JIT concept considers that the quality of the output product produced by a firm can be maximised by minimizing inventory at any point within the production chain, including inter-firm linkages. As such, maximising the number of inter- and intra-firm transactions per time period would be an essential policy (: p. 1). Commencing from this idea, McCann used the logistics cost approach as a source of agglomeration between firms (: p. 6). Though interfirm relations are more explicitly pronounced in this model compared to the pure agglomeration model, the industrial complex model neglects a number of attributes in a way that limits its scope. For example, *the role of government is seemingly unimportant, and the role of external organisations is not evoked*.

Clusters as per this model are effective only if spatial proximity enhances inter-firm transactions along particular production chains via the formalization of just-in-time production and supply chain management practices (Yeung et al. 2006). Thus, this type features more industrial concentration and specialization of firm activities than the model of pure agglomeration. Also, untraded interdependencies are out of scope in this model. Nevertheless, a significant shortcoming of this type emanates from the excessive focus on inter-firm transactional dynamics within clusters **without considering possible connections and linkages** between cluster firms with other firms and organisations (government entities for example) **outside the industrial complex**. This omission could be explained by the fact that most empirical studies of industrial complexes measure inter-firm relations quantitatively in input–output models (Yeung et al. 2006). The Gordon and McCann industrial complex are described as isolated, static where endogenous forces are their growth vehicle and thus its application is limited. As such, Porter's competitive advantage theory (1990) might fit to address such shortages within a framework of a **'New' industrial complex** that is

⁶² McCann P. (1998) The Economics of Industrial Location: A Logistics-Costs Approach. Heidelberg. Springer.

still built on the inter-firm input-output relations but also addresses at the same time other cross-sector and cross-cluster relations within the framework of the competitivity.

The Porterian Cluster

Porter's competitive advantage⁶³ is a clear distinction from the classic and the neo-classic economics: "National prosperity is created, not inherited. It does not grow out of a country's natural endowments, its labour pool, its interest rates, or its currency's value, as classical economics insists" (1990: p. 1). Instead, competitive advantage is attained through specialisation, differentiation, and innovation in a highly localised process.

Porter (1990, 1998) points out that clusters are one of the main sources of competitiveness, notably due to the presence of numerous networks between firms. He develops the hypothesis that co-location favours both competition and cooperation behaviour. Firms can cooperate during upstream phases of R&D projects and at the same time compete on downstream phases (commercialization). Thus, this combination of **competitive and cooperative relationships between co-located firms** allows the emergence of emulation effects that stimulate co-operation and competition and therefore a greater competitiveness of firms located in a cluster. Essential inputs, such as skilled labour and scientific knowledge, are critical to the innovation capacity of the cluster.

The concept of the competitive advantages is represented by Porter's Diamond comprising four determinants: **factor conditions, demand conditions, related and supporting industries and strategy, and the context for firm strategy and rivalry**. The last two determinants correspond to the forms of cooperation and competition between firms.

⁶³ As explained by Pettigrew, Thomas, and Whittington (2002), the concept of competitive advantage goes back to Joe Bain's 1959 Industrial Organization and Igor Ansoff's 1965 Corporate Strategy. Porter (1980) and (1985) then developed the concept into its canonical form. (Cf. Beinhocker, E. D. (2006) *Origin of Wealth: Evolution, Complexity and the Radical Remaking of Economics*. Harvard Business School Press.: p. 481)

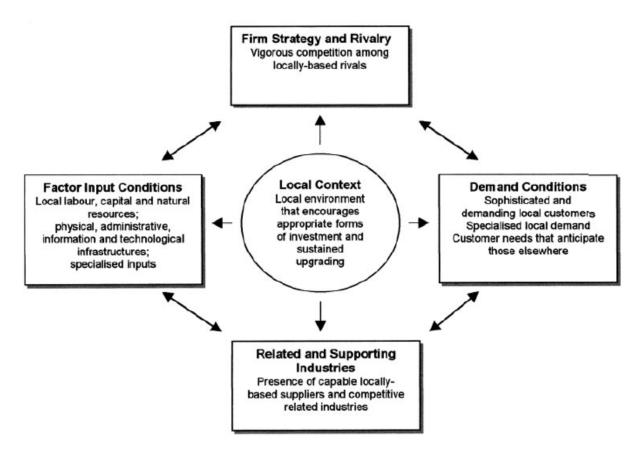


Figure 3 Porter's Diamond (Martin and Sunley 2003 based on Porter 1990)

The Cluster as a space for inter-organisation relations

Competitive industries are not scattered helter-skelter throughout the economy but are usually linked together through vertical (buyer-seller) or horizontal (common customers, technology, channels) relationships. Nor are clusters usually scattered physically; they tend to be concentrated geographically. (Porter 1990: p. 68)

In this model, not only companies connected through the input-output production chain, organisations such as public institutions, universities and research centres are well considered part of the cluster (Bresnahan et al., 2001; Feldman et al., 2005). Porter insists that these organisations, 'whether they be schools, universities, standard setting agencies, consumer societies, professional societies, or the judicial system' (Porter 1998: p. 38x), all have a role in creating the conditions for higher productivity⁶⁴.

⁶⁴ On the role that public research and universities may play in local economic development see, among others, Etzkowitz and Leydesdorff (2000), Boucher et al. (2003), Arundel and Geuna (2004).

As such, the cluster is a form of organization of economic activity showing particular interests for firms. To improve their performances and be competitive, some firms choose the strategy of cooperating in order to amplify the agglomeration externalities, to benefit from emulation effects as well as the resources that the territory offers. These benefits are reinforced by territorial policies that seek to attract businesses by communicating on their strengths. Thus, the territory becomes a collectively constructed process that can be analysed in terms of the various forms of proximity between agents (Chesnel et al. 2013).

Porter suggests that **spatial proximity** of establishments creates a favourable economic environment of competitiveness and innovations, an environment which strengthens productivity and economic growth through the transfers of technology and information.

The Cluster as a Network of Actors

Porter's cluster is characterised by "a form of network that occurs within a geographic location" (1998: p. 2269). Cluster firms are collocated in space and reciprocally engaged in a network of relations - planned and unplanned, formal and informal (Gertler 2008; Simmie, 2006; Swann, 2006). The resulting "functionally defined industrial system" (Malmberg and Power, 2006, p. 56) is characterised by effective interaction between cluster actors enhancing institutional proximity (i.e., shared norms and values that promote the bonding process) between these actors (Wolfe and Gertler 2006).

Indeed, the strong networking ties over which knowledge and information is exchanged is the key argument that differentiates clusters from the simple spatial gathering of firms. Such a network is what characterises the cluster as a 'system' and asserts a localised collective identity since the knowledge exchange results in a trend of collective learning (Gertler 2008).

As such, the network aspect of the cluster theory provides another view of externalities that are not only emanating from spatial clustering but from strong linkages among actors. Policy circles usually adopt the networking view of the cluster. OCED for example defines clusters as: "networks of production of strongly interdependent firms (including specialised suppliers), knowledge producing agents (universities, research institutes, engineering companies), bridging institutions (brokers, consultants) and customers, linked to each other in a valueadding production chain" (OECD, 1999: p. 5). In this sense the inter-firm relations considered here are apparently only formal. Hamdouch (2010) argues that the Porterian clusters is a spatial industrial organisation that is based on (a) The links between actors in terms of geographical proximity, of complementarities and of trustworthy relationships building; and (b) The existence of both competitive and co-operative interactions amongst the co-localized firms (: p. 5). From these two dimensions, Porter indicates, that colocalised firms enjoy greater competitivity. Indeed, the causal relationship between cluster membership and competitiveness is an added value of cluster theory (Martin and Sunley, 2003, p8). As such the cluster theory is not only advances the industrial agglomeration theory but also bridging network theory and competition theory (Porter, 1998).

In the second entry to our 'triumvirate' typology, we explicitly adopt the notion of the cluster as a set of relationships represented in a network of a variety of actors - the idea embedded in Porter's view of the cluster. However, the discussion below is heavily influenced by Porter's competitive advantage theory rather than limiting it to narrowly cluster-related ideas. Though we acknowledge the vast scope of Porter's stream of ideas, we deem his competitive diamond is the central of his 'clustering' theoretical framework. However, though the discussion below starts from elements evoked in Porter's theories, it extends the cluster notion beyond the Porterian cluster but remains within the inter-organisational scope of agglomeration dynamics.

Beyond the Porterian Cluster

Conflict and competition as an Entry

Clusters as per Porter's diamond are **self-reinforcing systems**. Cluster's inter-organisation relationships range between cooperation and rivalry. He uses the word 'intense' repeatedly seemingly to emphasise the **uneven distribution** of relations. While Krugman talks about regional economic inequality leading to locational patterns, Porter talks about the inequality at the level of interrelationships and the degree to which actors are exploiting them leading to clustering phenomenon.

This 'unevenness' is a source of rivalry between actors and it inherently comprises some sort of conflict. Intense rivalry is healthy, and is undoubtedly necessary, for the evolution of any industry. While there is intense rivalry among local companies, constant pressure is created for more innovation- a synonym for industrial advancement. Conflict is one important form of interchange between companies and can have different origins. While conflict might originate from usual day-to-day market exchange, it might also **lead to other forms of rivalry**. Firms, as a matter of fact, in a certain space have different and **sometimes conflicting economic interests**. Suppliers and buyers, for example, face conflicts over prices and the resulting division of profits. As per Porter (1990), this difference in economic interests may **bias or restrict information flow** among them because of a desire to keep information proprietary. *"The fact that fluid interchange may benefit all the local firms in competing with foreign rivals does not wholly mitigate their concerns about relative bargaining position"* (p.152). Conflict is seen also an element within the dynamics of **spin-offs** which are often healthy for the national industry as it creates more rivalry. It also unlocks new product and process **innovations** *"that were stifled by inertia or conflicts with existing strategies"* (p, 123).

Competitiveness is used extensively by Porter as a justification for linkage over various scales. Competition is observable on a firm level, as well as on a district, a region, a city, a nation and an industry level; hence, Porter (1998) talks about the 'competitiveness of locations'. Three strategies have been proposed to describe such competitiveness: '*differentiation (of product or service), cost leadership, and focus strategy (focusing activities on the needs of specific segments of the market)*' (Matrin and Sunley 2003: p. 14). Porter's 'competitive diamond' fits in the centre of such strategies.

Competitiveness in this sense can be translated into productivity growth strategies including non-tradable activities (Krugman 1997) and incentive schemes policy makers propose to enhance the positioning of local economies on a regional, national and cross-national level as the later work of Porter suggests (e.g. Competitiveness index). Under these strategies lies place promoting through **branding** and image development as a key approach to competitiveness (Kavaratzis, 2004; Turok 2009; Kong 2010; Vicari Haddock, 2010). As such, throughout the account of Porter's evolved work on clusters, he slowly embraces the '**network'** side of the definition at the expense of geographical constraints of the definition.

The role of Chance

Within the theoretical framework that Porter has introduced to represent the competitive advantage of firms, regions and nations, chance events play a focal role. Such a role is emanating from the **discontinuity** that chance events create leading to **a shift in competitive**

position. Established competitors might lose their advantages 'by force of chance' and this opens **a window of opportunity** for new firms to rise and achieve competitive advantage.

To explain the dynamism of the chance, Porter explains that altering conditions in the "diamond" is one face of the role played by chance events. Examples on chance events can be "*major shifts in input costs or exchange rates*", which can create *"selective factor disadvantages that catalyse periods of significant innovation*" (: p. 125, *emphasis added*). In this perspective, political conflicts, wars, new innovations and new technologies, financial shocks, global shift in demand among many other examples, can lead to an important shift in the diamond conditions whether positively or negatively. Thus, chance events can **be a stimulus or a deterrent to the flow of material, products and knowledge in any value chain**. One useful example for the different effects of chance on nations would be coming from the consequences of World War II where Germany, Japan and Italy have quickly emerged as new world industrial powers despite being on the losing side in the war. (Porter 1990: p. 125). Porter highlights that the faster a company (or a nation) can detect the change, the more it can adapt to face it.

History Matters

As per Porter (1998c)⁶⁵, 'A cluster's roots can often be traced to parts of the diamond that are present in a location due to historical circumstances'. Over a number of his works, Porter has evoked the idea of the accumulation and concentration of knowledge and learning. Also, he acknowledges the idea of Path Dependency, as a subsequent to the discussion of the role of chance events, as it affects the diamond conditions (1990: p, 857).

As part of this stream of ideas, an important current has emerged in the study of the stages of development and evolution of clusters. By applying the product cycle theory, some researchers have sought to describe the evolution of clusters. They thus identify stages of emergence, development, maturity and decline. These steps are established through the evolution of the number of companies or employees, but also by the evolution of the nature of the links between firms (For a review of the evolution and the key ideas and arguments of

⁶⁵ Porter M.E. (1998c) *Clusters and the New Economics of Competition*. Harvard Business Review November-December 1998 Issue. https://hbr.org/1998/11/clusters-and-the-new-economics-of-competition

the Cluster Life Cycle approach, see: Trippl et al. 2015⁶⁶). The cycle nature of clusters has also appeared in Porter's works:

Once a cluster begins to form, a self-reinforcing cycle promotes its growth, especially when local institutions are supportive and local competition is vigorous. As the cluster expands, so does its influence with government and with public and private institutions. (1998c: 84)

Schumpeter (1934: p. 66) identified five types of innovation: new products, new methods of production, new sources of supply, the exploitation of new markets and new ways to organise business. Of which Porter (1990) emphasises the first two types, what is usually referred to as "technological innovation". As such, firms create competitive advantage 'by perceiving or discovering new and better ways to compete in an industry and bringing them to market' (1990: p. 45). However, Porter's view to the role of innovation in the evolution of the cluster is seen as an element of the competitive advantage of the cluster **without** paying much attention to the **evolutionary characteristics** (Baptista 1998⁶⁷, Sölvell 2008⁶⁸).

The Role of Governments – Upgrading the network

Porter's notion of the cluster has been embraced widely by public entities around the world, partly due to the emphasis Porter puts on the role of the government in modern international competition. He considers the government as one of two additional factors affecting the diamond (the second being the chance). And since "*a nation's competitive advantage depends on the ability of its industry to innovate and upgrade*" (2000: p. 73), the government should enhance and upgrade the cluster. The ways the government affects cluster upgrading is by enhancing the four factors of the competitive advantage as discussed in the following figure from Porter (1998b)⁶⁹:

⁶⁶ Trippl M. Grillitsch M. Isaksen A. and Sinozic T. (2015) *Perspectives on Cluster Evolution: Critical Review and Future Research Issues*. European Planning Studies. Volume 23, 2015 - Issue 10. (2028-2044).

⁶⁷ Baptista, R. (1998) *Clusters, innovation and growth: a survey of the literature.* In P. Swann, M. Prevezer and D. Stout (Eds.) *The dynamics of industrial clusters: international comparisons in computing and biotechnology.* Oxford University Press

 ⁶⁸ Sölvell, Ö. (2008). *Clusters, Balancing Evolutionary and Constructive Forces*. Ivory Tower Publishers, Stockholm.
 ⁶⁹ Porter M. E. (1998) *Clusters and Competition: New Agendas for Companies, Governments, and Institutions*. Harvard Business School Working Paper, No. 98-080, March 1998.

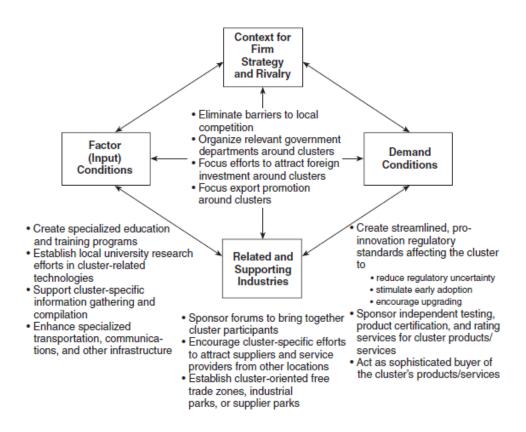


Figure 4 - The Full Version of Porter's Diamond (1998b)

As such, cluster policies have become an important strategic topic for regional and industrial policy in many countries and regions, not only in the western world but also in developing countries. On an important remark, Porter also notices that national and international competition, either positively or negatively, affects the formation and the emergence of the cluster: *"Government policy also influences firm strategy, structure, and rivalry, through such devices as capital market regulations, tax policy, and antitrust laws"* (1990: p.128).

Scale of Clusters

Originally designed to be applied at the national level, the diamond model has been widely used for describing processes on the regional and local scales (Asheim et al., 2006). Though Porter states that the scale of a cluster relates to the distance over which information, transactions, incentives and other interactions occur (Porter 2000), they still have no essential self-defining boundaries, whether in terms of inter-sectoral or inter-firm linkages, information networks, or geographical reach (Martin and Sunley 2003). Porter (1998c: p. 79) defines these boundaries with no spatial reference at all: 'A cluster's boundaries are defined by the linkages and complementarities across industries and institutions that are most important to competition.' This extends the concept outside a limited region and takes into account the effect of global markets. Porter also highlights the interactions between clusters: '*Cluster* development is often particularly vibrant at the intersection of clusters, where insights, skills, and technologies from various fields merge, sparking innovation and new businesses' (Porter, 1998c). As such there is no such thing as a standard cluster (Morgan, 2004: p. 17). Clusters can occur across national, state, and metropolitan economies.

Martin and Sunley (2003), raise several reasonable questions about the chaos that the cluster theory finds itself in:

The obvious problem raised by these cluster definitions⁷⁰ is the lack of clear boundaries, both industrial and geographical. At what level of industrial aggregation should a cluster be defined, and what range of related or associated industries and activities should be included? How strong do the linkages between firms have to be? How economically specialized does a local concentration of firms have to be to constitute a cluster? ... In addition, at what spatial scale, and over what geographical range, do clustering processes (inter-firm linkages, knowledge spillovers, rivalry, business and social networks, and so on) operate? What spatial density of such firms and their interactions defines a cluster? The difficulty is not just that the boundaries of clusters, as Porter admits, are 'continuously evolving' (: p 10).

The question of boundaries and scale is thus centric to the problematic task of defining clusters. Nevertheless, the seemingly intentional flexibility of boundaries, as put by Porter, might be intended to accurately reflect the wide range of linkages in a wide spectrum of specialised economic activities. As such it anticipates the inclusion of different linkage scales not only across industries but also across spatial levels. As a matter of fact, a pure geographically closed multi-firm specialised production system is theoretically non-existent - the linkage to *ex-situ* government entities and international value chains being a simple underdetermination or refute to the existence of such system. Even though Porter (1998: p. 202) indicated that 'those with weak and non-existent linkages can safely be left out', which might push some to exclude many linkages as the degree of strength or weakness is not

⁷⁰ Refer to the previous chapter for a literature review of cluster definitions and typologies

adequately definable, a linkage, such as with local authorities, might still prove vital to the emergence and the evolution of a cluster even if such linkage is assumed 'weak'. Thus, a linkage is weak if it is not vital to the functionality of the production-consumption system the cluster is built upon.

Since stretching the notion of clustering over a variety of spatial scales weakens its empirical and analytical significance (as argued by Martin and Sunley 2003), complexity theory (discussed below) might provide us with an analytical tool that places the flexibility of boundaries and the multi-scalar nature as a central salience of the notion.

For us, defining the cluster is actually emanating from such flexibility and elasticity that Porter himself has given to the notion in terms of scale and borders by applying it to many cases (Martin and Sunley described it as 'extreme'). Though Martin and Sunley (2003) have highlighted many valid arguments around the ambiguities of Porter's cluster, they give the impression that all Porter's work (stretched over 20 years) is considered as an integrated body of one theory while Porter himself notes its incompleteness and the evolving nature of the concept.

Inter-scalability as an inherent attribute of clusters rather than an extra-cluster property

Releasing the notion from its *strict* geographical constraint that assumes tying a cluster to a specific spatial scale or a highly circumscribed area, our definition of a cluster comprises the city / region level concentration of strongly linked firms and industries that policy makers acknowledge as an influential component of the city / region brand and image, its competitive advantage and its industrial specialisation. Since this definition is relying on strong and multifold inter-firm linkages, a cluster can play an inter-scalar role and can cross spatial jurisdiction boundaries of policy makers or local governments over its life-cycle.

The proximity approach – Stretching the Porterian Cluster

For Porter, geographical proximity plays an important role, but unlike what we have seen in the pure agglomeration model, this proximity is built upon the interactions between collocated actors. Originally, the concept of proximity has been associated with physical space and measurable distance-transport cost (Rallet, 2002). However, the 'French School of Proximity' (Torre & Gilly, 2000; Torre & Rallet, 2005; Boschma, 2005) doesn't consider the notion of proximity as only a purely geographical phenomenon but also under a number of inter-relational forms. While proximity could be spatial – the distance weighed by the temporal or monetary cost of crossing (Torre, 2006) it also might be institutional, organisational, social, cognitive, cultural, etc. according to the mode of interaction between actors. Torre and Rallet (2005)⁷¹ classified the non-spatial modes of proximity under the term of 'organised' proximity or 'relational' proximity.⁷²

"while geographical proximity is defined as spatial distance between actors, both in an absolute and relative meaning, organised proximity is associated with the closeness of actors in organisational terms" (Boschma, 2005, p63).

Relational proximity can be defined as 'the ability of an organization for its members to interact. The organization facilitates the interactions within it, in all cases, a priori easier than with units outside the organization' (Rallet and Torre, 2004: p. 37). Initially mobilized to explain coordination between organisations and cities, proximity analysis later took into account the role of individuals (Grossetti, 2004, Bouba-Olga, 2006, Bouba-Olga and Grossetti 2008, Zimmermann, 2008, Boschma, 2005). The role of individuals will be discussed later in the social network model of clustering.

⁷¹ Torre A. and Rallet A. (2005) *Proximity and localization*. Regional Studies 39, 47-59.

⁷² For more see: Dubois A. Copus A. and Hedstrom M. (2012) *Local Embeddedness and Global Links in Rural Areas: Euclidean and Relational Space in Business Networks*. In C. Hedberg and R. Miguel de Carmo (Eds.) *Translocal Ruralism: Mobility and Connectivity in European Rural Spaces*. Springer

Conclusion

According to several authors (Malmberg and Maskell, 2002; Asheim et al., 2006), cluster theory extends agglomeration theory, as the emergence of clusters cannot be explained solely by classic transaction cost reduction arguments. We fully acknowledge the point that Gordon and McCann raise around the introduction of industrial complexes as a separate model of clusters - having taken into account inter-firm production connections as a centrifugal agglomeration force (compared to pure transaction cost in the first model). However, we also acknowledge its weaknesses and limitations as well. Porter's diamond of inter-connected economic entities (including institutional organisations and cluster's exterior connections) introduce a viable alternative. While Porter's concept of interorganisation connectivity (and the inherent competition) as the source of spatial clustering considers only inter-organisation geographical proximity, introducing 'organised' proximity as a complementary concept adds value and coherence to this model of clusters. Nonetheless, as also adopted by Gordon and McCann, interpersonal proximity as a source of clustering is considered for a separate third entry of this typology triad; namely the Social Network Model.

3. Social Networks – Inter-individual relationships as source of concentration

The two first entries to the typology of clustering dynamics consider the spatial relations of economic entities (the pure agglomeration model), and the inter-organisational relations (the industrial complex). However, both models shed less light on the non-economic interactions among actors leading to economic cost/profit decisions. Gordon and McCann (2000) proposed a social network model of a cluster relying on ideas from social sciences, specifically the work of Granovetter (1985). This model is based on the relationships of mutual trust between the **key decision-makers of the different organizations**, which they believe must be at least as important as the hierarchical decision-making relationships in individual organizations. While these relationships of trust can take a variety of forms (lobbying,

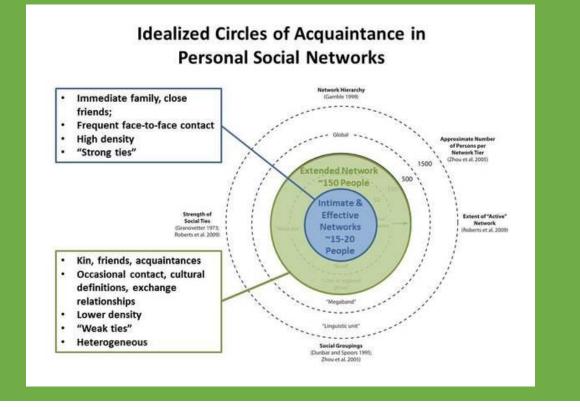
arrangements and informal alliances), they share a common history, common experience of decision makers, key decision makers.

InfoBox 1 defines the typology of inter-personal relations and their social scale.

Typology and scale of interpersonal relations

Social relationships play a crucial role in acquiring tacit information and in convincing resource holders to join the fledgling venture, whether as employees or investors. Because the social ties that facilitate both of these antecedents rarely extend beyond the regions in which these relevant resources and knowledge reside, entrepreneurs within a given industry most frequently arise in close proximity to industry incumbents.

To tackle the social scale as an attribute of social networks, a topological categorization of interpersonal relations is essential. The entry of such categorization is borrowed from the idea of *length-scale* in physics where **the order of the network** is defined by the *social* distance over which the *tie* is constructed. Starting from anthropological literature on the social environment of a human being, *social scales* would ascend from the human persona (ego) upwards based on the relations to other individuals where many social relationships are defined, formed, and/or maintained by symbolic, culturally-defined behaviours (e.g., kinship and exchange). The basic representation of scales of social relations would utilise **nested structures** with increasing sizes where the ego is in the central circle followed by the intimate circle (first degree family relationships) where ties are inherently strong, followed by weaker tie circles up to reach the whole society and beyond. Graphically, an "ideal" personal social network can be represented as a series of concentric circles of acquaintances with ego at the centre.



InfoBox 1 - Topology and Scale of Inter-Personal Relations (White 2012)

Nevertheless, Gordon and McCann (2000), do not attempt to define very precisely the nature or types of these interpersonal relations and their role in the clustering phenomenon. We add other notions from academic literature to enhance the typology they propose, specifically the proximity theory.

"birds of a feather, flock together" ~ An English proverb.

From literature in social science, typology of ties studied in social network analysis divides dyadic relations into four basic types—similarities, social relations, interactions, and flows. While much of social network research can be seen as '*working out how these different kinds of ties affect each other*' (Borgatti et al. 2009, p. 893), economic geography is interested in how these relations are affecting the distribution of economic actors in space.

Table 2- Topology of Interpersonal Ties (Borgatti et al. 2009) – Emphasis and graphs added.

Similarities	5		Social Relations			Interactions	Flows	
Location	Membership	Attribute	Kinship	Other roles	Affective	Cognitive	e.g.,	e.g.,
e.g.,	e.g.,	e.g.,	e.g.,	e.g.,	e.g.,	e.g.,	Sex with	Information
Same	Same	Same	Mother	Friend of	Likes	Knows	Talked to	Beliefs
spatial	clubs	gender	of	Boss of	Hates	Knows	Advice to	Personnel
and	Same	Same	Sibling of	Student of	etc.	about	Helped	Resources
temporal	events	attitude		Competitor		Sees as	Harmed	etc.
space /	etc.	etc.		of		happy	etc.	
						etc.		

The main question is thus from an economic geography point of view is how social relations are helping to develop spatial relations and, by extensions, how inter-personal networks transcends spatial scales (i.e. district, city, region, national and supra-national). The answer to this question can be found later in studying the structure of social network over space and in the **proximity approach** where an interpersonal network is defined not only in a geographical distance proximity, but also via the cognitive, social, organizational, institutional proximity.

But first we will be looking into the basic concepts of the social network as per **Granovetter** theories.

Structural Embeddedness

In contrast with the classical economics in which the human individuals are considered as atomic, autonomous, value maximizing actors focused exclusively on economic gains, the sociological approach instead, considers that those actors are also concerned with their social standing and social assets. Hungarian scholar Karl Polanyi proposed the idea of social **embeddedness** suggesting that economic actions and social relationships are deeply intertwined and "*…social relations are embedded in the economic system*" (Polanyi, 1944 : p. 57). This idea can be traced to the research on the role of organizations in society (e.g. Gouldner 1954, Selznick 1957, Stinchcombe 1965). However, later research in the context of sociological and economic approaches (Myrdal, 1957; Granovetter, 1983; Swedberg, 1993), considered economic activity as a by-product of social relations and interactions between different actors. Geographers have theorized and used the concepts of Granovetter (1973; 1985) from a distinct spatial point of view, to explain **the economic theories of transaction costs and agglomeration economies** (Hess 2004).

Granovetter's idea refutes the structural-functional view of human actor in classic and neoclassic economic literature in which the human actor is either '**under-socialised**' – and atomised actor, or '**over-socialised**' - an agency-free actor (Sorenson 2013)⁷³. In Granovetter's words:

Classical and neoclassical economics operates, in contrast, with an atomized, undersocialized conception of human action, continuing in the utilitarian tradition. ... In classical and neoclassical economics, therefore, the fact that actors may have social relations with one another has been treated, if at all, as a frictional drag that impedes competitive markets. (Granovetter 1985, pp. 483-484)

As such the difference is highlighted between a *rational actor* whose choices are made within a set of context-independent decision *rules*, and *social actor* whose actions are driven by a context-defined set of *values*.

⁷³ Sorenson O. (2013) *Social Networks and Industrial Geography*. Journal of Evolutionary Economics. Springer Verlag

The notion of network is essential in the idea of embeddedness (Granovetter 1992a: p. 491)⁷⁴. Granovetter also established the connection between the concept of embeddedness to a theory of institutions. He argued that that institutions are **"congealed networks"** (1992b, 7) and that economic institutions are characterized by *"the mobilization of resources for collective action"* (Granovetter 1992b, 6)⁷⁵. An important distinction needs also to be drawn, according to Granovetter, between an actor's immediate and distant connections— what Granovetter refers to as **"relational embeddedness**" and **"structural embeddedness**", respectively (Granovetter 1990: pp. 98–100; 1992a: p. 33). As such, relational embeddedness refers to the nature of *dyadic (pairwise)* relations, whether they are strong ties or weak ties, affecting directly individual's economic action. On the other hand, structural embeddedness refers to the effect of more distant ties and the overall impact of all dyadic relations in the network. Therefore, two levels of complementary and indispensable analysis are there.

Network Structure: Range, Closure, Structural Holes

Internal and external networks of a **geographic agglomeration** have different structural characteristics and therefore different functions and contributions in information transmission and knowledge flow (He et al. 2013). Because external actors are more likely to be from different geographic places and operate in different social and institutional contexts, it is less likely to find **overlapping**, **multi-level and cohesive** relationships in the network of external linkages as in that of internal linkages.

This corresponds to the 'closure' (Coleman, 1988) and 'range' (Reagans and McEvily, 2003) arguments in the social network literature. While the former refers to dense networks in which actors are tied to multiple actors who are connected to one another, the latter refers to the extent to which network connections span institutional, organisational, or social boundaries. The effect of the network on binary (dyadic in sociological terms) relations, or the structural embeddedness, can be understood through the concepts of Closure (Coleman 1988) and the Structural Hole (Burt 1992). The first is often associated with strong ties, while the other is concerned mainly with weak or non-existent ties (He et al. 2013).

⁷⁴ Granovetter, M. (1992a) *Problems of explanation in economic sociology*. In N. Nohria and R. G. Eccles (Eds.) *Networks and Organizations: Structure, Form, and Action*. Boston: Harvard Business School Press.

⁷⁵ Granovetter, M. (1992b) *Economic Institutions as Social Constructions: A Framework for Analysis*. Acta Sociologica. Volume: 35 Issue: 1, (3-11). Harvard University Press.

The somewhat **paradoxical importance of weak ties** is evoked in an earlier seminal paper by Granovetter (1973). Basically, exchange of information over strong ties is usually done through minimal codes in a familiarity setting with simplistic constrains. Over weak ties, however, more explicit and elaborated codes are needed for an information to be fully communicated. Thus, the scope for creativity and innovation is more likely to be the outcome of exchange over weak ties.

Both concepts (Closure and Structural Holes) are elaborated by (Burt 1992) through the notion of a **social capital⁷⁶ metaphor** which is grounding its definition on the inter-individual exchange and build-up of information depending on the structure of their connections: *"the people who do better are somehow better connected"* (: p. 8, 45)⁷⁷. The following diagram summarises Burt's ideas:

⁷⁶ The OECD definition of social capital 'includes such structural and psychological elements as the networks of personal relationships and sense of mutual understanding that enable people to live and work together effectively. Social capital is associated with greater trust, co-operation, reciprocal engagement and social cohesion. Furthermore, social capital can enhance the rapid diffusion of knowledge between individuals, communities as well as within and between firms' (OECD/ONS, 2002; OECD/Government of Canada, 2003). ⁷⁷ See also: Burt R. S. (2002) The Social Capital of Structural Holes. In M. F. Guillen, R. Collins, P. England and M. Meyer (Eds.) The New Economic Sociology: Developments in an Emerging Field.

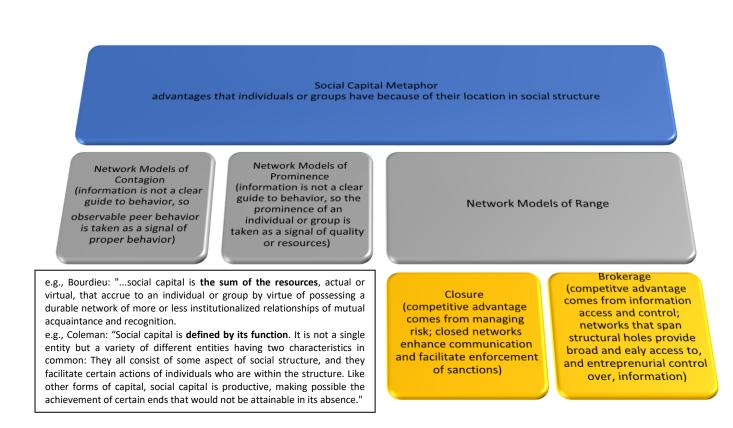


Figure 5 Social Capital, in Metaphor and Network Structure (Burt 2000, p. 347)

As per Coleman (1988, 1990), actors are better off in networks with '**closure'**, simply defined as the dense network in which actors are tied to multiple actors, who are connected to one another.

'An important form of social capital is the potential for information inherent in social relations A social scientist who is interested in being up-to-date on research in related fields can make use of everyday interactions with colleagues to do so, but only in a university in which most colleagues keep up-to-date' (1988: p. 104).

Coleman states that the closure of a network affects the access to information and speeds up information transmission and it develops trust, norms and culture, which govern actions in the network. **Reputation** is an accumulative outcome of an evolving and profound interpersonal relation and damaging it becomes highly costly socially and economically with time. Offenders and malfeasants are quickly excluded from the community as bad news spreads quickly within a connected network and this makes cheating *'literally unthinkable'*

(Granovetter 1992). In addition, the closure and the consequent network-specific norms and culture might lock members within the network and impede dealing with outside members.

Building on Granovetter idea of weak ties (1973) where weak ties are essential to the information flow between otherwise disconnected groups, Burt (1992, 1997, 2000) argues that a structural hole exists wherever there is a gap between the otherwise disconnected groups of actors. The difference with the closure model lies in the way the information is circulated in the network. While information circulates redundantly in the 'closure' network - given that all actors are connected to one another, the circulation of information in the other type is non-redundant because groups of actors are disconnected except through actors within the structural hole. These actors (who are connecting *groups* of interconnected actors have access to information from different ends and thus enjoy competitive advantage over other actors. Structural hole actors have the opportunity to benefit from their position as brokers. Opportunism is an obstacle in the structural hole model from a governance point of view.

However, actors spanning the structural hole play a crucial role for diffusing innovation and they are likely to be the **Gatekeepers** in the **evolutionary trajectory** of the network itself. Rychen & Zimmermann (2008)⁷⁸ define gatekeepers (the term mediator could be used) as individuals or organizations that bridge the gap between different communities. Spatial **interscalability of a network**, where connections **transcend spatial boundary** of the local network, is seen developing also through the intermediate brokerage actors. (more on these notions can be found from literature of the proximity school – to be discussed later in this chapter).

Interpersonal Networks and Industrial Clusters: from Marshall to Porter

Some networks emerge out of interactions while others are formed by the purposeful activities of human actors – managers, network entrepreneurs, brokers, stakeholders. Human actors in business networks make multiple strategic decisions and choices that frame and shape their interactions with partners. Individual actors' attributes and strategic decisions

⁷⁸ Rychen, F., & Zimmermann, J.-B. (2008). *Clusters in the Global Knowledge-based Economy: Knowledge Gatekeepers and Temporary Proximity*. Regional Studies, 42(6), 767–776.

amalgamate in what is called a relational context or relational dynamics that affects directly or indirectly all members of the network (Todeva 2006).

The notion of space is consistently present in the social science literature since any action is embedded in a place and it might be affected by and/or is affecting its location. As per Abbott (1997)⁷⁹ "one cannot understand social life without understanding the arrangements of particular social actors in particular social times and places... Social facts are located" (: p. 1152). Applying the spatial attribute to the 'hypothetical' a-spatial social network model results in identifying the underlying logics of social relations in **a given space** (Pecqueur and Zimmermann 2004: p. 55-56)⁸⁰.

Nevertheless, geographic distribution of industry has received limited attention from sociologists. The other way around, the idea has seen growing interest in literature from economists, economic geographers, and planners. As a first-hand result, it is evident that social networks play an important role in determining this distribution (Sorenson 2003). Business and entrepreneurship literature (as per Sorenson 2003) has extended the classical Marshal's triad of economic externalities (1890) by accentuating the role of **managers** in accurately recognising 'the benefits of certain locations and therefore locate there (or that strong selection pressures produce an equilibrium geographic dispersion from random entry)' (: p. 514). Academics benefited of an extended division of labour (Romer, 1990), labour pooling (Diamond and Simon, 1990; Rotemberg and Saloner, 1990) and informational spillovers (Arrow, 1962). Krugman (as seen above) acknowledged the role of individuals, however, only within the organisational inter-firm network where the firm is the atomic actor.

⁷⁹ Abbott A. (1997) *Of time and space: the contemporary relevance of the Chicago School.* Social Forces. 1997; 75:1149–1182.

⁸⁰ Pecqueur B. and Zimmermann J-B. (2004) *Economie de proximités*. Hermès – Lavoisier.

InfoBox 2 - From Neoclassic economic theory to Social Networks (Huault 1998)

From Neoclassic economic theory to Social Networks

The following table, produced by Isabelle Huault (1998), based on the work of Swedberg (1994: p. 30), gives us a better understanding of the methodological breakthrough adopted by Granovetter (1985) with respect to neoclassical theory. Using a different methodology (sociology, history, anthropology in particular) and a multi-methodology (qualitative and quantitative), he breaks with the practices of the neoclassical school, based on predictions based on abstract concepts. This new posture allows him to analyse **the role of history** in the creation of inter-individual relationships.

	Neoclassic theory	Work of Granovetter
The concept of actor	Isolated atomic actors (individuals, households and companies). sub- socialization.	Social actor (group and institutions) in interaction with other actors. Avoid the pitfalls of over-and under-socialization.
The sphere of action	Any situation where a choice and rare resources appear, essentially the market (economy independent of the rest of society).	The economic system as an integral part of society. Focus on the institutional framework, the social structure of the economy: the main concept of embeddedness (1985).
Types of economic actions	Only rational behaviour, with emphasis on choices and maximization procedures (formal rationality).	Rational actions but also all other categories of economic actions as well as the reasons for non-economic actions.
The result of economic action	Convergence towards equilibrium (equilibrium harmony).	Conflicts of interest and tensions : concrete interactions between real actors. Results of perceptions and social representations of actors.
The concept of time	discrete and stationary time coincides with the action that is analysed (concept of stationary and adaptive time). Instantaneous results of the action. Comparative Statics.	Concrete and variable time, exceeds the analysed action, socio-historical time . Taking into account the history of the organizations , the genesis of the institutions. Central concept of economic dynamics, focus on changes and developments .
The basic scientific method	Predictions based on abstract concepts (abstract predictions). Analytical and closed modelling, normative and formal statements.	Descriptions and explanations based on empirically-founded concepts, on the precise characterization of social networks. Plural methodology (qualitative by interview and clinical studies, quantitative by questionnaire). Incorporate the contingency into the theoretical structure.
Intellectual Tradition	Smith, Ricardo, Samuelson	Weber, Durkheim, Schumpeter, Veblen, Polanyi

 Table 3 Isabelle Huault, « Embeddedness et théorie de l'entreprise autour des travaux de Mark Granovetter », Annales

 des Mines, juin 1998: p. 73-86.

Porter, on the other hand, acknowledged the 'social structure of clusters' in the dynamics of clustering:

"Social glue binds clusters together, contributing to the realization of this potential... Relationships, networks, and a sense of common interest undergird these circumstances. The social structure of clusters thus takes a central importance (Porter 2000: p. 264)."

Since it is now established that economic decisions of actors can be explained by extraeconomic reasons, the case of localization choices can be explained by multiple interindividual relations. Gordon and McCann (2000), identify three characteristics of the interpersonal trust-based relations in a social network setting of clusters. First, they highlight the propensity of firms to engage in *'risky co-operative and joint-ventures without fear of opportunism'* (: p. 520, *emphasis added*). This confidence can be explained by a stake in **reputation** (Coleman, 1988). Second, relationships are flexible. A committed relationship can be achieved **without significant cost**, which is different from contractual relationships. Third, this model is reflected in the existence of organizations with the aim of achieving **collective goals**, such as lobbying, or territorial marketing. The implementation of these collective actions is not simply ensured by monetary rewards and monitoring the compliance with commitments (Molho 2016).

Olson (1965/1971)⁸¹ shows that the importance of **density and size** of social relation network is based on an accumulation of **trust** over time, the possibility of social control, the existence of an authority or a sense of common interest more or less transcendent, and finally, the perception that this community can be profitable. In addition, this model highlights local links to national and international networks (Amin & Thrift, 1992). Through informal relationships established locally, individuals can bridge the grid with networks at different scales. Based on case studies, this cluster model focuses on network structuring factors.

Linkages of actors within a cluster can be grouped into either internal or external. Internal interactions between actors are very intensive and frequent compared to the interaction with external actors. Hence a cluster could be conceived as a '*dense network of internal actors within the critical mass, linked through relatively sparse external linkages to other clusters*

⁸¹ Olson M. (1965/1971) *The Logic of Collective Action: Public Goods and the Theory of Groups*. Harvard University Press

or organizations and therefore embedded in the global production networks or global value chains' (He et al 2006, emphasis added).

Though Granovetter's arguments on embeddedness have found its way to numerous domains, some critics have pointed out that Granovetter works ignores many aspects of economic action, such as the macroeconomic level, culture, and politics (Smelser and Swedberg 2005)⁸². To address this shortage, Zukin and DiMaggio suggest that, one should not suggest notions such as "political," "cultural," and "cognitive embeddedness". In this regard, **The French School of Proximity** added new dimensions for the social network as crafted by Granovetter by highlighting not only the spatial linkages between economic actors but also the **non-spatial relations**. (to be elaborated in the next section).

Beyond Granovetter

Proximity Theory – Dynamics of Ego-network in the Economic Space

Duranton (2008)⁸³ considers that one of the major challenges for spatial economics is the development of a **theory of proximity** that explains 'why direct interactions between economic agents matter and how'. He also adds that '*Non-market interactions will no doubt loom large in any theory of proximity*' (: p. 751).⁸⁴

Indeed, spatial and non-spatial proximity is unavoidable in the economic locational decisions of actors. Beside the geographical proximity, Boschma (2005) proposed four forms of proximity (namely: cognitive, social, organizational, institutional proximity – collectively called the organised proximity), while studying their impact on interactive learning and innovation. He conjures that 'geographical proximity per se is neither a necessary nor a sufficient condition for learning to take place. Nevertheless, it facilitates interactive learning, most likely by strengthening the other dimensions of proximity' (: p. 61).

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⁸² Smelser N.J. and Swedberg R. 2005 Introduction. In N.J. Smelser and R. Swedberg (Eds.) The Handbook of Economic Sociology, Second Edition. Princeton University Press.

⁸³ Duranton, G., 2008. *Spatial Economics.* In S. N. Durlauf and L. E. Blume (Eds.) *The New Palgrave Dictionary of Economics*, Second Edition. Palgrave.

⁸⁴ Duranton is explicitly criticising the neoclassic economic model of trade (new economic geography) highlighting transportation cost as the main dilemma.

While geographical proximity is defined by the distance between actors, whether in absolute or relative distance, the other forms of proximity is associated with closeness and propinquity in organisational terms.

- Cognitive proximity refers to the existence of similarities in knowledge and skills between actors that promote mutual learning and the ability to communicate effectively (Boschma and Lambooy 1999, Nooteboom 2000). As such, people sharing the same knowledge base and expertise may learn from each other.
- Social proximity refers to the concept of social embeddedness (Polanyi, 1944, Granovetter, 1985) and corresponds to all socially embedded relationships in relational networks.
- Organizational proximity refers to the different organizational modalities existing between actors. Their ability to organize collectively to coordinate their transactions makes it possible to account for the level of organizational proximity.
- Institutional proximity is at a macroeconomic level and refers, on the one hand, to the existence of an institutional framework consisting of institutional "rules of the game", laws and regulations to which the actors subscribe.

By identifying the existing proximities between individuals, it becomes possible to grasp the role of the cognitive, cultural, social, institutional and organizational dimensions in case of cooperation. With this distinct methodological approach, we can understand the territorial dynamics through the articulation of geographical and organized proximities. These local and non-local relationships echo the existence of strong ties and weak ties (Granovetter, 1973) in corporate networks.

Gatekeepers (the network brokers or mediators)

Relying solely on the spatial clustering of firms within clusters is not enough to create relationships between individuals within these clusters. Thus, Rychen and Zimmerman (2006) emphasized the role played by gatekeepers or "knowledge gatekeepers" who connect individuals who otherwise do not know each other. As discussed above, this lack of relationship is described as a "structural hole" by Burt (2004). He defines it in the following way: "A structural hole is a non-redundant relation between two contacts" (Burt, 1992: 18).

Contacts are redundant if they know each other directly, or indirectly if they know the same people.

According to Rychen and Zimmerman (2008)⁸⁵, the more actors tend to rely on a maximum number of gatekeepers the more the cluster becomes strategically efficient thanks to the numerous subsequent relationships that are established by individuals. Out of these dense relationships emerge projects and innovations that will allow the cluster to sustain itself. Nevertheless, some authors condemn the practices of "knowledge passers" which can also contribute to lock-in effects. As per Talbot (2010), "*these territory-bound agents are able to filter the knowledge according to their interests and more generally to control the knowledge that enters or exits a cluster*" (: p. 129). Even though these gatekeepers are an integral part of the ecosystem they help to animate, the actors of the territory must be able to emancipate themselves from any control to keep the free will of their initiatives (Chesnel et al. 2013). Making the territory attractive to creative individuals, political decision-makers requires to bet, but not only, on these gatekeepers, sponsors of the development of inter-individual ties in a complex and constantly changing territorial ecosystem.

Conflict as an entry

"... unlike rivalries with foreign competitors, which tend to be analytical and distant, local rivalries often go beyond pure economic or business competition and become intensely **personal**. Domestic rivals engage in active feuds; they compete not only for market share but also for people, for technical excellence, and perhaps most important, for "bragging rights." (Porter 1990: p. 85)

In this context, we are considering the interpersonal conflicts which are placed over, affecting and in the same time emanating from the inter-personal connections (**Ego-network** as per the proximity theorists) within the **local** inter-organisation network. As such, this is to be distinguished from the intra-firm interpersonal conflicts (organisational conflict) were workers in the same organisation dispute. While inter-firm conflict may take a number of

⁸⁵ Rychen F. and Zimmerman J.B. 2008 Clusters in the Global Knowledge-based Economy: Knowledge Gatekeepers and Temporary Proximity. Regional Studies, 42:6, 767-776.

forms, in the context of business concentration or clusters we are considering spatial conflicts or conflicts leading to spatial consequences.

Porter (1990) admits that personal conflict might be healthy for the industry as it might be a **spin-off** factor. *"Today's partners also often become tomorrow's competitors, especially partners with more robust competitive advantages or that are more dynamic"* (: p. 66)

Positive results of conflict might be in enhancing the partnership rather than in splitting up. Gallaud and Torre (2004) show that moments of conflicts between partners usually give rise to better issues when partners arrange together by face-to-face discussions rather than distant communications. Three types of inter-personal conflicts (over the ego-network) can affect the spatial decision of a firm: *Conflict of interest, Conflict of objectives, and Conflict of authority*.

The level of cooperation in contracts vs. competition and conflict is a factor that affects collaborative decisions and choices, which further affects the continuity of individual relations (Todeva 2006). *"If coalition members have conflicting objectives and intentions, they will interpret the coalition in a different way, seeing different opportunities for themselves, and creating asymmetries within the action set in order to achieve their own objectives"* (Todeva 2006: p. 70).

Weber's contribution on types of authority (1947)⁸⁶ remains a milestone in our understanding of power relations. The distinctions between **legitimate vs. coercive power** and **traditional vs. bureaucratic authority** remain fundamental to the analysis of behaviour in organisational settings. The legitimate power is also considered as utilitarian (or exercised through **incentives**) and normative (or exercised through norms and symbols). Power and authority are used for the exercise of control at multiple levels – to supervise activities, to coordinate tasks under the conditions of specialisation and division of labour, to monitor performance, to act towards conflict resolutions when contradictory interests and demands emerge, and when prescribed rules have not been complied with by some (p.71)

Bargaining facilitates the mutual adaptations that partners undertake and assists them in developing expectations. **Intermediation** (or brokerage) assists partners to identify

⁸⁶ Weber A. (1947) The Theory of Social and Economic Organization. New York: Oxford University Press

alternative ways to satisfy their needs through partnerships. Intermediation supports actors to make better choices and decisions. **Conflict management** is an essential mechanism that is triggered when partnerships are in trouble and individual actors have to make additional efforts. Influence tactics are applied by each partner in order to alter the direction of a relationship, and the individual techniques are through framing and displacement of partners' roles and functions. (: p. 121). Conflict might also arise from **uncertainty and threat of change** (Kilduff & Krashhardt 2008)⁸⁷.

The role of government in solving emerging conflict is played in both directions, conciliating conflicting parties or separating them. Incentives, intermediation and bureaucratic authority are key tools into conflict management. The spatial consequences are seen through the converging or the diversion of entities in the space.

Other authors evoked the territorial conflicts as a trigger for the clustering or the dispersion of firms (especially in literature on proximity, e.g. Torre et Beuret 2012, Cooke 2014, Torre 2014, Torre et al. 2014).

⁸⁷ Kilduff M. & Krackhardt D. (2008) *Network Dynamics and Organizational Culture: Cognition, Personality, Dynamics, and Culture*. Cambridge University Press

Conclusion

The third approach to clusters considers the role of interindividual relations in contrast to inter-organisational relations. The importance of the role of individuals in the network depends on the strength or weakness of his ties to other individuals and his structural position in the network as well as the network structure as a whole. Ties can represent exchange of codified and tacit knowledge over the ego-network and the evolution of the cluster means increasing the size of the network by creating more connections. Structural holes exist wherever there is a gap between the disconnected groups of actors except for gatekeepers spanning the structural hole. Gatekeepers can allow the individuals in their networks to benefit from the information and contacts necessary for the development of the network. The role of government to stimulate these inter-individual relations is explored. Indeed, government officials can be the gatekeepers connecting the local economic scene to the international network. However, by establishing physical space for bringing together actors (whether the space is temporary – exhibitions and trade fairs; or permanent – top-down developments), the government plays an exceptional role that exceeds the role of a gatekeeper.

4. The role of Government

For the last couple of decades, most policy makers around the globe are adopting the concept of clusters as a tool for economic development. Furthermore, academics are helping policy maker to establish a trend of cluster-based economic development which derives its entire logic from the economics of business concentration (Ketels and Memedovic 2008). From the discussion above the government, in order to promote clustering as a tool for economic development, it has to engage into developing the different element of the triple mechanism of industrial clustering. As such the role of government can be translated into three **strands**: upgrading the space, upgrading the network and upgrading the interpersonal network - what is referred to as the ego-network defined by (Rychen and Zimmerman 2008) as *"the result of individual and bilateral decisions to form links that take into account the whole existing or expected network"* (p. 769).

Upgrading the space

Increasing the 'attractability' of the space requires upgrading space attributes such as physical attributes, resources (materials, human resources, financial resources, etc.), location accessibility and connectivity. Upgrading the space is translated through the government development plan of infrastructure and the plan for a friendlier business environment through better communication strategies, promotional campaigns, enhanced legal and institutional setup, and comprehensive supporting services. All of that lies within a strategy to a specific spatial scale whether be it a district, a zone, a city, or a region. Such strategy is to be distinguished from the general branding strategies and city marketing campaigns or the Place-neutral policies that target attracting inbound investments without focusing on a specific cluster.

Upgrading the network

To better connect companies, the government role is essential in many ways. By enhancing the communication infrastructure, the institutional environment, the legislative system and the supporting services, the government are upgrading the space and the inter-company network in the same time. Furthermore, and probably more importantly in this entry, the inter-firm ties are enhanced through the role of government-supported agencies such as government development companies (whether or not fully subsidized or owned by the government), supported NGO's or other institutions, universities and research centers, etc. Government trade agencies practicing strategies to bring together local and external business players are yet another example of how the government is upgrading the inter-firm network. Exhibitions, trade shows (whether local or external) and similar 'networking' events are - probably by definition – an upgrading tool that can be at the disposition of governments. As mentioned above for upgrading the space, upgrading the network here is done bearing in mind a specific cluster at a specific geographical scope.

Upgrading the ego-network

As Krugman stated in his 1998 paper "The Role of Geography in Development", access to government officials is important for business executives. As a result, concentration of

businesses follows political centralisation, especially in developing countries. The government role in upgrading the personal network could be present by facilitating such access. Furthermore, enhancing the role of personal connections within the ego-network can be seen through the double role the society elites are undertaking by holding business and governmental positions in the same time. Even if this is not the case, the elites usually have a network of **informal contacts with politicians and of government officials** with or without direct involvement in local politics (Basset 1996)⁸⁸. The role of the government is not only to serve the interests of the 'notables' but also to negotiate (informally at this point) these interests to serve wider strategic development goals. Nevertheless, empirical research into this entry is still severely lacking (Beel et al. 2016)⁸⁹.

The role of elites

The influence of businesses on local politics depends on the social norms, the legislative environment and the political system of the country (see Saunders, 1978; Barnekov et al., 1989 for more on the subject in the UK and the US). For the UK, Basset (1996) states that over the past decade, new business elites are 'becoming increasingly involved in urban policymaking, often through the widening network of partnership organisations which are to be found in many urban areas'. **However, this empowerment of new business elites was not entirely the result of state sponsorship. During this period, British business itself was finding a new enthusiasm for local activism (Jacobs, 1990).**

As per Beel et al. (2016): 'UK government strategy with regards to city-regions is highly probusiness, despite talking the language of localism, and it focuses upon engaging business elites to become involved with the development of city-regions alongside elective representatives. Via this strategy it intends build networks than can harness a particular model of (neoclassical) agglomeration growth and little more. Mohan and Mohan, (2002) describe this with regards to the work of (Putnam, 1993) in terms of how the policy hopes to build social capital among business elites:

⁸⁸ Basset K. (1996) *Partnerships, Business Elites and Urban Politics: New Forms of Governance in an English City?* Urban Studies, Vol. 33, No. 3, 539-555, 1996

⁸⁹ Beel D. Jones M. Jones I.R. (2016) *Regulation governance and agglomeration: making links in city region research*. Regional Studies, Regional Science, 3:1, 509-530

'Networks of civic engagement are said to: foster norms of 'generalized reciprocity' ... increase potential risks to those who act opportunistically that they will not share in benefits of current or future transactions'. (Mohan & Mohan, 2002: p. 193)

The Network Approach: Government as Gate-keepers, Gate-makers, and the Gate itself!

The role of governmental in promoting social networks is essential to the emergence and the evolution of clusters and that is being done through several directions and strategies. While Krugman acknowledged the role of individual government officials for enhancing spatial concentrations, the inter-individual relations, nonetheless, were considered an inherent and indivisible element within his theories. Social interaction does not thus play a major role (Ghiglino & Nocco 2017)⁹⁰. The role of government in the Social Network model is, on the other hand, essential and indispensable.

He et al. (2013) discusses the governmental policy towards developing clusters through a social network lens. They highlight "the weakness in the theoretical underpinnings of policy making, particularly regarding the overall network structure". For their analysis, they adopt Raines' (2002)⁹¹ typology categorising cluster policy instruments into four types:⁹²

- **community-building**: encourages interaction between cluster members, engender common interest, and develop the cluster's identity and image;
- projects and linkages: targets specific groups of firms and organizations networked for common purposes;
- common resources: where the policy provides common services or shared facilities;
- *external linkages building*: unlike the three types above which targets the internal cluster community, this type of instruments establishes linkages with external actors

⁹⁰ Ghiglino, C. and Nocco A. (2017) *When Veblen meets Krugman: social network and city dynamics*. Economic Theory, Springer; Society for the Advancement of Economic Theory (SAET), vol. 63(2), pages 431-470, February. ⁹¹ Raines P. (2002) *Clusters and prisms*. In P. Raines (Ed.) *Cluster Development and Policy*. p. 159–177. London: Ashgate.

⁹² The fourth type is added by He et al. (2013)

for innovation, knowledge transfer, trade and inward investment. (: p. 14, [emphasis in the original])

Granovetter's work refers to the institutional settings of social network ... Granovetter also differentiates, though not explicitly, between networks of personal and political relations (1992, p: 10). Nevertheless, in almost all countries in the world, enhancing social capital is a focal point in governmental policies. Burt (1997), argued that the **social capital** of individuals depends on the centrality of their position in a given network. Granovetter (1973) has highlighted how "**weak ties**" that bridge actors across groups contributes to **the shaping of opinions**. He also argued that community members suffered because they could not access the knowledge held by those from outside the community. As such, the government agencies can bridge the relation where there is discontinuity in the network or as it's later defined as **Structural Holes**. In this role, the governmental agencies play the **Gatekeeper** linking two or more groups, whether on the local level or with external parties.

He et al. (2013) point to "the importance of **range**—**the structure of external linkages**, **the balance between closure and range**, and the co-evolution between the overall network structure and geographic agglomerations' technological regimes and life stages" (: p. 16) [emphasis added]. The position of the government, the political instrument and the policy enacting body, over the structure is thus a factor in linking actors not only over local-local relations but also local-external relations.

Proximity scholars, on the other hand, provide a different scope to the governmental role through emphasising the effect that governmental policies can play to enhance proximity, whether geographical or organised⁹³. As per Torre (2014)⁹⁴, the proximity approach:

"... leads to a broadened conception of territorial development – including considerations of regional planning– which can be analysed through the proximity based approach (geographical or organized proximity). Particular

⁹³ See also: Talbot D. (2010) *La Dimension Politique De l'Approche de Proximité*. Géographie, économie, société 2010/2 (Vol. 12). Lavoisier.

⁹⁴ Torre A. (2014) *Proximity relations at the heart of territorial development processes: from clusters, spatial conflicts and temporary geographical proximity to territorial governance*. In A. Torre and F. Wallet (Eds.) *Regional development and proximity relations*. Edward Elgar.

emphasis must be placed on the analysis of the processes of **territorial governance**, which help to bring together the different categories of actors present on one territory, and which therefore constitute '**engines'** of territorial development." (: p. 116) [emphasis added]

The **territorial governance** ".. should be understood as the set of processes and mechanisms through which stakeholders or actors of different natures (productive, associative, individuals, representatives of public authorities or local authorities ...) contribute to the development, sometimes concerted, sometimes Conflict, joint projects for the future development of territories (Leroux, 2006, Torre and Traversac, 2011). [cited in Torre et Beuret 2012]⁹⁵

As per Rychen and Zimmerman (2008) some cluster structures emerge from the strategic building of ego-networks by individual agents through **temporary geographic proximities**. As per Maskell et al. (2006: p. 998), *'identifying, selecting, approaching and interacting with new partners is a tricky and costly process'*, and this is where temporary geographical proximity (e.g. trade shows, conferences and exhibitions etc.) can be the right means for potential partnership. Such temporary spaces, or 'hubs', readily viewed as temporary clusters (Maskell et al., 2006), allow actors to interconnect **face-to-face** for many purposes such as the collection of information, sharing experiences, speculations about a certain type of production (Entwistle and Rocamora, 2006). Torre (2014) highlights that this *'hub formula'*, helps *'individuals from different horizons'* to meet in one place, and to save on transport costs (p. 101).

The government agencies setting up those temporary spaces play a connecting role between different economic actors, both local and international. However, the role is bounded by the temporary space and organising it, while the gatekeeper role of the government is diminished to minimal as space is bringing companies' representatives head-to-head. In the same time, some private agencies can still play the role of Gatekeepers using the temporary geographic proximity.

⁹⁵ Torre A. et Beuret JE. (2012) *Proximités territoriales : Construire la gouvernance des territoires, entre conventions, conflits et concertations*. Economica, collection Anthropos

Though this role can be seen as institutional and through an inter-organisational network, the interpersonal network is present as well. In particular, interpersonal cooperation and interpersonal **conflict**. Both are emanating from the interpersonal trust (Granovetter 1984), which is leading positively to cooperation or negatively to **corruption**⁹⁶ and dispute.

In this regard emerges the concept of **the leader**, and **the leading elite**, leading to the structural positioning of leaders within the network and their role in the economic change. This demonstrates the overwhelming conditioning power of social structures—including intra-elite structures—in the processes of economic change.

Following the work of Rychen and Zimmerman (2008) on the ego-network configurations, we are considering the role of government as gatekeepers, but also as influencers of the information flow process as network enhancers. For each of the configuration of the ego-networks, the space notion is positioned differently. Considering knowledge as an exogenous factor that facilitates clustering, knowledge becomes an externality or a local public good (Antonelli 2000, Bellandi, 2002). In this context, linking between companies is done through capturing knowledge spillovers and so reducing production costs, contributing to the formation of incentives for competing firms to partner with each other (Rychen and Zimmerman 2008).

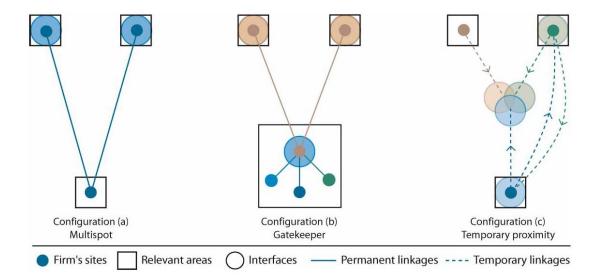


Figure 6 - Basic ego-network configurations (Rychen & Zimmerman 2008, p. 770)

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⁹⁶ See : Granovetter M. 2004 The Social Construction of Corruption. Paper prepared for the conference, "The Norms, Beliefs and Institutions of 21st Century Capitalism: Celebrating the 100th Anniversary of Max Weber's The Protestant Ethic and the Spirit of Capitalism", October 8-9th, 2004. Cornell University

The role of government can be translated into the three-fold role and explained in proximity and ego-network models as in the following table.

Role of Government	Gate-Keepers	Gate-Makers	The Gate itself
Proximity type	Geographic & Organised	Temporary Geographic	Geographic
Role	Negotiating with external firms to join Trade show		Production actor / Internal Cluster player
Global-Local Connection	External \rightarrow Local Local \rightarrow External	Local → Local External → Local	Local → Local External → Local
Spatial Scale	Regional & International	City, Regional	District
Social Network Ties	Weak		Strong
Role of Individuals as gate-keepers	Central		Peripheral
Cluster Specialisation	Weak		Strong
Examples	Trade Bilateral Agreements Trade Missions External Fairs and Exhibitions	Local Trade Fairs and Exhibitions	Government initiatives Top-Down development projects
Example of Government Entities	External trade commissions CCI's Economic promotion departments	Fair and exhibition commissions Economic promotion departments CCi's	Urban development departments Economic local commissions
Network Graph Government Space Temporary Clustering	External	External	External

Table 4 The Role of Government in Interfirm Networking

In this regard, a distinction must be made into two dichotomies; namely the dichotomy of the **'instructed' vs the 'spontaneous'** (Cohendet, Roberts and Simon 2010), and the dichotomy of the **'local' vs the 'global'**. The first is differentiating between top-down developments (e.g. led by the government) and the bottom-up communities. The government can play a focal role either directly by being intermediator between economic actors or indirectly by influencing the connection over the local-local or local-global networks.

5. Towards a Complex Approach of a Cluster Theory

The Gordon and McCann (2000) approach to evoke the dynamics of clustering can be described as complex as it deals with three layers of analysis that borrows elements from different economic theories pouring into the real-life cluster phenomenon.

This triple model typology is not meant to distinguish between different real-life types ontologically; instead, these types might and should converge in any case study. Gordon and McCann admit that a cluster may comprise elements from more than one of the types they proposed. They highlight the importance of defining the dominant type in order to study its performance better empirically.

Defining analytically which of these types is the dominant structural characteristic of a particular cluster (or set of clusters) is thus essential, in order to be able to discuss their performance empirically, and to determine what more general lessons may be drawn from that. (: p. 515)

Nevertheless, a given cluster may contain elements of more than one model, they insist that:

Contrasts in the policy implications of these three ideal types of cluster make it particularly important to avoid confusing features of one with those of another, even though elements of each may co-exist in particular situations. (ibid: p. 528)

Though Gordon and McCann admit that a cluster may comprise elements from more than one of the types they proposed, they highlight the importance of defining the dominant type in order to study its performance better empirically:

	Pure agglomeration	Industrial complex	Social Network model
Main questions	What forces businesses to agglomerate on a given territory	To what extent do inter- organisational relationships promote the effectiveness of the cluster and the organisations that make it up? What role does the government play in the consolidation of economic activities? What forms of cooperation and innovation are developing between cluster member companies?	How are networks organised between individuals? What are the roles of inter- individual relationships in the development of a cluster?
The conception of the Cluster	Agglomeration of businesses	A network of organisations (companies, collectivities, universities, associations) grouped in a given geographical area	Network of individuals
Theoretical references	The Marshallian district, externalities, Theory of international specialisation, Product differentiation, New economic geography	Marshallian District; Porter, Theory of institutional arrangements and contracts (agency, transaction costs); Economics of proximities between organisations	Embeddedness theory; Economy of proximities between individuals
Main elements	Forces of agglomeration, Centripetal forces (specialised labour market, knowledge, information and specialization externalities, historical endowments), and centrifugal forces (role of ICTs, rent prices); Spatial proximity	Cooperation between cluster actors (industrial dynamics, dynamics of firms with associated institutions); Public policies (policy tools, evaluation of mechanisms, governance); Spatial and organized proximities	Social embeddedness of actors (gatekeeper, intermediate locations); Proximities (spatial, organized, cognitive)

Table 5 - Three-entry model to dynamics of clustering (based on Chesnel et al. 2013)

In this conclusion, we draw on different sub-section conclusions in the discussion above to pave the way towards a complex approach to studying clusters in general. A particular emphasis is put onto the role of government, the spatial scale notion and conflict as the main entries to be discussed further later.

The Spatial Scale – The Local-Global Dichotomy

From the discussion above, whether the cluster is a result of external economics, a result of inter-firm production relations or a result of inter-personal interaction, or else (i.e. a mix of all three entries), we can differentiate between two levels of the spatial origin of the 'inbound' clustering firm: either local- whether by **local** we mean sub-regional (district, city or inter-city

clusters) or sub-national (Regional or inter-regional) and **global** (border-crossing supraregional and supra-national). Differentiating between the two spatial scales is explicitly evoked in the work of Krugman and Porter and some other thinkers in the neo-classical economic school. It is especially useful in assessing the role of government and how clustering is evolving to differentiate between a local scene embedded within a global environment. The question of the spatial origin of the clustering firm evokes the questions of a cluster's boundaries – which, again, evokes a chain of other fuzzy questions. However, as discussed above, the Porterian cluster is, by definition, of a flexible boundary setting that can be defined by the cluster actors themselves or the governance authority managing it, if any. Clustering dynamics, then, are the different forces driving an '**inbound'** company or companies, (inbound in the sense that it is foreign to a particular space, at a specific spatial scale), to relocate into this space together with other industry-related actors.

For simplification purposes, and since clustering is dominantly a metropolitan phenomenon (Krugman 1991), we will consider three levels of scales (district, city, and regional level). Translating the triple cluster dynamics into the three scales can be elaborated in the following table:

Scale	Pure Agglomeration: External economics (Marshall triad)	Inter-firm network: Competition, Cooperation & Conflict	Ego-network: Social weak & strong ties, social clubs, relative proximities
District	Locational attributes: proximity, accessibility, rent, place reputation, aesthetics, etc.	Leader company, minimising logistics cost, joint projects and ventures, spin-off dynamics,	Personal connections,
City	City resources (including existing infrastructure, labour market, creative class, existing clusters etc.), city brand and reputation, city proximity, accessibility and connectivity (Globality), legal environment, etc.	Branching and spin-off, partnership opportunities, Institutional environment, educational and university cooperation, exhibitions and trade shows	Personal connections, access to elite class
Regional	Regional capacity and resources, regional	Branching and spin-off, regional competition	Personal connections,

Table 6 Examples of 'Inbound' Clustering Dynamics by Spatial Scale

integrality, access to regional clusters.	strategies, access to regional networks and multiple potential partnerships	joining multiple social networks
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In urban policy research, Evans (2009) propose five cluster scale, namely the neighbourhood, the city region, the region, and the transnational scales. The following table provides the definitions for those cluster scales:

Table 7 - Cluste	r Scales and	l definition	for policy	(Evans 2009)
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Scale (cluster geography)	Definitions
1. Transnational	Interactions between enterprises with institutional co-operation that crosses national boundaries. Supported by policy frameworks which facilitate cross-border cluster development.
2. National	Interactions between enterprises with institutional co-operation within national boundaries. National creative cluster policy.
3. Regional	Interactions between enterprises with institutional co-operation within a region. Regional creative cluster/sector policies.
4. City region	Interactions between enterprises with institutional co-operation within a metropolitan area. City creative cluster/sector policies.
5. Neighbourhood	Interactions between enterprises with institutional cooperation within a city district, area or a specific place. Local, place-based cluster/sector policies.

Furthermore, **from an urban planning perspective**, Healey (2006)⁹⁷ highlights the importance of the internal-external relationship when deciding the geographical scale of the cluster. She advocates for a '*scalar consciousness*' as a way to imagine a territory '*both in relation to its external positioning and its internal differentiation*'. She admits that developments are usually found contained within hierarchical levels bound within legal-administrative borders. However, she continues, '*The force behind many of the new sub-regional strategies reflects*

⁹⁷ Healey P. (2006) *Relational complexity and the imaginative power of strategic spatial planning.* European Planning Studies, 14:4, p. 525-546.

the recognition that these borders no longer "contain" the relational reach of significant living and working patterns, let alone that of production and distribution chains.' (p. 534).

Local Buzz and Global Pipelines

The cluster is defined by the linkages between its members and complementarities across industries and institutions and its evolution is dependent on the interaction between collaborators and competitors (Porter 1998). These relationships can either be 'horizontal' – i.e. among competitors, or 'vertical' - i.e. relationships along the supply chain (Dang et. al. 2011). The exchange of information is the first crucial element in innovation dynamics. Research also suggests that geographical proximity is essential for innovation (McCann 2008)⁹⁸. While the horizontal relationships are putting pressure on firms for more product differentiation and increased efficiency, the vertical links stimulate observation and comparison and thus enhance productivity. Clusters in this sense are ideal incubators of innovation (Preissl and Solimene 2003). Local buzz is created through continuous exchange and updating of information between not only competitors but also by collaborators stimulated by co-location within a cluster (Bathelt et al. 2004)⁹⁹. While competitors compare their performance effectively through getting information on "the cost and quality of the production factors they use" (Bathelt 2005:108), producers along the same supply chain use "learning by interacting" to formalise and anticipate their offer and update their knowledge about the market (Malmberg and Maskell 2005).

As per Rychen and Zimmermann (2006)¹⁰⁰, one main advantage of the cluster is based on their capacity to foster complementarity between dense internal interactions that sustain innovation and at the same time fulfil the needs for external and global knowledge. Current research also shows that cluster performance does not only result from the quality of interactions and coordination inside the cluster but also from **external networks** and cooperation with distant rivals or partners.

⁹⁸ McCann P. (2006) Agglomeration Economics. In Karlsson C. (Ed.) Handbook of Research on Innovation and Cluster. Edward Elgar.

⁹⁹ Bathelt, H.; A. Malmberg; and P. Maskell (2004) *Clusters and Knowledge: Local Buzz, Global Pipelines and the Process of Knowledge Creation*. Progress in Human Geography 28:31-56.

¹⁰⁰ Rychen, F., and Zimmermann, J. B. (2006). *Clusters in the global knowledge based economy: knowledge gatekeepers and temporary proximity*. Regional Studies, 42(6): 767–776.

The base line of the buzz-and-pipelines approach is about the effect of information density and exchange between local companies and external actors – "the higher the density of information about external markets and technologies, and, as a consequence of that, the more dynamic the locally occurring flows of information and learning processes". This interaction of external and internal linkages again helps the clustered companies to become more innovative and at the same time strengthens the cohesion between them (Henn 2013).

As per Dang et al. (2011)¹⁰¹, the role of the **gatekeepers** is to create links and channels both inside and outside the cluster. As suggested by Keeble and Wilkinson (1999), successful clusters are those, which combine dense internal inter-firm interactions with external, and often global networks.

As such, "Local buzz" and "global pipelines" are thus, mutually reinforcing mechanisms (Bathelet et al. 2004) helping companies to identify the frontiers and the limits of their knowledge, and to capture new technical knowledge.

Bathelet et al. (2004), is concerned with spatial clustering of economic activity and its relation to the spatiality of knowledge creation in interactive learning processes. It is argued that the co-existence of high levels of buzz and many pipelines may provide firms located in outwardlooking and lively clusters with a string of particular advantages not available to outsiders. Buzz refers to the knowledge exchange resulting from a variety of informal local relationships. The concept of buzz is strictly connected and comparable with the Marshallian industrial atmosphere (Marshall, 1920), to the mechanism of localized knowledge spillovers (Breschi and Lissoni, 2001), to the Japanese Ba (Nonaka and Konno, 1998), and to the specific immaterial concept of buzz offers the opportunity to broaden other pre-existing concepts, more strictly related to the area of the industrial production system. Michael Storper and Anthony Venables, in an article published in the Journal of Economic Geography in 2004, made an extensive argument about the role of buzz in the explanation of urban

¹⁰¹Dang, RJ. Mortara, L. Thomson, R. and Minshall, T. (2011) *Developing technology intelligence strategy to access knowledge of innovation clusters.: The case of KODAK in Cambridge*. In Hülsmann M. and Pfeffermann N. (Eds.) Strategies and Communications for Innovations, SRINGER-Verlag, Chapter 1.4, 2010. <hr/>

concentration. This concept was developed to describe the importance of face-to-face (F2F) contacts in metropolitan areas and then extended to explain the agglomeration advantages of firms located in IDs and clusters. Bathelt et al. (2004) used the term buzz to describe a peculiar aspect of a form of industrial organisation, the cluster, marking the transition from an urban to an industrial economics perspective. The global pipelines metaphor is used to illustrate the knowledge networks built upon formal, distant business relationships. These relationships can, in fact, include the R&D collaborations of dynamic local companies as well as the captive ties of a multinational with a subsidiary in the cluster (Lazzeretti 2013)¹⁰².

The Complexity Setting of Cluster Dynamics

As such the combination of Local Buzz and Global Pipelines provide the complex setting for clustering dynamics by including the three cluster models theorised by Gordon and McCann into **a fused scene of inter-influencing dynamics**. On the one hand, the personal and informal face-to-face information exchange (the local buzz) is done over the social network which is, as per the social network model of clusters, bringing player closer (whether in the geographical sense of the word or the relative sense as per the relative proximity).

On the other hand, the local buzz is by definition done over the **network of managerial personnel** in related industries, thus over the ego-network that is 'embedded' into a **formal network of business**. The buzz is therefore potentially turned into a formal exchange over the formal network of companies. As such the buzz is evolved within the **institutional setting** where the network of companies is abided (or framed) by **formal relations that can range between cooperation, competition and conflict**, or, a combination of the three together. The second model of clusters, the industrial complex, is a direct influence of the local buzz, and a consequent level of interaction.

Furthermore, as argued by Lazzeretti et al. (2013), the concept of buzz is associated with the mechanisms of localised knowledge spillovers in the Marshallian concept of industrial atmosphere. As such, the buzz is also considered a **strand** for pure agglomeration where the

¹⁰² Lazzeretti, L. Sedita S.R. and Caloffi A. (2013) *Founders and disseminators of cluster research*. Journal of Economic Geography (2013) pp. 1–23

fluid flow of information is helping to bring together industry players into a geographical concentration.

6. Conclusion

The theoretical approach we followed takes into consideration a complex mix of factors built essentially upon the Gordon and McCann typology (2000). However, the inclusion of questions such as the role of government, chance and conflict to the dynamics of business clusters are adding value to the theoretical model and reflects what Porter (2000) considers as external 'exogenous' factors to his well-known 'cluster diamond'. The idea of 'Local Buzz and Global Pipelines' are seasoning the complexity of the theoretical model by combining the three-entry model of Gordon and McCann over a mechanism of information exchange and a bipolar spatial field – the local-global contextual inter-relational perspective.

The following table summarises the main entries discussed earlier in this chapter for the triad of clustering dynamics: Pure agglomeration model, Industrial complex model and Social Network model.

	Pure agglomeration model	Industrial complex model	Social Network model
Main source of agglomeration	Marshal's triad, Space resources	Inter-organisation relationships	Inter-personal relationships
Spatial scope	Local to regional (Refer to	Table 4)	
Network structure	Irrelevant	Business Network	Ego-network
The role of government	Upgrading the space attributes	Upgrading the network	Upgrading the ego- network
The role of chance	Local and regional trigger events affecting the space attributes/resources	Trigger events affecting business network	Personal events
Conflict as an entry	Resource-based conflicts, territorial conflicts	Market-based conflict, Coopetition, formal and legal conflicts (contract- based)	Personal conflicts
Analytical Units	Districts, Regions, Firms	Firms, Institutions, Clusters	Individuals, business owners, managers, policy makers, political elites.

Table 8	Cluster	Dynamics	- Main	Flements	Studies

Going Forward

As per Thrift:

'Society is always and everywhere spatial and temporal. Easy enough concepts, perhaps, but the implications are only now being thought through' (Thrift, 1983: p. 49).

Our analysis in this chapter has covered the spatial part of the complex clustering phenomenon. Our aim in the next chapter is to further shed some light on, first, dealing with the complexity of the concept, and second, looking into the temporal evolution of clusters through the implementation the concepts of evolutionary economic geography. Hence, the theoretical framework would then better reflect the **spatio-temporal continuum** in which clusters develops in quasi real-life settings.

CH II – INDUSTRIAL CLUSTERS IN THE SPATIO-TEMPORAL CONTINUUM: THE COMPLEXITY-EVOLUTIONARY TOUCH

As seen from the previous chapter, the complex theoretical approach used for studying clustering dynamics takes into account the spatial side of the phenomenon. **The time factor** – the evolution of clusters over time and how clustering dynamics change - will complement the spatial study of such dynamics. In this chapter, however, we will be focusing on the complexity characteristics of a cluster and the cluster dynamics from an evolutionary perspective. As per Boschma and Fornahl (2011) the fact that the existence of clusters can only be understood when studying their dynamics over time has received a high level of recognition among academics (e.g. Audretsch and Feldman 1996; Pouder and St. John 1996; Swann et al. 1998; Maggioni 2002; Brenner 2004; Iammarino and McCann 2006; Menzel and Fornahl 2010; Ter Wal and Boschma 2011).

However, many academics have studied the time factor within a **Cluster Life Cycle approach** (e.g. Hassink et al. 2012, Fornahl and Menzel 2006, Menzel and Fornahl 2010, Ter Wal and Boschma 2009, Suire and Vicente 2009, Staber and Sautter 2011, Fornahl and Hassink 2017). Nevertheless, the life cycle approach is criticised for being **too deterministic** (Boschma and Fornahl 2011)¹⁰³. Instead, Martin and Sunley (2011) proposed a framework based on the **adaptive cycle model** in which *'cluster evolution is viewed as an adaptive process with different possible outcomes based on episodic interactions of nested systems' (pp. 1299). Trippl et al. in their (2016)¹⁰⁴ article "Perspectives on Cluster Evolution: Critical Review and Future Research Issues", review academic literature studying cluster temporal evolution - the*

¹⁰³ Boschma, R. and Fornahl, D. (2011) *Cluster Evolution and a Roadmap for Future Research*. Regional Studies, 45(10):1295-1298 ·

¹⁰⁴ Trippl, M., Grillitsch, M., Isaksen, A. & Sinozic, T. (2015) *Perspectives on Cluster Evolution: Critical Review and Future Research Issues*. European Planning Studies, 2015. Taylor & Francis.

dynamic and temporal characteristics of clusters in a cluster life cycle approach rather than the static expressive analysis of 'functioning' clusters. They identify a number of missing elements such as '*indifference to place-specific factors, neglect of multi-scalar impacts and underappreciation of the role of human agency*' (: p. 1). These three elements resonate closely with **Gordon and McCann's triple entry to cluster dynamics** as elaborated in the previous chapter.

Among others, Martin and Sunley (2006) consider that a cluster is best understood as an explicit product of **path dependency**, however, both authors later acknowledged the shortage of such explicitness and called for a 'more open notion of path dependence that allows for more or less continuous adaptation and mutation of technologies, industries and regional economies (Martin and Sunley 2010: p. 9). The notion of **multiple path dependency** is introduced to tackles such shortages and to account for both actor's evolution and the cluster's evolution as a whole.

In this chapter, we are borrowing elements from evolutionary economics and complexity theory and applying them to the three typologies of cluster previously discussed in the previous chapter. While we highlighted the role of chance, scale, government and conflict in the clustering dynamics in the previous chapter, this chapter will try to put in perspective some of these factors to evolutionary concepts. Enunciating the role of government within a complexity / evolutionary setting opens the door for a discussion on the cluster policy and the emergence of an **adaptive transformative policy**.

1. The time factor – Evolutionary Economic Geography in a nutshell

The work of Pouder and St. John (1996)¹⁰⁵ is one of the earliest and compelling attempts to address the time-variant benefits of geographic clustering. They argue that the benefits to geographic clustering vary by stages of development of the clusters. During the early stage of geographic clusters (i.e., the origination phase), economies of agglomeration (or, benefits of clusters) dominate diseconomies of agglomeration (or, costs of clusters), showing positive net benefits of clusters. As time goes by, clustered firms are likely to experience relatively high

¹⁰⁵ Pouder, R. and St. John, C.H. (1996) *Hot Spots and Blind Spots: Geographical Clusters of Firms and Innovation*. Academy of Management Review, 21: p. 1192-225.

levels of congestion costs, within-region competition for localized inputs, and knowledge expropriation, expecting decline in the net benefits from geographic clustering in the later phases (i.e., the convergence and the decline phases).

Given the theory of agglomeration, Pouder and St. John (1996) suggest that the strength of economies and diseconomies of agglomeration varies with the age of geographic clusters. They propose three distinct phases of the evolution of geographic clusters: origination, convergence, and decline – in other words, a *life-cycle*. However, Martin and Sunley (2011) criticise the life-cycle approach as it implies "an imminent logic and necessary historical sequence" (p. 1301).

The paradigm of evolutionary economics in geography has begun to take shape recently after an infancy period that span the last two decades. Basically, as Berg & Hassink (2014) note: 'the major terms and concepts of evolutionary economic geography are derived from evolutionary economics, generalized Darwinism and complexity theory'. The definition of evolutionary economic geography seems then emanating from these three components, as Boschma and Martin (2010) put it:

".. evolutionary economic geography is concerned with the spatialities of *economic novelty* (innovations, new firms, new industries, new networks), with how the spatial structures of the economy emerge from the *microbehaviours of economic agents* (*individuals, firms, organisations*); with how, in the absence of central coordination or direction, the economic landscape exhibits *self- organisation*; and with how the processes of path creation and *path dependence* interact to shape geographies of economic development and *transformation*, and why and how such processes may themselves be place dependent. (pp. 7 [emphasis added])¹⁰⁶

The following chart illustrates basic concepts coming from different strands of the evolutionary economic geography:

Generalised Darwinism Concepts from modern evolutionary biology: variety, novelty, selection, fitness, retention, CULI mutation, adaptation. 'Population dynamics thinking'

and scope of evolutionar

CONTINUUM: DUBAI ART & DI

Complexity Theory Aspects of complex 'farfrom-equilibrium' adaptive systems: emergence, selforganisation, adaptation, fitness landscapes, hysteresis

EL.

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Figure 7 major theoretical frameworks for evolutionary economic geography (Boschma & Martin 2010)

As such, EEG is built upon Nelson and Winter's (1984) evolutionary theory of the firm with neo-Darwinian (evolutionary biology) analogies and metaphors (especially variety, selection, novelty and inheritance) (Martin and Sunley 2010)¹⁰⁷. The emergence of evolutionary paradigm in economic geography (e.g. Boschma and Frenken, 2006; Martin and Sunley, 2006; Boschma and Martin, 2007, 2010) has opened the door to applying the concepts of evolutionary economics to the dynamics of clustering. In fact, a recent article (Coenen et al. 2016)¹⁰⁸ has placed agglomeration as one central idea of Evolutionary Economic Geography EEG (pp. 6). For them, two interrelated issues are marking EEG: '(1) **agglomeration economies, related variety and regional branching**, and (2) **path dependence and lock-in** (Coe 2011; Hassink 2010; Boschma and Martin 2007; Boschma and Frenken 2006)'.

¹⁰⁷ Matrin R. and Sunley R. (2010) *Complexity thinking and evolutionary economic geography*. In Boschma R. and Martin R. (Eds.) *Handbook of Evolutionary Economic Geography*. Edward Elgar

¹⁰⁸ Coenen L. Asheim B. Bugge MM. and Herstad SJ. (2016) *Advancing regional innovation systems: What does evolutionary economic geography bring to the policy table?* Environment and Planning C: Government and Policy 0(0) 1–21. SAGE Publications

However, along with exploring the evolutionary concepts of a cluster, Martin and Sunley (2007) explored the idea of the economic landscape as a **complex adaptive system** by applying elements from complexity economics. In their words, they wanted to examine whether apply complexity 'can be used to help inform an evolutionary perspective for understanding the uneven development and adaptive transformation of the economic landscape' (pp. 573). From another point of view, Potts (2000: p. 186)¹⁰⁹ suggests that complexity should be defined as "the singular general principle of evolutionary framework".

To dive into the world of evolutionary economic geography, our approach is to simplify the concepts behind Complexity, Darwinism and Path Dependency and apply a moulded amalgam to the temporal study of cluster dynamics, whether it is considered pure agglomeration, a network of businesses or a social network.

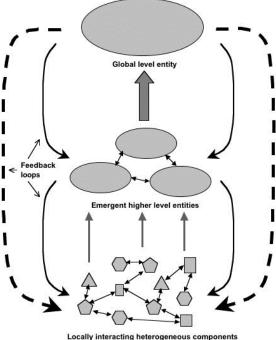
2. Complexity in a nutshell

The simplest introduction for the concept of complexity might be implied in a simple phrase:

"The whole is more than the sum of the parts" ~ Aristotle

Similar to the fact that the forest is greater than the sum of its trees or the flower is more than its petals spread apart, a first figurative entry to a complex system is that it is a cohesive whole comprised of smaller components that are acting interdependently together to

¹⁰⁹ Potts, J. (2000), *The New Evolutionary Micro- economics: Complexity, Competence and Adaptive Behaviour*, Cheltenham, UK and Northampton, MA, USA: Edward Elgar.



The idea of compl reads components randomness component

Figure 8 The typical conceptual model of a complex system (from Parrott, L. 2002)

produce the functionality and the attributes of the whole. Two words come together to define complexity: System and Synergy; the first refers to the structure, the second refers to the function. In essence, the complexity approach appeared in the last century as a direct critique to the simplification of scientific methods. But that's not all.

The idea of complexity bears a randomness component that gives the cohesive whole a glimpse of 'liveliness'. Complex systems are

essentially characterised by structural, spatial, and temporal **self-organisation** in which they are **neither completely ordered** (leading to an equilibrium whether in the form of a spatial or a temporal pattern or balance) **nor chaotic** (completely random without order). Such temporal dynamics are usually described as **non-linear**, **non-deterministic and stochastic**. But the randomness within these dynamics is not without limit as the change in the system is caused by minor changes of components in a complex, distributed feedback and selfreinforcing mechanisms (McGlade and Garnsey, 2006).

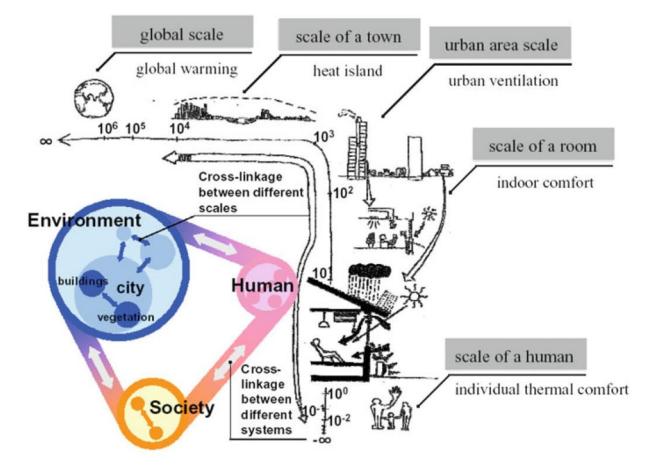


Figure 9 -Wide range of Spatial Scales in complex Environment-Human-Social Systems. (Source: Tanimoto 2015 p. 2)¹¹⁰

Elements in a complex system interact over a network of relationships in various spatial ranges and scales and thus complex systems are multi- scalar. **Boundaries** are vaguely determined as these relationships extends to other 'outer' elements that exist out of the 'expected' frontier. Only for the purpose of analysis researcher can define or propose a boundary that distinguish a system from its environment. As such the complex systems are inherently open and consequently dissipative as these relations with the outside elements represent a constant exchange of information, material or energy.

Applying the effect of randomness (which is actually a **non-linear** process rather than a pure random event) for this exchange (whether in the quantity, the direction or the type of such exchange) results in an **irreversible** change and that leads to a **path dependency** where the system behaviour or its trajectory is an accumulative process. Furthermore, the openness of complex systems implies that change can be extended to external elements. Nicolis and

¹¹⁰ Tanimoto J. (2015) *Fundamentals of Evolutionary Game Theory and its Applications*. Evolutionary Economics and Social Complexity Science. Volume 6. Springer Japan.

Prigogine (1989) theorise that non-linearity and constrains over the system cause **instability** that leads to '*to the bifurcation of new branches of solutions*' (: p. 73). Thus, a complex system can grow **branches** and connect to other systems.

The connectivity between system components allows for a 'feedback' interaction that can allow the restructuring of the system over time and this **self-organisation and emergence** is what gives complex systems its liveliness. With time, components are affecting each other to an extent that their individual behaviour is changing to accommodate to the continuous flows of feedback. As such adaptation is also an inherent characteristic of complex systems. As a result, the overall functioning of the whole cannot be reduced to the functioning of its subcomponents. At least, this **decomposability** is limited (Martin and Sunley 2010). Similarly, we cannot deduce the behaviour of the system by knowing the functionality of sub-components. Furthermore, measuring the causality of the change is one of the major challenges of the complexity approach. Thus, the complex systems are described as non-deterministic and nontraceable.

The following table illustrate the main attributes of complex systems (Source: Martin and Sunley 2010, p. 97):

Property	Attributes
Distributed nature and representation	The functions and relationships are distributed across system components at a whole variety of scales, giving the system a high degree of distributed connectivity.
Openness	The boundary between a complex system and its environment is neither fixed nor easy to identify, making operational closure dependent on context (and observer). Such non- isolated systems tend to be dissipative – subject to constant interaction and exchange with their environments.
Non-linear dynamics	Complex systems display non-linear dynamics because of various complex feedbacks and mutually self-reinforcing interactions amongst components. Complex systems are thus often characterised by path dependence.
Limited functional decomposability	Because of its high degree of connectivity, and the open, dynamic nature of its structure, there is limited scope for decomposing a complex system into stable components
Emergence and self- organisation	There is a tendency for macro- scale structures (including spatial structures) and dynamics to emerge spontaneously

Table 9 Generic Properties of complex systems (cf. Martin and Sunley 2010 p. 97).

	out of the micro scale behaviours and interactions of system components.
Adaptive behaviour and adaptation	The same processes of self-organisation imbue complex systems with the potential to adapt their structures and dynamics, whether in response to changes in the external environment, or from within through co-evolutionary mechanisms or in response to 'self- organised criticality'.
Non- determinism and non- tractability	Complex systems are fundamentally non-deterministic. It is not possible to anticipate precisely their behaviour even if we completely know the function of their components. This does not imply, however, that the behaviour of such systems is random, in the sense of being haphazard.

3. Complexity in a multiple school of thought

On the back cover of Roger Lewin's book "Complexity"¹¹¹, we find:

"Complexity theory is destined to be the dominant scientific trend of the 1990's. But what is it?

It is the unifying theory which states that at the root of all complex systems lie a few simple rules. This revolutionary technique can explain any kind of complex system---multinational corporations, or mass extinctions, or ecosystems such as rainforests, or human consciousness. All are built on the same few rules". (2000, back cover)

As such the complexity theory is essentially in search for a *unifying theory*. However, to date such unifying theory does not exist. Instead, a strain of theories has emerged all share to some degree similar principle and the 'complexity' label.

Manson (2001) notes that Complexity Theory owes much of its contents to System Theory with which many concepts are shared, such as the anti-reductionism and the holistic appreciation of system interconnectedness (p. 406, *citing von Bertalanffy, 1968*). However, as Manson (2001)¹¹² notes, System Theory was eventually abandoned by researchers in many fields (including geographers) due to the static view that general system theory usually deals with. Morin (1997), for example, indicates system theory has failed to lay its own foundation

¹¹¹ Edwin R. (2000) *Complexity: Life at the Edge of Chaos*. University of Chicago Press; 2nd edition.

¹¹² Manson S.M. (2001) *Simplifying complexity: A review of complexity theory*. Geoforum 32 (2001) 405-414.

by elucidating the concept of system (p. 101). Instead, Complexity Theory deals with continuously interconnected changing entities in a non-linear relation.

System Theory	Complexity Theory	
Static entities linked by linear relationships	Non-linear relationships between constantly	
	changing entities	
Emphasizes quantities of flow and not	Examines qualitative characteristics such as the	
necessarily their quality	symbolic content of communication	
Simplification and parameterization of flows and	How complex behaviour evolves or emerges	
stocks, a process that assumes that the system	from relatively simple local interactions	
exists in equilibrium	between system components over time	

Table 10 Key differences between Complexity Theory and General System Theory as per Manson (2001)

As stated by Manson and O'Sullivan (2006), 'complexity has a relatively open ontology that supports a strand of constructivist work drawing on complexity chiefly as a source of metaphor or analogy' (: p. 682). Over the last century the complexity thought has gone through a long journey of mutation and evolution in a vast number of disciplines. As per Carbonara et al. (2010)¹¹³, considering the historical development of the idea of Complex Adaptive Systems (CAS) in the field of 'geographical clusters¹¹⁴', they propose three schools of complexity that can be distinguished: The European Phase (school), the American Phase (School) and the Econophysics school. The complexity in the first is math intensive, and analogies are drawn from natural science experiments such as the heat dissipation between cold and hot surfaces - what Prigogine (1955) termed 'dissipative structures' (cited in Carbonara et al. 2010- p. 24). The second is the Santa Fe School which deals with the complexity mostly in extensive use of agent-based computational approaches. The third is using Pareto-distributed rank/frequency in their ranking of community attributes, giving way to fractal structures, power laws, and scale-free theory. In what our thesis is concerned, none of these schools potentially overlaps with our objectives. Nevertheless, the study of the 'scalability' of systems in the Santa Fe school might be an interesting point of thought in the subject of industrial clusters.

Morteau (2016) investigated different complexity thoughts by discipline, particularly in economics, geography and planning. Manson (2001) on the other hand, looked into the

¹¹³ Carbonara et al. (2010) *Making Geographical Clusters More Successful: Complexity-based Policies*. E:CO Issue Vol. 12 No. 3 2010: p. 21-45

¹¹⁴ Geographical clusters as defined in reference to the Marshallian industrial district.

analytical approach used by academics to tackle complexity principle and concluded hat to reach a coherent understanding for complexity theory on a discipline-by-discipline basis, it is better to divide complexity research into three divisions. He observed that complexity can be either Algorithmic, Deterministic or Aggregate.

Author	Concept of division	Divisions		
Manson 2001	Methodology and Discipline	Algorithmic Complexity	Deterministic	Aggregate
Carbonara et al. 2010	Historical- geographical view	European School	American School	Econophysics School
Morteau 2016	Discipline- specific	Economic Complexity	Geographical Complexity	Planning Complexity

Table 11 Generic divisions of Complexity Theory (theories)

Also, authors agree to distinguish three generations of theories of complexity. The first generation emerged after the Second World War to take an interest in hard sciences. It starts from the idea that complex situations can be dealt with by successively solving a series of simple problems. Beginning in the 1960s and following discoveries in physics and biology, the first porosities were born with the social sciences. Finally, the 1990s saw a certain generalization of the field of complexity. Morin (1990) plays a major role in denouncing too great epistemological and organizational fragmentation of the disciplines and proposing theoretical tools to connect this knowledge. Thrift (1999) offers an additional reading by tracing the interactions between managerial sciences, social and natural sciences or philosophy.

The following table summarises the basic ideas of complexity theory within the main three disciplines:

Discipline	Main questions	Main complexity elements employed	Key authors
Economics	How does the economy evolve in time real?	Routines, Path Dependency,	Arthur, Nelson,
Leonomico		Small historical	Winter,

Table 12 - Key complexity elements as per literature by discipline (Source: Morteau 2016)

	Why do we see such organization diversity within firms?	events, Openness, Nonlinear dynamics	Boschma, Martin
Geography	Where do new industries emerge? Why do some industries decline in certain regions? What is the ideal level of economic specialization for a region? To what extent does the institutional environment play a role in economic development?	Path Dependency, Path Creation, Lock-in, Co- evolution	Storper, Walker, Scott, Pumain,
Planning	How can complexity be integrated in project methods? What influences governance and networks of actors have on the project urban process?	Adaptability, Openness, Participatory governance, Flexibility, Co- evolution	De Roo, Pinson, Allen, Bertolini, Comunian, Chapain

4. Complexity and Industrial Clusters

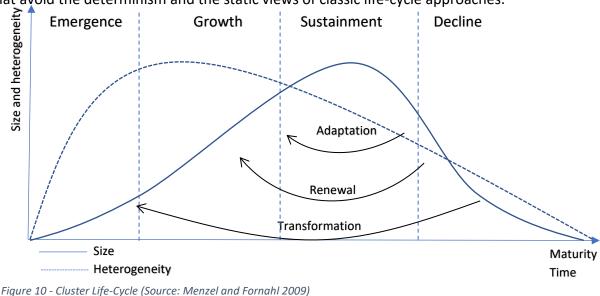
Complexity thinking is growing steadily while it is applied to numerous disciplines. Complexity is thus touted as an interdisciplinary movement. Even more, as Manson and O'Sullivan (2006) note: *"some respects it is actually supra-disciplinary such that complexity generalizations from one field are applied to others sometimes appropriately"*. Space and place-based research, they argue, is both interdisciplinary and supra-disciplinary. Thrift (2002) highlights the discovery of the importance of space in many disciplines, which is leading to interdisciplinary research.

As the notion of cluster lies at the intersection of a multitude of disciplines (i.e. Economics, geography, urban planning and policy etc.), the input of complexity theory within these fields would enlighten our research approach. Also, as stated before, a recent article (Coenen et al. 2017) has placed agglomeration as one central idea of Evolutionary Economic Geography EEG (p. 6). Essentially, economic geography literature applying complexity theory to clusters consider clusters as **complex adaptive systems**.

Cluster Life-Cycle approach

"Clusters pass through life cycles – they emerge, grow, mature and ultimately decline. Unlike the human body, however, they can adapt and transform to escape their terminal fate." - Matthias Kiese, Ruhr-University Bochum, Germany. On the cover of Fonahl and Hassink (Eds.) (2017)

In opposition to classic theories of clusters which call for a One-size-fits-all cluster model, and the subsequent related policy initiatives, the life-cycle approach calls for specific study, and specific policy responses depending on the stage of the cluster development (Fornahl and Hassink 2017). Theorists of the cluster life cycle approach, (e.g. Bergman, 2007; Brenner, 2004; Menzel & Fornahl, 2010¹¹⁵; Fornahl & Menzel 2006; Ter Wal & Boschma, 2011, Fornahl et al. 2015, Hassink et al 2010, Trippl et al. 2015) have adopted a life-cycle view for the evolution of clusters which, at the bottom of it, divides the evolution of cluster into phases of **birth, growth, maturation and decline**. As mentioned above, a dynamic view of clusters and the idea of how cluster change and develop is not new (Stroper & Walker 1989 discussed this for example). It was Pouder and St. John (1996) who first introduced a coherent application of the life-cycle approach to the industrial clustering phenomenon. Martin and Sunley (2011) added a complexity-evolutionary perspective to this approach introducing adaptive life-cycles that avoid the determinism and the static views of classic life-cycle approaches.



¹¹⁵ Menzel, M.-P., Fornahl, D. (2010) *Cluster life cycles: dimensions and rationales of cluster evolution*. Industrial and Corporate Change. 19, 205–238.

Nevertheless, many life-cycle authors focused on the early stages of the cluster emergence and beyond for two main reasons. First, it is the usually the genesis of the cluster and *its initial conditions* that shapes the future development path of the cluster (Carlsson 2006, Menzel et al. 2010, Bernella et al. 2017); and second, early-stage policy initiatives adapted the clusters are crucially more effective than in later stages (Carlsson 2006, Feldman 2006). Especially in its early days of formation, the cluster is subject to a host of differing trajectories (Martin & Sunley, 2011). With time, contingencies decrease and become more tied up to former choices; a fact that is defining path dependency (David, 1985; Martin, 2010; Martin & Sunley, 2006; Sydow et al., 2012). However, authors such as Menzel and Fornahl (2009) assert the difficulty of studying the early stages of cluster birth for lack and information and since "*the emerging cluster is not actually a cluster*" (: p. 225).

Complex Adaptive Systems, Identity and the Adaptive Life Cycle approach

"The key components of a cluster are the particular types of similar and related firms – let us say, computer software firms - and their associated institutions. The key relationships are the various network interactions, interdependencies, inputs, outputs, spillovers, and emergent external economies that connect the co-located firms and associations and which turn them into a functioning system, that is a cluster." (Martin and Sunley 2011: p. 1304)

Complex adaptive systems have been around in the literature on economy and economic geography for few decades (McKelvey 1999, Cavalier 1998, Stacey 1996). As clusters exhibits many generic features of such systems (as discussed earlier in this chapter), the idea that industrial clusters are complex adaptive systems is strongly grounded (Martin and Sunley 2007, 2010). Clusters are identified as a 'mesh' made up of interconnected elements with each having identified functionality that may or may not be related to other elements' functions, giving rise to 'a particular identity' of the whole (Martin and Sunley 2011). Porter once defined clusters as: 'geographic concentrations of interconnected companies, specialized

suppliers, service providers, firms in related industries, and associated institutions ... in particular fields that compete but also cooperate' (1998: p. 197).

Martin and Sunley (2011) lists several characteristics of complex adaptive systems and compare them to the behaviour of clusters (Table 13).

Openness	Boundaries with environments are neither fixed nor easy to identify, making operational closure difficult, and the system subject to constant exchange with its environment. Clusters are subject to constant competition from other clusters in the same industry, and to other 'exchanges' with their 'external environment'. (MARTIN and SUNLEY, 2003, 2007).
Non-linear dynamics	Various feedbacks and self-reinforcing interactions amongst components, with the result that they are often characterized by path dependence.
Emergence and self- organization	there is a tendency for macro-scale (in this case, cluster-wide) structures and dynamics to emerge spontaneously out of micro-scale behaviours and interactions of system components (the individual firms and institutions that make up a cluster) (MARTIN and SUNLEY, 2011b ¹¹⁶).
Co- evolutionary mechanisms	The macroscale features can exert influence ('downward causation' effects) on the micro- scale components (SAWYER, 2005). And the process of self-organization gives complex systems the potential to adapt their structures and dynamics, whether in response to changes in the external environment.

Table 13 CAS selected features applied to clusters (Adapted from Martin and Sunley 2011)

However, Martin and Sunley (2011) argue that the idea of clusters as complex adaptive systems suffers a number of shortages, one point of which is particularly critical: as clusters evolve over time, they can **change identity**, but the **CAS concept ignore a constant definition for a changing system**. The change in system identity lies problematic within the evolution of complex systems and stems from the definition of the system itself. They argue that while most discussion on complex systems doesn't account for the change in the definition of the system itself and thus a change in the system identity, some sort of **continuity** is required though an identity can evolve. The system identity is defined by the sum of key components of the system and their key relationships.

As a response to this point, Cummings and Collier (2005) suggest five types of complex adaptive systems according to their different evolutionary trajectories. 'These are distinguished on the basis of whether the system under study maintains a continuous identity through time; whether alternative stable states (implying some form of self-reinforcing

¹¹⁶ Martin R. L. and Sunley P. J. (2011b) *Forms of emergence and the evolution of economic landscapes*. Journal of Economics of Business and Organisation

dynamic) are possible in the same physical location; and whether the role of exogenous forces and processes is strong or weak' (Martin and Sunley 2011: pp. 1304-1305)

Of these models, the adaptive life cycle model for the cluster evolutionary trajectory is that in which complex adaptive systems "follow after one another in the same location, and may even be similar to one another in certain respects ... new system may retain some of the components of the old, but do not display continuity of identity over time, and therefore constitute different systems". (: pp. 1305-1306).

According to the same authors, the adoption of the adaptive life cycle model tackles two paradoxical issues with the life cycle approach. First, the seemingly contradictory two characteristics of complex systems: stability and change. This has been evoked in the **Panarchy theory** (Gunderson and Holling 2002). The idea of **'resilience'** to external effects and shocks seems to account for this contradiction where resilience itself changes with time as the system evolves. Second, the other paradox is that the **interconnectedness** of CAS elements, which increases with time, results in reduced **adaptability** to environment changes. This implies a trade-off between connectedness of elements and system resilience with time. 'The 'adaptive cycle' model seeks to reconcile this contradiction or conflict by positing a fourphase process of continual adjustment' (: p. 1306). Each phase of the adaptive cycle is characterised by a changed level of three dimensions: a) **resources** available to the system, b) **connectedness** of system components, and c) **resilience** or system vulnerability to shocks and stresses.

Without going into the details of the adaptive life cycle proposed by Martin and Sunley (2011), it's worth noting that they eventually admit the shortages of such approach, most importantly the **restrictive assumption** that a system evolution always goes in four-phase cyclical sequence which is deterministic in some aspect. Also, such model considers less emphasis on **endogenous triggers** of change and the **continuous exogenous pressure**, but rather it focuses on shocks that might affect the system as a whole. Furthermore, the **co-evolution** of the cluster in context with exogenous factors and other clusters, with which the current cluster is in competition, is not evoked.

As discussed above, the triggering reasoning for Martin and Sunley to develop this model is their postulation that a change in a system identity is conflicting with the definition of complex adaptive systems. Adopting this view without adopting the restrictive phasing cyclical model of cluster evolution is what prompts us to think of a more adapted multiple path-dependency model (see for example: Bergek and Onufrey 2014, belussi et Sedita 2009) that accounts for the shortages provoked above. However, we are mobilising a few elements from cluster life-cycle literature and we are also using notion from Martin and Sunley's adaptive life cycle model.

Actors, Networks and Institutions

Cluster life-cycle literature focused on studying changes to the main **three elements** that drive the cluster through different states of their developments, namely **actors, networks and institutions** (Maskell & Malmberg 2007, Menzel & Fornahl 2010, Ter Wal & Boschma 2011, Fornahl et al. 2015).

On one hand, empirical analysis in EEG often focuses on **networks of agents and institutions** rather than other spatial entities as the unit analysis (Kogler 2015). On the other hand, Dopfer et al. (2004) propose a multi-scalar perspective on cluster evolution in a '**micro-meso-macro**' framework that aspires to combine different scales and hierarchies within the analysis. However, this approach is yet to be tested empirically (Trippl et al. 2015).

Though we are not using the full life-cycle framework in our analysis (we are focusing on the genesis stage instead), we are using cluster elements as evoked in life-cycle literature, namely actors, networks and institutions. In addition, though we are not following the 'micro-meso-macro' approach as proposed by Dopfer et al. (2004), but we are trying to retain the idea of combining scales and hierarchies in the analysis.

To build our theoretical framework, we will start by defining the elements and the complexityevolutionary approach ending by combining them with **Gordon and McCann's Cluster dynamics** as discussed in the previous chapter. To define the principal element in our evolutionary model, we partially follow Fornahl el al. (2015)¹¹⁷ in their review of literature on the evolutionary economic geography having in mind the clustering phenomenon:

- Actors: individuals, firms and public organisations. Special emphasis is put on the learning capabilities of actors thanks to their 'memory' (Ciliers 1998). Important also to emphasise their heterogeneity as studies show that 'heterogeneity and possibilities and capabilities of exploiting heterogeneity are crucial for cluster growth and renewal' (Fornahl et al 2015: p.3). Actors in the clusters are affected by endogenous and exogenous forces, particularly the Marshallian externalities along with urban (Jacobian) externalities.
- Networks: Networks represent the structure by which actors within the cluster are connected. Evolutionary approaches in networks seek to understand the structural transformations of these networks and how they are triggered and how they are affecting actors along the network. The structural effect of flow of information (how the positional characteristics of actors on the network is affecting information exchange over network connections) is an essential aspect. The special positioning of certain actors within multiple network structure gives rise to the concept of Gatekeepers and their roles in the structural evolution of the network.
- Institutions: 'A cluster's institutional setting consists of, for instance, its supportive environments, regional cultures and cognitive frames' (: p. 4). Some authors stated that institutional change, especially state driven, precedes cluster evolution (Avnimelech and Teubal 2006), but recent research stresses the **co-evolution** between actors and their institutional environment. Additionally, two more institution-related notions are particularly helpful in understanding the evolution of the cluster as a whole: a) the evolution of the **cluster identity:** for example, the transformation of the institutional environment towards new collective supportive organizations, new training and skill courses and collective branding procedures (Tomlinson and Branston

¹¹⁷ Fornahl, D. Hassink, R. and Menzel, MP (2015) *Broadening Our Knowledge on Cluster Evolution*. European Planning Studies. 2015. DOI: 10.1080/09654313.2015.1016654

2014); and b) the **co-evolutionary dynamics** between cluster firms and their institutional environment especially as a result of a sudden change.

Conclusion

'the [industrial district] can be conceptualized as an evolving complex system, **a learning system producing localized knowledge**, strongly based on the local culture and the capabilities of the local actors' Belussi et Sedita (2009: p. 508, emphasis added).

Scanning the evolutionary economic geography literature provide essential entries to the elements of the industrial clusters in their spatio-temporal continuum, put in line with concepts such as **path dependency, complex adaptive systems, co-evolution and mutation**. As such, each of the elements of the cluster is linked and explained using evolutionary economics concepts. In the next section we will re-introduce some of these concepts which will serve eventually in building our theoretical framework.

5. A proposed EEG framework – Multiple Path Dependency

In this section, we are defining key evolutionary elements to be retained from the previous literature scan on evolutionary economic geography.

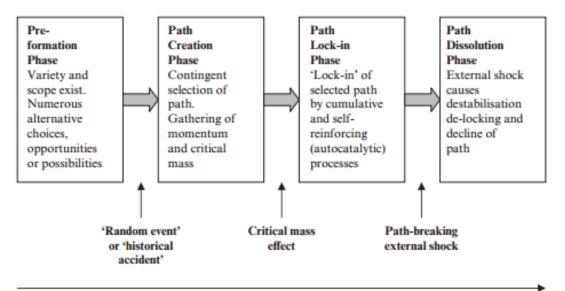
As argued above, evolutionary theory in geography has emerged from at least three theoretical positions: **complexity theory** (Frenken, 2006; Martin and Sunley, 2007; Plummer and Sheppard, 2006), **path-dependence** (Martin and Sunley, 2006) and **generalized Darwinism** (Essletzbichler and Rigby, 2007; Rigby and Essletzbichler, 1997). As Essletzbichler and Rigby (2010)¹¹⁸ explains: "*Complexity theory focuses on the creation of variety, path-dependence stresses the retention of existing information and knowledge, and generalized Darwinism examines how a population of heterogeneous entities evolve through interaction among themselves and with the environment that they help shape." (: p. 43)*

¹¹⁸ Essletzbichler and Rigby 2010 *Generalized Darwinism and evolutionary economic geography*. In Boshma R. and Martin R. L. (Eds.) *The Handbook of Evolutionary Economic Geography*. Edward Elgar.

In similar fashion, complexity economics also synthesizes evolutionary approaches with complexity thinking on dissipative systems. In Beinhocker's (2006) account, for example, the essential complexity framework that spans both natural and social systems is an adaptive, iterative evolutionary algorithm. In this algorithm, the universal evolutionary mechanisms are those that act to **differentiate**, **select** and **replicate**, and allow adaptive agents to **co-evolve with their environments** (see: Martin and Sunley 2007).

As Kogler argued in a recent article (2015), 'the most prevalent applied approach in this line of enquiry, however, is the theory of 'Path Dependency', which circumscribes a whole array of concepts, including branching, path creation and lock-in, among others (Boschma and Lambooy, 1999; Martin and Sunley, 2006, 2010).

Path Dependency: the simplest form of definition from path dependency in economy comes from Martin and Sunley (2010b): Path dependency means that *'the present state of the economy will depend on where it has come from, and on how it got there'* (p. 69). History and memory influencing self-organising systems, most importantly in co-determining the structure of the system (Cilliers, 1998). Complex adaptive systems move between stability and change by combining and recombining both path dependent and path creation processes (Baum and Korn, 1999).



Time



¹¹⁹ Martin and Sunley (2010b) *The place of path-dependency in an evolutionary economic geography*. In Boschma and Martin 2010 The Handbook of Evolutionary Economic Geography

Co-evolution: It is increasingly clear that industries do not evolve in a vacuum but coevolve with other economic agents and alongside the broader institutional settings that sometimes develop within the regions in which they are embedded (Freeman, 1995; Nelson, 1995). McKelvey (1999) makes use of Porter's (1990, 1998) notion of 'coevolutionary pockets' to suggest that clusters not only evolve within a competitive industry environment but coevolve with it. As such the cluster as a CAS moves between stability (inertia) and change (adaptation), at the edge of chaos (Lindsay 2005). Depret and Hamdouch (2007)¹²⁰ argue that the co-evolution in the context of techno-industrial change happens in three modes: sequential (one phase leading to another), diachronic (the rhythm of change is defined by multiple paths) and contingent (where the combination of small random events and factors affect the passing from one phase to another without a steady trajectory) (: p. 105).

Bifurcation: In evolutionary economics literature, as in the work of David and Arthur (Arthur et al., 1987; David, 1988, 1994, 2005), the search process is mainly undirected, and decisions mainly contingent. Several alternative opportunities are explored at an initial stage until a 'critical juncture' occurs – which is usually a 'historical accident' or a 'random event'. In consequence, one particular development opportunity or decision is then 'selected' or preferred over alternatives. This process is likened by David to the idea of 'bifurcation' used in complexity theory (Martin and Sunley 2010b). The resulting opportunity or development then begins to acquire more momentum by attracting other actors or developing more market influence, thus a development path is formed when a critical mass around this activity begins to build up. While the path gets 'locked- in' after a certain threshold of momentum, the phase of cumulative and self- reinforcing development follows (ibid).

Sydow et al. (2005) argue that the assumption that path creation is a random event or 'accident of history' in David's path dependent model ignores the fact that the emergence of a new technology, a new product, or a new organisation, is often the outcome of purposive behaviour and directed decision making by economic agents (Martin and Sunley 2010b).

¹²⁰ Depret, M. & Hamdouch, A. (2007) *Changements technologiques, logiques institutionnelles et dynamiques industrielles : Esquisse d'une approche co-évolutionnaire appliquée à l'industrie pharmaceutique et aux biotechnologies.* Innovations, 25(1), 85-109. doi:10.3917/inno.025.0085

Further, they suggest the model is incomplete in the sense that it says nothing about how paths 'de- lock', break up and dissolve.

Adjusted Multiple Path-dependency Model

Generally connections are specific direct relationships between elements and are ubiquitous in the economic system. They exist in the structure of interdependencies and interactions between agents. They exist in the modalities of technology and the forms of organisation and competence. They exist as contracts. They exist in the structure of decision rules and the way that information is processed, in all such events, the dynamics of economic systems can be seen to occur most in the space of connections. (Potts, 2000: p. 3121)

Thus, from this perspective, economic evolution – and hence complexity economics – is about the emergence and evolution of multiple connections in the form of networks. Potts concludes that graph theory could be a useful methodology to deal with economic complexity at the representational level (Martin and Sunley 2010: p. 101)¹²².

An example of the genesis of an industrial cluster in a path dependency context can be found in the genesis of the Silicon Valley. The genesis of the Silicon Valley can be traced back to three main components: The military heavy investments starting from the 1930's (Navey, aerospace industry and NASA's Ames Research centre), the war and post-war military supporting private industries (HP, Bell, Shockley Semiconductor etc. up to the late 1960's), and Stanford University (Stanford Research Institute was established in 1969 and became one of the four nodes of ARPANET – again a government research project). With generous governmental fund injection, many local and external historical incidents redefined the objectives of main players (e.g. the US Department of Defence desire to develop technologies during the Cold War and the desire of the University to develop the local job market) (Sternberg 2015). Such events defined the trajectory that made the emergence of the cluster possible and with it the ID changed from an research/military industrial region into a high-tech cluster and the shift in the leading firm/institution was

¹²¹ Potts, J. (2000), The New Evolutionary Micro- economics: Complexity, Competence and Adaptive Behaviour, Cheltenham, UK and Northampton, MA, USA: Edward Elgar.

¹²² Martin, R. and Sunley, P. (2010) Complexity *thinking and evolutionary economic geography*. In Boschma R. and Martin R. (Eds.) The Handbook of Evolutionary Economics. Edward Elgar.

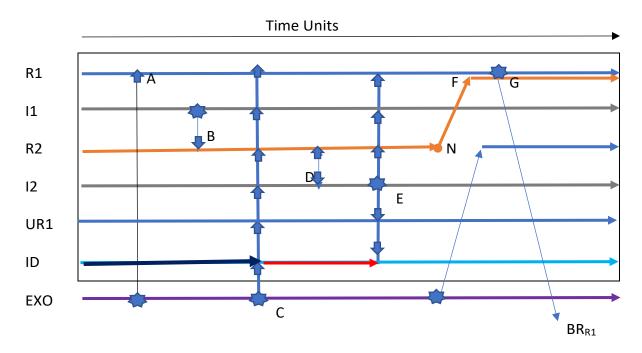
made from research/military to high-tech companies staring from the 70's such as Apple/Intel and later Google and more recently Facebook (noting that no obvious leader existed at any time after the cluster has emerged. (Currently thousands of high technology companies are headquartered in Silicon Valley. Among those, the following 39 are in the Fortune 1000¹²³).

As such, different evolution forms exist, these include for example an institutional change (through a change in the law environment for example), the emergence of a local leader firm, the emergence of a leading research facility, a bifurcation of an already existing firm, or a change in the physical attributes of the territory.

Furthermore, as seen above from the discussion of Martin and Sunley (2011) concerning the problem of identity change in complex adaptive systems, in our proposed adjusted multiple path-dependency model, we consider a system identity having its own evolutionary path that receives input (change) from different trigger-events by actors within or outside the cluster. A system identity path is connected, by definition, to all actors' paths and any change to a system identity is always affecting other paths, though to varying degrees. In the same time, a change in cluster's identity is by itself an event that triggers change in external entities whether they are other clusters in the region, other regional group of actors, the institutional environment or even (less likely, or less importantly) a single firm or an individual. System Identity is particularly important when looking into the **global/local exchange** of cluster actors and whether such exchange is tilted towards either side.

The following figure illustrates our conceptual representation of the proposed framework.

¹²³ A list maintained by the American business magazine Fortune, in which the 1000 largest American companies are ranked by revenues.



▲ Event ♣ Trigger↓: Co-evolution. Rn: Related firm , In: Institution, URn: Unrelated firm,
 ID: Cluster Identity, EXO: exogenuous factor (trigger or affected). BR: branching. N:
 Emergent firm

Figure 12 Graphical representation for the Adjusted Multiple Path Dependency Model

This graphical model can be explained further by elaborating its different components. Excpet for the system identity, each line in the graph represents an evolutionary trajectory of a cluster actor. Extra-cluster actors are summed under the EXO line which represents a source of external event-triggers rather that a trajectory. The horizontal lines connect the event triggers with the affected companies within the cluster and they also represent one evolutionary form (the graph highlights Branching, Co-evolution, and Birth of a company, but other forms are also possible and assumed under the general Change category as explained below).

In the graph we can define different event-triggers and their responding evolutionary concepts:

• Exo: All exogenous factors including that originate in other clusters, including competitiveness. However, continuous exogenous stress could be transformed to periodical instant events that can have an observable (and to somewhat predictable) effect on the cluster actors, networks or institutions.

- Furthermore, the model doesn't reflect, at this stage, the different types of events, firms, or institutions, the network structure, nor the social network. However, this can be reconciled by not only differentiating the triggers, and effects, but also differentiating types of actors. This model needs a complementary tool to count for network structure. Such tool could be represented graphically over the same model, but this is left for a further research.
- ID: As evoked by Martin and Sunley (2011), a system changing identity is a shortcoming of complex adaptive systems. In this model, system identity is represented by a path that is susceptible to evolution. Identity can be changed due to either endogenous or exogenous factors (triggers / events) case C and Case E for example. The following are example of possible cases comprised or covered by this model.
- A: an exogenous factor / trigger affects a firm, and this changes its path (it changes its sources, structural network position, competitive position, individual position over the ego-network, etc.)
- **B**: An **endogenous institutional event** affects an actor's path. This actor could be a firm or another institution.
- C: an **exogenous event** that affect the identity path of the cluster which in turn affect the evolutionary path of its actors (in part or in whole) whether in related or unrelated firms, its institutions, and networks.
- D: **Co-evolution**: an institutional change that cause an evolutionary change in a firm's path that affect the policy which in turn affect the firm. On the other way around, an evolution to one or more firms (new product, new technology, a special growth etc.) could initiate change would affect an institutional change. (See e.g. Tomlinson and Branston 2014, Lindsay 2005)
- E: an **endogenous institutional** change that affects the **system identity:** in a coevolutionary perspective it might also affect cluster actors (related and unrelated firms, institutions and networks).
- F: **Elongated co-evolutionary path**: a firm (mostly a related one, either within or from outside the cluster) joins another firm in an evolutionary path for a certain amount of time. This co-evolutionary path doesn't necessarily mean that the

evolutionary path for any of both companies is dissolved. (example of such event could be a shared project, a joint venture etc.)

- G: Branching, diversification or bifurcation: two key points in the growth of a cluster, is the vertical and horizontal diversification of firms: (a) vertical within the same industry by generating off-springs (e.g. branching) either locally or externally, and (b) horizontally into related industries (Boschma 2016 includes unrelated industries as well) by establishing side businesses. Accumulating external economics is a key trigger.
- N: Emergence: an emergent path in this case is due to an exogenous event, but it could be also due to an endogenous event. N could also be a company exiting the cluster, another dissolved, a merger of two companies, etc. Similar to the role they play in branching of local firms on the outside of the cluster, Gatekeepers play a focal role in bringing new entrants to the cluster as well as bringing together different networks of actors.

6. Conclusion: Arriving at some practical questions

Applying the multiple path dependency model illustrated above to the triple cluster spatioeconomic dynamics evoked in the previous chapter (Gordon and McCann 2000), would lead us to develop the following practical questions over the evolution of clusters – Table 14.

	Pure Agglomeration	Network of firms	Network of Individuals
Agents	Related firms	Related and unrelated firms and other organisations (e.g. institutions)	Individuals
Network	Production-based, basic connections	inter-organisation network, Local-global network, institutions, research and non-profit included	Inter-personal network
Institutions	Sectorial production legal entities, territorial administration + Territory brand & Local Identity	Government entities, legal environment, territorial collectivities, etc. + Market Reputation and identity	Social clubs, + Local cultural norms and traditions
		identity	

Table 14 Theoretical Questions on Clustering Dynamics from an Evolutionary Perspective

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Main theoretical referenceMarshall Triad / Territory ResourceMarket dynamics, business relations, CompetitivityInterpersonal relations. Social proximitiesComplexity-Evolutionary complexity-EvolutionaryPerspective124Interpersonal relations. Social proximitiesComplexity-Evolutionary conditionsTerritory initial conditionsMarket initial condition (instant equilibrium)Interpersonal relations. Social proximitiesChange triggersTerritory initial conditionsMarket initial conditions (instant equilibrium)Networking events Change in actors (New actors, disappeared actors, disappeared beattor, disapteation, conflic				
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cluster trajectory Territorial conflicts Market conflicts Personal conflicts	institutional			Role of the elites
Scalability effect Spatial continuum Global-Local network Distant relations		Territorial conflicts	Market conflicts	Personal conflicts
	Scalability effect	Spatial continuum	Global-Local network	Distant relations
	-			

Going forward, we will discuss the genesis cultural and creative clusters in light of our discussion of the concepts of evolutionary economic geography and the dynamics of industrial clusters.

¹²⁴ Important note: the division in this table is not by any means an enquiry for an ontological approach but rather a way to simplifying the complex. The research to these questions should always be horizontally hence taking into account the triple clustering dynamics (pure agglomeration, business network and interpersonal network) in the same time. A cluster-based new technology or a new urban project for example cannot be achieved within territory resources-based agglomeration dynamics only (Marshall's pure agglomeration triad), but it would require a network of businesses and a network of interpersonal relations to get achieved.

CH III – GENESIS OF THE CREATIVE CLUSTER: AN EVOLUTIONARY PERSPECTIVE

"Culture has become a key factor in the competition among cities to attract visitors, and an important part of the service-based economy" ~ (Porter, 1998).

"The cultural economy is coming to the fore as one of the most dynamic frontiers of capitalism at the dawn of the twenty-first century." ~ Allen J. Scott (2000:3)

As seen in the introductive chapter of this thesis, cultural and creative clusters are considered a subset of industrial clusters to the same degree as creative production is considered as an intrinsic category of industrial production with certain considerations. The literature on cultural and creative clusters tends to adopt such classification with or without explicitly referring to it. Pratt (2004), for one example, states explicitly that creative clusters are a subset of industrial clusters and the economic dynamics and the policy responses are similar for both categories. Thus, by extension, the dynamics leading to the agglomeration of industries and to the emergence of industrial clusters are similar in the case of the cultural and creative industries. However, the particularities of cultural and creative clusters remain perceptible and they are emanating from a different production process and a different value creation.

Creative industries represent an area of high risk, with extreme fluctuations in market success. This includes a low survival rate and high pressure to innovate and rapidly changing project cultures. Some say it is somehow a foreshadowing of tomorrow's job market: more flexible, project-led, requiring mobility and high qualifications. (Von Streit and Lange, 2013)¹²⁵

¹²⁵ Von Streit A. and Lange B. (2013) *Governance of Creative Industries: The Role of Social and Professional Networks*. In Musterd S. and Kovac Z. (Eds.) Place-making and Policies for Competitive Cities. John Wiley & Sons, Ltd 2013.

Building on the conclusions from the previous three chapters, (i.e. from the literature review (the introductory chapter), from the industrial cluster theory (Chapter I) and from the

complexity theory and the concepts of the evolutionary economic geography (Chapter II), in this chapter we are aiming at:

- 1- Revisiting the Cultural and Creative Clusters in light of the three-entry model: Assessing what the literature could provide on the modified three-entry approach elaborated in Chapter II from Gordon and McCann (2000). Though this is a particularly difficult mission as the literature doesn't provide exactly the same typology or categorization, we are relying on browsing for literature examples on implicit rather than explicit features or characteristics of each model.
- 2- Examining literature around the idiosyncrasy of creative clusters and extending the analysis into higher scales (i.e. the city) taking into consideration the transition from creative clusters to the creative city and the policy implications.
- 3- Assessing how the evolutionary Economic Geography could help understand the clustering dynamics of cultural and creative industries and the characteristics of cultural and creative clusters. Basically, we are looking at what had the literature to say on Cultural and Creative Clusters from an evolutionary complexity perspective.
- 4- Concluding with the analytical framework that applies results from our analysis of industrial clusters (Chapter I) and the evolutionary/complexity approach (Chapter II) in addition to considerations specific to Cultural and Creative Industries.

1. Cultural & Creative Clusters, The Cluster Three Dynamics Model

"An adequate understanding of clusters requires a combination of geography, social networks and inter-organizational relations". ~ Nooteboom (2004)

This Nooteboom's quote can be elaborated in the light of the triple entry theory to cluster dynamics, namely the territorial attributes, the inter-organisational networks, and social networks. Examples from literature on Cultural and creative clusters can be in one way or another fit into this triple branch theory, only if we emphasise its main shortcomings: 1) these different theoretical 'models' are not separate alternatives as they often (mostly) overlap and subsequently: 2) this typology is more pertinent theoretically rather than empirically.

In the following section, we draw several examples from the literature to highlight the characteristics of cultural and creative clusters in light of this triple-entry theory. One important benefit is sensing the shift from industrial districts/clusters to cultural and creative clusters. Idiosyncrasy of cultural and creative clusters leads us to give special attention to a) the urban externalities under the first branch of the theory '*pure agglomeration*', b) to the institutional dimension of creative clusters and the network effect in temporary projects in the second branch and the third '*business and inter-personal networks*', and c) to the role of elites, patronage and sponsorship in the third.

Territory Locational Attributes (Pure Agglomeration)

The territorial location attributes are formulated in the previous analysis of agglomeration economies (Chapter I) based on the classical Marshallian externalities, the neo-classical Krugmanian discussion of concentration forces and the Jacobian 'urban' externalities. The early literature on cultural districts, and later on cultural and creative clusters, revolved around these lines of discussion. Similar to the discussions on industrial clusters, the entry of territorial attributes (giving rise to pure agglomeration dynamics as per the Gordon and McCann's model) is a departure point in all discussion of clustering dynamics of cultural and creative industries. Factors such as specialised labour, infrastructure, supporting facilities, reputation, population characteristics, prices and rental rates, environmental conditions, availability of advanced technology, and the institutional environment (particularly initial conditions of laws and regulations), are among the first to bring into consideration in this category of clustering dynamics.

In a particular example, the reference to the Marshallian externalities is explicit in the literature on the 'Third Italy'¹²⁶— where the phenomenon is termed as the 'new industrial

¹²⁶ Defined as: the specialized industrial districts located predominantly in small. towns and rural areas in the Italian regions of Piedmont, Lombardy, Veneto, Friuli-Venezia Giulia, Emilia-Romagna, Tuscany, the Marches and Abruzzi (Bianchini 1991)

district' (Becattini, 1989, 1990). The clustering in these 'production systems', called industrial cultural districts in what related to cultural production systems, concentrations is due to companies having primarily sought *specialised labour pools and knowledge*. A similar observation can be seen in the Baden-Württemberg, Milan-Lombardy and Ile de France cases (Storper & Salais, 1997). Santagata (2002) recalls the example of the textile and apparel district of Carpi in Italy¹²⁷ where a large pool of employees means a diverse series of products.

It is noted that the clusters of mono-cultural industries (as coined by Evans 2009b¹²⁸) profit mostly from the Marshallian externalities and thus fit mainly in the pure agglomeration model. Examples of mono-cultural industries include TV/film & music post-production and studios, new media, textiles, and ceramics as per Evans (2009b).

What also can be considered part of the agglomeration externalities of cultural and creative clusters is the "secondary footfall effect" or the "visitor economy" (Evans 2009¹²⁹, 2009b), which is an externality associated with value added by tourist spending. In this regard, museum quarters or districts for example (as described by Santagata 2002) are advantageous of the pure agglomeration forces, where museums profit from the inflow of tourists and visitors while affecting indirectly the neighbourhood or the city where it is situated. The Bilbao Museum Effect (e.g. Grodach 2010¹³⁰, Plaza 2000¹³¹) is widely noted in the literature on cultural districts around the world. The Bilbao experience is copied to different parts of the world such as in The Louvre Abu Dhabi and The Guggenheim Abu Dhabi, UAE, The Louvre-Lens, France etc. (Boushnaki 2011¹³², Lord 2007¹³³).

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¹²⁷ Santagata W. (2002) *Cultural Districts, Property Rights and Sustainable Economic Growth*. International Journal of Urban and Regional Research. Volume26, Issue1. March 2002 Pages 9-23

¹²⁸ Evans G. (2009b) From cultural quarters to creative clusters – creative spaces in the new city economy. In Legner, M. (Ed.) The sustainability and development of cultural quarters: international perspectives. p. 32 – 59. Institute of Urban History Stockholm

¹²⁹ Evans G. (2009) Creative Cities, Creative Spaces and Urban Policy. Urban Studies 2009 46: 1003

¹³⁰ Grodach, C. (2010) *Beyond Bilbao: Rethinking flagship cultural development and planning in three California cities*. Journal of Planning Education and Research, 29(3), 353–366.

¹³¹ Plaza B. (2000) Evaluating the Influence of a Large Cultural Artifact in the Attraction of Tourism: The Guggenheim Museum Bilbao Case. Urban Affairs Review 36, 264-274.

¹³² Bouchenaki M. (2011) *The Extraordinary Development of Museums in the Gulf States*. Museum International, No. 251–252 (Vol. 63, No. 3–4, 2011) ^a UNESCO 2013

¹³³ Lord G.D. (2007) *The "Bilbao Effect": from poor port to must-see city*. The Art Newspaper, No. 184, October 2007

This entry also explains the emergence of art districts in the industrial brownfields driven at the emergence phase of the cluster by essential territory-based factors such as low rents. Examples include such as the 798 Art District in Hong Kong (Yin et al. 2015¹³⁴):

The emergence of Factory 798, an art gallery complex in an industrial area in Hong Kong. The project is 'rent-driven land-use succession' from industrial use to an art district where the complex was meant to be an electronics industry project. The art district was realised through upgrading (attracting high-end galleries and advertising). The emergence of this district is "*a story about the path-dependent nature of development and a story that involves the interaction of processes unfolding at different scales*" (: p. 148).

Knowledge spillovers (part of the Marshall's triad) could be the crucial clustering driver of information-based industries such as high-tech creative industries and content-creating businesses (Thorsby 2010). Such knowledge spillover is extended to beyond Marshallian externalities (specialization) or locational economies, but to what is called Jacobian (diversification) externalities or urban economies¹³⁵. While Marshall externalities (or the MAR externalities: Marshall (1890), Arrow (1962), and Romer (1986) formalized by the work of Glaeser et al. 1992¹³⁶) describe the intra-industry localisation benefitting from the knowledge spillover of the same or related-industry firms, Jacobs (1960) argues that the most important sources of knowledge spillovers are external to the industry within which the firm operates. This is also extended to other extra-locational attributes related to the urban characteristics of the city. As such, it is diversified local production structure gives rise to urbanization (diversification) externalities or Jacobs externalities (Beaudry and Schiffauerova 2009¹³⁷). In this sense, some unrelated industries tend also to cluster together as in some cases of several cultural subsectors showed strong co-location patterns (Currid and Williams 2010). The **urban**

¹³⁴ Yin et al. (2015) *The 798 Art District: Multi-scalar drivers of land use succession and industrial restructuring in Beijing*. Habitat International, Volume 46, April 2015, Pages 147-155

¹³⁵ Stachowiak and Stryjakiewicz T. (2017) *Specialisation as a Driver of the Development Dynamics of Creative Cities and City Regions*. In Chapain C. and Stryjakiewicz T. (Eds.) *Creative Industries in Europe: Drivers of New Sectoral and Spatial Dynamics*. Springer

¹³⁶ Glaeser, E., Kallal, H., Scheinkman, J., Shleifer, A., (1992) *Growth in cities.* Journal of Political Economy 100, 1126–1152

¹³⁷ Beaudry C. and Schiffauerova A. (2009) *Who's right, Marshall or Jacobs? The localization versus urbanization debate.* Research Policy 38 (2009) 318–337. ELSEVIER.

externalities or the cross-sector externalities could be reciprocal, for example when the rising of office rents in some emerging art districts is caused by the influx and agglomeration of creative firms.

In this sense, Santagata (2002) describes the idiosyncrasy of the creative clusters leading to localisation economies when creative people are in search for returns through knowledge spillover: "*They move about, in search of better opportunities to create, and they find them in localized places where increasing returns are made possible by the diffuse and free circulation of ideas, and where saturation is never attained. From the theoretical point of view, industrial districts offer proof that perfect competition is not always an equalizing spatial process" (: p. 11). Florida et al. (2008) and Glaeser et al. (2001) highlight the unique ability of large cities to attract creative talent. Similarly, the concentration of cultural institutions in large cities has enabled these institutions to benefit from economies of agglomeration.*

Some consider cultural districts that are in the inner cores of the cities are essentially pure agglomeration clusters where entrants are benefitting mostly from locational aspects of the district such as urban accessibility, urban connectivity, abundance of services and quality of infrastructure. Examples of inner-city art districts benefitting mainly of pure agglomeration dynamics include Soho district in New York and Chelsea in London (Grodach 2011, Murdoch et al 2015).

From an urban planning perspective, planned or designed cultural districts and cultural-led regeneration projects are promoted using primarily locational aspects rather than networking attributes or social attributes. As Hutton (2008) points out, the economic and social restructuring in the inner city helps trigger a new round of industrial innovation and restructuring marked by new production that combines arts, knowledge, and technology, and in some cases, finance, which together result in high value-added outputs (Hutton, 2004a; 2008; Indergaard, 2004). The economy of the resulting inner-city districts is shaped by agglomeration economics. Examples include many capitals around the world, but most significantly Singapore, Hong Kong, London, Vancouver and Toronto. In what related to art districts, though the appearance of arts is arguably linked to the creative class and the

affluence (the abundance of leisure time and spending) (Evans 2002¹³⁸), art businesses tend to be located in low-rent areas such as in the industrial fringes of cities (Chapple and Jackson 2010: p. 481). Example of such areas include also Al Quoz industrial area in Dubai, UAE, as we will be discussing this case in detail in the second part of this thesis.

In this category, we note specifically two more factors: 1- Supply driven demand 2- Nonrelated industry leader role of clustering. (both are not directly part of production network or economic externalities). The supply-led nature of demand in arts and cultural and creative industries plays a significant role.

Business Network attributes: (Economic interdependencies)

While businesses choosing to 'cluster' to achieve minimal logistic costs is a grounded factor in the agglomeration literature, the business network is essentially focused on the direct business ties (the network) between firms as a primary force that brings firms spatially closer.

The importance of rivalry and the intra-firm and inter-firm information exchange is emphasised as a source of competitivity and growth in the Porterian approach (Porter 1990). Though the factor model represented by Porter's infamous 'Diamond' comprises factors of human and physical resources as sources of agglomeration (which we classified under Pure Agglomeration dynamics), the networking factor with related and unrelated firms and the incorporation of the institutional environment is the added value of this model compared to the pure agglomeration model (Gordon and McCann 2000).

Cultural business networking

Production in the creative industries is organised in **temporary projects** due to the necessity of combining various aesthetic elements which represent different cultural and industrial subsectors (Pratt 2002, 2006; Grabher 2002, 2004). These projects are constituted through short term alliances between creative specialists, whether businesses or individuals (Pratt 2006). The duration of products and projects to create them, and the firms that produce them, are short, as projects very often cut across firm boundaries. This means that the 'firms'

¹³⁸ Evans G. (2002) Cultural Planning: An Urban Renaissance? Routledge.

are constantly recycling and revolving around projects. It is often claimed in connection with the creative

An active knowledge-reliant network is an essential feature for a successful cultural and creative cluster (Fleming 2004)¹³⁹ and it "flourishes through connectivity". Santagata (2002) provide the example of the Los Angeles Motion Picture Complex that has emerged to become a best example of a well-established and flexible network economy. He attributes the emergence of this cluster to the 'atelier effect' of the movie production industry where it requires the "cooperation of a variety of professionals, including designers, painters, writers, photographers, craftsmen, stylists, musicians, multimedia experts, artists, wardrobe designers, tour managers and Shumpeterian entrepreneurs" (: p. 13). What he called the 'atelier effect' implies the short-term project-based alliance networks which is an intrinsic quality of the creative production process. Examples of the temporary inter-organisation networks can be seen in almost all subsets of the cultural and creative industries but mostly obvious in the case of arts projects (visual arts, films, theatrical projects, etc.).

Business and Management literature defines an inter-organisation project as: "joint collaboration and coordination among two or more organizations ... working jointly to create a tangible product/service in a limited period of time". These projects involve in many cases "multiple organizational actors with disparate goals, overlapping areas of responsibility, and differing levels of expertise" (Jones and Lichtenstein 2009: p. 233, 234)¹⁴⁰. Rutten and Boekema (2007)¹⁴¹ cite a number of "**opportunistic**" and "**non-opportunistic**" motives for clustering through collaboration projects including sharing risks, sharing costs, the opportunity to innovate, the access to external knowledge among other motives.

The institutional dimension of inter-organisation networks

¹³⁹Fleming, T. (2004) *Supporting the cultural quarter: The role of the creative intermediary.* In Bell D. and Jayne M. (Eds.) *City of Quarters: Urban Villages in the Contemporary City.*: p. 93-108.

¹⁴⁰ Jones C. and Lichtenstein B. (2009) *Temporary Inter-organizational Projects*. In Cropper S., Huxham C., Ebers M., and Smith Ring P. (Eds.) *The Oxford Handbook of Inter-Organizational Relations*. Oxford UniversityPress.

¹⁴¹ Rutten R. and Boekema F. (2007) *Regional innovation clusters: evaluation of the South-East Brabant cluster scheme*. In Cook P. and Schwartz D. (2007) *Creative Regions: Technology, culture and knowledge entrepreneurship*. Routledge. London.

Collaboration in cultural and creative clusters isn't limited to private companies as private and public cultural institutes, universities and research centres are also involved. The Institutional Dimension refers to relationships between firms, non-governmental, and governmental organisations within the cluster (Becattini, 1979; Aydalot, 1986; Saxenian, 1994). The institutional setting no doubt influences the local actors' knowledge base and their interaction. The role of institutions in enhancing the network might be seen through the organisation of cultural events (Russo 2000)¹⁴². In addition, peer relations among large institutions and festival organisations could shape the cluster emergence and evolution. One or more of these institutes could be the leader that ignites the clustering phenomenon. This is seen in institutional network clusters where the government institutions, museums and research and education facilities play the focal role. Van der Borg and Russo (2013) give several examples from European cities such as Amsterdam, Bolzano, Edinburgh, Eindhoven and Manchester, whose inner cores represent mixed Museum/creative art clusters. A particular interest is given to the governmental role in a cluster-oriented strategy that would focus creating networks that connect the various cluster members across institutions (Wolman and Hincapie 2015)¹⁴³. This role is essentially central in the creative city policy campaigns (discussed later in this chapter).

Ego-Network attributes: (Social Interdependencies)

Inter-individual networks are considered an important channel of knowledge and information diffusion (Zander and Kogut, 1995; Zucker et al., 1998; Sorenson, 2003). Porter has emphasised the importance of inter-individual networks in his works, particularly in that knowledge spillover and learning is facilitated by frequent face-to-face contacts. However, the social network concept in a Porterian cluster remains "something of a black-box" (Martin and Simmie 2008)¹⁴⁴. The social network model of cluster dynamics proposed by Gordon and McCann builds on the Granovetter focuses on social ties and trust facilitating cooperation and

¹⁴² Russo A.P. (2002) *Cultural Clusters and Tourism Development: The Challenge of Venice*. In Jelencic D. A. (Ed.) Culture: A Driving Force for Urban Tourism. Institute for International Relations. Zagreb.

¹⁴³ Wolman, H., and Hincapie, D. (2014) *Clusters and Cluster-Based Development Policy*. Economic Development Quarterly, 29(2), 135–149.

¹⁴⁴ Martin, R. and Simmie, J. (2008) *The theoretical bases of urban competitiveness: does proximity matter?*, Revue d'Économie Régionale & Urbaine 2008/3 (octobre): p. 333-351.

innovation between cluster actors. The idea that the geographical proximity of firms can be the key for mutual trust relations between decision-making agents in different firms thus reducing opportunism and promoting cooperation and eventually growth.

Since creative projects involve particularly important face-to-face interaction, the interindividual network dynamics is an intrinsic layer of the creative industry production, as Potts et al. (2008) put it: '*The creative industries are the set of economic activities that involve the creation and maintenance of social networks and the generation of value through production and consumption of network-valorized choices in these networks.*' (: p. 176)¹⁴⁵.

Interpersonal relationships, whether they are purely personal such as **family relations**, partnerships, or friendships, or **firm-related**, such as participation in professional clubs or milieus help to sustain the commitment of employees (Scott, 1996) play an important role in the decision-making processes by individuals. Furthermore, the role of personal networks is also important because they greatly influence entrepreneurship (Kovács and Musterd 2013 ¹⁴⁶).

Markusen and Johnson (2006) and Currid (2007) have documented the critical role that **artist centres and artist networks** play in generating and sustaining vital cultural scenes. Grabher (2006), has noted that social networks actually represent special forms of market, using the example of organisation in the software and advertising industry. Grabher focused on the intra-organisational dimension of the emergent, network-based cooperation and the entrepreneurial and socio-spatial practices in these industries. Social interaction for Pratt (2000) ranks at the same level of importance with the place. In a case study of new media firms in **New York's Silicon Alley**, he demonstrated that place and space are still important, as is the value of social interaction. The role of institutes in promoting the social network is essential to the growth of the cluster though building a 'web of contacts' that help in providing opportunities for artists (and other economic active agents) and eventually build their career beyond the art space itself (Grodach 2011). The density and diversity of face-to-face

¹⁴⁵ Potts J, Cunningham S, Hartley J, Ormerod P (2008) *Social network markets: a new definition of the creative industries.* J Cult Econ 32(3):167–185. doi:10.1007/s10824-008-9066-y

¹⁴⁶ Kovács Z. and Musterd S. (2013) *Personal Networks*. In Kovács Z. and Musterd S. (Ed.) *Place-making and Policies for Competitive Cities*. Wiley-Blackwell.

interactions are seen as central at smaller scales (i.e. at the cluster scale rather than at the city scale) (Wood and Dovey 2015).

Particular interest is brought by scholars in the domain of creative industries to the role of the interpersonal networks in constructing a) the **scene** (Straw 2001, Blum 2001, Currid 2007, Grodach 2011, Wen 2012¹⁴⁷), b) the **local buzz** (Bathelt et al. 2004, Lazzeretti et al. 2013, Bathelet et al. 2014) and c) the **temporary spaces** and **temporary clusters** (Storper and Venables 2002, Bathelt et al. 2004, Maskell et al. 2005, Richards 2013). The elements of these three concepts are highly intertwined which allows us to fuse them into an intermediate scale between the cluster and the city, in what we call the creative scene in the next section.

2. The Spatial Complexity Setting of Creative Cities

As discussed earlier in Chapter 2, the Gordon and McCann triple-entry approach is not meant to ontologically distinguish between different real-life types; instead these types might and should converge in any case study. It is evident that at any moment, the clustering dynamics might comprise more than one type of agglomeration forces depending on the economic, social and institutional setting and the phase in which the cluster is at the moment of study. Though it is important to define the dominant type in order to better empirically study its performance, the three-model approach is more theoretically pertinent than empirically.

Having said that, and after exploring how each of three strands of our developed theory from Gordon and McCann approach apply in the case of cultural and creative clusters, it is in our interest to take the model one further step towards the city level. Spatial complexity is by definition the extension of dynamics beyond the spatial the local boundaries, the local scale and the local actor. Thus, the aim of this section is to investigate to integrate and extend some of the explanations given beforehand, particularly **the scene**, **the local buzz**, the **temporary clusters**, and **the creative city** dynamics.

¹⁴⁷ Wen, W., (2012) *Scenes, Quarters and Clusters: The Formation and Governance of Creative Places in Urban China*. Cultural Science Journal. 5(2), p.8–27.

From the Creative Cluster to the Creative Scene

The scene: The assemblage of creative projects/nodes

The social consumption of art and culture is not spatially random: cultural events appear to locate in particular nodes within the city—within very narrow geographical spaces (Currid and Williams 2010).

Social networks in cultural clusters form the 'social bonds' in which economic activities are embedded. The intensity of the social (informal) interaction between economic agents over the close geographical distances is what transforms the cultural and creative cluster into a scene through creative projects (Lange 2011, Hartley 2010, Sagot-Duvauroux 2016, Molho and Marteau 2016, Ambrosino and Sagot-Duvauroux 2018). Bennett and Peterson (2004)¹⁴⁸ describe music scenes for example as 'informal assemblages' where 'performers, support facilities and fans come together to collectively create music for their own enjoyment' (pp. 3-4). Not only through performing arts a creative place becomes a scene, but also 'through exhibitions ... studio tours, lectures, guest-curated exhibitions, and workshops that bring artists, gallery owners, museum curators, collectors, and others' (Grodach 2011). The scene is thus a 'social space' that is federating different forms of embeddedness of creative activities within the territory (Sagot-Duvauroux 2016), whether it be social, economic or urban embeddedness. The scene concept provides a complementary approach to the creative cluster approach rather than an alternative to it. However, it takes it beyond the geographical limits of the space as cluster actors dissipate their creativity into higher spatial scales through cultural events. The scene concept relies heavily on the cultural events in defining itself: the dialogue between actors of economic development, urban development and cultural actors (Molho and Morteau 2016). One of the first to bring the concept into urban economics, Straw (2001)¹⁴⁹, stressed the social context and the globality of the scene: "Scene' is used to circumscribe highly local clusters of activity and to give unity to practices dispersed throughout the world. It functions to designate face-to-face sociability and as a lazy synonym for globalized virtual communities of taste" (p.248). While the scene is the result of the

 ¹⁴⁸ Bennett A. and Peterson A. P. (2004) *Music Scenes: Local, Translocal and Virtual*. Vanderbilt University Press, 2004
 ¹⁴⁹ Crow W. (2001) Scenes and Sceneibilities. Public, p²22, 22(2001); p. 245, 257.

¹⁴⁹ Straw W. (2001) Scenes and Sensibilities. Public, n°22-23(2001): p. 245-257

assemblage of cultural and creative activities of the cluster, or several clusters, the 'buzz' is the result of the inevitable social interactions between individual actors and it is an intrinsic element of the scene, its continuity, it evolution and its sustainability.

The buzz: The social mesh of the scene

"Where Marshall found something 'in the air' in trade clusters, a certain 'buzz' or 'atmosphere' is said to permeate creative clusters" (Wood and Dovey 2015: 54)

Buzz refers to the knowledge exchange over a variety of informal relationships in an economic space, mirroring to a certain degree what Marshall referred to as something 'in the air' in the industrial district, or the industrial 'atmosphere' (Storper and Venables 2004¹⁵⁰; Currid and Williams 2010). The proximity of the actors makes them exposed automatically to news, gossip, rumors and recommendations about technologies, markets and strategies, by just being in the cluster (Grabher, 2002). The buzz of the creative clusters is a representation of the diversity of tastes, skills, needs, supplies of the creative people and the consumers of creative production. The creative cluster in this sense is 'a socio-spatial assemblage that gears capitalism to creative production; a place where cross-connections between differences become the norm' (Currid and Williams 2015: 72).

The informal, direct and unplanned exchange of information, knowledge and inspiration between the cluster actors through face-to-face contact is what allows the persistence of urbanization and localization forces (Stroper and Venables 2004). However, it not only the local buzz that assures the continued growth of clusters and how they reproduced knowledge and innovation, Bathelt et al. (2004) suggest that the growth of a cluster depends on systematic linkages between its internal networks "local buzz," and its external knowledge and market environment, conceptualised as "global pipelines."

From the extensive literature on the social interaction and buzz concept we highlight the important of (a) the role of the buzz in motivating the consumption of cultural goods and generating aesthetic and market value (Caves, 2000) (b) the role of the media in enhancing the buzz and signalling the social and economic markers of the cultural products (simply the

¹⁵⁰ Storper, M., and Venables, A. (2004) *Buzz: Face to face contact and the urban economy*. Proceedings of the LSE Resurgent City Symposium, London. April 2004.

reputation, the value and the absorption of different creative products) (Currid and Williams 2010), and most recently the role of virtual media platform such as the online social network in complementing the face-to-face interactions in diffusing the knowledge and information and building the shared tastes (Lange & Schüßler 2018); (c) the role of the institutional setting as it shapes not only the flow of information but also knowledge creation (Bathelet 2004¹⁵¹); and (d) the role of gatekeeper in connecting the local buzz and the global pipelines.

The buzz is the social bond of the scene that keeps actors and institutions socially bond together developing the creative content and what connect various actors. However, it is imperative to note that the buzz is happening not only between co-located actors (i.e. in a cluster) but also between actors who are not permanently co-located. This is easily understandable in the case of creative production which is characterised by temporary projects. Thus, as lbert et al. (2015)¹⁵² have noted, "economic geographers have become more systematically interested in interaction that connects actors who are not permanently co-located" (p.323). Maskell (2014)¹⁵³, in particular, describe how firms seek knowledge through building global pipelines and the process to that is done through participating in events such as exhibitions, trade fairs, conventions, congresses, etc. or what is referred to as "**temporary clusters**".

The temporary cluster: Building networks

Temporary clusters act as platforms for new creative ideas as they are born through social interaction (Maskell et al., 2006). The firms are in need continuously to seek new knowledge and special know-how to be able to persist and sustain its growth. Social network channels are essentially important to convey this type of knowledge. These channels can be supported by temporary clusters where enterprises come from outside to meet local ones (collective meetings, exhibitions, and through many other formal, but interindividual, gatherings), in the result the once physically distant relationships become closer and stronger.

¹⁵¹ Bathelet H. (2004) *Toward a multidimensional conception of clusters: The case of the Leipzig media industry, Germany.* In Power D. and Scott A. (Eds.) *Cultural Industries and the Production of Culture.* Routledge.

¹⁵² Ibert, O., Hautala, J., & Jauhiainen, J. S. (2015). *From cluster to process: New economic geographic perspectives on practices of knowledge creation*. Geoforum, 65, 323–327.

¹⁵³ Maskell P. (2014). Accessing remote knowledge--the roles of trade fairs, pipelines, crowdsourcing and listening posts. Journal of Economic Geography, 14(5), 883–902. doi:10.1093/jeg/lbu002

The temporary art clusters, for example, are essentially important in contributing to develop a broad ex-local network of artists, collectors and art gallery owners that frequently get together, thus creating an important support to the local scene. This network results in local collaborative projects that enables some artists to distribute their works internationally (Cohendet et al. 2009)¹⁵⁴.

Lange (2005, 2011) examines the role of 'culturepreneurs' in forming 'scenes' within which projects are discussed and formed, knowledge is exchanged, and innovation is stimulated. These creative 'hot-spots' are often bars and clubs in which leisure consumption is mingled with and transformed into work, embedding the creative network in a specific location, even though these hot-spots may move frequently around the city.

However, in the case of creative industries the temporary clusters in creative and cultural industries can take the form of variety of events, not entirely formal.

As a conclusion, the scene is the assemblage of cultural events, while the buzz describes how these events are socially bonded, and the temporary clusters describes the formal gathering.

From the Creative Scene to the Creative City

In recent years, culture has taken on a more instrumental meaning in cities. It now represents the ideas and practices, sites and symbols, of what has been called the 'symbolic economy', i.e., the process through which wealth is created from cultural activities, including art, music, dance, crafts, museums, exhibitions, sports and creative design in various fields. This new concept of culture increasingly shapes city strategies in the face of both global competition and local tensions. (Zukin 2004: 3, emphasis added)

Arts and culture can play a community development role by facilitating social interaction, collective action, and stronger, vibrant communities (Murdoch et al. 2015). The community building is an intrinsic outcome of a scene where it brings a greater focus on the aesthetic and normative identity of the cultural productions of a territory (Molho and Morteau 2016).

¹⁵⁴ Cohendet P. Grandadam D. and Simon L. (2009) *Places, Spaces and The Dynamics of Creativity.* the International Conference on Organizational Learning, Knowledge and Capabilities (OLKC), in Amsterdam, The Netherlands, 26-28 April 2009.

The scene becomes the visible part of the social and cultural energy of the city and by which the city is "brimming with vitality and appears as an attractive place for both residents and visitors" (Sagot-Duvauroux 2016). This is in line with Florida's Creative Class hypothesis where a city attracts talents though its liveliness and diversity (2002). Landry (2000) argues that the most critical resource a city has is its people: "Human cleverness, desires, motivations, imagination and creativity are replacing location, natural resources and market access as urban resources. The creativity of those who live in and run cities will determine future success" (p.51). In this direction, cities are continuously investing in cultural facilities and amenities, to provide a fertile place for a creative class who will, through their creativity, ultimately bring economic growth and wealth (Florida, 2002, 2008; Florida et al., 2008). However, in order for cities to develop its creativity "fertile soil", they have to use "mechanisms, tools and devices that are needed to reveal, enhance, nurture, interpret and enact creative ideas" (Cohendet and Alii 2010: 93)¹⁵⁵. These mechanisms and tools are interpreted in strategic initiatives and institutional responses in the form of economic, cultural and urban policies.

Over the last two decades, a thicket of literature has been developed around the idea of creative city since it was first introduced by Bianchini and Landry (1995) and taken further by Landry (2000). The main question suggested by the concept is how cities become more competitive through investing in its cultural and creative economy. Authors have described the cultural dynamics of cities from different perspectives. *"Some have focused on cultural consumption (Jones and Wilks-Heeg, 2004; Molotch, 1996) and image (García, 2005), while others have looked at cultural production (Grabher, 2001; Pratt, 1997)"* (Cf. Comunian 2010: 1157-1158). The urban concentration of creative industries is a constant argument in this literature where geographic proximity is essential for creative actors to cope with the idiosyncratic characteristics of creative projects (e.g., Bathelt, 2005; DeFillippi, Grabher, & Jones, 2007; Grabher, 2001, 2002; Hauge, Malmberg, & Power, 2009; Rantisi, 2002; Scott, 2000, 2006). An interesting analysis of the specitity of the dynamics of creative industry concentration is introduced by Cohendet et al. (2010) where they argue that a certain

¹⁵⁵ Cohendet P. Grandadam D. and Simon L. (2010) *The Anatomy of Creative City*. Industry and Innovation Vol. 17, No. 1, 91-111.

'middleground' of creative community is necessary to connect exploratory creative scenes on the 'underground' to the 'upperground' of established creative production firms and cultural institutions (Lange and Schüßler 2018). Thus, they are extending the place-based externalities to the knowledge externalities created through organized projects and events that connect different layers of the creative actors. In this sense, the middle ground is partially converging with the idea of the Cultural Scene. While, the scene is based on the complex assemblage of the creative projects, the middleground concept is more focused on the dynamics of temporary interaction and the connections between creative force, 'the underground' and the established organisational creative production 'the upperground'. However, both concepts are place-based, made in the form of a) *galleries, bars or cafes*; b) *the cognitive spaces of idea exchange emanating from interactions in these places* and c) *actively organized projects and events* (e.g. festivals and tradeshows, sometimes described as temporary) (Lange & Schüßler 2018: 2). Both concepts are henceforth merged into the city creative scene CCS.

The following chart illustrates the transitional dynamics from the creative cluster to the creative city.

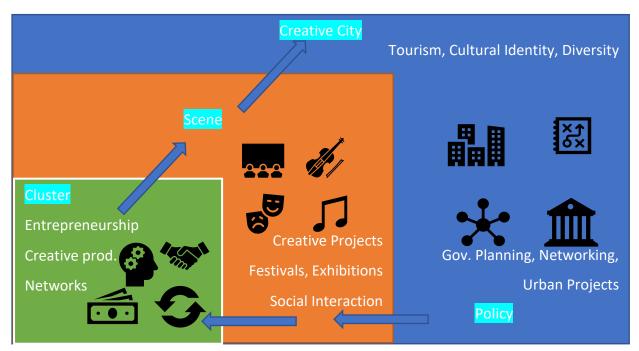


Figure 13 - From Creative Cluster to Creative City - A graphical representation of elements and dynamics (Source: Author own work)

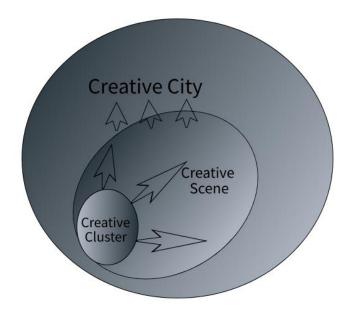


Figure 14 - Creative production/consumption is happening through creative projects within and beyond the cluster limits. The creative scene is the assemblage of place-born creative activities, while the creative city is the city defined by its active cultural scene.

Nevertheless, the implication of using the creative scene in this thesis is twofold: a) the importance of the middleground in creating the global pipelines that connect local scenes to international actors, b) the policy dimension: how policy-makers are using the scene to 'govern' the bottom-up dynamics of creative clusters and how the build on the existing scene to architect their top-down projects.

Role of Elites, Patronage and Sponsorship

The role of elites in the domain of cultural industries is to some extent self-evident. Public and private collectors, patrons, political figures are essential to art and culture networks in any context (Evans 2002)¹⁵⁶, patronage has been "*a feature of 'culture and commerce' with the performing and visual arts, architecture and crafts, being reliant upon individual commissions and corporate sponsorship, from the Medicis to Mobil Oil"* (: p. 30). Public patronage could be seen as an intervention in the arts and culture, and contrast should be made between 'state-approved art' in non-democratic or centrally planned countries, and the '*arms-length arts policies of liberal (i.e. capitalist) regimes*' (ibid.). The authoritarian dictation of the visions of political elites on urban spaces (in the form of strict top-down planning) might daunt the

¹⁵⁶ Evans G. (2002) Cultural Planning? An Urban Renaissance. Routledge.

eventual attractivity of the place among residents and the eventual product might not appeal to resident aspirations (Shin 2013¹⁵⁷). Nevertheless, some authors hints at the importance of such role in non-democratic societies or in the lack of the democratic tools as it might be essential to the growth of the art and culture market (Pareja-Eastaway and Pradel i Miquel 2017)¹⁵⁸. This might be seen as the case of Dubai, UAE, and the other Gulf city-states where a governmental intervention has become the standard development strategy in areas where entrepreneurial initiatives are below strategic ambitions; the cultural industry sector as an example (*Further discussion for the Dubai case in Chapters V and VI*).

What is interesting in the case of the cultural and creative clusters is how political and business elites, patrons and collectors are situated in the inter-individual and interorganisation networks of the clusters. Most precisely, how firms are connected to them as they are an important source of funding for creative projects, on one hand, and how they themselves can act as gatekeepers connecting these firms with other levels of the network whether it be the government, other markets or else, on the other hand. Some studies evoked these questions (Ridgeway 1989¹⁵⁹, Foster et al. 2011¹⁶⁰). Foster et al. (2011) found that different strategies are followed by gatekeepers when they use their social networks to manage search and selection processes in markets characterized by excess supply, demand uncertainty, and shifting and socially defined evaluation criteria in varied strategies.

More importantly, the role of gatekeepers might be a role for policy to strengthen 'boundaryspanning capacities' by linking the local and global networks (Bathelt et al., 2004). In the context of creative cities, governments sometimes can operate as gatekeepers for some events and as a primary stakeholder for others (Richards and Palmer 2010)¹⁶¹. This is in line

¹⁵⁷ Shin, H.B. (2013) *Elite Vision before People: State Entrepreneurialism and the Limits of Participation*. In Altrock, U. and Schoon, S. (eds.) *Maturing Megacities: The Pearl River Delta in Progressive Transformation*. Springer

¹⁵⁸ Pareja-Eastaway M. and Pradel i Miquel M. 2017 Multiple Endeavours Towards New Patterns of Economic Growth: The Case of Creative and Knowledge Industries in Spain. Chapain C. and Stryjakiewicz T. (Eds.) Creative Industries in Europe: Drivers of New Sectoral and Spatial Dynamics. Springer.

¹⁵⁹ Ridgeway, S., (1989) *Artist groups: patrons and gate-keepers*. In: Foster, A., Blau, J. (Eds.), Art and Society: Readings in the Sociology of the Arts. State University of New York Press, Albany, NY: p. 205–220.

¹⁶⁰ Foster P. et al. (2011) *Gatekeeper search and selection strategies: Relational and network governance in a cultural market*. Poetics 39 (2011) 247–265

¹⁶¹ Richards and Palmer (2010) *Eventful Cities: Cultural Management and Urban Revitalisation*. Butterworth-Heinemann

with the triple government-as-gatekeeper model developed in Chapter I of this thesis. (See Table 4).

Conclusion

In this section we tried to investigate, to integrate and to extend some of the explanations given beforehand, particularly **the scene**, the **local buzz**, the **temporary clusters**, and the **creative city** dynamics. The utility of this approach resides in understanding the **spatial continuum** of creative production and in return **the policy implications** at different scale, be it the city scale or the cluster scale. The intermediary scale is found in different concepts and form in the literature, it is implied in the concept of the scene (Straw 2001, Sagot-Duvauroux 2016), in the concept of the middle ground of a creative city (e.g. Cohendelet et al 2010), in the project cycles (Grabher, 2002), in the concept of 'buzz' (Currid 2007, Currid and Williams 2014) in the dyad of local buzz and the global pipelines (Barthlet et al. 2004, Maskell et al., 2006), in temporary clusters (Maskell et al., 2006) or cyclical clusters (Power & Jansson, 2008), and in fairs, festivals and events (Lang et al. 2014, Richards 2013). It is not in our interest to dissect the literature on these concept, but rather simply to provide an introductory theoretical connection between the creative clusters and the creative city. We hereby call it the City Creative Scene (CCS).

Cultural and creative clusters is a complex phenomenon that is inscribed in a multitude of layers. Rather than considering the cultural cluster a pure economic phenomenon or trying to categorise the types of clusters (e.g. Evans 2009), creative clusters often mix production, exchange, consumption and recreation without clear divisions, and the melting lines between life and work and between production and consumption seem to be essential (Chapain and Comunian 2009).

"[Creative] clusters are characterized by synergies that emerge from a 'mix of mixes'—a mixed morphology linked to a multiplicity of functions (production, exchange, reproduction, recreation) and socioeconomic mix. The 'buzz' or 'atmosphere' of a creative cluster is the emergent effect produced through an intensive co-functioning of people, practices, identities, spaces and built forms." (Wood and Dovey 2015: 52)

The 'buzz' in the sense evoked by Wood and Dovey (but also in Currid 2007, Currid and Williams 2010) is what turns the cluster into a scene enabling it to extend its effective

influence beyond the cluster actors and beyond the cluster space to the city scale and even beyond - the national / regional level and in some cases to the global level. The scene shapes part of the cultural identity of the city/region through events or festivals that revives the collective cultural values of the people. It builds what Rishards (2013) calls the **Eventful City** and is in the same time a powerful tool in the hands of the political elites to construct the **Creative City**. As such the scene can be produced through cultural and creative entrepreneurial initiatives in organic (spontaneous) clusters or through strategic cultural policies of governments in a top-down (planned) clusters.

3. The Evolutionary 'Touch'

In a nondeterministic, evolutionary, and highly complex world, the evolutionary approach adopts the view that *"the most desirable outcomes are unknown but there may be many possible acceptable outcomes, and where change is characterized by both path dependence and unpredictability"* (Feldman and Braunerhjelm 2006¹⁶²).

As stated before in Chapter III, Evolutionary Economic Geography holds a different standpoint to explaining clustering dynamics, despite the fact that the EEG perspective is largely regarded as **a methodological approach rather than an alternative grounded theoretical framework** (Boschma and Frenken 2018). Our aim in this section is to provide key literature examples on how economist and economic geographers dealt with creative industries using the evolutionary or the complexity approach.

Evolutionary Economic Geography and Cultural and Creative Clusters

Comunian (2011, 2012, 2018) argues that the cultural development of a city is a complex adaptive system as an ever-evolving development embedded within an economic, social and urban structure with open boundaries. More specifically, the behaviour of cultural developments is path dependant: *'It is not possible to understand the cultural development of a city in a vacuum; the specificity of the context and its historical development contribute*

¹⁶² Feldman M. and Braunerhjelm P. (2006) *The Genesis of Industrial Clusters*. In Braunerhjelm P. and Feldman M. (Eds.) *Cluster Genesis: Technology-Based Industrial Development*. Oxford University Press.

to the cultural profile, activities and individuals existing within the system; cultural planning needs to take into consideration this path-dependence' (2011: p. 1162). The complex approach to the creative city proposes an analysis of the historical dynamics that lead to the specialization of a territory of the cultural economy (Storper and Scott 2009). Bontje et al. (2011) state that two applications of the path dependence concept are significant for research on the creative economy: the first is in the creation and reproduction of related businesses with networks of relationships in a specific location (Clusters); and second, the evolutionary paths of cities and regions and the resulting development consequences.

Hall (2004) points out that an important element to understand when looking at a creative city is how its history influences its current economic situation and dynamics. Staber (2008) notes that cultural regions often specialise the way firms do. In order to build a competitive advantage, the ideas occurring in a region should be consistent with core ideas defining the region. *"The reason for this is that an environment filled with semantic associations, symbolic meanings and cultural representations that reflect the core set of ideas can trigger people to perceive a new idea as being consistent with that set than when such associations are absent"* (2008: 573). Nevertheless, knowledge-intensive production systems (creative industries included) are influenced highly by the globalisation of markets and values. Globalisation present both opportunities and threats to indigenous cultural activity in developing nations.

As such, specialisation, differentiation and diversification can be explained in a path dependency context. In this perspective, three factors are specifically relevant in the trajectory of creative clusters: 1) the local historical context (history matters), 2) the local institutional context, 3) the local-global linkages are crucial to understand the new patterns of growth of the creative sector.

Boschma and Frenken (2018)¹⁶³ exhibit the main ideas that EEG has input towards different lines of economic geography. Of these ideas they evoke clustering dynamics in evolutionary economic geography, networks and institutions.

¹⁶³ Boschma R. and Frenken R. (2018) *Evolutionary Economic Geography*. In Clark, G. Feldman, M. Gertler M. and Wöjcik W. (Eds.) *The New Oxford Handbook of Economic Geography*. Oxford University Press.

Clustering dynamics: Uneven performance, better routines, better pre-entry background, better ability to exploiting externalities.

History matters, whether in neo-classical economic geography context or from an evolutionary perspective (Boschma and Frenken 2018). However, the EEG sets the evolution of clusters in a path- and place dependent historical processes. As mentioned earlier in this section, Klepper (2007) challenged the Marshallian clustering concepts using evolutionary micro-perspective approach in an industry life-cycle context. In this approach, firms are characterised by being heterogeneous in their routines and capabilities which means they show differential growth rates. Most importantly, companies with a higher level of pre-entry experience tend to have more effective routines and thus better growth. Boschma and Frenken (2018) highlight especially the case of spin-off companies that *"inherit superior capabilities from successful parents from the same or related industries and therefore tend to outperform other types of entrants"* (: p, 215)

Networking: Non-local linkages, or temporary proximities, are crucial for the competitiveness of cluster firms.

Grabher (2001, 2004, 2002)¹⁶⁴ has focused on the networking characteristics of the projectbased art and cultural industries. He sees the cultural industries as organised in two sorts of networks, those within the global corporation (or group of companies) and those within localities (the 'village') – both are 'heterarchies', self-regulating systems that allow not simply learning or adaptation but future-orientated 'adaptability'. He argues that collaboration in projects is often about short-term relationships.

Temporary cultural and creative exhibitions, art fairs, and cultural events are a direct outcome of a collaboration network which directly pours into the cultural scene of the creative milieu, creating what is called the '**Local Buzz'** as described by (Hall 2000). The knowledge transfer through the non-local linkage is what allows local entrepreneurship to emerge and to cluster in a spin-off/ networking process. Networking processes have two alternative and

¹⁶⁴ Grabher, G. (2002) *Cool Projects, Boring Institutions: Temporary Collaboration in Social Context*, Regional Studies, 36 (3): p. 205 - 214.

Grabher, G. (2004) *Learning in projects, remembering in networks? Communality, sociality and connectivity in project ecologies,* European Urban and Regional Studies, 11 (2), p.103-123

complementary dimensions, the inter-organisational network and the inter-individual network.

Finally, temporary spaces (intermediary spaces as per Haydn et al. (2006)) are of great importance in permitting informal actors to weigh on the **urban agenda setting**. (Corijn 2009)¹⁶⁵.

Institutional: Co-evolving with the establishment of new institutions or the adaptation of existing ones.

Co-evolution with the institutional environment of the clusters is central to the evolution of the cluster itself. Maskell and Malmberg (2007) argue that perceptions of actors that coevolve with their institutional setting lead to different clustering phases. Ter Wal and Boschma (2011) describe how clusters co-evolve with the respective networks. Menzel and Fornahl (2010) describe knowledge heterogeneity and the way actors utilize it through the life cycle of a cluster. Fornahl et al (2015) found that "the growing cluster has a larger heterogeneity of firms and an institutional environment supporting the exploitation of this heterogeneity". Staber and Sautter (2011) describe how a local identity evolved with the evolution of the cluster. Concerning creative clusters, Berg (2015) shows that the film and TV cluster in Seoul, South Korea evolved due to institutional changes on the state level. indicates that its evolution strongly depends on the setting of respective institutions and regulations as well as its institutional surrounding. Trippl et al. (2015) describe the multi-scalarity of relations and institutions, from local to global scales as an important research issue in the future. Fornahl et al. (2010) stated that the growth of the clusters is accompanied by the establishment of particular institutions like labor markets, venture capital, or common standards, and such institutions neither precede nor follow cluster emergence, but co- evolve with it.

¹⁶⁵ Crojin E. (2009) Urbanity as a Political Project: Towards Post-national European Cities. In Kong L. and O'Connor J. (Ed.) Creative Economies, Creative Cities: Asian-European Perspectives. Springer.

A Complex Approach

From the discussion above, the question of why cultural industries cluster in space can be analysed through a matrix of criss-crossed question.

On the micro level of firms, it is important to differentiate between **the clustering dynamics** (the reasons a firm is relocated closer to a same-sector firm of group of firms) and **the clustering effects** which are the direct or non-direct result of the process of clustering. While the first group of forces explains the potential, anticipated advantages or externalities the firm expects to achieve by entering the cluster, the real resulting clustering impact on the firm might be, or is, different and varies from one company to another. Such variance, whether positive or negative, directly pours into the fate of the cluster as a whole by adding to its growth or decline. This reminds of the complexity view of the cluster as the resulting evolution of the cluster is the collective outcome of all indigenous factors (agents within the group of companies and their relations within the group), adding to that the exogenous factors.

Clustering dynamics are also **cross-sectoral**. Similar to the urban externalities that explain advantages between unrelated industries, clustering of cultural industries will in most cases, affect **unrelated industries** either to cluster (centrifugal: positive clustering effect) or to quit the cluster (centripetal: negative clustering effect).

Institutional environment: whether the clustering is happening in an organic evolution or forced by a planned action, public policy, public intervention, or other institutional effects are, directly or indirectly, part of the clustering dynamics, the emergence of the cluster and its evolution. This is reflected not only by the

Clustering might be at a multiple level of **spatial scale** in the same time. For example, a firm attracted by agglomeration dynamics to a specific cluster might end up located at the boundary of the cluster or at a 'proximity' from the cluster rather than within the cluster. In this regard, on a frim level, the clustering externalities are radiated beyond the cluster's physical boundaries and this is stretching the cluster's boundaries and could be a reason for the spatial growth of the cluster. Similar to the point A, a complexity view of the clusters sets it within the natural open environment.

Combining all the creative businesses in one basket could be highly misleading if the **internal heterogeneity** is not taken into account. Hartley (2005) gives the example of publishers who see nothing in common with gaming development professionals. Gaming professionals see themselves in a different category of industry though they actually employ creative performers, designers and writers (Liu 2015).

As stressed by a number of authors (e.g. Gordon and McCann 2000, Martin and Stanley 2003), there is **no pure type of clustering dynamics** but rather clustering is a melange of different attributes at any time of the cluster evolution. Nevertheless, the resulting locational action is the resulting **net force** is the combination of the three groups of forces, whether positive (clustering) or negative (dispersing).

By extension to the previous point, we can say that the prevailing or the dominating clustering or dispersing forces is varied according to the **stage of evolution** of the clusters. While the triggering factors of cluster emergence could be pure agglomeration forces, the growth of the clusters could emanate from business networking forces (Porterian Cluster dynamics) or Social networking dynamics. In fact, we hypothesize that pure agglomeration dynamics are the most essential forces at the emergence stage of the cultural cluster life cycle, be it a bottom-up cluster or a top-down project.

4. Cluster Genesis and the Evolutionary Analytical Framework

"...a cluster is launched by this combination of locational assets, chance events, and entrepreneurial dynamism, ... [then] a strong degree of importance to the role of increasing returns and feedback". (Wolfe and Getler 2006: 250)¹⁶⁶

In this passage from a 2006 book chapter on the cluster emergence, Wolfe and Getler, reiterate cluster dynamics as presented by several authors (but mainly Porter) in an evolutionary approach to highlight the role of path dependency and its policy implication. Though this phrase doesn't summarise all elements included in their analysis of the genesis

¹⁶⁶ Wolfe and Getler (2006) Local Antecedents and Trigger Events: Policy Implications of Path Dependence for Cluster Formation. In Braunerhjelm and Feldman 2006 Cluster Genesis Technology-Based Industrial Development. Oxford University Press.

of a cluster (most particularly a knowledge-intensive cluster i.e. technology cluster), it mirrors partially the clustering triad detailed earlier in this chapter (Territory locational attributes, business network attributes and the interindividual network attributes).

In this section, we are building on the previous chapter (Chapter III) in which we develop the previously presented trigger-event model adopting concepts and elements studied in the previous sections. Bearing in mind the question of genesis of the creative clusters, discussion is oriented based on the hypothesis presented by Carlsson (2006) and the discussion of this hypothesis by Stoerring and Dalum (2007).

The Genesis of Cultural and Creative Clusters

"... once a New York–based company came to Los Angeles for a winter haven and then established a permanent studio there, other companies followed. Within a few years a self-sustaining agglomeration had been created." (Carlsson 2006¹⁶⁷: p. 265-266, on the path dependency in the origin of Hollywood Film Industry Cluster)

Most EEG literature to the industrial clusters divide the evolution of the cluster into four phases: emergent phase, self-organisation phase, the maturation phase and the declining phase. However, **little is discussed on the pre-existing initial conditions "the regional setting"**, without which the cluster emergence might never had happened. The region is characterised by the local resources including the human capital and the local industrial capacities (infrastructure, technology, etc.), the institutional setting (including social and industrial institutions, legal environments and the governmental policies), the interdependent relationships between private and public actors, social interdependencies and the environmental conditions. The process of cluster emergence takes place within this framework (incorporated in Figure 18 in the next section).

As discussed earlier, for Carlsson (2006), the emergence of a cluster is achieved necessarily through two main stages: **the first stage**, in which the regional context in a specific industry

¹⁶⁷ Carlsson B. (2006) The Role of Public Policy in Emerging Clusters. In Braunerhjelm P. and Feldman M. (Ed.) Cluster Genesis: Technology-Based Industrial Development. Oxford University Press.

is gradually developed (what Asheim et al. (2011)¹⁶⁸ call "The regional advantage"), and **the second stage** where a cluster is emerged into existence. The first stage is characterised by an accumulating series of slowly developing events that might be spontaneous, random and chance events or through public policy intervention. The second phase is necessarily dependent on and conditioned by the first stage (path dependency setting), and it is characterised by "*some triggering event coupled with an entrepreneurial spark*".

The regional favouring winds

The regional initial conditions (the favouring winds to the cluster genesis) are a complex matrix of spatial regional attributes favouring agglomeration (mainly represented by the Marshallian and neo-Marshallian pure agglomeration forces) and the entrepreneurial initiatives and the institutional setting that evolves in light of both space attributes and private and public actions. The following chart illustrates the intertwined relation between regional actors and the space leading to agglomeration dynamics.

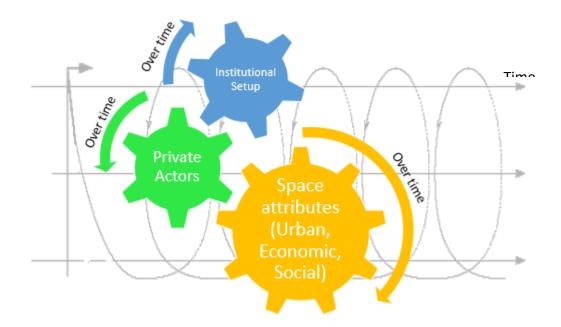


Figure 15 A complexity-evolutionary view of regional agglomeration attributes (the favouring winds) (Own work)

¹⁶⁸ Asheim, B.T., R. Boschma and P. Cooke (2011), 'Constructing Regional Advantage: Platform Policies based on Related Variety and Differentiated Knowledge Bases'. Regional Studies, 45(7), 893-904.

The first stage is characterised by the accumulation of knowledge spillovers dependent on the pre-existing competences in the same or related industries. Carlsson states that *"The most important aspect of path dependence may be the existing entrepreneurial climate resulting from preexisting conditions"* (2006: 265). One of the conditions favouring new firm formation might be the absence of an established entity that can absorb the talented and skilled labour available in such industry. Such skilled labour might be connected to a local university program that created an important knowledge spillover for example. At this stage, "the emergence of clusters is "*is associated primarily with competence and to a lesser extent with geography and certain locations*" (ibid: 270).

Government intervention might be seen in institutional and policy reforms that create favourite conditions needed for the transition to rapid development. Prevezer and Tang (2006) give the example of the evolution of policy in the Chinese biotechnology clusters. The reform happened over two stages, the first is characterised by sowing the seeds of institutional reforms in the form of strategic development programs while the second was more focused on *"incentives to assist startups to assist start-ups, on attracting potential entrepreneurs back to China from abroad, and on developing regional clusters around science parks"* (: 127).

Carlsson (2006) argues that the policy role in setting up the right environment for cluster emergence can be summarised in six points: 1) to ascertain the existence of a sufficient knowledge base, 2) to create transparent incentives, 3) promote entrepreneurial experiments, 4) create markets or guarantee appropriate market conditions, 5) create resources or augment resource creation and 6) promote positive externalities.

In all these six points the policy reform should create resource satisfaction in order for a cluster to develop successfully:

There are six resource requirements: A sufficient knowledge base, financial and human resources, market identification by firms, a sufficient number and variety of actors (including one or several leaders or prime movers), networks among various types of actors (industry– government, industry– university, industry–industry, professional networks, and others), and *institutions (market conditions, regulations, supporting organizations, etc.) (ibid: 275).*

EEG work has tended to view the selection of particular paths (as opposed to their creation) and regions as based largely on chance events during "**windows of locational opportunity**" when emerging industries can escape the constraints of existing spatial structures to create new agglomerations (Boschma and Lambooy 1999; Storper 1995).

The events defining the early path creation (during the first stage of emergence in Carlsson's view) can be seen in: a) the relocation of the first comers or the first movers who might or might not become cluster leader at some point of time (refer to the example of Hollywood example evoked by Carlsson cited above). Flagship developments such as museums and university research facilities might trigger the cluster emergence organically b) an entrepreneurial action that redefines the space as an incubator for a specific industry or through developing an production driven interdependencies (seen in the industrial complexes of the auto industries or in some design clusters led by a central manufacturer), real estate developers targeting specific industries as their anchor tenants might accidentally create such type of clusters c) by governmental intervention, mostly referred to as top-down cluster initiatives that make use of different incentive vehicles to develop a specific industrial cluster. This could be inscribed in a more general development or redevelopment policy, and d) other exogenous chance event that neither related to private or public actors but rather triggered by non-entrepreneurial event (environmental, public events such as festivals). Figure 3 illustrates these possible events triggering cluster formation within the regional initial condition setting.

Important to state that whatever the event trigger that leads to the emergence of the cluster is (in time T₀) is by definition leading to the change in space identity.

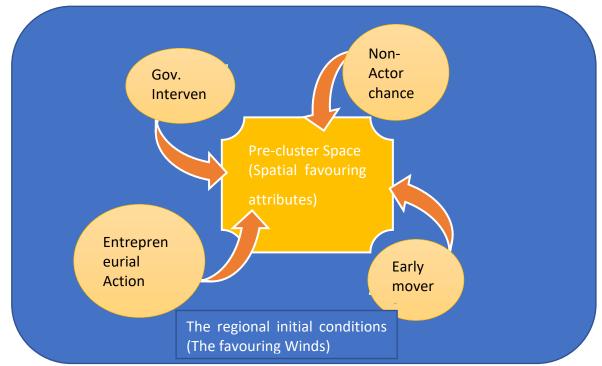
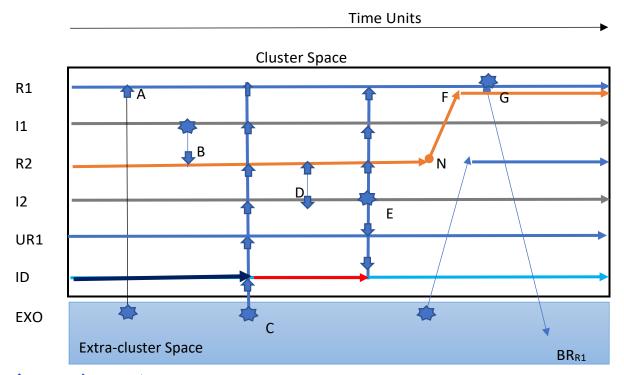


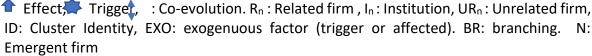
Figure 16 - Possible event-triggers leading to cluster emergence (Own work)

Once the space has passed the 'successful' threshold of the triggering event, actions are accelerated towards acquiring the 'cluster' identity, from which the second stage is started through a combination of inter-actor dependencies which rely mainly on entrepreneurial actions and might involve interaction with institutional agencies.

The Trigger-Event Evolutionary Routine: A theoretical framework

Figure 17 represents a graphical model of the event-trigger evolution of the newly formed cluster. (For the explanation of different forms of trigger-events refer to the previous chapter).







A Cultural and Creative Cluster is the result of a complex, multi-scale matrix of actions and interactions between actors on the space. Any space at a starting point T0 is characterised by a set of attributes (**initial conditions**) that not only define the space itself, but also its attractivity to businesses to be relocated in it. Any event (whether it is a change in the **institutional** setup or in the **network** of actors or a **chance** event) might **lead or force** decision makers in organisations to make locational decisions, it is modifying the territory attributes and thus modifying its attractivity to other actors which might **trigger** a series of agglomeration actions that leads to the **genesis** of a cluster. The **routine** is repeated with every action happening within the cluster or over the **links** connecting cluster actors (interorganisational and inter-individual links) among each other within the clusters or to other outside actors leading to the **evolution** of the cluster, the change in its institutional environment and its growth or decline. The following chart is a graphical representation of the analytical framework on which the methodological approach is built.

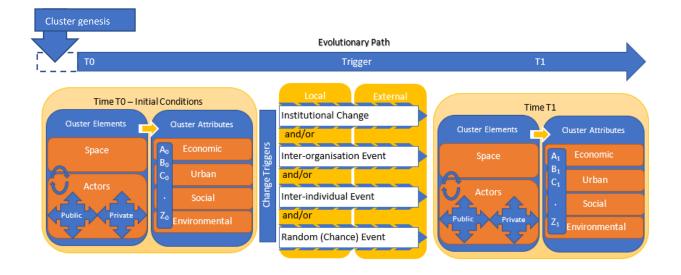


Figure 18 A Graphical Representation of the Analytical Framework for the Cluster Trigger-Event Evolutionary Routine

The Cluster Elements and Attributes

The cluster attributes are the direct or indirect result of the interactions between the territory elements, i.e. the space and the territory actors. It is not only the reciprocal impact between the space and the actors, but it is also the interaction between the actors themselves. For example, a new joint venture between company X1 and X2 might mean expanding or opening new production facilities on a regenerated plot of land (urban impact), which in the same time could mean an enhanced production or a new product with an imperative impact on the market (economic impact), eventually such 'event' will see an enhancement into the interpersonal network for individuals in both companies and might affect the social mix of the space, especially if the product is a service, or if the new facility means new employees are moving closer to their work area with their families (Social Impact). Furthermore, any urban, social or economic change has an environmental footprint that can be observable or measured (environmental impact). The ensemble of the attributes at one point of time T_x is what defines the territory's identity (ID). In this perspective, the territory ID could be interpreted in an evolutionary context where the ID can change gradually through the change accumulation. However, the territory ID can still change abruptly due to a brusque event such as the relocation of a major unrelated business that consequently impact the main industry focus of the territory, or due to a natural disaster leading to the abrupt decline in activity, or due to forceful policy change, etc. It is important to link time intervals to events (triggers), as

such T0 is the time stamp for Event 0 that involves imperatively an action from a specific actor X0. This action is leading to a change in one or more attributes of the space which eventually favours or disfavours the entry of other actors in the cluster. An action that is materialised by an actor entering the cluster, or exiting the cluster

TO – Cluster Initial Conditions

At a certain point of time T0, in the Pure Agglomeration approach, the territory is defined by a static set of attributes linked to the geography and the history of the space that together favour or disfavour the entry of a new firm. These attributes are a combination of the existing territory actors, their inter-organisation and inter-individual networks, and the territory urban, economic, social and environmental characteristics. In case the territory can be described as a *tabula rasa*, the virgin state of the space might be considered for actor 0 (in time T0) as an attribute of attractivity by itself; the territory is not burdened with a history constraint. In this case, a wide variety of possibilities to select from is present, less path dependency and a potentially a large window of opportunity.

T0 is objectively defined by the time immediately before the major event without which the territory path won't (to a certain degree of certainty) converge to form the cultural district. This event won't necessarily narrow down the field of possibilities to a limited number of choices (i.e. the formation of the cluster identity) but will be essential to such identity to be constructed at a later stage. It can be either the entry of the founding actor, actor 0, or through a major institutional change such as a public initiative to create a specific industrial district.

Nevertheless, as iterated before, the initial conditions are not independent. They are also tied into a path related to the history of the territory, or at least the region in a time interval (a series of time points) that we call T₋₁. In what concerns locational decisions of businesses, each place has a historical component that matters. If not ascribed by the place itself, it is surely extended from the history of the region this space is located in or from an adjacent place. The historical component is also found in the history of the business itself. A migrated business to a virgin land might be fleeing a harsh competition or a saturated market, as such the new place is being selected based on a historical event outside the place itself and becoming at the time of selection (decision) part of the history of the place.

Trigger-Events

A trigger is defined as an event that is causing a change in the territory attributes. This event can be an action by one or more of the territory 'local' actors, by external actors, or by a chance event that is irrelevant to local or external actors. Importantly enough, we can differentiate between public actions leading to an institutional change imperative to the territory and its other actors, and the private actions that are usually affecting a lower number of actors. Any trigger can have one of two types of effects: a positive impact (growth) encouraging the next incoming actor, or a negative one (decline) encouraging the next actor outgoing of the cluster.

Institutional Change: Public actors are responsible for the institutional change. This change is usually imposed by public authorities through public policies. However, the policy change could be either participatory or dictated, from the local public actors (within the cluster / the territory) or from external public actors – depending on the scale of the public policy it covers.

Inter-organisation Event: An event that is initiated by private companies either located within the cluster or outside. Examples of the inter-organisation events can be found in the collaboration of two or more companies to handle a project together, a strategy change, a relocation of one company, a company spinoff, etc. This event is causing a restructuring of the inter-organisation network and affects, to a certain degree, the attractivity of the cluster for the next entrant. It is important to note that companies' internal events that doesn't affect the other companies / actors nor the cluster attributes are not considered. Being said, some internal effects, however, could be considered as a factor towards more or less cluster attractivity (push and pull factors).

Inter-individual Event: a social event, between two or more individuals can encourage the next incoming actor, or can encourage the next actor outgoing of the cluster. A social event can be simply a connection of two individuals in a random coincidence which leads to the formation of a new cluster firm or to a new institutional change.

Random (Chance) Event: this is the special event that is independent from current cluster actors, cluster territory, and the industry. It is normally a sudden event and mostly unexpected. Example of these events include natural disasters, regional and international

crisis (including political turmoil), a sudden change in network structure when for example one gatekeeper exits the network suddenly (because of death for example).

5. Conclusion

At any point of time, any of the four dimensions of triggers cannot be independent; however, there might be a temporal sequence to the prevailing type of clustering dynamics. For example, at a certain point of time T0, in the Pure Agglomeration approach, the territory is defined by a static set of attributes linked to the geography and the history of the space that together favour the entry of a new firm. These attributes are fixed on the short run for the entrant, but they evolve immediately once the new entrant is active in (part of) the inter-firm / inter-individual network and the new network structure becomes, at point T1, a new attribute that may or may not favour the entry of other firms. As such, this dynamic is repeated every time a new entrant enters the cluster and the characteristics of the clusters are changed compared to those attracted the precedent cluster members. Not only the event where a new actor has entered to the cluster can add to the territorial attributes, but also other types of events such as institutional changes, environmental changes and small events. It is at this point of the study where the input from the Evolutionary Economic Geography becomes of interest.

Building retrospectively on the current status of the cluster, moving back in history to reach a nominal starting point of the cluster, choosing an event or the series of events that allowed the creation of the path on which the cluster has acquired its current identity. A definition of the cluster identity is seemingly unavoidable in this context and a historical exploratory exercise is required. The proposed point of time is not necessarily defined as part of the cluster emergence, however the event to which is associated is defined as decisive towards the creation of the path of the cluster growth and thus is considered the Point T0 after which the path is brought into 'microscopic' investigation. Nevertheless, to respect the spatiotemporal continuum it is equally essential to explore other decisive events preceding the point T0. Henceforth, a historical annotation exercise is necessary at a maximum focus in search for small events.

CONCLUSION TO PART ONE

This first part explored how the thicket of literature on industrial clusters, and by extension on cultural and creative clusters, has held numerous theoretical positions towards analysing such phenomenon. It provided our theoretical position, theoretical objectives and guidelines. The academic interest was driven towards highlighting the dynamics of such concentration, a trend that started with the seminal work of Marshall on the industrial agglomeration back in the beginning of the 20th century. Gordon and McCann (2000) provided a three-model theory namely pure agglomeration, industrial complex and social network model.

Adopting a complexity / evolutionary approach to tackle the question of the emergence of cultural and creative clusters mirrors the recent academic research on the same topic (and on the larger question of industrial clusters) and provides a rather useful means to understanding the phenomenon in different phases of formation at different scales, in an honest approximation of the real-life case. The short history of the emergence of the city of Dubai adds potential, not only to the strength of the case study, but also to the chosen approach as capturing data on the historical instants leading to the formation and the evolution of the cultural and creative districts in the city, including the role of different actors in different urban scale, presumably gives a better close-ups of the elements of the evolutionary approach.

This first part shows how, in the literature, three major currents are distinguished to treat this object. First, the so-called "creative economy" that seeks to understand the mutations of capitalism and their translation in the territories. Secondly, the one on "the creative city", carried mainly by urban planners and whose objective is to study these cities that bet on urban amenities (museums, cultural lighthouses, etc.) to regenerate and renew a declining urban space. Thirdly, the current of the "creative class" which is interested in the driving individuals of this economic renewal.

By the convergence between literature on industrial clusters and evolutionary economic geography, this chapter proposes an evolutionary perspective to the dynamics of cultural and creative clusters that is based on two stages; the regional favouring winds and the cluster genesis. The theoretical framework analyses these two steps through an evolutionary routine

that is based on the concept of path dependency. A trigger-event instance leads to the modification of the territory attributes, be it the territory physical attributes, the business network, the interindividual network or the institutional setup.

This in return allows us to introduce a particular case study, Dubai Cultural and Creative Clusters, to study their genesis and evolutionary dynamics at the intersection of urban economic and cultural policies in next part. The case study is thus dissected into two spatial levels; the regional level on which the regional dynamics of agglomeration (dubbed as the regional favouring winds in Chapter IV); and the district level, on which the dynamics of agglomeration according to our theoretical model is built. The analysis is made through a longitudinal approach that keeps an eye for evolutionary dynamics (the trigger-event routine framework).

The next part, The Case Study, starts with a chapter on the methodological approach, which outlines the scrutiny approach to the case study. The remaining three chapters detail the case study, first on the emergence of the city and its policies, second on the emergence of the art and cultural developments, and third on explaining the genesis of art and cultural district in the city in an evolutionary approach. PART TWO: THE CASE STUDY

CH IV – METHODOLOGICAL APPROACH

As discussed in the introduction chapter of this thesis and the chapter 4 discussing the literature review of the cultural and creative clusters based on the industrial cluster theory and the use of the complexity / evolutionary approach, this thesis is on the lookout for a central answer on the different mechanisms of the emergence of creative and cultural districts and the public policy intervention. In this chapter we are presenting an analytical framework based on a narrowed down understanding on the literature review and the specific hypotheses produced previously as a first step to introducing the case study and providing a methodological approach to carrying out the research inquiry on the chosen field, which is the city of Dubai in the United Arab Emirates.

1. Introduction to the Case Study:

As an emerging city-state looking to position itself on the economic world map, Dubai has embraced a Global City approach that is targeting turning the city into a major business and tourism destination. Part of this strategy have seen adopting the creative city/economy discourse. However, Lacking the rich history and culture compared to the classical cultural capitals of the region (i.e. Cairo, Damascus, etc.), the Gulf cities are relatively recent. Built upon the oil wealth of the gulf countries, these emerging cities have been remarkable examples of nascent cities in the twenty first century (Salama 2010). Coming up from small desert coastal villages that were mainly supported by fishing, pearling and small trade activities, Dubai, (and the other neighbouring city-states such as Abu Dhabi and Doha), has grown in only few decades to compete for a Global City positioning as part of a regional branding and economic development strategy.

The cultural evolution of Dubai cannot be reviewed independently from the cultural context of the country (UAE) and the region (the Gulf region and the Arab world).

The Regional Context

The United Arab Emirates are now a centre of cultural activity as countries invest billions of dollars to compete in the race to become the cultural hub of the Middle East. Abu Dhabi's plan is to construct branches of the Louvre and Guggenheim museums on Saadiyat Island, and the city is responsible for promoting Art Paris Abu Dhabi Fair. Dubai boasts 50 galleries, hosted its inaugural art fair, Art Dubai, and has welcomed auction houses Christie's and Bonhams. Sharjah is hosting its ninth Biennial in March 2009, once again offering a space large enough to encompass blockbuster-sized exhibitions.¹⁶⁹

Southwest of the city, Dubai's sister state Abu Dhabi is building the Louvre Abu Dhabi and Guggenheim Abu Dhabi that will be ready in 2015 and 2017 respectively. These two branches of the famous Paris and New York museums are likely to have a strong emphasis on Arab art - which, in turn, is fuelling the Arab art boom and boosting speculative art investments.

In Qatar, the Doha Film Institute has partnered with New York's Tribeca Film Festival to put on an annual film festival with a focus on developing country artists. Qatar-UK 2013 is a yearlong celebration of the partnership between Qatar and the United Kingdom that features a range of joint activities in culture, sports, education and more, including exchanges of artists. Qatar also recently built the iconic Museum of Islamic Art, designed by I.M. Pei, which displays Islamic heritage in a bold and modern building. Doha is home to Sotheby's first international sales series in the Middle East.

With all these developments, there's now a growing pride among Arabs in the art of their region. When the Art Dubai art fair began in 2007, it was largely a platform for Western galleries to sell Western art to the Arabs. However, in 2010, Art Dubai began to refocus its offerings to feature art from the region instead of the West. Of the 500 artists featured at this year's fair, more than 50 per cent of them are from the Middle East, North Africa and South Asia. And that has translated to stronger sales.

This helps figuring a regional tourism cluster that is emerging out of this complementarity. With Dubai winning the race to host World Expo 2020 and Doha wining another race to host

¹⁶⁹ Cotela Tanner, S. (2009) Contemporary Art in the Middle East. Art Book volume 16 issue 4 November 2009.P 15

the FIFA World Cup 2022, the governments in the region and urban developers are racing against time to establish a solid cultural and touristic offering for the demand upsurge anticipated for the two global mega events.



Figure 19 - Map of the UAE (Source: Foss.ae)

The Dubai Case: Focus on UAE Art and Cultural Districts

Galleries in Dubai were created in a number of successive waves in different neighbourhoods. Al Bastakiya district in the historical heart of Dubai (officially renamed Al Fahidi Historical District) is considered the first art gallery district Dubai where a British expatriate, Collins Allison, created the first art gallery of the country (Gallery Majlis) in 1988.

By the late nineties, the already growing economy in the city has and the growth in expatriate population augmented the pressure on cultural demand and businesses have been seen 'naturally by the forces of market' evolving with this growth in demand. An number of art galleries began to come to existence by the late 90's in Al Quoz Industrial Area where an Iranian businessman first opened Total Art Gallery, followed by Courtyard Gallery close to it. From there, more art galleries started to pop up around the first comers. However, it is not until 2007, when a local businessman owning a marble factory decided to turn it into a warehouse business as a real estate investment when the first art gallery owner (Al Ayyam Gallery) approached them to rent a warehouse for his first Dubai art gallery. From there, what has been intended as a multi-purpose warehouse real estate investment turned to focus on renting out spaces for galleries and artist workshops and Alserkal Avenue was born in 2010, today's Dubai prominent art gallery district. This venue has become an address to around 30 art galleries and a number of art related service and creative companies in addition to an exhibition space, a social activity centre and some unrelated businesses such as industrial companies and workshop that has survived the early days of the industrial complex. The surrounding area, Al Quoz is also home more art galleries and other creative industry companies.

Around the same time where the first galleries started to appear in Al Quoz, Dubai International Financial Centre DIFC, a multi-high-rise building complex hosting the top notch financial services in the country including Dubai Stock Exchange center, and a financial arm of Dubai Government, have opened the Gate Village, a dedicated building for local and international art galleries in addition to dining destination and other companies. Some international art galleries, and local emerging art business, seeking a footprint in the region found DIFC the most prestigious address for their operations. Today the Gate Village boasts being the home of less than 10 galleries in addition to the offices of two of the world-famous art auction companies, Christie's and Bonhams.

Large real estate developers, the main vehicle for economic development of the Emirate over the last decade, have effectively collaborated to these government strategies – worth mentioning that government is a stakeholder on the board of some of these developers. Thus, art and cultural space was on the developers' agenda as well, paving the way for a number of art and cultural spaces to appear and to have a number of new art business market entrants, especially in the high-end office complexes and retail centers such as DIFC, Dubai Mall and Burj Down Town.

In 2014, one of the country's biggest developers, Emaar, announced plans to embark a mixeduse development orbited around art and artists, namely The Opera & Art Museum District. The pipeline project is planned to comprise residential offering, office space buildings and hotels surrounding an opera house, contemporary art museum and a commercial center with up to 70 art galleries, according to marketing circulars. Emaar has long been a giant economic player in the non-oil economy of the country and is a key support to the city of Dubai with its massive portfolio of investments. Thus, a massive 'retail' art space pouring into the market would definitely affect the art cluster emerging in the city.

The following map illustrates the number of art-related actors in Dubai and Sharjah.



Figure 20 - Map of UAE Art and Cultural Districts as per 2017 (Number of art and cultural organisations)

Dubai Design District, better known as D3, was the latest addition of Dubai government in its 'specialized city' approach to urban development when it was inaugurated in 2015. The 200ha master-planned, purpose-built district is the government answer to its policy to promote and nurture emerging local talent while also providing home to established international design, luxury and fashion brands in addition to local and international art galleries. The new 166

real estate investment is composed of residential, commercial and retail spaces and developed by TECOM Investment, another development arm of the government of Dubai that operates under Dubai Holdings.

Inseparable from this, an active artistic movement in the city is represented by a number of initiatives, mainly created or supported by the government. In particular, the annual Art Dubai exhibition is seen vital in the artistic movement in the city and the region. From its modest beginning in 2007 of just 8000 visitors and 40 participating galleries, Art Dubai received in its 2014 edition 25,000 visitors, with 85 galleries and 500 artists from 34 countries including cities as diverse as Berlin, London, San Francisco, Istanbul, Beirut, Beijing and Bangalore.

Compared to the 'organic' Al Quoz art cluster, the DIFC art and D3 district are 'planned' through a collaborative work of the real estate developers and the government entities.

Significance of the research

Dubai case as an emerging Global City that in a short period of time with no long economic, urban and cultural history is not completely a unique case to academics. Singapore and Hong Kong, Dubai closest comparable matches, have attracted lengthy waves of academic interest in recent decades. However, studying the case of Dubai has a lot more to offer than Singapore and Hong Kong. From an economic perspective, Dubai has gone from a small sea-shore pearling village in the beginning of the 20th century to a business hub money and world trade and shopping destination and a logistics hub that connects the west to the east depending on the regional oil wealth and recursive neo-liberal market strategies. From an urban planning perspective, the city has its own urban model, what academics are calling 'Dubaisation' which is a mix of 'Starchitecture' logics, branded urban precincts 'including specialised industrial cities' mostly executed in a real estate business logic and top-down speed-urbanisation policies – all allowing an urban 'miracle' to rise in the desert from a tabula rasa setting. Socially and culturally, Dubai has a thin line of cultural production history inheriting its culture from the Islamic culture and the surrounding nations in the region. Looking into the riser of cultural districts / clusters in Dubai set into the three unique dimensions is not all what gives our research its significance; it is also its theoretical and methodological approach.

Understanding what's happening in the cultural field in Dubai would provide a lens to understanding the emergence of cultural developments in the other Gulf emerging cities. This sheds light on the strategic interest of these cities to collaborate between them and the formation of some sort of a global cultural destination with different offering in each of these cities.

2. Methodology and Field Research

The research design of this study relies on a case study approach (Yin, 2003)¹⁷⁰. As per John Gerring (2007), the case study is best defined as an intensive study of a single case (or a small set of cases) with the aim of generalising across a larger set of cases of the same general type. The case studies in this project are both intrinsic and instrumental. An intrinsic case study means that the case itself is of interest and the study aims to discover what is important using 'thick description' (Geertz 1973). An instrumental case study provides an insight into an issue or interrogates a generalisation - The case itself plays a secondary, supportive role to facilitate our understudying of something else and interpret the issues identified (Stake 2003).

The overall design of the research is **longitudinal** (Pettigrew, 1979), from the beginning of the rise of the city-state of Dubai (and the region), and the establishment of the country (UAE), for it provides a transparent look at the formation and development of the cultural cluster over time. This study relies upon extensive, qualitative research of **the historical evolution of culture, cultural policies, urban policies and the development of cultural districts**, its events, museums, art fairs, art workshops and other cultural attractions but essentially in what is related to visual arts. The **data collection** began in 2013 and ended in 2018. **Retrospective data** collection (from early 1970's to date) was mainly based on documentary sources, including previous studies, local databases (from local associations and institutions) and archives (of public speeches and industry reports), press archives of local and national newspapers, and industry databases (from 2000 onwards). Real-time and historical data collection (2017) was based on in-**depth semi-structured interviews** (directed towards local clusters' actors and experts with representatives from the public sector and the private

¹⁷⁰ Yin, R. K. (2003). Case study research: Design and methods (3rd ed.). Thousand Oaks, CA: SAGE Publications Inc.

sector), participant observations of several events and gatherings hosted by Alserkal Avenue and Dubai Design District and **secondary sources** (web-sites and archive, official press release, public reports).

We checked for **triangulation** of different data sources in order to obtain more **robust evidence** (Jick, 1979). In order to make clear from the outset the empirical base on which the analysis is founded, we first focused on secondary data. This also accompanies an examination of the literature to ensure external validity. To this regard, archival data were collected from the field, referring to local documents from Alserkal itself, the Dubai Chamber of Commerce, UAE Art Society, Dubai Art as well as documents reports on the history of cultural industry in Dubai, Abu Dhabi and UAE in general. Additionally, **electronic databases** and physical archives of some local and industry-specific **newspapers and magazines** were used. This resulted in a database of almost 100 articles. These articles are analysed through **text-mining techniques** to test the historical development of culture in the city and the region and to discover events that helped form the clusters under study. As such a qualitative approach has been applied into the analysis of the collected data as this type of research inquiry is generally not well served by quantitative data in the existing cultural cluster policy literature (Chapain and Roberta, 2010; Hesmondhalgh and Pratt, 2005; Martin and Sunley, 2003).

Semi-structured Interviews

Over the period of the study, 2013-2017, a number of face-to-face, telephonic and online interviews have been made with different types of actors for the purpose of collecting data and information related to our study.

Selecting interviewees did not follow a methodological process by itself but rather left to roll organically. The point of start was listing main interesting profiles in the art and culture industries form private and public organisation and targeting to interview them. However, due to time constraints and to financial constraints I preferred to interview

Initial list of interviewees included art gallery owners, government officials, collectors, art consultants, artists, managers of the developers of the selected districts among others. Please refer to Annex 2 for a list of interviewees.

Public Policy Documents

Three types of policies are used in the assessment of the emergence and the evolution of cultural clusters in Dubai and the Gulf region. Economic policies, urban planning policies and cultural policies. Also, where applicable policies are checked for different governance levels, in particular for cultural policies, bringing the focus from the wider Arab level through the cultural policies of the Arab League, to the cultural policies of the GCC organisation, to the country level (UAE federal cultural policies) and finally zooming in to the city-state policies paying attention to different 'flag' policies with different objectives and different governmental bodies. For example, cultural policy is the core strategical component of the work of Dubai Culture, the ministry level cultural planning authority in the city-state of Dubai, but cultural policy is also an important component of the Tourism Policy and the Economic Policy and the high level 'Visionary Plans' of the city.

Collecting these documents in a first stage and crossing them in a next stage is an essential analysis step for the research inquiry in hand. Equally important is the collection and the analysis of the historical versions of these policy documents to reflect on the evolution of these policies. In addition, economic, social and cultural statistics were collected from different governmental sources.

The following table highlights key collected documents focused on policy and strategy in the UAE:

Policy Documents	Issued by	Year	Highlights	
Proceeds of Smart Cities Forum	Dubai Gov.	2014	Statement of Smart City Policies - On innovation and creativity	
Clusters and Dubai's Competitiveness	Dubai Economic Council	2009	Clusters and Dubai's Competitiveness	
Dubai Culture Strategy Expo 2020	Dubai Gov	2014	Creative Clusters as a tool	
Dubai Strategic Plan 2015	Dubai Gov	2011	Human Capital and Cultural Initiatives	
Dubai Tourism Vision by (DTCM)	Dubai Gov	2013	Cultural Tourism	
Dubai Urban Plan 2020	Dubai Gov	2012	Cultural districts are noted	
Law no. 15 of 2014 concerning the Creative	Dubai Gov	2014	the Creative Clusters in the Emirate of Dubai	

Table 15- Key policy documents and reports collected

Clusters in the Emirate of Dubai			
Malty & Dilon 2007 Dubai Strategy, Past, Present and Future.	Harvard Business School	2007	Evolution of economic strategy of Dubai
IMF Country Reports UAE / Qatar	IMF	2010- 2015	Economic Dev. / Cultural Tourism
Le Louvre Abu Dhabi. Accord entre France et EAU	Le Louvre	2007	Agreement details between UAE and France
March Meetings - Sharjah Art Foundations (Video)	Sharjah Art Foundation	2008 - 2016	Cultural Strategy in the UAE
National Agenda	UAE Fed Gov	2013	Global missions and goals
Science, Technology & Innovation Policy	UAE Fed Gov	2015	
UAE Gov Strategy 2011-2013	UAE Fed Gov	2007	Highlighting gov role in developing regulatory env. In the Free Zones (Clusters)
UAE National Innovation Strategy	UAE Fed Gov	2015	
UAE Vision 2021	UAE Fed Gov	2015	Global positioning of UAE Vibrant Culture Active Communities Cohesive Community Human Capital and Creativity Diversified Economy Knowledge Economy

Online Newspaper articles

Since our study is longitudinal (over 20 years between 1997 – 2017), and while historical data is not systematically available through any single source, a review of press articles provided a compromise to this lack of information. The data collected included culture-related press articles from the main three English newspapers in the country, namely Gulf News, National and Khaleej Times. The chosen articles are collected online through an inquiry search (using the searching tools of each website with the help of a software for automatic search) for culture related terms such 'art', 'culture', 'painting' and the names of the cultural districts under-study (Alserkal, D3, DIFC and Al Fahidi) in addition to the key events over the discourse of art and culture of the city of Dubai (e.g. Art Dubai). The resulted articles are then filtered through a manual scrutiny process to cut out irrelevant articles.

The analysis stage involved a text-mining routine that searched for approximate terms related to research questions asked by this study. The results are cross-checked against other data

sources and interviews made with key actors. It is particularly important to highlight the collection of 'Press Interviews' with key cluster actors as a rich source of information and their perspective on the particularity of the market in the city and the region and the development path of the city and its cultural districts and their own experience and expectations, hopes and recommendations for the future.



Figure 21 The Main Three English Newspapers in the UAE (illustrations source: various online)

GULF NEWS & SEARCH Fotory 22. 2019 Last updated 7 minutes app	Khaleej Times
UAE NEWS BUSINESS SPORT OPINION LEISURE LIFEASTYLE CULTURE GUIDES M	POPULAR Prayer Timings Cinema Listings Weather VAT Calculator Interactives Qatar Crisis Flight Status More
ART DUBAI Use AND, OR, NOT to refine search Author (Optional) Section (Optional)	Your Search
Showing1 - 15 of13695 results Sort by: Most Recent Most Relevant FILTER RESULTS ALL ARTICLES IMAGES VIDEOS	ART DUBAI Q GO 1
[]]The Nati	ional
UAE WORLD BUSINES	SS OPINION ARTS&CULTURE LIFESTYLE SPORT
art dubai	Q
Showing 1 - 10 results of 9766 for "art dubai"	Sort by: Newest Oldest
	ng up – Elie Khouri, chief executive of Omnicom Media Group Middle East Us media giant's regional operations is adamant the industry will start to recover in 2018

Figure 22 Online search engines of the main three English newspapers in the UAE (screenshots)

In addition to the local newspapers, we also used press articles from a number of international newspapers to reflect the international view on the urban, economic and cultural development of the city and to provide neutral view (and more importantly critical) of the UAE local policies. Press resources included the UK's Financial Times, The Times among others, and also The Economist,

Furthermore, a number of art-related magazine archives were collected, in hard copies or in soft copies (online). These magazines include Bazaar Arabia, Canvas, Art in the City and Art News.

The following table illustrates some of the relevant magazines and newspapers cited:

Magazines	Country	Newspapers	
Canvas	UAE	Gulf News	UAE
Canvas Daily	UAE	Financial Times	UK
Tashkeel	UAE	The Times	UK
ArtMap	UAE	New York Times	USA
Nafas Art Magazine	UK	The Art News Paper	UK
Art Oriented	UK		
Art Review	USA		
The Culture Trip	UAE		
Bazar Art	UAE		
Artnet	France		
Frieze	USA UK		
Art Forum	USA		

Table 16 - Summary of Key Press Resources Used

Online Archive – WayBack Machine

In order to retrieve information about the past events in certain galleries for example, or to retrieve information that is not valid today and in the absence of answers from current available secondary or primary resources, Archive.org is an online portal that provides archived versions of websites in different points of time. We basically used the advanced searching tool to search specific string entries (e.g. Dubai Art Gallery) and browsed through relevant results for the required information. The following image is a screen capture of the website page for the search engine. The results list a number of art gallery websites and the dates they are available within the archive.org database.

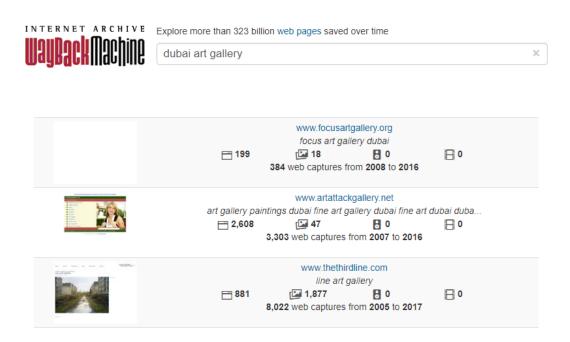


Figure 23 - Online Archive – WayBack Machine (Screenshot)

Reports, Books and Other Publication

Publications of different cultural organisations such as ADMAF, Alserkal, and event books released by art galleries provided an insightful window on the different activities of these organisation and their strategies over the years. Some publications, presented as standalone books, provide articles written by artists, art critics, or academics and provided different perspectives on the cultural journey of the country and the region. A number of books provided a series of interviews with key artists and art related personalities, mostly to elaborate the advancement of the cultural and artistic life of the country. We also consulted periodical publication by public entities such as the yearly statistical book.

The following figure illustrates some of the specialised publication used in this research.

University of Angers 2018



Figure 24 - A sample of art and culture related publications in the UAE

Other data sources

Other sources are used to complement or to cross-check primary and other secondary data. These sources included:

1- Social Media (mainly Facebook, Instagram and Twitter): Most industry players and individuals use social media as a communication platform. News on key market activities are usually published on these platforms immediately. It is worth noting that the social media tool helped more importantly at the early stages of data collection to identify the key market players and also helped in some cases to connect with these market players, especially for those who are not currently active. For example, the cofounder of Art Dubai, John Martin, has left Art Dubai in 2011. By contacting him through the social media I was able to connect with him and arrange for an interview.

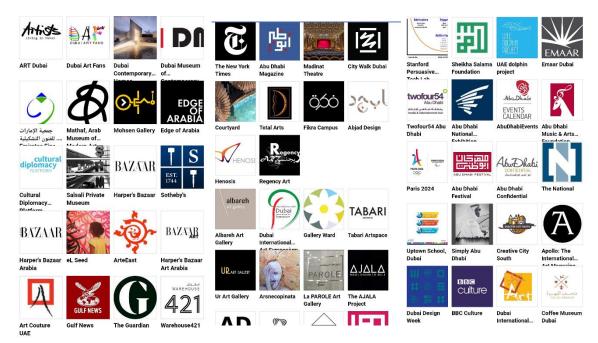


Figure 25 A sample of Facebook accounts followed during the data collection stage (Phone Screenshot)

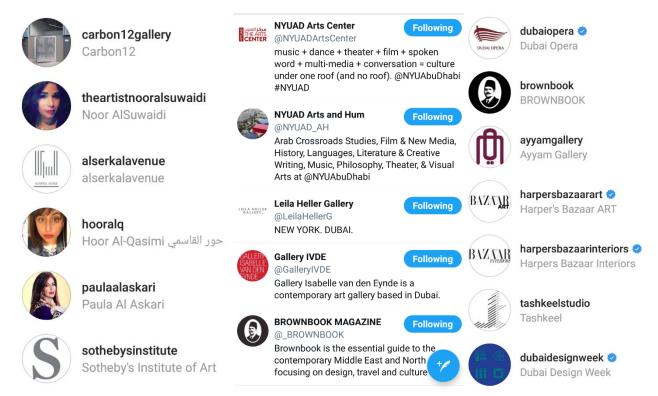


Figure 26 A sample of Twitter and Instagram accounts followed during the stage of collecting field data (Phone screenshot)

- 2- Art Dubai Catalogues: 2007 onwards, included a comprehensive list of exhibitors, event sponsors, artists, and main event programs, speakers and paralleled events.
- 3- Exhibition Brochures: provide a window on the development of local art market over the years.

4- Online video interviews and documentaries: some videos found online (e.g. on YouTube.com) have provided some insight on the cultural activities in Dubai over the last decades. One video has recorded a cultural event held in the early 80's by British expats in the city. Another clip documents Al Fahidi Historical District in the era that precedes the emergence of Alserkal Avenue and when the number of art galleries in the city where only a handful. Some press and online video interviews during key art events such as Art Dubai, Art Abu Dhabi and Sharjah Biennale were also rich source of information.

Real-time Research

Over two occasions, in June 2017 and in November 2017, I had the opportunity to participate in some events organised by the Art and Cultural community in the UAE. These events include: Art Exhibitions (for example Maraya Art Centre in Sharjah, a number of galleries in Alserkal Avenue, Outdoor exhibition at Dubai Design District), Networking & Social events (Nadi Al Quoz – Alserkal Avenue, , Networking Dinner by Christie's) (June 2017), in addition to the inauguration of the Louvre Abu Dhabi (November 2017), Art Abu Dhabi (November 2017) and its accompanying events and Sharjah Biennale (June 2017). These events not only provided me with the access to some of the key high-profile art and culture personalities in the country but also provided first-hand experience of the dynamics of networking in this domain and how networks are bringing together individuals to execute art and cultural projects and the public policy 'invisible' hand and the laissez-faire dynamics.

3. Research Design

In the theoretical framework introduced above, in order to study the specific case study, we opt for a systemic view of the cultural clusters in Dubai and the region over a defined period of time. Though deconstructing the system into its elementary components would risk the loss of observing its complexity, a systemic view, however, would allow us to observe the interchange of information, products and services among cluster actors locally and externally in a certain degree of continuum of space and time. For this purpose, we are following the above described model in deconstructing the cluster through following the following steps:

Defining the historical context of the case study (The Regional Favouring Winds)

Telling the story of the growth of the city from three perspective each at a time, the general and political history of the region, the economic development of the city and the social and cultural evolution. Again, writing the historical discourse of the city would follow a longitudinal line and the main source of information would be the secondary resource: history books, scientific and press articles with input from interviews whenever required.

- 1- A historical context of the region: a brief introduction into the region, the political and economic history of the region and its main development milestones giving rise to the its current status and how these milestones affected the development of the case study in hand.
- 2- An Economic Context: the focus on the economic strategies the city has adopted and is adopting currently would provide the economic mesh the cultural industries are embedded in.
- 3- A Social / Cultural Context: the societal characteristics that form the cultural market in which cultural demand is formed.

Defining the Cultural districts

- 1- The space elements: not only the geographical description of the place, its physical components but also its attributes in a three-dimensional perspective: urban, economic and social. The scale dilemma: to respect the spatial continuum, we have to consider a multi-scalar perspective into the cluster.
- 2- The cluster actors: a review of actors would mean delicate scrutinising of cluster's industrial players, related industry players, institutional players, and key individuals affecting the evolutionary path of the cluster. Defining cluster actors is tricky as it depends on the definition of the cluster's boundaries, the cluster's scale, the definition of the related and unrelated industries and the research objectives (research question).
 - a. Cultural businesses: Art galleries, event organisers,

- b.Cultural organisations: Private and Public Museums, NGO's, art facilities, art education centres and universities
- c. Public institutions: government entities, legal environment
- d.Individuals: key people whose actions are decisive for the formation and the development of the cluster. In the cultural domain, we can identify art sponsors, collectors and artists, and also key public actors whose decision make a difference for cultural, urban and economic policies.

Defining TO, the initial conditions:

Defining the historical context of the city and defining its cultural districts would allow us to define a certain point of time that our study would built upon as the initial conditions of the space, where a potential path is appeared.

Defining events:

A scrutiny routine, using methodological tools would allow us to define events that are either considered triggers to the development of the cluster, its institutional setup, its networks or to the general city / regional environment that is potentially affecting the cluster in the future.

Mapping

Using the above-mentioned steps, relying a number of secondary resources but mainly Art Guides of the city (such as ArtMap published by Art in the City - JAMJAR, and MyArtGuide) we are putting art galleries on a temporal map. According to the available resources we are able to track the movement of Dubai art businesses and events from year 2007 up till 2017.

4. Case Study Research Flow

The following diagram illustrates the field research design:

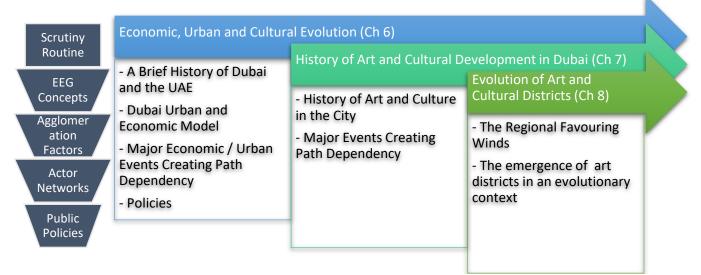
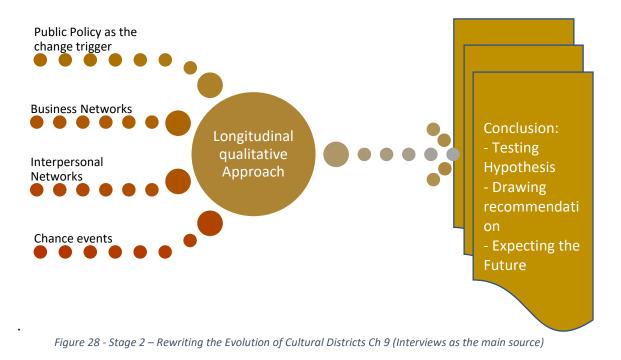


Figure 27 - Stage 1 – Scrutiny Inquiry using Primary and Secondary Resources



CH V – THE CASE OF CULTURAL DEVELOPMENTS OF DUBAI

It is evident that cities of the Gulf, remarkably Abu Dhabi, Doha and Dubai, are belligerent to establish themselves as the new cultural/creative hubs of not only the Region but also the Arab and Islamic World. Their governments have long planned for a cultural thriving society, but the scene is still in its infancy. In its rapid evolution under the pressure of a large expat population and an obvious effect of globalisation, the cultural mix here has gone through a unique journey of emergence and has lately received a remarkable global attention. Part of this recognition is linked to the efforts governments in these city-states to brand themselves in the four corners of the globe as live-and-work destinations, and also as a tourist one stop shop with a wide spectrum of tourist attractions. As such, governments have recently triggered cultural tourist attractions by adopting a number of economic and social policies. Museums, art centres and educational facilities in addition to festivals and cultural events are being tools towards marketing these cities as a cultural destination. These cultural attractions have emerged organically or by planned action of policy makers following intra-urban spatial dynamics centred on cultural districts – an archetypical character of cultural and planning strategies of the so-called creative cities. Cultural policies of these city-states have seen notions such as cultural district, creative cluster and creative city repeatedly cited by policy makers and cultural players.

My initial aim is to analyse the evolution of cultural and creative clusters in the region through economic geography lenses following an evolutionary and complexity approach that will hypothetically explain the path cultural clusters, creative people and decision makers whether on a neighbourhood level, on the city level or on the regional level which is considered as both the national (UAE) level and the supra-national regional level in the same time.

However, it is not possible to delve into the cultural evolution of a city without considering its urban and economic evolution. Especially in the case of Dubai, a city that emerged from a desert coastal village to a global economic hub in a matter of only decades, we are obliged to consider its quick emergence first. Thus, this chapter is divided into two main parts, first the economic and urban dynamics of the city emergence, which led to, second, the cultural evolution of the city.

1. Dubai an Emergent City - The Dubai Model

Lacking the rich history and culture compared to the classical cultural capitals of the region (i.e. Cairo, Damascus, etc.), the Gulf cities are relatively recent. Built upon the oil wealth of the gulf countries, these emerging cities have been remarkable examples of the nascent cities in the twenty first century (Salama 2010). Coming up from small desert coastal villages that were mainly supported by fishing, pearling and small trade activities, cities like Dubai, Abu Dhabi and Doha, have grown in only few decades to compete for a Global City positioning through intensive economic development and city branding strategies. Such strategies sought a rapid urban development to attract investments and visitors from the four corners of the globe as a means to diversify its economy away from near-complete dependence on oil and gas revenues.

Doha, Abu Dhabi and Dubai and other cities in the region have adopted similar economic and urban strategies and evolved in what researchers collectively call the Dubai Model (Elsheshtawy 2006, Hvidt 2009 among many others). Economic diversification away from oil and gas dependency, planning business and industry clusters, the intervention of the ruling elites and the government, the aspiration for a global city positioning have been the core concepts in the development strategies of such model. Creative city / economy discourse has been part of their social, economic and cultural policies.

However, these city-states have reached different city images and cultural identities. Variances emanate from their inter-city competitive attitude, variances in financial resources and their political role in the regional tensions. Similar to other nascent cities (i.e. Singapore¹⁷¹), the rise of cultural policy and cultural clusters have been relatively later in the development process of these cities.

¹⁷¹ See: Kong, L., (2012) Ambitions of a Global City: Arts, Culture and Creative Economy in "Post-Crisis" Singapore, International Journal of Cultural Policy, 18, no.3: 279-294

The evolution of culture and cultural industries in the nascent cities of the Gulf has attracted much debate among world academics, journalists and politicians in the last decade, (of the academics we highlight the works of Yasser Elsheshtawy, previously a UAE University professor; Ashraf Salama, previously a Qatar University professor; Ali Al Raouf of Hamad Bin Khalifa University, Karen Exell of UCL Qatar; and Martin Hvidt, previously a Zayed University professor).

In a couple of his articles, Elsheshtawy refers to the epic novel of Abdel Rahman Munif "Cities of Salt"¹⁷² shedding a pessimist view on the mushroom emergence of these cities with no strong roots into history or culture. However, Elsheshtawy himself (and many others) opposes this pessimism by stating that culture is being revived, borrowed and invented to create a rich and unique cultural scene, leading some to predict it will help these cities replace the classical capitals of the Arabic culture (Obeid 2012). The question of the evolution of these cities into a global position, from a *tabula rasa* into a regional hub, has been heavily asked over the last two decades, and in return heavily debated. One can easily notice that nearly all literature written on the economic and social characteristics of the emergence process of these cities has revolved around three points:

- 1- Economic Diversification, away from the declining resources of oil and gas; whether horizontal within the same industry, or, most commonly, vertically into other industries;
- 2- The effect of globalisation and the efforts towards city marketing and city branding aiming at better positioning of these cities globally;
- *3* Visionary Plans: the role of the ruler / leader as an initiator to flagship developments and by extension to governmental policies.

All three, to be detailed later, have always had a cultural aspect. Cultural industries have played a central role in economic diversification, city marketing strategies and strategic vision of these cities. Furthermore, public policies have adopted The Big Push¹⁷³ strategy where public initiatives led the accelerated development of a broad spectrum of industries. From

¹⁷² Monif A.R. (1984) Cities of Salt. Random House.

¹⁷³ pioneered by Paul Rosenstein-Rodan (1943) and further discussed in Murphy, Shleifer, and Vishny (1989). See: Todaro & Smith (2011) Economic Development. Addison-Wesley. P:163

an urban perspective, whether stated or not, the development of these countries has not been possible without an evolving notion of culture.

The uniqueness of the case of the city-states of the Persian Gulf emanates from a number of factors that are hardy observed together anywhere else in the world. The speedy growth trajectory from marginal coastal villages to 'world cities'¹⁷⁴ supported by huge spending from the sudden oil and gas riches mixed with an authoritative tribal government system and the subsequent population imbalance between locals and expatriate residents have marked such uniqueness. Elsheshtawy (2010)¹⁷⁵ stated that Dubai has no equivalent in any other urban centre in the world, and thus potentially useful lessons could be derived. The strategic location of the Gulf with its proximity to the lucrative markets of Asia, and the emerging economies of Africa, has a central role in its economic rise.

Resemblance between these city-states is beyond debate. The United Arab Emirates and Qatar both follow similar approaches towards economic diversification away from oil and gas dependency; their system of governance (city-wise) is almost identical and their degree of involvement in issues such as globalisation, the international financial crisis and world politics is corresponding though not sometimes analogous (Hvidt 2013, Hazime 2011). Economic policy variances however emanate from acute difference of resources and political attitude in relation to regional positioning strategies. Urban policies of the cities of Dubai, Abu Dhabi and Doha are also similar, and many academics espoused a certain reading to the urban development model of these cities describing it as the Dubai Model.

The Complexity of the Dubai Model

To understand the economic and urban evolution of the Gulf city states, it is necessary to shed light on the Dubai Model which has been replicated and self-replicated over the last two decades. Elsheshtawy, (2006)¹⁷⁶ has coined the term *Dubaization* labelling the influential phenomenal urban evolution of Dubai, hinting to the city's rapid emergence through mega-

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¹⁷⁴ John Friedmann (1986) introduced world cities as part of a world-systems framework, where cities are the 'basing points' of capital in the world-economy.

¹⁷⁵ Elsheshtawy 2010 Little Space Big Space, Brown Journal of World Affair

¹⁷⁶ Elsheshtawy, 2006 "From Dubai to Cairo: Competing Global Cities, Models, and Shifting Centers of Influence?" in Cairo Cosmopolitan: Politics, Culture, and Space in the New Middle East, ed. Paul Ammar and Dianne Singermann (Cairo: American University in Cairo Press, 2006)

projects characterised by iconic structures, man-made islands, large urban schemes, and specialised industrial and business areas in the beginning of the 21st century. The term has been adopted to describe the influence on other cities (e.g. Hvidt 2010, Horigan 2011, Thorpe 2010, Elsheshtawy 2010). The Dubai Model is extended beyond the Gulf region to other cities in the Middle East, Africa and elsewhere. Examples can be seen in Doha (Adham, 2008: 247); Bahrain (Dayaratne, 2012: 322); Baku, Azerbaijan (Valiyev, 2012: 632); Khartoum, Sudan; and Nouakchott, Mauritania (Choplin & Franck, 2010), India and even Panama (Elsheshtawy 2010). The first attempt to mould a Dubai Model in literature on the city has been through the work of Sampler & Eiger (2003)¹⁷⁷ though from a business management point of view.

It has been argued that Dubai has borrowed its mode of development from other city-states such as Singapore and Hong Kong, characterised by strong intervention, strong port logistics, less historical burden and strong ambition towards international positioning. However, the regional economic dynamics in Dubai is not at all similar to the later cities (mainly Elsheshtawy 2006, Hvidt 2009, but also Landry 2006 and Elbadawi 2009¹⁷⁸).

Opportunism

The emergence of Dubai was mainly due to its rulers wanting to seize the opportunity arising in regional deteriorating politics. For example, the deteriorating positioning of Beirut as a regional financial centre due to the Lebanese civil war between 1976 and 1991 gave the way to Dubai to take its role, or as Landry (2006) put it, Dubai saw a **window of opportunity** and seized it. As a matter of fact, the Lebanese war was one of a series of regional conflicts from which Dubai has benefited (Hvidt 2009¹⁷⁹). Starting with the 1976 international oil crisis, to the Lebanese war 1976, to the Iranian Islamic Revolution 1979 and the following Iraqi Iranian conflict, to the Asian financial crisis mid 1990's and finally the 9/11 terrorist attacks where the USA's tighter financial measures in the aftermath of the attacks impelled many Gulf investors to withdraw their millions in the USA and lodge them in Dubai banks. Dubai's

 ¹⁷⁷ Sampler J. and Eigner S. (2003), Sand to Silicon: Achieving Rapid Growth Lessons from Dubai (London: Profile,).
 ¹⁷⁸ See: Al Sadik,A & Elbadawi I.A. (Eds.) 2012 The Global Economic Crisis and Consequences for Development Strategy in Dubai. Palgrave Mac

¹⁷⁹ Hvidt M. (2009) The Dubai Model: An Outline of Key Development-Process Elements in Dubai, Int. J. Middle East Stud. 41 (2009), 397–418.

response to such crises has been always prompt. An investment opportunity was created to attract the wandering capitals around the globe.

Industrial Districts - A City of Cities

In his work 'A History of Future Cities', Brook provides a brief description of an archetype company functioning within the Dubai model: "A state-owned company managed by Western experts that would thrive in open international competition". That is indeed the most important tool in the hands of the government to efficiently achieve their policy goals. Hvidt (2009) describes the pathway followed to develop different districts calling them "cities with the city" – they are named officially as cities, e.g. Media City, Internet City etc. The logic of the development process, which has been in place since the early 1990's, begins when a land plot owned by the ruler is handed to a state real estate company to install basic infrastructure and key buildings. The remaining plots are then sold to investors and third-party developers relying on an acute shortage of residential and commercial supply in the market to insure their saleability and the premium gained by investors capitalising on their investments. This approach has proved a huge success over time and helped give the city the needed resources to evolve. In this manner, the urban structure of the city has developed into thematic districts "cities".

Abu Dhabi, didn't wait long to follow Dubai receipt to real estate developments and developing new districts. In 1999, The Economist¹⁸⁰ (1999) published an article on the – at the time- upcoming **Saadiyat Island** project. The pathway to its development goes as follows:

"Abu Dhabi Freezone Authority" [A newly established government entity] has hired such big names as Clifford Chance, an international law firm, to create a legal system for the project, and Arthur Andersen, an accounting and consulting firm, to program the planned stock market's computers. On July 19th, the authority handed a private company, the Emirates Global Capital Corporation, a 50-year concession to develop the island. Already, EGCC has raised more than \$1 billion of the \$3.3 billion it needs for the

¹⁸⁰ The Economist, July 22 1999, Sandcastles in the air, <u>Online</u>. accessed 04.08.2016

project, including \$400m from the government. It expects to raise the rest by the end of the year."

The narrative illustrates the government way to applying the accelerated development path, which is still to some extent valid today but with important changes related to the development scale, financing approaches, management style and the role of local human resources.

Hvidt (2009: p. 401) defined nine key parameters that characterize Dubai's economic development path:

- Government-led development (ruler-led)
- Fast decision making and "fast track" development
- Flexible labour force
- Bypass of industrialization—creation of a service economy
- Internationalization of service provision
- Creation of investment opportunities
- Supply-generated demand ("first mover")
- Market positioning via branding
- Development in cooperation with international partners.

From the point view of our study, Hvidt's list draws a solid picture of the characteristics to Dubai economic development process; however, it falls short to highlight the evolution of urban structure of the city which is governed by mega-projects as per Elsheshtawy (2006). Understanding the urban development evolution is essential into understanding the emergence of clusters in general and consequently the cultural cluster.

Hvidt (2016) provided a general overview of the development logic of the built environment in the Gulf cities which is characterised by the '**lavish building schemes**'. He defines these schemes as '*urban projects that display a blend of creative architecture quality craftsmanship and high-end building materials applied to create unique and luxurious space for business living or leisure purposes*' (: p. 31). His definition is overlapping with Elsheshtawy's Dubai Model. He argues that the emergence of these schemes was due three reasons: 1) the focus on domestic economic development and diversification; 2) the application of the cluster approach; and 3) the late-late-late entry into industrialization.

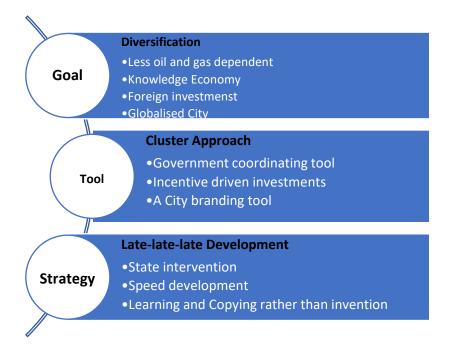


Figure 29 The Logic of 'Lavish Building Schemes' in the Gulf Cities (Own work adapted from Hvidt 2014)

In reference to many literature entries on the evolution of the Dubai Model (in Dubai and beyond), particularly Elsheshtawy (2000, 2004, 2006, 2010), Hvidt (2007, 2009, 2016), Al Raouf (2005), Davidson (2008), Sampler and Eigner (2003), our understanding of the Dubai Model revolves around three points that assumingly draws a full picture on the urban/economic development pathway of the Gulf cities, and reflects the complexity nature of the city development elements over time. The three elements are interconnected and overlapping continuously:

- 1- Visionary Plans: the role of the ruler / leader as an initiator to high level guidelines that form the basis of governmental policies, the speedy development and the speedy decision making (what is referred to as The Big Push), and the focal role of flagship developments around which economic activity can be generated.
- 2- Economic Diversification, away from the declining resources of oil and gas; enhancement of local production; copying and replicating experiences, building knowledge-based activities, attracting international partners and branches, providing economic and social incentives, etc.

3- The aspiration towards attaining a Global City positioning and the efforts towards city marketing and city branding by means of internal and external international events, attracting talents, enhancing network connections to world cities, creating a 'hub' environment, etc.

The convergence of the three axes creates a complex system that drives the evolving economic, social and urban scenes of the city.

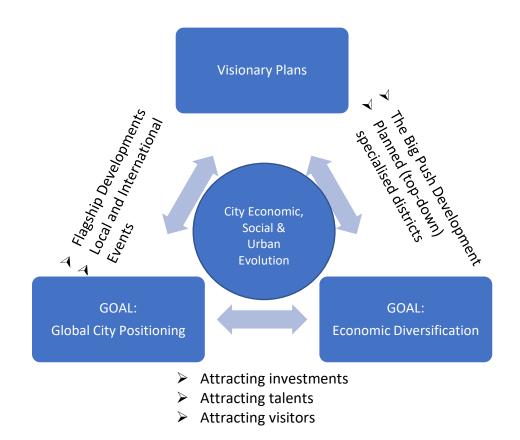


Figure 30 Dubai Development Strategy Pillars (Own Work)

Having in mind the evolutionary perspective of the development process, this model helps us understand the repeated routines in which new developments emerge in Dubai and in the cities that replicate or follow Dubai's pathway. The emergence of specialised industrial districts (the cities within cities), in a matrix of objectives / initiatives in Dubai and the other city-states in the region is thus seen within these three dimensions proposed where they represent a complex system in which elements are integrating to form the whole scene. These elements thus co-exist over the entire evolution pathway of the city. White (1988) argues that the common bottom line between the strategies of the emerging cities (in Asia in particular) is "a historical legacy of strong and economically active states, traditions of social and political hierarchy and strong nationalist sentiments underpinned by cultural homogeneity and reinforced by external threats" (: p. 24 cf. Hvidt 2007). This justifies, from the point of the governing elites at least, the need for continuous state intervention and the rapid approach to development and change.

Neoliberalism – An Entry to the Global City and the Creative City

Neoliberalism is increasingly seen as an essential descriptor of the contemporary urban conditions and the transformations of regulatory systems all over the world (Brenner & Theodore, 2005:101). The inter-urban competition meant in the last decades a struggle to attract capital and investment by building reputation of business-friendly environments and pleasant and safe conditions for employees and visitors. For a definition, Brenner et al. (2010:330) argue that 'Neoliberalisation represents an historically specific, unevenly developed, hybrid, patterned tendency of market-disciplinary regulatory restructuring'. Sager (2011) argues that the current neoliberalisation of many societies "is shaped by economic globalisation and international capital mobility, and characterised by fewer restrictions on business operations, extended property rights, privatisation, deregulation, erosion of the welfare state, devolution of central government, uneven economic development and increasing social polarisation" (: p. 149).

An important characteristic of the neoliberalisation process is the shift of emphasis of city governments from providing social and cultural services and welfare issues to the city reimaging and marketing and providing employment opportunities and implementing largescale urban developments; in short improving the city physical attributes to better cater for anticipated international investors and wealthy population (Acuto, 2010¹⁸¹). Dubai story is a best example for this process, where the government, in a span of only one decade, focused its efforts on the process of urban and economic change while little (comparatively) is done

¹⁸¹ Acuto, M. (2010). High-rise Dubai urban entrepreneurialism and the technology of symbolic power. Cities, 27(4), 272–284.

for social and cultural provision. However, as Hourani and Kanna (2014)¹⁸² highlight, the process is highly path dependent especially for nascent cities or cities that are "off the map". They suggest that neoliberalism itself is transformed in so doing.

Property-led local economic development policies became a driving force of urban policy starting in the UK in the late seventies but widely spread later in the world, especially in the emerging Asian cities as part of experimenting with markets under previous political and economic institutional settings (Sager 2011: p. 151). Dubai, with its rapidly changing cityscape and the unfinished list of skyscrapers and shopping malls, is often taken as perfect case study of **market-driven urbanism** as per Hourani and Kanna (2014: p. 601).

Tabula Rasa and Policy Experimenting

Policy experiments are essential for the identification of adequate policies. A reference to Christensen's (1985)¹⁸³ characterisation of how to cope with **uncertainty in planning** can help articulate this idea further. According to Christensen planning problems can be characterised in terms of the uncertainty about goals and the means of achieving them If there is agreement on goals and the technology is known 'programming' can take place. If no agreement can be reached on goals, '**bargaining'** needs to take place. If not enough is known about the technology, 'experiments' should be carried out. The existence of both disagreement about goals and uncertainty about technology results in **'chaos', and 'order'** must somehow 'be discovered'. This last, 'chaotic' situation is particularly irrelevant here. Situations of this type seem by no means atypical in planning. They are, arguably, even characteristic. .

Diversity and Identity

Davidson (2008) highlights the importance of history in how the economic paths of the two neighbouring emirates got diverged into two distinct growth trajectories. "..differing historical experiences combined with external events and a vast disparity in oil wealth have led to distinct macroeconomic strategies emerging within extremely flexible federal state." (: p. 143)

¹⁸² Hourani and Kanna (2014) Arab Cities in The Neoliberal Moment. Journal of Urban Affairs, Vol. 36/No. S2/2014

¹⁸³ Christensen (1985) Coping with Uncertainty in Planning. Journal of the American Planning Association. Volume 51, 1985 - Issue 1. Pages 63-73.

As such, growth strategy diversion was primarily economic emanating from the variances in resources however it is also linked and 'dependant' on the city historic regional positioning. While Dubai was historically a commercial port between the east (mainly Indian subcontinental merchants of gold, spices and textile) and the west (Arabia and Africa), Abu Dhabi was relying heavily on its emerging political position and the sudden oil boom that led to naming the city as the capital of the newly established federation in 1971. Gradually, historic variances led to growth differentiation reflected in the city image and consequently its cultural identity. How the city is perceived locally, regionally and globally is an indirect consequent to the economic diversification path each city took over the last decades. Cultural strategies adopted in both cities were dependent and firmly linked to the economic transition the society witnessed from the pre-oil era to current times. Such strategies are evolutionary by nature as they are reshaped repeatedly in a quasi-circular feedback loops connecting the city's past cultural image to the broadened futuristic multi-cultural vision through a series of initiatives.

Prior to the financial crisis in 2008, Abu Dhabi's diversification is superficial as the oil rich emirate can rely on its accumulated oil wealth and its portfolio of investments overseas to establish export-oriented industries. On the contrary, the scarcity of Dubai's oil, presumably exhausted by 2015, has pushed the emirate to some high-risk rapid diversification strategies targeting enticing more direct foreign investments. Such strategies saw the promotion of tourism, establishing new economic 'free zones', and relaxing the property ownership laws for foreigners which led to a large scale real estate boom. (Davidson 2008).

Speed Urbanisation

Since 1970, the urbanization and population of Dubai have increased dramatically, most importantly between 1995 and 2003. Annual Urban Spatial Expansion Index (AUSEI) describe the temporal changes of Dubai in terms of its annual urbanization growth rate and is calculated using the formula:

$$AUSEI_{t} = \frac{(U_{t} - U_{t-1})/U_{t}}{(N_{t} - N_{t-1})} \times 100$$

Where, Ut and Ut-1 are the total urbanized areas at the current year under study and former year; and N is the total number of years from time t (current year) to time t-1 (former year).

Table 2 shows the urban development of Dubai during the last 45 years (Khalil et al. 2017)¹⁸⁴.

Year	Urbanization (Km ²)	AUSEI		Bonulation [10] and [20]
		Period	Index Value (%)	Population [19] and [20]
2015	661.0932	2003-2015	4.0	2,446,675
2003	343.4742	1995-2003	6.0	1,141,610
1995	177.9633	1985-1995	1.4	689,424
1985	153.5247	1973-1985	2.9	370,791
1973	Less than 100	-	-	183,000 @1975

Table 17 - Dubai city development during the last 45 years. (Source Khalil et al. 2017)

contrast, the lowest pace happened during the period of 1985 and 1995, AUSEI of 1.4%. As for the period of 2003 to 2015, though the world witnessed a harsh economic crisis, the City maintained a moderate urbanization rate, i.e., AUSEI of 4%. The population of the City jumped from 183,000 at 1975 to more than 2 million in 2015, which is an increase of more than 1,200% in less than 50 years.

As can be seen in Figure 17, the population and urbanization trends almost coincide perfectly to each other. In some other Cities, the trend between both might differ at a certain point of time because of horizontal expansion of those cities—that results from high-rises buildings.

Planning Dubai – Copying Singapore?

Dubai economic and urban development was led by heavy top-down planning approach that prioritised inward investments into what is perceived as high-profit sectors such as real estate and the financial services. As explicitly highlighted by Dubai Economic Department, the first two phases of Dubai governmental strategy (1996-2000 and 2001-2010) were 'investment-driven'. As such art and culture were not a priority per se. However, starting from 2011 the government in what is called its 'Phase 3' of its strategic plan has prioritised innovation which include technology-driven industries and also creativity in what related to art and design.

1996-2000	2001-2010	2011-2020
Investment driven	Investment driven	Innovation driven
Setting a policy framework to	Expansion of regional production	Technology-based activities
encourage investments	and the market base	

¹⁸⁴ Khalil et. al. (2017) Multi-Temporal satellite imagery for infrastructure growth assessment of Dubai City, UAE. MATEC Web of Conferences 120, 09006 (2017)

Upgrading of business climate	Promoting (selective) investments	Upgrading of science and technology
Improving productivity and economic diversification	Searching for skills	

Hvidt (2009) notices that Dubai is adapting policies and copying initiatives that originated in Singapore. Both cities have formalized an exchange of ideas and procedures at the state level to the point that the general director of the Executive Office (an executive government entity led by Dubai ruler and responsible for the city high level strategies), stated that "*Singapore became a reference point for Dubai because of the similarities between the two countries—especially in vision and proactive leadership*" (cf. Hvidt 2009). One example of the early copied experiences from Singapore is the annual shopping festival, a family entertainment and shopping event that engages retail and hospital and entertainment offering in the city for a full month every year. Even more, Dubai has copied Singapore in centralising development initiatives in the hand of few holding companies which proved to be one important factor in auditing, control and coordinating mega-scale projects.¹⁸⁵

In what concern art and cultural development, Singapore provide a similar trajectory as well. Policy initiatives in Singapore rarely considered art and culture as central in the first two decades after independence. When art and cultural developments was finally appeared on the political agenda, this was meant as a city marketing tool (Kong 2012¹⁸⁶).

Dubai Urban Emergence Time Line

The following table illustrate a historical account of the emergence of Dubai since the early 60'es and the discovery of oil in 1966 from a small coastal village with no more than 60,000 inhabitants to a global city with around 2.3 million inhabitants. The number of tourists highlights a governmental policy towards increasing the attractivity of the city in the global context and reflects very well the success of such priority strategy.

Table 19 - Dubai Urban Emergence Time Line

 ¹⁸⁵ For more on the Singapore development model, see: seeW. G. Huff, "What Is the Singapore Model of Economic Development?" Cambridge Journal of Economics 19 (1995): 735–59 (cf. Hvidt 2007)
 ¹⁸⁶ Kong L. (2012) Ambitions of a global city: arts, culture and creative economy in 'Post-Crisis' Singapore, International Journal of Cultural Policy, 18:3, 279-294,

Dubai Urban Emergence Time Line					
Year	Major Developments	Population (millions)	Tourists (millions)		
1960's	Development of Jumeirah Neighbourhood	0.06			
	Al Quoz Neighbourhood				
	Dubai Airport Established				
1971	UAE Federation Established				
1975		0.18			
1979	Jebel Ali Port opened				
1983	Port Ali Free Zone				
1985	Emirates Airlines Established	0.37			
1994			1.0		
1995	Dubai Investment Park	0.69			
	Dubai Airport Free Zone				
	Dubai Airport Terminal 2				
	Jumeirah Beach Hotel				
1999	Burj Al Arab Hotel				
2000	Dubai International Airport Termial 1	0.86			
	Emirates Towers - Sheikh Zayed Rd.				
	Dubai Internet City		3.4		
2001	Palm Jumeirah Construction Works				
2002	DIFC Inaugurated				
	DMCC (Dubai M				
	Palm Jebel Ali Construction Works				
2003-2005	10+ com./Ind./Res. Urban Projects	1.32			
2006	Freehold Ownership Law		5.5		
2007	Mall of the Emirates				
	Dubai Festival City				
2008	The Atlantis Hotel & Resorts	1.65			
	Dubai Mall				
	Fly Dubai				
	Dubai Airport Terminal 3				
2009	International Financial Crisis	1.77	6.1		
	Burj Khalifa				
	Dubai Metro				
2010	Al Maktoum Intl. Airport	1.91			
2012			10.0		
2013	Expo 2020 awarded to Dubai	2.21			
2015	Dubai Design District				
2016	Dubai Opera House				
2017			15.8		

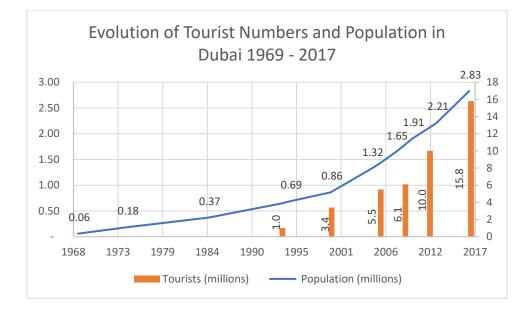


Figure 31 Evolution of Tourist Numbers and Population in Dubai 1969 – 2017 (Sources: Compiled from Dubai Statistics Authority and Dubai Year Books 2000, 2001, 2006, 2012, 2017)

2. Cultural Policies

The structure of cultural public institutions in the United Arab Emirates is inherited from the country's political model; a federal country composed of seven Emirates each equipped with a quasi-independent internal decision-making power. The central 'federal' government assumes decisions affecting the national level leaving most of the local development strategies to the city-state level governments.

Specific government incentivized initiatives include, to name but a few, the Saadiyat Cultural District on Saadiyat Island and TwoFour54 in Abu Dhabi; Dubai Design District, Dubai Art Week, the newly established Fashion Council, and Mohammed bin Rashid City in Dubai; as well as the Sharjah Art Foundation, Maraya Art Centre, and Barjeel Art Foundation in Sharjah. Abu Dhabi and Dubai have separate strategic agenda on the emirate level, which have both diversification of the economy at its core.

As such, the UAE's 'federal' Ministry of Culture operates decentralized entities in the form of cultural centres at the level of each emirate. These entities have limited role compared to the independent institutions running under each Emirate's local government. The cultural evolution of the country (and the economic evolution as well) is centred around the biggest three cities (*city-states*), namely Abu Dhabi, Dubai and Sharjah.

Cultural policies of Abu Dhabi, the country's federal capital and the largest of the seven Emirates by area and by economic power, are managed by Abu Dhabi Tourism and Cultural Authority ADTCA, or TCA in short, since 2012. The formation of TCA was a merger between Abu Dhabi Authority for Culture and Heritage (ADACH) and Abu Dhabi Tourism Authority (ADTA), ordered by the UAE President and Abu Dhabi ruler, Sheikh Khalifa, in a measure to develop all tourism strategies, including cultural tourism, at one institutional agency. Prior to 2012, ADACH, which was established in 2005 was responsible for developing the culture and heritage sector of Abu Dhabi. In 2006 TDIC was created as the tourism asset management and development arm of TCA.

In Dubai, largely regarded as the economic and commercial regional hub, the Dubai Culture and Art Authority (DCAA or Dubai Culture in short) was created in 2008 to draw cultural strategies in the city. It is chaired by Sheikh Majid bin Mohammad bin Rashid Al Maktoum, the sun of the ruler of Dubai.

The cultural strategies of Sharjah, the city is largely considered as the cultural 'pioneer' of the country, are drawn by an amalgam of institutional strands mainly shaped by the Department of Culture (the local cultural authority) and Sharjah Art Foundation (SAF) established in 2009 and the current management umbrella of Sharjah Biennale. SAF is presided by Hoor Al Qasimi, the daughter of the ruler of Sharjah.

UAE Ministry of Culture

Right after the United Arab Emirates was born in the 2nd of December 1971, the Ministry of Culture and Information was established by the Federal Law No. 1 of 1972. In 2006, a federal decree cancelled the Ministry of Information and Culture and replaced it with the Ministry of Culture, Youth and Community was developed. In February 2016 the Council of Ministers issued a decision to add some specialties and change the Ministry's name to the Ministry of Culture and Knowledge Development.¹⁸⁷

The Ministry's main goals remain in promoting the national cultural identity and cultural awareness, enhancing the cultural educational process, preserving historical sites and the

¹⁸⁷ Ministry of Culture and Knowledge Development, About the Ministry Online

national heritage treasures, and providing basic cultural infrastructure at the federal level (such as libraries). InfoBox 3 details the different objectives of the UAE Ministry of Culture as per their website.

InfoBox 3 - Objectives of UAE's Ministry of Culture (Source: Ministry of Culture) [emphasis added]

As per the UAE's Ministry of Culture, the Ministry's main objectives are:

- To represent the state in local and international cultural and artistic conferences and establishing and supervising artistic festivals so as not to fall within the other entities' terms of reference.
- Establish cultural seasons to benefit from the outcome of human thought and to expand knowledge horizons for citizens.
- To provide **library services** to the public through public libraries across the state.
- To protect and develop **all forms of arts** so as to maintain the artistic heritage of the state, to encourage and achieve a suitable environment for growth of the creative faculties, to showcase new talents and to encourage the authoring and translation in the various aspects of literature.
- To explore and maintain the **historical heritage** of the country.
- To take part in the **revival and documentation of Arab history** and national heritage to serve as a historical reference and a source for the level of progress of literature and arts.
- To preserve **national identity**, strengthen the sense of belonging, permanent investment of young people's abilities, embrace charity and direct them towards full community development to achieve these goals.
- To create a unit dedicated to preparing the **younger generations** for leadership, reconnaissance and communication through applied programs.
- To raise the level of community **cultural awareness**, improve practices and innovations, enrich cultural exchanges that serve the cause of community development by improving behaviours and to devote civilized conduct as a practical approach between the different groups in society.
- To coordinate with various competent entities to identify the means that lead to **integrating the expat groups** into the country's community fabric, thus making them effective and positive elements in maintaining the principles and interests of this community.
- To **coordinate activities** between the federal government, local governments and media organizations that aim to protect the cultural heritage of the state and activities that are related to cultural issues, and to sponsor initiatives that aim to create channels of communication with civil society organizations and the private sector in order to serve these issues.
- To **disseminate the values of cultural investment** so the culture becomes a productive sector for the national economy.

The Arab and The Islamic Capital of Culture

Considering the important economic, social and cultural impact of the cultural capital event in Europe, the Arab group in the UNESCO proposed to extend this European experiment to include the Arab countries. As such Cairo was selected as the Arab cultural capital in 1996, followed by Tunis the next year and then Sharjah (UAE) in 1998.

Assigning Sharjah as the Capital of Arab Culture after Cairo and Tunisia is seen as a gesture of appreciation to the efforts the Emirate held to restore its historical precinct and the different cultural initiatives led by Sharjah Ruler, an enthusiast of history, art and culture. The

importance of Sharjah as a radiant of culture within the region is highlighted into the inauguration commentary of Federico Mayor, the Director-General of UNESCO at the time.

In 2009, Sharjah was named the Capital of Islamic Culture for the year 2014 by The Islamic Educational, Scientific and Cultural Organization (ISESCO) which is a specialized institution of the Organization of Islamic Cooperation (OIC). The announcement was made by ministers of culture of the OIC at a conference in the Azeri capital of Baku in recognition of its *"remarkable contributions in preserving, promoting and disseminating culture at local, Arab and Islamic levels"*¹⁸⁸. For this year-round event, 24 projects were scheduled for the year worth around AED1.5 Billion (USD 0.4b) in Celebration of SICC, including Al Majaz Island, a 4,500-seat amphitheatre and Islamic park, new museums and traditional markets, as well as other heritage projects.

The significance of the cultural offering of Sharjah is partly due to the existence of several landmark museums in the city¹⁸⁹ and the many cultural events including Emirates Fine Art Society Annual Exhibition (since 1981), Sharjah Biennale (since 1993) and Sharjah International Book Fair (inaugurated in 1982). It is also worth mentioning that Sharjah was also named the Capital of Arab Tourism for 2015.

Cultural Differentiation

Although the majority of Arab and Gulf cultural ministers are concerned about identity politics, it is clear that national cultural identities are complex and overlapping because of many historical and geographical factors¹⁹⁰. As such a trend of differentiation is observed in terms of cultural policies and identity promoting tactics.

Since the 80's, and more effectively after the Gulf War in 1991, the cultural policies in the Gulf were moved gradually towards differentiation from their Arab context, by their common (tribal) traditions, but also because of the type of their new economy and their common

¹⁸⁸ Sharjah Islamic Culture Capital Website Online

¹⁸⁹ For a list of existing museums in Sharjah, see: Sharjah Cultural Policies further ahead in this chapter.

¹⁹⁰ Dragićević Šešić, M. 2010 Les politiques culturelles dans les pays arabes : enjeux émergents, professions émergentes. Part 2/4 Complexité des politiques culturelles : un cadeau « empoisonné » de l'histoire. Association Marcel Hicter Pour La Démocratie Culturelle - FMH

political references. Even among themselves, Gulf States are in a process of cultural differentiation and distinctiveness¹⁹¹. Such trend to distinctiveness is mirrored in the governmental policy to emphasize national identity that is different and unique on a bar with the cultural identities of neighbouring Gulf nations. Using local folklore, traditions, heritage and other cultural elements, not only Gulf countries but also the Gulf city-states are defining and promoting their own local cultural identity. Such trend calls a sense of pride for citizens but also bears a sense of competitivity and an attitude of rivalry towards other nations. In light of the recent developments of mega-scale star-architecture projects, cultural developments in each city state seem to position the city with a cultural offering that overlaps but doesn't replicate the experiences of other neighbouring cities but in the same time attempts to distinct itself to a noticeable limit.

Art Education

Until the 80's, there existed no educational program destined at teaching arts in the UAE, nevertheless, the Ministry of Education has financed, as early as the 1970's, a number of scholarship of young Emiratis to study in some Arab countries such as Egypt, Syria and Iraq. And thus, the first two generations of the Emirati artists were educated abroad. Coming back to their country, these artists contributed to the educational process by giving art lessons in the workshops of established artists at the time.

On the level of schools, art education was mainly an interest to private school agendas rather than the public curriculum. On the level of universities, there wasn't an undergraduate degree in fine arts until University of Sharjah partnered with the UK's Royal College of Arts to offer an art and design degree. Later Sharjah University inaugurated The College of Fine Arts and Design (CFAD) which offered degrees in Fashion Design with Textile, Fine Arts, Graphic Design and Multimedia and Interior Architecture and Design. Similarly, in Abu Dhabi, Sheikh Zayed University (SZU) created The College of Arts and Creative Enterprises and offers a number of art and design undergraduate degrees including four Bachelor of Fine Arts in animation, graphic design, interior design and visual arts. On an interesting note, the United Arab

¹⁹¹ as opposed to specialisation since no clear differences that can justify vertical or horizontal topological demarcation.

Emirates University (UAEU) in Al Ain offers a Bachelor of Education in Art Education which is designed to prepare art teachers for school grades (K-9, Cycle 1 and Cycle 2). More recently, the New York University in Abu Dhabi (NYUAD) offered Art practice and Art History Major and minor in design. However, for graduate art degrees, it is still lacking in the curriculum of the UAE universities.

The Cultural Evolution of Dubai

Dubai has always been a trade post that connects regional traders far from political conflicts and tensions. Traders from the neighbouring nations, Iranians, Indians, Pakistanis and fellow Arabs and from places further afield, made up the majority of the city's inhabitants as early as the 1960's. This majority has not only shaped up the economic scene of the city but also its cultural scene. The apolitical positioning of the city (and the country to some extent) has been a strong, if not a pivotal, point in attracting economic investments to the city, however, in what concerns the cultural scene of the city, the ahistorical context seems a recurrent issue that cultural industries and cultural policies are either trying to avoid or to overcome insistently. The a-historical / a-political representation of the city is still dominating the academic literature on Dubai and its neighbouring Gulf cities as one academic postulates: "Today it still seems acceptable to represent the Arab Gulf, in ways no longer so acceptable in the case of other postcolonies, ahistorically and apolitically" (Kanna 2011: p. 1)¹⁹². For some, mostly authors from a Western perspective, the city is trying to build its cultural scene on a cultural tabula-rasa where cultural industries didn't start to 'exist' in the city until recently. However, others (such as local art voices in UAE and the GCC region), insists that the cultural history of this part of the region should be considered as an extension and a continuation of the regional Arab and the Islamic evolution and thus its deeply rooted in history¹⁹³.

"All this talk of a new local arts scene is no more than business as usual. It's the profit to be made from overhyped Iranian artists that interests galleries. Emiratis are left to fall by the wayside." (Schindhelm 2011, p 133).

¹⁹² Kanna, A (2011) Dubai: The City as Corporation. p. 1.

¹⁹³ Voices of this logic include Sultan Saoud Al Qassimi, a UAE art critic and writer.

As per Schindhelm, his organisation (Dubai Culture) has prioritized its projects. First in line are those announced by the ruler and of central economic significance, for which the funding has already been secured. Then there are those for which we do not yet have financing, but which have the ruler's blessing. Finally, there are the proposals that remain undecided. The Deira complex ranks somewhere off the bottom of the list. It has zero priority.

In Abu Dhabi the close relation between cultural policy and tourism ambitions is straight forward. The cultural developments in the city are seen as an economic catalyst (Bilbao effect) which will generate cross-sectoral economic activities, especially in tourism, hence the fusion of the ADACH (Abu Dhabi Authority for Culture and Heritage, founded in 2005) and ADTA (Abu Dhabi Tourism Authority, founded in 2004) to form the ADTCA (Abu Dhabi Tourism and Cultural Authority – TCA for short) in 2012 (Dumortier 2014)¹⁹⁴.

3. Conclusion

In this chapter we provided an overview of the pillars of the emergence of Dubai in the last century. The main dynamic forces to this emergence being a combination of a fixed yearning to diversify the economy away from oil and gas on which Dubai is less advantageous and a steady opportunistic approach that capitalised on regional and international instances (mostly crises) where Dubai remained or felt as an investment safe haven for returning capitals. However, this wouldn't have possible without an infrastructure initial capacity which is revolved around developed logistics, balanced politics and friendly business environment; for which Dubai has spent long time into becoming ready.

Every city around the globe has its own and unique story to tell; its unique culture to exhibit to the world. No doubt, the cultural evolution of any city is a strand braided into its economic, social and urban evolution, and Dubai is no different. Nevertheless, the uniqueness of Dubai culture does not manifest in the offering itself, but also in how it was evolved. The cultural journey of the city has seen many stages, many ups and downs and a speed developmental

¹⁹⁴ Dumortier B. (2014) The Cultural Imperative: Saadiyat Cultural District in Abu Dhabi between Public Policy and Architectural Gesture," in Under Construction: Logics of Urbanism in the Gulf Region, ed. Steffen Wippel, et al. (Farnham: Ashgate Publishing, 2014), 186.

trajectory over the last decades. The following chapter provide a detailed look into the art development of Dubai in the last three decades (1980-present).

CH VI - A BRIEF HISTORY OF ART AND ART DEVELOPMENTS IN THE UAE – KEY PATH MILESTONES

As seen from the introduction to the case study, the Cultural Districts in Dubai, are still in the emergence phase and the art scene in the city and the country is still recent. To deconstruct the components of the city's art scene in the lookout for clustering dynamics, we first examine the historical timeline of the artistic activities in the city (and the region where it is related) and then we search for specific criteria as referred to by the theory and the methodological approach.

1. 1980-1990: The Founding Years



Figure 32 UAE Art Development 1980-1990

Almost all writings on the evolution of the artistic scene in the UAE has one artist and one place to start with, Hassan Sharif and Sharjah the pioneer artist and the pioneer place of art in the young history country. As early as 1980, Hassan Sharif was among the few artists to establish the Emirates Fine Art Society in Sharjah which was formed by a decree by Sharjah Ruler, Sheikh Sultan bin Saqr Al Qasimi. Sharif studied fine arts at The Byam Shaw School of Art (now part of Central Saint Martins) between 1979 and 1984. On coming back to the UAE in 1984, he established Al Mareija Art Atelier after he was granted an art space from Sharjah Department of Culture and information. In the same year, the first issue of Al Tashkeel magazine, the first and only art periodical at the time, was published. Prior to 1980, however, there were a few local artistic activities and local artists. As per Sharjah Art Foundation (2015) Al Ansari exhibition in 1972 was the first local art exhibition.

Sharjah cultural scene was mostly shaped up by Arab speaking artists and thus oriented towards Arab speaking audience, composed of UAE nationals and Arab expatriates in the country. Sharjah was also an attractive cultural magnet for Arabs from the adjacent Emirate, Dubai. Sharif established in 1987 the Free Art Atelier in the Youth and Arts Theatre (a cultural centre run by the General Authority of Sports and Youth of Dubai) mainly to accommodate



one of Dubai's premier fine art galleries, a true haven for artists and art lovers alike.

Figure 33 Introduction Plate at the Door of Majlis Gallery

for education art oriented towards the young. Sharif is currently regarded as one of the pioneer "five" conceptual artists from the United Arab Emirates; the others being Abdullah Al Saadi. Hussain

Sharif, Mohammed Ahmed Ibrahim and Mohammed Kazem. Other UAE artists at the time included Abdul Qader Al Rayyes, Abdurrahman Salim, Dr. Mohammed Yusuf and Dr. Najat Makkiyah (the only woman artist in the group at the time). The group's main activities (either within the Emirates Fine Arts Society or during meeting in Al Mareija Art Atelier or elsewhere) included organising artists exhibitions including the annual exhibition of the Emirates Society, and collaborating for art projects, however the art educational purpose was essential. It was Sharjah where most of the artistic activity taking place. Artists from the other Emirates were invited to participate in workshops, to exhibit their works or to attend exhibitions. Over the years, a group of young artists began to emerge in the UAE thanks to the efforts of these pioneer artists.

In Dubai, the Art Society of Dubai was founded in May 1976 by artists and British expats Mary Jose and Caroline Jackson¹⁹⁵. With the help from Businessman Khalaf Al Habtour and Oscar Mandody a Director at the Ruler's Office the Society moved into a Villa on the Beach Road in Jumeirah 1 in 1979¹⁹⁶. Mr Mandody had underwritten the Villa rents for the first three years. During this period 20 local companies contributed to maintenance and improvements in the centre. An evolving platform for artistic expression, the organisation changed its name to become the Folk-Art Charity Association for Teaching and Showing, and then to 'The Dubai Arts Centre', and since 1995 it is known as the Dubai International Art Centre (DIAC)¹⁹⁷. DIAC was a platform for art education and saw the rise of Dariush Zandi, a former town planner for the municipality who went to establish the Courtyard, the first art gallery in Al Quoz industial area.¹⁹⁸

The year 1988 witnessed the establishment of the first commercial contemporary art gallery in the country by Allison Collins. A resident of Dubai since the 1970s she converted her rented property to an art exhibition during the regeneration of the quarter. Al Majlis Gallery is situated at Al Bastakiyah (Currently Al Fahidi¹⁹⁹) at the Creek-side historical centre of Dubai. The gallery is mainly focused on contemporary art from the Arab and Islamic World and sought catering to collectors from the west and the wealthy expatriates in the UAE.

¹⁹⁵ Johnson A. 2008 The artistic life in Dubai. Gulf News August 7, 2008. Online Accessed: 12 Nov. 2016

¹⁹⁶ Art Dubai 2012 DIAC. <u>Online</u>. Accessed: 12 Nov. 2016

¹⁹⁷ Gulf News 2001 The complete picture, By Leslie Wilson Jr <u>Online</u> 12/06/2001 00:00

¹⁹⁸ Johnson A. 2008 *op. cit.*

¹⁹⁹ The Heritage Village and Beit Sheikh Saeed in the historic district of Shindagha and Fareej Al Fahidi are considered the main heritage venues during the Dubai shopping festival. – edit for later

On the broader international level, the year 1987 witnessed the inauguration of The Arab World Institute in Paris, a pan-Arab cultural organisation that will affect the diffusion of Arab art and culture in Europe and the world. In 1989, Hassan Sharif participated for the first time in Cairo Biennale.

2. 1990-2000: Getting Noticed (regionally and globally)

The growth of art activity in Sharjah, and the art and cultural passion of the ruler of Sharjah led to the establishment of Sharjah Biennale in 1993. Sharjah Biennale was not only the first in UAE, but also the first in the Gulf area and grown gradually to become one of the

InfoBox 4 - Key Regional Political Events before 2000

- 1981-1989: Financial Crisis oil price collapse (Glut)
- 1982: Israel invasion of Lebanon
- 1987: Palestinian Intifada
- 1987: Iraq-Iran war ends
- 1990: Iraq invasion of Kuwait
- 1991: Liberation of Kuwait
- 1991: Middle East peace process begins
- 1996: Lebanon Israel War
- 2000: 9/11 Attacks

biggest art event in the Arab world. Sharjah Biennale has put the city on the art and cultural map in the region and the world. Art collecting by locals and by GCC visitors saw a turning point. In 1995, Sheikh Hassan Bin Ali Al Thani of Qatar made the first acquisition of Emirati art works (Hassan Sharif) for his collection of a yet to be established Arab Art Museum (Mathaf) in Doha²⁰⁰. The art collection industry began to shape up in the country with the opening of The Sharjah Art Museum which first opened its doors on April 17, 1997 during the 3rd Sharjah International Arts Biennial – a solid evidence of the role of art events giving rise to more permanent cultural venues.

The Sharjah Biennale had its important role in bringing international artists, especially artists with a connection to the Arab and Islamic world, to the region to establish local businesses. For one important example, Jeffar Khaledi, a US artist of Palestinian origin based in New York, submitted some works to the 1997 edition of Sharjah Biennale and eventually won the grand biennial prize. After Sharjah he moved to Al Quoz. In his words, Khaledi said: "… [I] felt the need to get back into painting. I rented a warehouse and built my studio as a live-work space".

²⁰⁰ Sheikh Hassan continued to buy more than 30 art works by Hassan Sharif. Mathaf was opened in Doha in 2008 – see: NYUAD (2017) We Cannot See Them But: An Exhibition and a book to

His live-work space evolved into one of the first commercial galleries in Dubai, B21 Gallery which later renamed after his partner Isabelle Van der Vaden who moved the gallery into Alserkal Avenue in 2012.

Sharjah was named the Arab Capital of Cultural in 1998, an initiative by the Arab League under the UNESCO to celebrate and promote Arabic culture in the "Cultural Capital" over a full year. The event witnessed collaborative cultural projects from different Arab League members. Sharjah was chosen as a cultural capital of the Arab World only two years after the initiative was announced in 1996, and after Cairo in 1996 and Tunis in 1997, both are capitals with long established cultural and political influence in the Arab world.

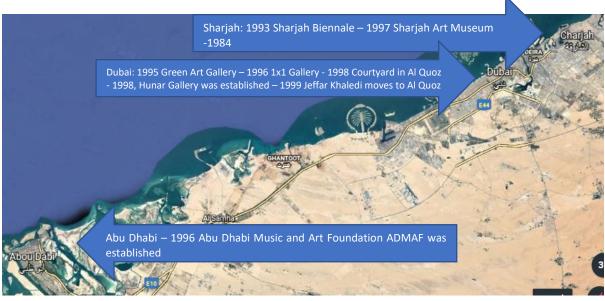


Figure 34 UAE Art Developments 1990-2000

In the neighbouring Dubai, a small community of expat artists commenced to form including Vivek Vilasini²⁰¹ and others. Expat communities had frequent cultural activities, such as those organised by the French Cultural Centre in Dubai that organised in 1998 the exhibition Artists from UAE.

²⁰¹ Ibid

Figure 35 Green Art Gallery Logo prior to 2005 (archive.org)

The city saw the establishment of Green Art Gallery in 1995 by Mouna and Mayla Atassi, two Syrian sisters with an established art gallery in Damascus since 1990 and in Homs since 1986. Similar to Al Majlis, Green Art Gallery was opened in a residential villa but this time at the Jumeirah Area, a luxury villa-type residential zone of the city. Green Art was mostly interested in contemporary arts from Middle Eastern countries especially Syria, Iraq, Egypt, and Lebanon. Not far from Green Art, in the next door

Satwa Neighbourhood, Malini Gulrajani opened an art dealer boutique for Indian artefacts²⁰² on Dhiyafa Street. Gradually, she started to get involved with the Indian art community in the UAE and back home in India and she started to collect art works. This has led her to opening her own art gallery (moving over the next 20 years between a villa in Jumeirah, and two spaces in Al Quoz, one of which was a temporary structure that she operated for just three months²⁰³) until she joined Alserkal Avenue in 2012.

In 1998, Dariush Zendi, an Iranian architect and a town planner working in Dubai Municipality established the Courtyard in Al Quoz industrial area as an open art space and a café hideout for artists. The Courtyard saw the first seed of artistic activity in Al Quoz industrial area that will see a thriving future one decade later. Zandi established Total Art Gallery at the Courtyard to cater for Middle Eastern contemporary artists but specially from Iran. Almost in the same time, in 1998, Hunar Gallery was established by UAE national businesswoman, Al Anood Al Warshow. The gallery features international portraits, landscapes, calligraphy and abstract art, as well as promoting up and coming local artists and works by women. The Hunar Gallery was situated in Al Rashidiya area opposite to Dubai International Airport.

This period saw more cultural activities as well in other Emirates. The Cultural Foundation of Abu Dhabi hosted a number of solo and collective exhibitions. Abu Dhabi Music and Art Foundation was established in 1996, And the Sand Palace meetings (1992-1997) were dedicated to the local art scene in the UAE.²⁰⁴

²⁰² Interview with Malini Gulrajani, June 2017

 ²⁰³ Ayad, A. 2016 Gallerist Malini Gulrajani finds her space and inspiration at 1x1. The National Newspaper. January 24, 2016, <u>Online</u>
 ²⁰⁴ NYUAD (2017) *Op. Cit.*

UAE artists started to exhibit their works in a number of regional and international art fairs such as Biennale Muscat for Youth in 1991 (Mohammed Kazem), UAE Fine Art Society in the USSR in 1990 and 1991, Biennale Dakka (Mohammed Kazem), UAE Art Exhibition in Sittard Art Centre in the Netherlands and UAE Contemporary Art Exhibition at the Institut du Monde Arabe in Paris in 1999.

3. 2000 – 2005: The Dubai Years

The early years of this millennia saw important factors that added a complete face-lift for the cultural scene in Dubai and the UAE and the roots of an art scene were only just starting to take hold. The first being the huge urban and economic boom in Dubai in light of announcing a number of major construction projects, of these projects, Dubai Media City, one of the first media and TV specialised districts to be founded. The events leading to this urban boom and how specifically impacted the art scene will be discussed in a different chapter of this thesis. InfoBox 5 - UAE University

The oldest higher education centre in the country, the UAEU was founded in 1976, only five years after the country was born. In comparison, the Higher Colleges of Technology were established 11 years later in 1988, and Zayed University in 1998. (UAEU Website)

The year 2003 was crucial for UAE art market as it witnessed the opening of a number of art galleries, Latifa College, and the announcement that Sheikha Hoor Al Qasimi reorients the Sharjah Biennial in its 10th year anniversary.

In 2003, Sheikha Latifa (the daughter of the current Dubai Ruler, Shaikh Mohammed bin Rashed Al Maktoum) opened the Latifa College in Dubai as an educational art centre and an art atelier focused on raising art awareness among the young²⁰⁵.

The same year saw Sheikha Hoor Al Qasimi, the daughter of Sharjah Ruler, Sheikh Sultal bin Saqr Al Qasimi, reorients the Sharjah Biennial in its 10-year anniversary. Hoor Al Qasimi with Peter Lewis (from Goldsmiths College) worked with a number of other international curators

²⁰⁵ Interview with Lisa Lashgar, Deputy president of Tashkeel. June 2017

to present installations, video and photography by 117 artists from 25 countries at the new Sharjah Expo Centre.

One year before that, Etemad Art Gallery was founded in Al Quoz area, not far from the Courtyard and Jeffar Khaledi reopened his art space as a commercial gallery (Galerie B21). While Etemad gallery sought dealing with established and emerging young Iranian artists, B21 had a more varied agenda for representing Middle Eastern contemporary artists.

Artspace Gallery (Currently Tabari Art Space) was founded in 2003 at the Fairmont Dubai Hotel by collector and art consultant, Maliha Tabari under the patronage of Princess Haya Bint Al Hussein, the wife of the current Ruler of Dubai. The gallery is specialised in the promotion of contemporary Middle Eastern Art and Artists. The Gallery later moved to Dubai International Financial Center DIFC in 2008, across the street from its previous location at the Fairmont Dubai Hotel.



In the historical district of Dubai, Al Bastakiyah District (Currently Al Fahidi), Mona Hauser, establishes XVA gallery as an exhibition venue for regional and international artists. The gallery hosted the French artist Sebastien Desarbres in November 2003²⁰⁶ and continued to host the same artist for two more seasons (2004 and 2006). XVA occupies the

former home of the Seddiqi family and was expanded later and turned in part into a 14-room boutique hotel (XVA Hotel). Next to XVA, Ostra Gallery opened in September 2004 and displays a contemporary arts and sculptures and calligraphy.

In 2005, The Third Line Gallery opened in Al Quoz industrial zone in Dubai by Sunny Rahbar and her partners Claudia Cellini, an art consultant previously working in Singapore and Omar Ghobash, a UAE diplomat and art passionate who later co-founded The Arab Fund for Arts and Culture AFAC in London in 2007²⁰⁷. This brought the galleries opened in Al Quoz Area at the time to 4 galleries, Etemad Gallery, Total Art at the Courtyard, Gallerie B21 and The Third Line.

²⁰⁶ Kalsi J. 2003 There is an artist within us all. Gulf News: Online

²⁰⁷ The Arab Fund for Arts and Culture AFAC, website: http://www.arabculturefund.org

Prior to opening the gallery, Sunny Rahbar, a New York art graduate of Iranian origin and who was raised in Dubai, took up the position of resident curator at Five Green, known as the first creative lifestyle showroom in the UAE, where she curated several exhibitions.²⁰⁸ Five Green, founded by Shahi Hamad, a retail entrepreneur, in 2004 as an original concept store. Designed by architect Khalid al Najjar, the contemporary concrete, steel and glass space showcased streetwear side by side to artwork.



Figure 36 Dubai Art Galleries by mid-2005 (Satellite Image source: earthshots.usgs.gov)

From there the art activities in Dubai accelerated especially with artists flying in to Dubai to participate in the year-round exhibitions. In 2005, Hetal Pewani, an Indian art passionate opened The Jam Jar, a Gallery / Workshop concept. Pewani described The Jam Jar in 2006: *"Our gallery is combined with the only DIY studio in Dubai where novices and artists come to express themselves on canvas. The gallery perfectly complements the existing art space as an avenue to promote local and international artists"²⁰⁹. Mattar bin Lahej, an Emirati Artist, established in 2005 Marsam Mattar, the first art gallery in the United Arab Emirates to be managed by an artist in Dubai²¹⁰.*

²⁰⁸ Antakly L 2016 Sunny Rahbar & The Third Line. Ninu Nina. <u>Online</u>. accessed 03.03.2017

²⁰⁹ Claire Ferris-Lay 2007 What the gallery owners say... .Arabian Business: 08 April 2007 Online

²¹⁰ Al Bustani H. 2014 My UAE: Mattar Bin Lahej one with the arts. The National Newspaper December 25, 2014. Online

InfoBox 6 - Selected UAE universities by year of establishment

Sheikh Zayed University in Abu Dhabi (1998) American University of Sharjah (1997) American University of Dubai (1995) University of Wollongong in Dubai (1995) University of Dubai (1997) University of Sharjah (1997) Abu Dhabi University (2003) The British University in Dubai (2004) The media started to play an essential role in documenting Dubai's evolving art scene and new media saw light to bridge the gap and to cater for this purpose. Bidoun, an art magazine established in New York in 2004 by Lisa Farjam, an Iranian-American who grew up between the US and Dubai, was the first art magazine specifically

focusing on art in the Middle East. The year 2005 was marked by launching Canvas magazine, the first art magazine in the region. In 2006, Ahmed and Rashid Bin Shabib founded Brownbook Magazine, a monthly publication highlighting "aspects of Middle Eastern culture such as emerging artists, off-the-beaten-path travel options and innovative Arab-inspired design"²¹¹. In 2007, Harper's Bazaar Arabia Art magazine was launched. In 2008, Contemporary Practices was launched as the only pure art critique magazine in the region (Downey, 2016).

Meanwhile, in the neighbouring Abu Dhabi, it was still only Abu Dhabi Cultural Foundation as the key venue for art exhibitions and it didn't provide sufficient access to artists. In one article in Gulf News dating back to November 2000²¹², one artist expresses her frustration by saying: *"Artists here should seek out new venues to hold their exhibitions in order to reach out to more people and overcome the lack of art galleries in Abu Dhabi*." The alternatives included private enterprise venues such as hotels, or even in unlikely places such as fitness clubs where this Abu Dhabi-based Finnish silk artist presented her works. Some artists contended themselves by working for private and public projects such as the hotels and the UAE Postage Authority, and oil companies²¹³ and local associations such as the Abu Dhabi Women's Union²¹⁴.

²¹¹ Ibid.

²¹² Daniel, K. 2000 Artists find it hard to display their work. Gulf News. 05.11.2000 Online

²¹³ For example, see: Artists to paint an ecological portrait of UAE. Gulf News 01.02.2001 Online

²¹⁴ Mathai S. 2001 Painted in metal. Gulf News. 01/05/2001 Online

4. 2006 – 2007: An Art Market is Born – The Trigger Years

With an art scene beginning to shape up, thanks to the continuous flow of artists, art collectors and tourists, thanks to a major construction boom that had put Dubai on the radar of tourists all over the world.

The brand Dubai has already been established with superlatives, icon buildings, starchitect



Figure 37 Christie's First Middle Eastern Art Auction - May 2006. Photo: Artnet.com

buildings and where the world is busy building the future global city. From academic and press writings and from interviews I made in Dubai, almost everyone agrees that two events greatly shaped and defined the future of the art scene not only in Dubai but in the whole region. Christie's first art auction in 2006 and Gulf Art Fair in 2007. Indeed, the year 2006 marked a

historical turn when Christie's held its first auction of International Modern & Contemporary Art in the Middle East²¹⁵. The auction was held around six months since Christie's has established offices in DIFC in 2005. The huge success of the auction reflected a growing appetite for art collectors in the region and the increase of awareness for the art value. The sale totalled \$8,489,400, with 111 of 127 lots finding buyers, or 87 percent.

From there, the art activities in the UAE accelerated in an unprecedented pace. Dubai Community Theatre and Arts Centre (DUCTAC) in Mall of the Emirates was opened in November 2006²¹⁶. The theatre was ownd and constructed by Majid Al Futtaim Group, which is renting out the building to the association (DUCTAC) for a nominal fee. The building has two theatres, the larger of which has capacity for 543 people and space for a live orchestra in addition to art galleries and art classes that were later added.

²¹⁵ Christie's Website

²¹⁶ Bardsley D. 2006 Dubai community theatre opens today. Gulf News November 1, 2006 Online



Figure 38- Samples from items during Christie's Auction Sales on May 24, 2006 (Source: Artnet.com)

In Sharjah, the year 2006 saw the Emirates Fine Arts Society celebrates its silver jubilee in Jan. 2006 with their 25th annual exhibition. The art fair celebrated 21 of the first artists²¹⁷ of the UAE²¹⁸. Art collection saw an increase of activity with a number of local and regional and international museums continued to acquire local and regional art works. As quoted by Hassan Sharif in 2006, of these collectors we note Arab Modern Art Museum in Doha, Sharjah Art Museum and Seitard Art Center in the Netherlands²¹⁹.

In Abu Dhabi, plans were underway for Al Saadiyat Island to accommodate for a cultural and educational precinct that include tier one international universities, such as New York University, the Sorbonne, and renowned museums namely The Louvre, the Guggenheim, and the British Museum. On the other hand, Emirates Palace, usually described as the second seven-star hotel in the country together with its Dubai counterpart Burj Al Arab, hosted a number of art exhibitions mainly targeted at wealthy collectors of the region.

²¹⁷ These artists are: Ahmed Al-Ansari, Hassan Sharif, Hussein Sharif, Salem Jowhar, Saleh Abdulrahman Zainal, Abdul Rahim Salem, Abdulkarim Sukkar, Abdullah Bovish, Obaid Sorour, Mohammed Al Qasab, Mohammed Yousif, Najat Makki "UAE", Mahmoud Hassan Ihsan Khatib, Mohamed Fahmy "Iraq" Ahmed Miloz and Dr. Abdelkarim El Sayed, "Palestine", Mohamed Mokhtar and Abdelkader Mubarak "Sudan". Source: Al Bayan Newspaper (Arabic) 01.01.2016 <u>Online.</u>

²¹⁸ Ibid.

²¹⁹ Al Ittihad Newspaper (Arabic) Interview with Hassan Sharif. Online

2007 – The Gulf Art Dubai Fair – Art Abu Dhabi and The Louvre Agreement

The success of the 2006 Christie's Dubai auction and the associated media coverage attracted the attention of art businesses around the world and also local business pioneers and policy makers all alike. The all three have come together in creating the next milestone in the path of art market in Dubai and the region, namely the DIFC Gulf Art Fair in 2007, later rebranded as Art Dubai.



Figure 39- Logo of the first version of DIFC Gulf Art Fair in 2006-2007 (Photo: Art Dubai)

Almost simultaneously with the preparation for Christie's Auction in 2006, DIFC Gulf Art Fair was in the cooking process. A Dubai based UK banker working as the manager of Dubai Commodities Exchange, Benedict Floyd, received a visit from his friend John Martin, who runs a eponymous gallery in Mayfair, London, dealing with contemporary artists, and the two came up with fair idea out of a small talk²²⁰. In one interview with Financial Times, Floyd gives the basic

justification for their idea at the time: "There was so much development going on and only a handful of galleries, so we thought there'd be a market for artworks. [...] But we were thinking of something along the lines of an affordable art fair at the beginning."²²¹ They rented a space in Madinat Jumeriah Hotel and called it the Gulf Art Fair having in mind travelling with it in different cities in the region. When Dubai International Financial Centre decided to sponsor with their project, the project got its much-needed financial boost and local support.²²² DIFC Gulf Art Fair exhibited 49 galleries from 32 countries and lasted 3 days between 7 and 9 March 2007.

Other events that coincided with DIFC Gulf Art Fair included the first edition Creek Art Fair (currently rebranded SIKKA Art Fair which is destined at local Emirati art talents) and the Dubai International Jazz Festival.

²²⁰ Interview with John Martin, November 2017

²²¹ Seth R. 2016 Local talent on display at Dubai's collectible design fair. Financial Times - March 11, 2016 <u>Online</u> ²²² Ibid.

The interest that DIFC showed towards arts has its roots at the Christie's success during their Dubai auction had happened in their premises with the attendance of many Dubai prominent finance and government figures. Similarly, the success of the DIFC Gulf Art Fair 2007 will lead DIFC to welcome art galleries in their premises starting from 2008 and eventually help create an art gallery hub at one of their buildings, namely Gate Village. Also, the government discourse quickly adapted to the new event and the art fair found its way their media vocabulary and to policy documents. In a press quotation in September 2007, the Governor of DIFC and Chairman of Art Dubai, Omar Bin Sulaiman said: 'We were so delighted with the feedback from galleries, collectors and the art world at the inaugural fair, and with the positive impact this has had on Dubai's image as a new international centre for the commercial art market. The change of name also reflects the commitment to arts and culture as highlighted in Dubai's 2015 Vision.'²²³

Floyd summarises the setup of the year he and John Martin created the art fair by saying: "There were already galleries here. The Third Line, for example. Christie's started here the same year. So we all started at the same time and I think we all probably saw the opportunity. I think to a certain extent, we were quite lucky. Mind you, in the global crisis we weren't so lucky, but it's give and take. I certainly couldn't think of a better city to start an art fair; it's Dubai's positioning, its place as a global hub that allows us to do what we do."²²⁴

Abu Dhabi cultural district at Al Saadiyat received a boost by announcing the signage of an agreement between the French Government and Abu Dhabi Government for the establishment of the Louvre Abu Dhabi on day before the inauguration of the much-awaited Gulf Art Fair in the neighbouring Dubai (implying an interesting coincidence). The cultural accord saw Abu Dhabi government paying 400 million euros (\$525 million) to use the Louvre brand for 30 years and lending paintings and art works of the Louvre to be exhibited in the Abu Dhabi museum. The Louvre Abu Dhabi was envisaged for opening in 2012 but got delayed until it was finally inaugurated in November 2017.

Another important concurrent (the same year) and competitor event took place in the neighbouring Emirate Abu Dhabi; Art Paris Abu Dhabi, in November 2007. Motivated by the

 ²²³ Al Bawaba News. More than 275 galleries apply exhibit DIFC Gulf Art Fair 2008. <u>Online</u>
 ²²⁴ Sandra Tinari 2015 Lunch with Ben Floyd. In Emirates Open Skies Magazine. Online

huge steps taken in Dubai, (again Christie's auction and Gulf Art Fair), Abu Dhabi Authority for Culture and Heritage ADACH, teemed with the renowned art fair organisers of Art Paris to launch an Abu Dhabi version of the international art fair. The fair resulted in a turn-over of USD 15,867,000 for a fair that attracted 9,200 visitors and collectors in three days.²²⁵

In Dubai, the existing art galleries benefitted from the number of visitors to the art fairs in Dubai and Abu Dhabi and sales was reportedly augmented in addition to the educational opportunities created by those fairs and increase of the public awareness of the importance of art. Commercial art galleries continued to pop-up in different parts of the city such as Carbon 12 in Dubai Marina, and the Flying House and Meem Gallery in Al Quoz, etc.

The Flying House²²⁶ was an important milestone in the development of the local Emirati art as it was established by the renowned Hassan Sharif and Mohammed Kazem, both considered as pioneers of the Emirati art. In 2008 it was reported that the gallery is home to over 2,500 contemporary works of art estimated to be worth Dh150 million at the time²²⁷. Also, in Al Quoz as well, Meem Gallery was founded in 2007 by Sultan Sooud Al-Qassemi, Mishal Hamed Kanoo and Charles Pocock specialising in contemporary artists in and from the Middle East. Other galleries to open in 2006-2007 include: Bagash Art Gallery²²⁸ (Opened in early 2006 to showcase southeast Asian Art), 4 Walls Gallery (opened in 2007 in Al Quoz displaying Middle East and international modern art.)

The UAE's participation at la Biennale di Venezia commenced in 2009 with a national pavilion at the 53rd International Art Exhibition and has continued in subsequent editions of the art exhibition. The year 2014 marked the UAE's first participation at the International Architecture Exhibition.

The Abu Dhabi art scene saw in 2006 the inauguration of Ghaf Gallery by Emirati artist Jalal Luqman. The gallery focused on local Emirati artists. Luqman opened gallery Citizen E in Dubai Design District in 2015. In 2007, Qibab Art Gallery, established by Iraqi artist Lamees Raouf (Al Bazirgan), with her husband the painter Nashat al Alousi, on Khalidiya street. Qibab Gallery

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²²⁵ Art Daily Newspaper. Art Paris Abu Dhabi: Modern & Contemporary Art Fair Opens Today. Online

²²⁶ Sharjah Art Foundation (2017) Exhibition Hassan Sharif: I Am The Single Work Artist. Online

²²⁷ Behan R. 2008 Where local art takes flight. The National Newspaper. August 10, 2008. Online

²²⁸ Source: www.bagashartgallery.com

exhibits works from Middle Eastern artists including works by Al Bazirgan's brother-in-law, the well-known Iraqi sculptor Natiq al Alousi. The gallery later closed doors in 2011 as the owners moved to Amman.



Figure 40- Dubai and new additions to art developments in 2007

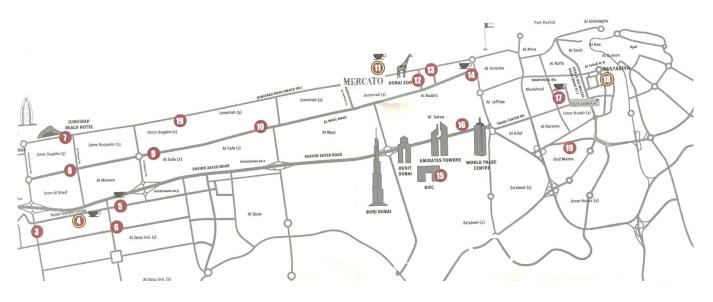


Figure 41 Dubai Art Map 2007 (Source: ArtMap provided by the JamJar)

5. 2008 -2010: The Three Strands of a Strong Dubai Art Market – Government, Business and Events

Both the announcement of the Louvre Abu Dhabi and the Abu Dhabi Paris Art Fair implied an increased competition between the two emirates to establish themselves as regional cultural hubs. In 2008, Dubai government announced the establishment of Dubai Culture and Art Authority, a ministry-level public entity that manages cultural public facilities and cultural public policies in the Emirate²²⁹. The new entity, spearheaded by Sheikh Majid bin Rashid, the son of Dubai Ruler, is to replace the previous cultural authority (Dubai Cultural Council) chaired by Mohammad Al Murr, a local cultural enthusiast and businessman. The press release announcing the establishment of DCCA note: "The aim of the authority will be to enhance the international status of Dubai, which will participate in developing and forming the cultural and heritage scene of the 21st century in the region and around the globe"²³⁰. This highlights that city branding, and tourism is the core approach behind cultural public policies and cultural developments at the time. As iterated in the press in interviews with government officials at the time, the motion was linked the celebrated Dubai 2015 Strategic Plan. We will elaborate further on cultural policies in the next chapter.

Important to notice that the announcement of DCCA also included the appointment of DIFC's director, Omar bin Suleiman, who successfully launched DIFC Gulf Art Fair in 2007 and who will be launching the subsequent Art Dubai Fair in 2008, only 10 days after announcing DCCA²³¹. Other board of director members include Mohammad Al Murr, Deputy Chairman, Majid Jaber Hamoud Al Sabbah, Reem Ebrahim Al Hashemi, Paolo Kwela and Keto Mark Antonio De Borr.

Almost two months after the birth of DCCA, the ruler of Dubai announced an ambitious cultural project that is aimed to "revive the national cultural heritage of Dubai²³²", Al Khor Cultural District. The project was set to renovate the old historical district of Dubai, where

 ²²⁹ Gulf News. Dubai Sets up Cultural and Art Authority. Gulf News 8 March 2008. <u>Online</u>
 ²³⁰ Ibid.

²³¹ The DCCA was announced on 03 Mars 2008, while Art Dubai was inaugurated on 19 Mars 2008.

²³² Landais E. 2008 Bastakiya revamp to make area cultural nerve centre. Gulf News. 24 May 2008. Online

exits already prominent Dubai culture and heritage facilities such as Dubai Museum and Al Fahidi historical district with its many cultural provisions and turn it into a tourist and cultural destination. Again, the project was set into a higher-level aim "to place Dubai as a unique sports and cultural hub on both the regional and international levels.²³³". Nevertheless, the project has never saw light as the financial crisis hit Dubai (and the world) by end of 2008. Michael Schindhelm, a German writer and a theatre critique, was working as a consultant at the DCCA at the time and he wrote a book that revolves about his experience and the fate of the project.²³⁴ Schindhelm (2011) gives an account of the development of the strategy of Dubai towards building the Opera complex, which eventually was downsized in the aftermath of the financial crisis by the end of 2008 and later awarded to Emaar to be built in DownTown Dubai next to Burj Khalifa rather than in Al Khor area.

The government support didn't stop with restructuring cultural entities and announcing cultural projects, but it also materialised through non-profit organisations. Tashkeel Foundation, a non-profit entity engaged in promoting art activities and art education was announced in 2008 under the leadership of Sheikha Latifa bint Mohammed, the daughter of the ruler of Dubai. Sheikha Latifa, who established Latifa college back in 2003, is an art graduate of Zayed University. Since its conception, Tashkeel serves as an independent resource for artists and designers living and working in the UAE.

With Art Dubai is now an established regional art fair (Nearly 70 galleries from 30 countries taking part in Art Dubai 2008) more art galleries relocated to Dubai from other countries in the region profiting from the friendly business environment and the newly public initiatives to revive culture in the city. DIFC, spearheaded by Omar bin Suleiman, invited local and international art galleries to the one of the DIFC complex buildings, namely the Gate Village, which eventually turned to be the new art gallery hub in the city. Cuadro Museum and Fine Art Gallery was founded by, Bashar Al Shuroogi, a Bahraini art collector and businessman, and inaugurated in 2008 at the Dubai International Financial Centre in the presence of HH Sheikh Majed Bin Mohammed, the newly appointed Chairman of the Dubai Culture and Arts Authority. Art Space Gallery, established in 2003 in Fermont Dubai Hotel, moved to DIFC in

²³³ Ibid.

²³⁴ Schindhelm M. 2011 Dubai High: A Culture Trip. Aurore Belkin

November of the same year and the inauguration was sponsored by DIFC whose Governor stated: "By promoting art galleries like Artspace, DIFC seeks to support Dubai's initiatives to harness this new artistic energy in the region. Artspace's new gallery promises to make a key contribution to this effort by showcasing the best in regional art.²³⁵" It was clear that the government of Dubai was making great strides to promote culture and cultural industries in the business life of the city.

Similarly, Dubai became a strong spot on the radar of regional art businesses. Ayyam Gallery, owned by cousins Khaled and Hisham Samawi who founded it in Damascus in 2006, moved to a warehouse owned by Abdul Monem Alserkal Al Quoz area in Dubai, attracted by the vast spaces of warehouses here. The move of Ayyam Gallery was the trigger behind attracting more galleries in the years to come to form Alserkal Avenue in 2010. In the same vicinity in Al Quoz area, Umer Butt launched Grey Noise Gallery, together with Hetal Pewani, the owner of The JamJar Gallery and art atelier, in 2008 with the passionately aggressive agenda of giving birth to a Pakistani gallery with global clout²³⁶. Dubai for some art businessmen was a business hub that connects to other places, Europe for example. Umer Butt, considered that "The idea of moving to Dubai was to collaborate with Europe" having in mind global art fairs such as Art Basel. Other galleries opened in 2008 and 2009 include 4Wall Art Gallery in al Quoz, by a UK-Iraki artist, later moved in 2013 to Erbil and established Fine Art Gallery,

The local-international interaction of artists has materialised on a higher level in 2009 with the UAE participating in Venice Biennale for the first time featuring the Emirati artist Lamya Gargash.

Between 2008-2010 art business, like all other economic activities at the time, were trying to dodge the financial turmoil. But then the global financial crisis hit in 2008, and the revenues of both Christie's and Bonhams took sharp dives, eventually prompting Bonhams to halt auctions in the city (after less than two years of presence in the city without much activity)

Synchronising art activities in different emirates was meant to mutually profit from the audience visiting from the region and the world. From 2008, it was clear that the artistic scene

²³⁵ Gulf News, ArtSpace Opens New Gallery at DIFC. Gulf News 03 November 2008. Online

²³⁶ Muhammed, S. 2012 Why Grey Noise Gallery Moved from Pakistan to Dubai: Q&A with Gallerist Umer Butt. BlouinArtInfo.com 02 April 2012. <u>Online</u>

in the country revolves around three major events Art Dubai in March, Sharjah Biennale in May and Art Abu Dhabi (called Art Paris Abu Dhabi in 2007 and 2008) in November. And thus, while a 'major' event is taking place in one city, small 'satellite' exhibitions are announced in the other cities. For example, Abu Dhabi Musical and Arts Festival was opened on 21 Mars 2008 to coincide the occurrence of Art Dubai (19-21 of the same month), and another exhibition, Art of Islam Exhibition, was opened days before Art Dubai (on 16 Mars) in Abu Dhabi as well. Other examples from that year include exhibitions in Qasba Area in Sharjah (21 Mars) and Christies auction (21 Mars).

In 2009, Art Dubai and the Sharjah Biennial coincided for the first time. Global Art Forum Lectures and discussions. Platform of Art Dubai for the exchange of thoughts, conceptual considerations, opinions, information, and networking.

Art Abu Dhabi was inaugurated in 2009 by initiative of ADACH. The year 2009 saw the exhibition Emirati Expressions as well, that showcased a number of local artists including Mattar bin Lahej, who established in 2005 Marsam Mattar, the first art gallery in the United Arab Emirates to be managed by an artist.

Private companies are seen as well jumping in the art scene to offer more sponsoring. In 2008, Mubadala, a newly formed investment company in Abu Dhabi by public and private investors focusing on real estate, sponsored the opening of the exhibition Picasso Abu Dhabi. the director-general of the fund, Khaldoon Khalifa Al Mubarak, reminded the public of its commitment to the arts: "Mubadala is engaged in the diversification of the economy of Abu Dhabi and the creation of a flourishing society. We believe that supporting the arts and culture is an important part of this process."²³⁷

The year 2009 was when Burj Khalifa (Burj Dubai before it was rebranded after the financial crises), the hight tower in the world was inaugurated. Emaar, the developer of Burj Khalifa has opened an art gallery in DownTown called The Pavillion. The Pavilion included a screening room, two galleries, a library and a popular restaurant. It was closed in 2013²³⁸ reportedly

 ²³⁷ Cocks, A.S. 2017 How offsets on arms sales into Abu Dhabi have helped finance its Louvre. The Art Newspaper.
 23rd November 2017 <u>Online</u>

²³⁸ Seaman, Anna 2013 The Pavilion Downtown Dubai is set to close. Online

because the site was being used as part of the construction logistics for Emaar's newest developments, including The Opera District and its various components. The Gallery by Emaar was reopened in 2014 as part of the new district.²³⁹

In the neighbouring Gulf state, Qatar, Museum of Islamic Art, designed by the renowned architect I. M. Pei temple, opened in 2008 and received a broad acclamation from international museum critics. The construction of another museum, The Museum of Modern Arab Art, Mathaf, planned fro an art collection portfolio that spans the mid-19th-century to the present, was underway. Two more museums were also announced in the same year including a museum of Qatari history, designed by Jean Nouvel, and a museum of Orientalist art by the Swiss firm Herzog & de Meuron²⁴⁰. These announcements heralded a new era of cultural competition between the three Gulf city-states, Abu Dhabi, Dubai and Doha.



Figure 42 – Dubai new cultural development 2008-2010 (Photo USA Earth Gov)

6. 2010-2017: From an Emerging Art Market to an Emerging Art District

In 2010, artistic scene in the UAE has survived the financial crisis with a wide grin as galleries are still opening and Art Dubai, and Art Abu Dhabi and Sharjah Biennale are showing less signs

²³⁹ Emaar Gallery http://emaargallery.com/about.html

²⁴⁰ OUROUSSOFF, NICOLAI 2010 Building Museums, and a Fresh Arab Identity. The New York Times. NOV. 26, 2010

of impact than every other industry in the country. Even though, the financial crisis greatly affected the governmental plans and budgets and cultural projects, such as Al Khor Cultural Development and Opera Dubai, faced inconspicuous and subtle shelving decisions that didn't go unnoticed by the art community, but they were unavoidably accepted. Nevertheless, in the next several years, cultural districts such as DIFC Gate Village, Saadyiat Cultural District, Alserkal Avenue and Dubai Design District dominated the evolutionary path of the cultural scene in the country.

Abu Dhabi's Saadiyat Cultural District Already Raised the Bar

As Abu Dhabi raised its effort to establish itself on the global map of tourism and cultural through announcing the plans for Al Saadiyat Cultural District, the development of Yas Island as a touristic destination and Reem Island as a business and residential destination among many other developments, the cultural scene in the entire UAE was changing even in a faster pace.

	LOUVRE ABU DHABI	GUGGENHEIM ABU DHABI	PERFORMING ARTS CENTRE	MARITIME MUSEUM
INITIAL EXPECTED OPENING	2013	2014	2018	2018
ARCHITECT	Jean Nouvel	Frank Gehry	Zaha Hadid	Tadao Ando
FOCUS	Paintings, drawings, sculptures, manuscripts and archaeological finds, all under a transparent dome.	Emphasis on Arabian, Islamic and other Middle Eastern art. It will also feature a centre for art and technology.	Will host performances of classical and modern music, opera and theatre.	Aims to celebrate the rich maritime heritage of the Arabian Gulf.
ACTUAL OPENING	Nov. 2017	NA	NA	NA

Table 20- Museums envisaged for Saadiyat Cultural District in Abu Dhabi (Source: Malcolm 2010 - in The Times²⁴¹)

Rebranded as Abu Dhabi Art (ADA), held between 19–22 November 2010. The fair was organized for the first time by Tourism Development and Investment Company (TDIC)

²⁴¹ Malcolm, Claire, Portrait of a new cultural capital. The Times Newspaper 17 October 2010

and Abu Dhabi Authority for Culture and Heritage (ADACH) under the patronage of Mohammad Bin Zayed Al Nahyan.

2012, the Abu Dhabi Tourism and Culture Authority was formed from a merger between Tourism Development and Investment Company (TDIC) and Abu Dhabi Authority for Culture and Heritage (ADACH)

DIFC Gate Village is the New Art Business Address



Figure 43 - Dubai Financial Center (Source: Construction Week)

On October 25, 2010, Ayyam Gallery announced the opening of a new gallery in the Dubai International Financial Centre (DIFC). The new gallery was inaugurated by Abdul Rahman Al Owais, UAE's Minister of Culture, Youth and Community Affairs. Ayyam Gallery is next to SpaceArt and Cuadro which moved to the Gate Village in 2008.

According to a number of interviewees, the move to DIFC was a result of a discounted rental prices offered by DIFC's governor Omar bin Suleiman to encourage the establishment of art destination in DIFC. Such action is seen as part of a diversification and attraction strategy to occupy empty rental spaces in the DIFC complex which is faced with huge losses in the aftermath of the financial crisis.

UAE Higher Education

Timeline:

 New York University Abu Dhabi welcomed its first class of 150 students and will soon transfer to the Saadiyat campus. After Ayyam, Farjam Collection, run by Lisa Farjam, moved in the Gate Village in 2012 along with Opera Gallery, The Empty Quarter, RIRA Gallery, XVA Gallery and Art Sawa in the same year. Similar to Ayyam, XVA and Art Sawa were already established in the city (in Al Bastakiyah and Al Quoz, respectively) and decided to keep their old galleries running. Later, Art Sawa abandoned their Al Quoz space, while XVA returned to Al Bastakiyah by late 2013, and only Al Ayyam that kept both galleries running till now (2018).

Sikka Art Fair

In 2010, the Creek Art Fair is rebranded Bastakiya Art Fair and changed into SIKKA Art Fair one year later. The art fair that was started its first edition in 2008 by the newly formed DCCA. The 2012 edition curators of the art fair included Salem Belyouha, Rami Farouk, a local artist, curator and publisher, Antonia Carver, the future Art Dubai manager and Emirati artist Ebtisam Abdul Aziz²⁴². In 2010 A.i.R. residency program established with Tashkeel and Art Dubai.

By mid-2012, the number of art galleries in the city had almost doubled. In Al Quoz only one can count 33 galleries, 20 of them in the newly branded Alserkal avenue. Alserkal announced plans to double its space by developing the plot next to it, which will eventually double the number of art galleries. The acceleration of the art market was paralleled by a number of initiatives from different govenmental entities in the city but mainly Dubai Culture. A new project Dubai Museum of Modern Art was announced in March 2012 by Dubai Culture.

2010 The Year an Art District was Born – Alserkal Avenue

By 2010, DIFC was ahead in the process to attract art galleries to its premises as a diversification/attraction strategy making it the second art gallery concentration in the city after Al Quoz. While DIFC galleries are in the same complex, Al Quoz galleries are dispersed over a wider area. This was to be changed when three art galleries moved to the same vicinity in Alserkal property to make use of vast spaces and reasonable rents, those galleries were: Carbon 12, owned by Koruosh and Zinda moved to Alserkal from Marina Towers in 2009, B21 Gallery owned by Jeffar Khaledi and Isabelle van den Eynde, moved to Alserkal rebranding the gallery to follow Isabelle's name (Gallery Isabelle van den Eynde) in 2010, and Green Art Gallery moved from Jumeriah in 2010 as well.

Rebranding Alserkal's industrial property as Alserkal Avenue was mainly triggered by the mere fact that the first art galleries attracted more audience on a daily basis more than other types of industries in the other industrial hangars. Based on information from gallery owners and Alserkal Avenue management, the idea was initiated by the property management company,

²⁴² D'Souza, Carolina 2012 Art fair at Al Bastakiya to showcase local talent. Gulf News March 13, 2012 Online

evoked by gallery owners and found listening ears at the property owner Mr. Abdel Monem Alserkal who was attending the first art events with an increasing passion. He said: "I thought, 'Why not have more of a destination, or a community, of art galleries and creative businesses'."²⁴³



Figure 44 - Alserkal Avenue in Al Quoz Industrial Area (Own work, base photo: Alserkal Avenue)



Figure 45 - Alserkal Avenue during one event in 2016 (Source: Alserkal Avenue)

In 2015, Alserkal Avenue expanded by developing the adjacent plot thus doubling the size of the property by more 22 spaces that were rented out to art galleries and art centres in addition to creative boutique shops and restaurants and open art spaces.

In 2015 as well, Alserkal Avenue launched Alserkal Avenue Programming, an agenda of series of events in collaboration of the districts 'tenants' but also from different parts of the city and

²⁴³ Milliard Colline (2018) The Man Helping Dubai Pivot from Oil to Art. In The Financial Times. Jan 1, 2018

beyond. While the events are targeting local, regional, and international audiences, they are primarily produced with artists living and working in the MENASA (Middle East / North Africa / South Asia) region. In 2017, an Artists' Residency is launched, further enhancing the organisation's scope beyond managing an art district.

In what seemed as a business initiative by Emaar, The Ara Gallery was established in April 2011 by Mrs Mouza Mohammed Al Abbar, the daughter of Mohammed Al Abbar the president of the property mogul Emaar. Passionate both about arts and humanitarianism, these interests led the founder to the planning of an art gallery that would provide Arab artists an exceptional location to promote themselves and their art, with the additional hope to try to aid charitable organizations through selected events. The Ara Gallery was closed in 2013 after only two years of activities for unclear reasons.

Dubai opera and D3 announced

Back in 2005, the Dubai Opera was announced as part of a comprehensive cultural quarter that sees the regeneration of the Creek old areas (Al Khor Cultural Project). However after the cancellation of Al Khor project due to the financial crisis that hit Dubai late 2008, Emaar announced its own cultural precinct in the Down Town area next to the prominent Burj Khalifa that was inaugurated in 2009. The new project, branded The Opera District (or Dubai Modern Art Museum & Opera House District) is announced in March 2012. The Dubai Opera was inaugurated in 31 August 2017.

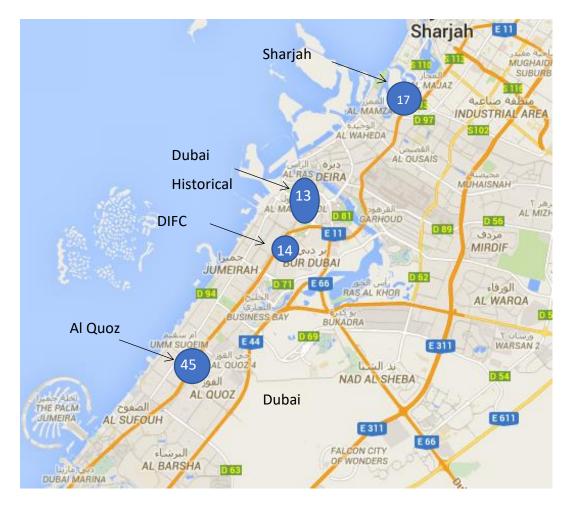


Figure 46 - Art Galleries and culture related industries in Dubai / Sharjah Key Areas in 2015

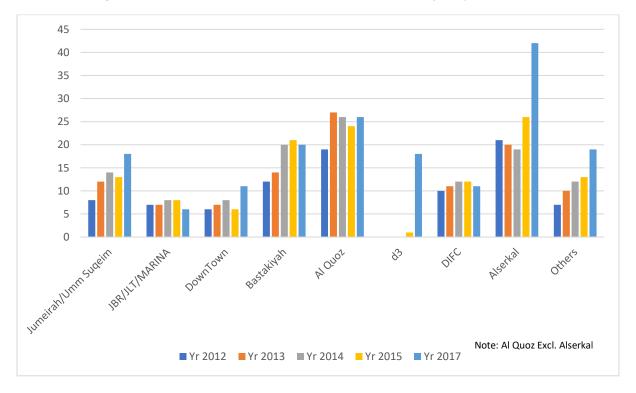


Figure 47 - The Evolution of Art Galleries and Art related organisations in KEy Areas of Dubai

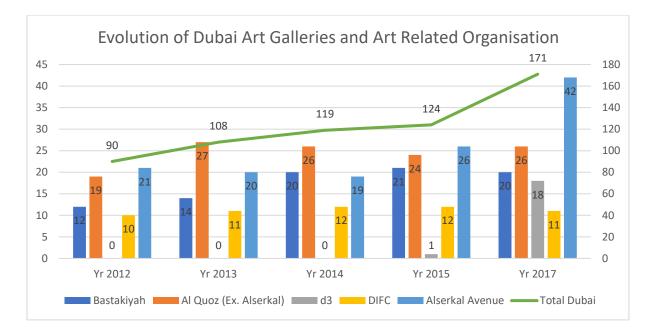


Figure 48 - Evolution of Dubai Art Galleries and Art Related Organisation 2012-2017

Cultural Foundations

The Salama bint Hamdan Al Nahyan Foundation's mission is "to invest in the future of the United Arab Emirates by investing in its people." Founded by Her Highness Sheikha Salama bint Hamdan Al Nahyan in 2010, the Foundation is committed to developing and supporting prolific and meaningful initiatives in the areas of education; arts, culture, heritage; and health.

Tashkeel organisation would grow with initiatives such as 'Artist in Residence – shortly A.i.R' programme announced in 2010 featuring local and international artists provides a platform for artistic and cultural exchange as the artists live and work in the UAE during the programme.

Art Auction Houses and Art Market

In 2011, Middle Eastern clients accounted for 8 percent of Christie's global auction turnover in 2011, the auction house said, up from 5 percent in 2010. The highest median prices are often found in smaller markets with a low volume of higher value sales, for example in the UAE and Singapore, where median prices exceeded €10,000, around one third of averages.

In 2015 auction sales were up by 5 percent: total auction sales of modern and contemporary Middle Eastern art were up 5 percent in 2015, as more auction houses started to offer sales of art from the region. However, Christie's sales in experienced a 22 percent decrease in turnover during 2015. **Sotheby's and Bonhams add new auction sales**: Christie's dominant position in the modern and contemporary Middle Eastern art market since 2006 has come under threat, as both Sotheby's and Bonhams increased their market share in 2015. Christie's share has fallen to 56 percent from 85 percent in 2014. Sotheby's has increased its market share to 28 percent (up from 16 percent) and Bonhams accounted for 16 percent in 2015 (there were no sales in 2014). **Iranian, Lebanese, and Egyptian artists dominate**: based on Christie's recent sale in October 2015, artists from Iran, Lebanon, and Egypt represented 75 percent of the sales total. At Bonhams, modern Iraqi artists accounted for 42 percent of total sales in October 2015.

outlook 2016: Neutral-to-positive outlook for 2016, but with more downside risk: a recent survey of international art collectors conducted by ArtTactic showed that 45 percent believe the modern and contemporary Middle Eastern art market will see further growth in 2016 (down from 56 percent in 2015), with 31 percent believing the market will remain flat. However, there are concerns about the next 12 months, with 24 percent (up from 16 percent in 2015) predicting that the Middle Eastern art market will fall. Wars, terrorism, and geopolitical tension in the region were cited as the main reasons for this, as well as the oil price decline. More auction competition will stimulate demand: up until 2015, Christie's had been the only auction house with a long-term, continuous commitment to the modern and contemporary Middle Eastern art market through its twice-yearly sales in Dubai. However, there are signs that both Sotheby's and Bonhams are increasing their focus on the region. More competition will help increase the size of the Middle Eastern art market and broaden the collector base.

With international sanctions on Iran lifted in 2016, it is believed that Iranian art market will see growth domestically and internationally.

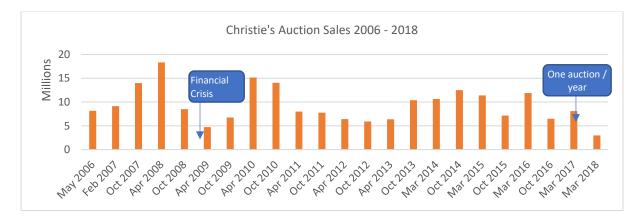
In a press interview, Christie's director Michel Jeha and Christie's sales manager Hala Khayat, highlighted the importance of Museum building for the auction houses and the art market in general in the area. Christie's dominates the market for Middle Eastern Modern and Contemporary Art: Christie's remains the leader in this market, with 15 consecutive auction seasons being held in Dubai and the auction house accounting for 74% of auction sales value within this collecting segment in 2013. After several years of holding both Turkish and Middle

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Eastern Modern and Contemporary sales in London, Sotheby's shifted its sales to Doha in April 2013 after an 18-month absence.

In 2008, Bonham's established their offices in Dubai only to close them after two years in the aftermath of the financial crisis. Sotheby's chose to establish office in the neighbouring Doha, however they opened an office in Dubai later in 2016.

In 2017, Christie's moved its regular October sale from Dubai to London at the firm's headquarters during the prestigious Frieze Week in London. The sale achieved a total of \$6,863,249 with sell-through rates of 85% by lot and 88% by value.



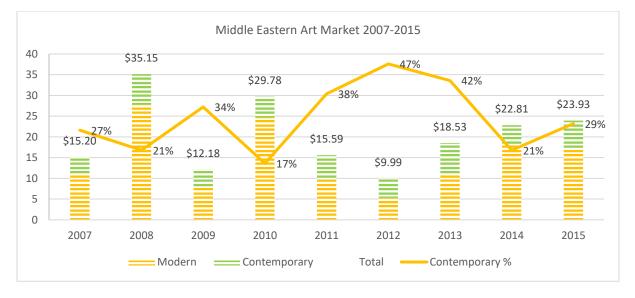


Figure 49 Middle Eastern Modern and Contemporary Art Market (Source: Deloitte Art Finance Report 2016]

The following chart illustrates the evolution of art and antique import/export market in the UAE between 2002 and 2012.

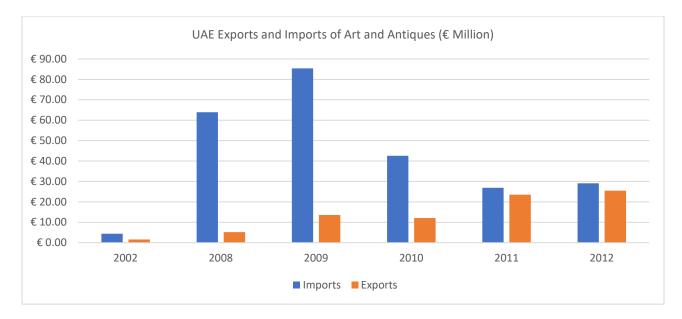


Figure 50 UAE Exports and Imports of Art and Antiques (€ Million). Source: Art Economics (2014)

7. Summary Time Line

Year	Major Developments in UAE	Major Developments Outside UAE
1980	Emirates Fine Arts Society founded in Sharjah	
1987		Institut du Monde Arab founded in Paris
1988		Darat Al Funun founded in Amman
1989	Majlis Gallery opens in Dubai	Magiciens de la Terre exhibition (Paris/ Centre Pompidou)
1993	First Sharjah Biennial held	
1995	Green Art Gallery opens in Dubai	
1992	Sharjah Biennial 2 held	
1997	Sharjah Biennial 3 held	Arab Image Foundation opens in Beirut
1999	Sharjah Biennial 4 held	
2001	Sharjah Biennial 5 held	
	Latifa College begins in Dubai (2003-2007)	Global art market doubles between 2003-2006
2003	Sheikha Hoor Al Qasimi reorients the Sharjah Biennial	
	Sharjah Biennial 6 held	
	The Third Line Gallery opens in Dubai	
2005	The Jamjar opens in Dubai	
	Canvas magazine launched	
	Sharjah Biennial 7 held	
2006	Sheikha Manal Young Artists Award established	Without Boundary: 17 Ways of Looking at MoMA in New York
	Brownbook magazine established	Creative Reckonings by Jessica Winegar published

	Christie's auction house establishes presence in Dubai	
		Modern Arab Art by Nada
2007	Latifa College graduates first class	Shabout published
	Initial DIFC Gulf Art Fair held	
	Global Art Forum 01 talks series held	
	Harper's Bazaar Arabia Art magazine launched	
	The Flying House established	
	Alserkal Avenue established	
	Sotheby's auction house establishes presence in Dubai	
	Sharjah Biennial 8 held	
	Tashkeel established	
	ArtMap lists 38 organizations	
2008	First Creek Art Fair held in Bastakiya	
	DIFC Gulf Art Fair becomes Art Dubai	
	First March Meeting held in Sharjah	
	Bonhams auction house establishes presence in Dubai	
	UAE participates in Venice Biennale for the first time	Global financial crisis
	(featuring Lamya Gargash)	
2009	Abraaj Group Art Prize inaugurated The Culturist blog launches	
	Sharjah Biennial 9 held	
2010	Creek Art Fair becomes Bastakiya Art Fair	
2010	A.i.R. residency program established with Tashkeel and	
	Art Dubai	
	Bastakiya/Creek Art Fair renamed SIKKA Art Fair	
2011	Venice Biennale (featuring Reem Al Ghaith, Abdullah	
	Saadi, and Sheikha Lateefa bint Maktoum)	
	Salsali Private Museum opens in Alserkal Avenue	
	Sharjah Biennial 10 held	
2012	A.i.R. residency cohort 2012	
2012	The State publication issue #1 released	
	A.i.R. residency cohort 2013, in partnership with Al	
	Riwaq Gallery, Bahrain	
	Salama Foundation begins Emerging Artist Fellowship	
2013	Wael Hattar initiates Young Collectors Collective	
	Campus Art Dubai 1.0 program	
	Venice Biennale (featuring Mohammed Kazem)	
	Salwa Mikdadi teaches Art History: Contemporary Art	
	at NYU Abu Dhabi	
	Sharjah Biennial 11 held	
	A.i.R. residency cohort 2014	
2014	A4 space inaugurated at Alserkal Avenue	
2017	First Introduction to Museum Studies course taught at	Here and Elsewhere exhibition at
	NYU Abu Dhabi	the New Museum, New York
2015	A.i.R residency cohort 2015	

Salama Foundation opens Warehouse 421 in Abu Dhabi Critical Practice Programme launched at Tashkeel Critical Practice Programme launched at Tashkeel Internet of the magazine issue #1 published 1980-Today exhibition at Venice Biennale curated by Sheikha Hoor Al Qasimi Internet of the magazine issue #1 published Alserkal Avenue begins first artist commissioning program Internet of the magazine issue #1 published Quoz Fest at Alserkal Avenue moved to November Internet of the mathaf Collection, Vol. 2 held at Mathaf, Doha But a storm is blowing from paradise exhibition comes to Sharjah Art Foundation But a storm is blowing from paradise exhibition held at the Guggenheim Alserkal Avenue expansion opens First Professional Practice course at Tashkeel Internet of the mathaf Collection, Vol. 2 held at Mathaf, Doha Portfolio Building course at Sharjah Art Foundation Foundation But a storm is blowing from paradise exhibition held at the Guggenheim Alserkal Avenue expansion opens First Professional Practice course at Tashkeel Internet of the mathaf collection Alserkal Avenue expansion opens at Alserkal Avenue Internet of the mathaf collection Internet foundation Internet of the mathaf collection Alserkal Avenue expansion opens at Alserkal Avenue Internet of the mathaf collection Alserkal Avenue expansion opens a			
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Louvre Abu Dhabi opens		Sharjah Biennial 13 held	
		Louvre Abu Dhabi opens	

8. Conclusion

"Dubai's art scene thus truly reflects the city as a whole: it is visual, prosperous, dynamic and future-oriented; according to one's taste, it can appear to be tacky, filthily rich, self-indulgent and superficial. But it is there, it is unique, intense, and it is developing rapidly". - Robert Kluijver (2013) Contemporary Art in the Gulf: Context and Perspectives In a matter of less than 20 years, UAE art scene was being constructed to be not only a regional player but also to figure on the global art maps. However, as seen from the previous sections, this was not a mere chance, nor it was due to a planned strategic action. In fact, it was a bit of both with a path highly adaptive and highly sensitive to changes. Born as local initiatives in the culturally pioneer Sharjah, art association had an educational role at the beginning, but soon it attracted the attention of the 'business' emirate Dubai. Driven by the success of its urban and economic model, art and culture was received as a business opportunity for both the government and the business players. Art galleries and art initiatives were emerging year on year in Dubai. A number of turning point events had the decisive role of twisting the path, redirecting it and pushing things forward. The 2006 art auction and the 2007 art fair, DIFC gate village in 2008, the opening of Alserkal Avenue in 2010, its expansion in 2015 and the opening of D3 in 2015 are defined as the six major milestones drawing the evolutionary path of art market in Dubai and consequently the art districts in the city. Four Art & Cultural Districts are defined, namely Bastakiyah (Al Fahidi Historical District), Alserkal Avenue (and the surrounding Al Quoz), DIFC (and DownTwon) and Dubai Design District (D3).

Similarly, the success story of the Dubai art market is associated strongly to individuals who affected the path and built it over the last two decades. From the visionary plans of Sharjah Ruler and Dubai Ruler to the active discourse of Emirati artists such as Hassan Sharif and Mohamemd Kazem, to Expatriate pioneers such Dariush Zandi and Ramin Salsali, to local art supporters as Sheikha Latifa and Sheikha Hoor, to business pioneers such as Benedict Folyd, John Martin and Abdel Monem Alserkal, to hardworking managers such as Antonia Carver and many more to be detailed later. Collectors, art consultants, artists, curators, art gallery owners and managers all formed a rich networked over which

Dubai, and the UAE at large, is a land of contrasts. Many of the young people I talked to there are adamant that, while the old world is in decline, opportunities are plentiful in the UAE. In a drive to diversify the country's oil-dependent economy (perhaps accelerated by the crude market's volatility during the last few years), the rulers have turned towards tourism, investing seemingly bottomless resources into the development of Abu Dhabi's Saadiyat Island. The recent acquisition of Leonardo da Vinci's record breaking \$450 million Salvator Mundi is the latest addition to the island, where it will be on view at the newly-opened Louvre Abu Dhabi. The success of Dubai is also due to the capable individuals who structured this art world. Art Dubai, the art fair first run by John Martin and now by Antonia Carver, is the most important single structuring element. It provides art professionals and art lovers from all over the world with a convenient reason to visit Dubai, and to return, because its scale of programs and activities expands each year. Christie's move to Dubai was timely, and it has provided an enormous boost to the local art market, not least because it sets pricing standards. Galleries such as The Third Line, Green Art, Isabelle van den Eynde and Cuadro, to name but a few, have ably positioned their artists on the local and now increasingly global art scene. The list above indicates the prominence of the art market, and some of the more serious curators and art lovers of the region balk at the superficiality and the lack of commitment of the Dubai art world. Interestingly, however, a non-commercial sector is emerging: sometimes in the shadow of the market, but at other times in a symbiotic relation with it. Art lovers who start by collecting art may at one point want to share their passion with the community, and individuals such as Rami Farook, Farhad Farjam and Ramin Salsali have turned toward patronage. One cannot omit the rulers of Dubai from this list, as they have not only tolerated, but also actively encouraged artistic development. Thus, Sheikha Latifa Al Maktoum is behind Tashkeel, while Sheikha Wafa Hasher Al Maktoum set up FN Design. It is also rumored that a high-ranking member of the Al Maktoum family is a large collector (buying through proxies)

Her reasoning also feeds in to the idea behind the Gallery that was launched earlier this year. "There are many contemporary artists in Iran who are interested in exhibiting their work around the world; our gallery provides the space for them."

Continuing success story we have opened another outlet in Alqouz, Dubai in 2012 to facilitate the international buyers. Where it opens new ways for us to progress there it held's the huge responsibilities to promote our traditional and contemporary art in the international market.²⁴⁴

²⁴⁴ Hamail Gallery Website – About Us. Online

CH VII – GENESIS OF ART AND CULTURAL DISTRICTS IN DUBAI: AN EVOLUTIONARY PERSPECTIVE

In this chapter, we are analysing the emergence of the art and cultural districts in Dubai (elaborated in detail in Chapter VI) and the evolving related policies (Chapter VI) which both evolved together (converged/diverged) in a co-evolutionary path that made the current status of art and cultural districts. The dynamics of cultural and creative clusters in our case study are produced in a complexity setting of three converging and interacting levels, the macro level (the national level or the sub-national/city level), the meso level (the district/cluster level) and at the micro level (the single company or the individual person). As elaborated in our theoretical framework (Chapter IV), our focus is to analyse the historical path of different districts (i.e. reconstructing the path) using an evolutionary perspective: fitting clustering dynamics in a path dependency framework.



Figure 51 - The four art and culture districts in Dubai (Own Work based on Google Earth image)

The longitudinal approach used in reconstructing the path, demands a departure point in history. Though such a departure point might differ (and should differ) in the trajectory of different art and cultural districts in the city, a common initial ground can be found in the

history of the cultural industries on the city level – what we will define as the regional (city) initial conditions (refer to the theoretical framework in Chapter IV). As such our study of the evolution of Dubai art and cultural districts is divided into two stages:

- a) **The first stage**, where **the favouring winds** created the ideal conditions without which these districts would have never happened, and
- b) The genesis of the art and cultural district: it is no doubt that the favouring winds created the evolutionary paths leading to the creation of each district, however, each trajectory is substantially different from the others.

In this view we are asking two main questions; first: *Why Dubai, and consequently how*? And second: *Why each of the four districts, and, similarly, how*? As such this chapter is organised in two main parts discussing first the regional favouring winds and second the emergence dynamics of each of the four districts bearing in mind the three-entry model developed earlier from Gordon and McCann (2000) – namely spatial attributes, inter-firm network attributes and the inter-individual network attributes. However, the discussion is led using the evolutionary economic geography indicators such as the locational window of opportunity, the role of chance, locational lock-in, adaptation, co-evolution etc.

As such the plan of this chapter is illustrated in Figure 52 below.

	2. The Conscis of the Cluster (District Lovel)
Key Histroical Anecdotes	2. The Genesis of the Cluster (District Level)
Initial Conditions	
Windows of Locational Opportunity	- Alserkal Avenue
Path Dependency: Role of Chance	- Dubai Design District
Co-evolution: the Institutional Settings	- Al Khor
Adaptation: The local-global networks	- DIFC
- Conclusion	- Organic vs. Planned from an Evolutionary Perspective
	- Conclusion

Figure 52 Plan of Chapter VII

Dubai Art Districts – A Timeline of Key Milestones

The following table highlights the significant events which contributed principally to 1) the emergence of the art market in Dubai, 2) the emergence of art districts,

Year	Political Change	Urban Change	Economic Change	Social/Cultural Change
1971	Establishment of the UAE			
1974			Jabal Ali Port	
1980				UAE Fine Art (Sharjah)
1988		Redevelopment of Al Bastakiyah Area		Al Majlis Gallery Established in Al Bastakiyah
1991	Gulf War			
1993				1 st Sharjah Biennale
1998		Dubai plans for mega- scale projects	Emaar established	Al Quoz first comers of art gallerists. Sharjah Arab Capital of Culture
2000		Free Zones: Media City Real Estate: Palm Jumeirah		
2001	9/11 attacks			
2003	Invasion of Iraq	Dubai announced major developments – Burj Dubai (rebranded Burj Khalifa in 2009)		
2006	Lebanon-Israeli War			 Christie's first art auction in DIFC Louvre Abu Dhabi Agreement
2007			World Financial Crisis	DIFC Gulf Art fair Art Paris-Abu Dhabi Al Ayyam Gallery in Alserkal
2008		- Al Khor Development - Saadiyat Cultural District	World Dubai bail-out and debt rescheduling	More galleries to Al Quoz DIFC Gate Village as an art gallery hub Art Dubai Art Abu Dhabi
2009		Metro Dubai completed, Many projects cancelled / on hold		UAE permanent pavilion at the Venice Biennial
2010	The Arab Spring	Burj Khalifa inaugurated		Alserkal Avenue established – 10 galleries

Table 21 - Timeline of Dubai Evolution

2012		Emaar Dubai Opera announced	Alserkal Avenue – 20 creative businesses - D3 announced
2015	Yemen War		Alserkal Avenue doubles in size - D3 opens
2016			Dubai Opera opens
2017	Qatar Seige		Louvre Abu Dhabi opens

1. The Regional²⁴⁵ Favouring Wind: At the intersection of Policies, Opportunities and Historical Anecdotes

The cultural evolution of the city is inscribed in its economic, political and urban evolution, and cannot be viewed only in the light of the recent developments in Dubai (i.e. the last two decades or what is called the Dubai boom years), but it is also strongly dependent on the early beginnings of the city transformation from a small Bedouin coastal trade village to a global city that embraces a creative city agenda.

The Early Path Defining Constraints: an immigrant pole, a trade pole and a diversified economy

As seen from Chapter VI in this thesis, it is argued that the current development path of Dubai has its foundation dating back to the early years of the twentieth century (Hvidt 2006) when the rulers offered the merchant (especially Iranian traders) to settle down in a donated land next to Al Fahidi Fort at the shores of Dubai Creek. Hvdit (2006) argues that "a critical juncture took place in early 20th century when the ruler of Dubai chooses to provide economic incentives to the Persian based merchant class to relocate to Dubai".

The last century series of political and economic 'action-reaction' instances in the history of the country was relatively unexceptional in the context of regional history. However, the path is more dependent on the early reactions by decision makers to adapt to these changes (either political such as the conflict with the neighbouring sheikdoms, the neighbouring countries or the British, or economic such as welcoming low-wage labour from South-Asian

²⁴⁵ In the case of a city-state like Dubai we used the term 'regional' to refer to the city scale as well as to the national (federation level) and the supra-national level in the same time.

countries and the transformation into a **rentier economy**). Such historical anecdotes helped Dubai establish itself as **an immigrant pole** in the region. Dubai particularly saw a leap in strengthening its regional political position when the **British embassy and a British air base were established** in the city in the mid-1930's (Al-Sayegh 1998)²⁴⁶. Though the geopolitical conditions were relaxed afterwards due to the new Dubai status, the neighbouring sheikhdoms such as Abu Dhabi and Sharjah remained strong competitors especially after the discovery of oil in the sixties and even after the formation of the current UAE in 1971. However, such competition was gradually regarded as economic rather than political.

The city developmental path constraints included most importantly **the low oil** compared to Abu Dhabi, 'Dubai's big brother' and the consequent need for diversifying economic resources. This proved unavoidable strategy during different **oil price crises (especially during** the early eighties) which forced an adaptive response from the government, and that led to an unprecedented development acceleration that changed the fate of Dubai once and for all.

In urban planning, the path creation crosses, evidently with the economic path, and the economic strategy of rapid development (Hassink 2010, Hvidt 2006), renteierism and exceptionalism (Antwi-Boateng and Binhuwaidin 2017²⁴⁷). In the 1990s, even before the era when **mega developments** have started to shape the future of the city, Dubai sought a regional positioning, most importantly to compensate for its rare oil resources but probably also **to step out of the shadows of the capital Abu Dhabi**. The city took considerable steps to establish itself as a modern city and was granted the Arab Town Award for the conservation of old buildings in 1988²⁴⁸. Dubai organising the Arab town summit in 1998 proves a desire for the city's rulers to enhance the position of the city regionally.

It is the 9/11 attacks in the US that triggered a massive repatriation of foreign investments back to the Middle East, and the young Dubai was the pot for this returning money. All of a

²⁴⁶ Fatma Al-Sayegh (1998). Merchants' Role in a Changing Society: The Case of Dubai, 1900-90. Middle Eastern Studies.

²⁴⁷ Antwi-Boateng and Binhuwaidin 2017 Beyond rentierism: the United Arab Emirates' exceptionalism in a turbulent region. Contemporary Arab Affairs, 10:4, 522-536

²⁴⁸ Dubai Municipality (1999) Dubai city - Focus on the Next Millennium - page 53?

sudden a large number of returning investors²⁴⁹ with vast amounts of capital were looking for a home in the region and Dubai allured them with a booming real estate market and developed logistics. Soon Dubai developed its business environment to adapt to this extraordinary opportunity and property free-ownership laws, and free zones were introduced while other incentives were enhanced on different levels and in little time Dubai became the new world investment mecca.

Regional Windows of Opportunity: Why Dubai and how?

Compared to other domains and industries in the city itself, the development of cultural industries of Dubai has gone through a slow evolution. Diversification efforts of the city government seemed to pay little attention to this market segment as strategy was concentrated instead on bringing the city from its inferior regional position to a global city through infrastructure projects, urban developments and enhancing the service sector including mainly financial services, the consumer market, real estate and tourism industry. As such the city was **locked-in** in a trajectory of development conditioned by the accumulation events in the past which left a spatial indeterminacy (Boschma 1997) for which cultural industries found little to fit in this trajectory. The 'late' evolution of cultural industries can be explained in economic geography by the window of locational approach which links human agency to new industry formation in place (Scott and Storper 1987; Storper and Walker 1989). This approach prescribes the framework of developing regional capabilities in order for new firms (or new industries, technologies) to form. It is specially relevant in the case where local capabilities are not sufficient for such formation (Martin and Sunley 2010b), which is, to a certain extent, the case of cultural industries in Dubai (and the UAE in general) as the city was witnessing a 'cultural slumber' (as described by Elsheshtawy 2012²⁵⁰) up to the early 2000s. The build-up of regional capabilities is seen through elevated development competition with

²⁴⁹ Due to the anti-money laundering provisions of the United States' Patriot Act, which made investing closer to home more appealing, and the meteoric increase in the price of oil. (Sayed Worrell H. 2017 The UAE's Emergence as a Hub for Contemporary Art. Arab Gulf States Institute in Washington)

²⁵⁰ Elsheshtawy Y. 2012 Museums in Arabia and the Myth of Cultural Enlightenment. Traditional Dwellings and Settlements Review Volume XXIV Number I Fall 2012

similar regional city-states that are adopting similar development strategies, through the build-up of resources and the build-up of human capital.

Money Talks: Accumulation of Wealth as a Source of Opportunity

A Dubai based art and lifestyle magazine (ALEF Magazine)²⁵¹ has noted in one article in 2008 that the shift in the scene was due mainly to two elements, first the geographical location of the city on the verge of two worlds (the east and the west)- and one can assume that position is not worthy if not combined with a sophisticated and efficient logistics hub supported by efficient connectivity internationally which makes Dubai "a culturally meeting point"; and the second is the money. The economic boom has encouraged "art-hungry collectors", which naturally formed a demand for which the supply was in severe shortage. The gap is soon to be filled by art galleries and other art entrepreneurs such as XVA, The Third Line and B21, some of the first commercial galleries in the town. International auction houses and the media also eased this gap. Sotheby's was the first on the Middle Eastern art scene, with their London auction in 2001 while Christie's opened their Dubai office in 2005. Canvas magazine, established in 2003, was the first art magazine in the region, while other magazines such as Bidoun and Contemporary Practices, have followed suit later.

The demand in the art market was not only fuelled by emergent wealthy businessmen in the Middle East, especially oil, gas and real estate moguls, but also by the surge of hospitality projects as part of their decoration projects. As part of their competitive strategies, hotels acquired traditional artworks, portraits of the country leaders, often mounted in gold-tinted frames, and different sorts of contemporary artworks from the region to show them in their luxury decorated lobbies. This is in return not only encouraged art galleries to enter into hotel design projects but also encouraged Emirati talents to provide pure local artworks that reflect local culture and traditions. Some of the hotels have developed their in-house art galleries such as Dubai's Noon Hotel Apartments and the Four Points by Sheraton (Seaman 2016)²⁵², while some galleries chose the hotels as their business base such as Tabari Art Space which was founded in The Fairmont Hotel in 2003. Art Consultants, whether based in Dubai such as

²⁵¹ Arsalan M. 2008 Scene Shifters. ALEF Magazine March/April 2008

²⁵² Seaman A. 2016 UAE hotel lobbies: the perfect place to show off local art. The National Newspaper October29, 2016

7A Consultants, an offspring of The JamJar, or an international office such as the US Soho Myriad, found the opportunity to thrive on hospitality design projects²⁵³.

Not only hospitality projects that required art design projects, but luxury residential and commercial real estate projects spread all over the city also nurtured such demand. Projects such as Emaar's Emirate Hills villa projects, or Al Barari Villas, or Nakheel's The Palm villas are only a few of a vast number of luxury projects with art design works.

Regional City Competition

Dubai has been, since early, an urban and an economic development sprinter thanks to a historical trajectory dependant on certain events by which the city turned into an immigrant pole, a logistics hub and a regional development star. The Dubai development formula, a mix of neoliberalist market conditions, mega-scale starchitect projects and an accelerated push towards financial and real estate investments, has been copied in different cities in the same region or beyond. This created a sense of rivalry between these cities to compete for the already shrinking global investment interest in the region. Cultural development was an instrument inscribed in such competition; each city was targeting to attain the position of the regional capital of culture.

Since the establishment of the UAE federation, Abu Dhabi, the capital city, was naturally the cultural centre of the newly born country benefiting from a number of cultural initiatives led mainly by the Ministry of Culture (establishing cultural centres, libraries and other facilities). Quickly enough, Sharjah was improving its local cultural capabilities thanks to a leading role of its rulers. The direct sponsorship of Sharjah rulers towards art and culture led to a concentration of artists and talents in the city which led to the establishment of Emirates Fine Art Society in 1980, the annual art exhibition in 1982, the Sharjah international book fair in 1980. These later led to the inauguration to Sharjah Biennale in 1993 and later to name Sharjah as the Arab Capital of Culture in 1998 (more details discussed in the previous chapter).

At the city level, it is evident that the cultural 'competition' between the main three cultural hubs in the UAE was essential to the evolution in each of these cities. Each of these cities was seeing itself as a cultural capital of the country, at least from an inside-out perspective or as

²⁵³ Ibid.

a city marketing cliché. Up to the early 80's, it was Abu Dhabi that first presented itself as the cultural capital of the country thanks to its political and economic capital status, its regional position and its relatively higher spending on cultural activities than other emirates. Starting from the early 80's, Sharjah took over the role of the cultural capital of the country thanks mainly to the initiatives of its ruler (Sheikh Sultan Al Qasimi) and the rising artist community in the city which led to the establishment of many museums, Emirates Fine Art Society and its annual art fair, among other cultural facilities and events. Sharjah was the economic hub in the 80's until the decline was triggered by a change in the political winds (following an unvoiced royal family incident) that led to the rise of conservative Islamic wing among the governing elites, the downsizing of the tourism sector, and a financial crisis that hugely increased foreign debt of the emerging emirate.

For Dubai, the cultural development was essential as part of its strategy to maintain its regional economic and tourist position in the early 2000s, especially after Doha and Abu Dhabi intensified the competition. However, it is the coincidence of a number of regional factors, such as the shrinking economic power of Sharjah, and the vast repatriation of foreign investments back in the region following the 9/11 attacks and the following US security measures that targeted Middle Eastern investments, which created the opportunity for the economic rise of Dubai.

Human Capital and Talent Capacity Building

In the late 1970's, a few young Emirati talents obtained government scholarships to study abroad (including the later becoming known artists Najat Makki and Mohammed Kazem). This trend has continued in the next decades leading to the second generation of local artists (and other creative talents in other industries such as in the film industry, design, fashion ...etc.). Not only in art and culture, but the city has also profited from its **educated western elite** in different domains coming back to undertake specific government roles combined with bringing western approaches and consultants. While the cultural development reference for Dubai remained Arabic cities, an essential and strong tendency to create a shift from the classical Arabic capital of culture was forced, again, by the weight of the expat community component of the city. However, the aspirational strategy of the global city implicates a more international cultural agenda with a futuristic ambition. Singapore, for example, served as one focal example of the urban and economic influence for a global city agenda for Dubai. It is important to note the importance of artists coming from the neighbouring countries in forming the human capital of art and culture. As explained by Hoor Al Qassimi, the director of Sharjah Biennale: "artists from other Arab countries also contributed to the scene, moving from Egypt, Iraq, Syria, Palestine, Lebanon, and elsewhere to live and work in the UAE. Many of them were members of the Emirates Fine Arts Society, which was formed in 1980 in Sharjah as a non-profit organization to support the work of local artists through exhibitions, lectures, workshops, and the publication of an important periodical, Al Tashkeel." (Al Qassimi 2016)²⁵⁴

Path Dependency: The Role of Chance

At the city level, our survey of the history, the press and from interviews with key individuals of the creative industries revealed a number of incidents that marked the development path of the art market and eventually the art districts in the city.

One incident is attributed to the beginning of the very first commercial art gallery in the city, Al Majlis Gallery. Al Majlis Gallery was never supposed to see the light unless for a chance event that never was expected, nor was it envisaged as a possible outcome. Allison had been exhibiting artwork in her house since 1979, but she was forced to start a commercial activity, with the help of her house owners to avoid the destruction of the house as part of an urban renovation project in the old centre of Dubai.

One interviewee, Mr Fourie²⁵⁵, Vice President of North 25 and a director at Meraas, one of the high-profile urban developers of Dubai (he happens to be an artist as well²⁵⁶), highlighted the importance of the rising experience local Emirati get from staying and studying in other countries. Mohammad Al Abbar, the founder of Emaar, one of the world biggest real estate developers which are behind the World's tallest tower and a key player in the rise of Dubai, had a focal role in transforming Dubai into a global city thanks, as Mr Fourie explains, to his experience in Singapore.

²⁵⁴ Al Qassimi H. (2016) Curatorial essay for 1980 - Today: Exhibitions in the United Arab Emirates. Nafas Art Magazine. <u>Online</u> Accessed 01 Dec. 2017.

²⁵⁵ Interview with Morné Fourie, 13 November 2017

²⁵⁶ Seaman 2016 Love of art is the theme running through design manager Morné Fourie's life. The National. June 26, 2016. <u>Online</u>

For Mr Fourie, the event that played a decisive role in the decision of establishing Emaar and leading it to become a world-level business was that Al Abbar had lived in Singapore for some time as a government business representative and had witnessed the massive development of Singapore in a short time.

For the event that was decisive in shaping up the history of urbanism in Dubai, Fourie said: "Somewhere probably in the 80s, Sheikh Rashid [Dubai Ruler at the time] must have made a trip to Singapore. Everything that Sheik Mohammed [current Dubai Ruler] speaks about wanting to grow the city always refers back to Singapore and the discussion they had with Singapore. They sent Al Abbar to Singapore to study. Then Al Abbar came back and gave them Emaar." He thinks that the growth of Singapore back in the seventies is what gave the idea to Dubai to decide on the development path on which it is right now.

The infamous Christie's Dubai 2006 auction which is regarded the main trigger of art development in the city, was dependent on a small event that led to its existence. As per Isabelle de la Bruyère, who was responsible for the 2006 auction, the director of Dubai office till 2012, highlighted the role of chance when Christie's was invited by Dubai Government to organise a charity auction for the 2003 festival "Camel Caravan". The success of this auction (sold 22 fibreglass camels for around USD1.5 million), led Christie's to consider opening an office in the city, which in fact took place shortly afterwards in 2005 (De la Bruyère 2018)²⁵⁷.

Similarly, the idea for the Gulf Art Fair (now Dubai Art) was born in a conversation between two British friends—art dealer John Martin and investment banker Benedict Floyd—and became a reality more than one year later with the support of the Dubai International Financial Center (DIFC). John Martin asserts the role of chance in triggering the whole process as the meeting between the two co-founders happened during a flight layover in Dubai on his way to a vacation in Australia.

Most of the interviewees, during the preparation of this thesis, have iterated the impact of the financial crisis, not only on the art market but in every aspect of life in Dubai.

²⁵⁷ De la Bruyère: During a seminar on the evolution of arts in the UAE. At the Institut du monde arabe, Paris. 26 September 2018.

Co-evolution: Institutional Evolutionary Setting

Though it is not until the late 2000's when Dubai adopted a creative-approach discourse in its development policy jargon, such delay was attributed to the city adopting the knowledgebased social development rather than the creative approach. Indeed, the city saw it is Media City (Media-related business district) as early as the year 2000 (and three years ahead of its Singapore match). However, the creative class thesis (as theorised by Florida 2002, 2005) is seen as being used as an excuse to develop and justify existing development strategies for some city governments around the world; Dubai is one of them (Mould 2014)²⁵⁸. As one concrete example, media cities represent a more 'robust' creative city policy. As such, rather than developing a comprehensive cultural-economic policy, these governments have attempted to develop the economic base of their cities through media and creative industries as some side economic development strategies. Such creative city policies are built upon a more 'realistic' view of creativity (ibid).

Such an approach to creativity was inscribed in the government global city discourse. Dubai established in 2008 the Mohammed bin Rashid Al-Maktoum Foundation, to foster, as announced by Dubai Ruler, a "knowledge-based society". It began with the International Design Forum, where against a background of studded white designer leather, creative luminaries such as Rem Koolhaas, the New York designer Karim Rashid, Paola Antonelli from MoMA in New York and Hans Ulrich Obrist from the Serpentine Gallery in London, lectured the locals about how best to bring the artistic set to a city where art has been limited to the aforementioned gilded horses. There are plans for a college of innovation and design.

The term "creative city" was not mentioned in the government literature except an online document on Dubai Cultural Authority website which justifies calling Dubai as a creative city. However, the way in which the concept is evoked is not set in a policy/strategy context but rather a reading of an exterior perception of the art and cultural developments of the city.

²⁵⁸ Mould O. (2014) Mediating the City: The Role of Planned Media Cities in the Geographies of Creative Industry Activity. In Conventz S. Derudder B. Thierstein A. and Witlox F. (Ed.) Hub Cities in the Knowledge Economy: Seaports, Airports, Brainports. Routledge

Under the title Dubai: The Creative City, the page reads: "Home to many of the world's biggest achievements, Dubai has gained a reputation as a multicultural hotbed of creativity and innovation, a reputation that global art institutions such as Christie's and Sotheby's, amongst others, have begun to recognise". Continuing to describe the government support and the many art galleries functioning in the city and the many artistic events, the page ends with a self-praising inflicting marketing-type phrase: "Dubai is not just a city of life: it is a city where art comes alive."²⁵⁹

As discussed in the previous chapter, the institutional change has been emanating mainly from the economic/urban agenda of the UAE / Dubai government, in addition to the rise of non-governmental institutions that are basically taking an interest in the development of the local cultural awareness through cultural and educational events.

Adaptation: The local-global networking

Almost all art-related academics, journalists and art market players in Dubai (and most likely all over the region) agree that two events played the crucial role in boosting the art market in Dubai, without which art scene wouldn't be able to support the emergence of an art district, rather than a comprehensive change in government policies to support art and artists, those events being Christie's auction in 2006 and DIFC Gulf Art Fair in 2007. The effect of these two events was materialised in the acceleration of art and art business activities over the short period that followed. This scene was captured vividly in a news article published by Arabian Business magazine less than one year after the first Christie's 2006 auction:

"It is only in the last few months that the Middle East art market has experienced a dramatic upturn in fortunes, with a host of new galleries and public exhibitions being announced on an almost weekly basis, and unprecedented volumes of canvasses passing between local and international hands for tens of millions of dollars." (Hankock and Walid 2007)²⁶⁰

Though the Christie's auction was not an inter-organisation event per se as it involved mainly Christie's in its organisation, it has succeeded in assembling around 500 art collectors or

²⁵⁹ Dubai Culture website: Dubai The Creative City. Online

²⁶⁰ Hancock M. and Walid T. 2007 The business of Art. In Arabian Business 01 Mar 2007. Online

'collector-to-be' boosting and encouraging a nucleus for an art business network. While around half of the actual buyers (53%) were reportedly coming from the region, around 23% were European and 11% coming from the Americas and Asia²⁶¹. The event has seen 127 lots of international modern and contemporary art offered, generating a premium-inclusive \$8.49m with 87% of lots sold. This event has proved its importance for years to come as it was the first test to the viability of commercial art in the region. The success of this event was beyond all expectations. As described by Hala Khayat, Christie's Dubai Sales Manager: "Though the 2006 auction itself was very well planned with months of study and gathering interest from potential buyers, the success was way **beyond what we expected**, and we set the records for the Middle Eastern art market since then."²⁶² Similar impressions were felt by Michael Jeha, the director of Christie's Dubai and the founder of the office in 2005: "When I wrote the business plan, we never had planned to hold auctions here. At least, not so quickly. Looking back at the business plan, it was on a side note towards the end of the plan that may be in five years' time we could get to a stage where Dubai would become a sales centre."²⁶³ As the success was beyond expectation, this in itself is considered as a chance event that changed the history once and forever. Jeha confirmed the accidental characteristic of the event by saying: "Usually when we do auctions we have a good idea what is going to happen and how the auction will perform", but for the first Dubai auction, there was nothing. "There *were hardly any pieces covered*^{"264}, he said (cf. Worrell 2017).

Nevertheless, examining the path constraints leading to the 2006 Christie's auction, there is also a chance event-trigger that is three years precedent to this event. As per Isabelle de la Bruyne²⁶⁵, Christie's sales manager at the time and the head of Christie's office up till 2012, it was a 2003 charity auction (during the Dubai Camel Caravan festival) for which Christie's was invited by the festival organisers and Dubai government organise, that prepared Christie's to

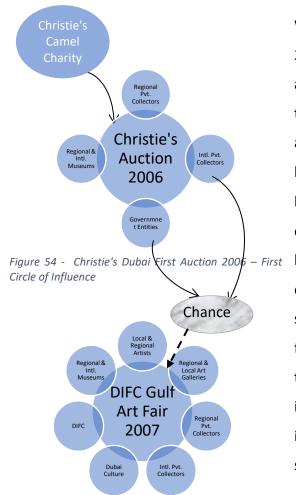
 ²⁶¹ ATG 2006 Middle Eastern buyers purchase half of inaugural Dubai sale. Antiques Trade Gazette. <u>Online</u>
 ²⁶² Interview with Hala Khayat June 2017

²⁶³ Sharma Rahul 2009 From Boredom to Love for Fine Art. Khaleej Times Newspaper October 11, 2009 Online

²⁶⁴ Worrell H. S. 2017 The UAE's Emergence as a Hub for Contemporary Art. Arab Gulf States Institute in Washington.

²⁶⁵ During a 2018 seminar at the Institut du monde arabe in Paris for the "Abdul Qader Al Rais Retrospective Exhibition" held on September 26, 2018.

set foot in the city. If not for that marginal event, Christie's would have probably kept the tradition of holding oriental art auction back in their London office as usual.



Influence (First degree network connections)

William Lawrie, Christie's Dubai Head of Sales in 2006, highlighted the fact that many of the auction attendees were first-timers, meaning that they were introduced to the world of auctioned art at this very moment and some became collectors afterwards. He also highlighted the interest shown by government officials which eventually affected the way they look into the importance of art, especially the economic impact and that was mirrored later by sponsoring the Art Fair the next year and the formation of the first art gallery concentration in the city, in DIFC premises.²⁶⁶ Similarly, the impact of the success has triggered art-related initiatives in the neighbouring emirates and citystates such as Abu Dhabi and Qatar.

Figure 54 - DIFC Gulf Art Fair 2007- First Circle of Christie's auction did not only test the market but also induced more growth. Museums around

the world saw the opportunity in an emerging art market while local museums, especially those in the planning phases were eyeing emerging local artists and regional arts.

While the auction was in preparation in 2006, two British friends, the first working as a financial manager at the newly established Dubai Commodity Exchange Market and the other is an art gallery owner in Mayfair London, Benedict Floyd and John Martin, respectively. They both saw a 'window of opportunity' in the current art market, and they decided to act quickly. The baseline for their idea was an annual art event, and they found in Madinat Jumeirah the

²⁶⁶ Interview with William Lawrie, June 2017

right place for it. While they were trying to market their idea in the city, DIFC decided to support the new concept financially, and thus the art fair became DIFC Gulf Art Fair.

The art events in Dubai and Sharjah proved the most important occasion for networking among artists and art business owners alike. The satellite events of Art Dubai and Biennale Sharjah became the hinge by which networks are enhanced and enlarged year after year.

Conclusion: The Emergence of an Art Scene

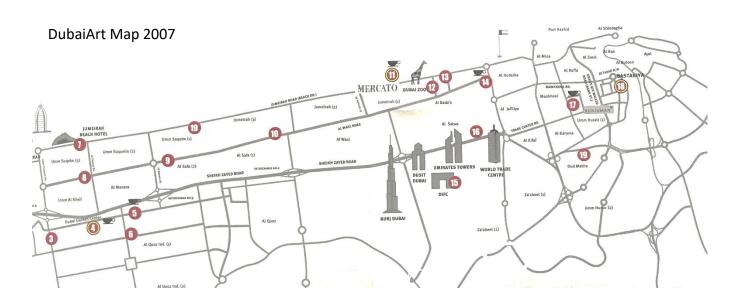
By the end of 2006, it is apparent that Dubai has finally woken from its 'cultural slumber'. The rise in art and culture awareness among the population, the rising income levels, the return of young local talents from abroad, the increasing number of artists relocating to the city due to the increased level of job opportunities, and the consequent increase of women entrepreneurs moving to Dubai as companions to their working husbands, have helped upgrade the local 'atmosphere' for an uprising artist community that will eventually create the art scene in the city.

The government role has also been focal. Different government departments emerged as sponsors of art and cultural events, DIFC's partnership with the founders of Art Dubai, for example, was the backbone of its success. The establishment and the announcement of more museums in the region have indicated a strong future demand for art and artefacts.

	Economic	Urban	Social/Cultural
Public Strategies / Initiatives	 Focus on real estate developments as an economic catalyst Dubai as a financial hub Strategy Dubai as a Tourist destination 	 Rehabilitation of Dubai historical Centre in 1988 Al Quoz Industrial Area Top-down Specialised Industrial Districts 	- Government- sponsored cultural initiatives in Sharjah - Sharjah Biennale (1993 onwards)
Private Business Scene	- the surge in business formation mainly in the service economy: hospitality and tourism services, financial services, retail, Information technology and media	 the surge in population meant a surge in a residential area and urban sprawl of the city Introduction of shopping malls Sheikh Zayed Rd. becoming the 'spine' of the New Dubai 	Local art societies and small art education centres and exhibitions Private collectors, local artists,

Table 22 City Views	Arte Statue and Att	ributes (the Year 2006)
TUDIE ZZ - CILY VISUU	Ι ΑΓΙΣ ΣΙŪΙŪŠ ŪΠŪ ΑΙΙ	IDULES (LITE FEUL 2000)

- Most importantly real estate developers and construction companies	- Jumeirah and Sheikh Zayed Rd. Towers home to wealthy residences	





2. The District Level: A Path Dependency Perspective

While the previous section followed the trajectory of the art development at the city level (considering the city as a complex system of interactions) giving rise to art and cultural districts, at the district level we follow an insider approach considering the complex system of interactions within the district case studies and interactions with its outside.

The acceleration in the art and cultural life in the city was no doubt linked to the success achieved by the first international art auction held in the city (Christie's Auction in 2006) and the first edition of the international art fair in the following year (DIFC Gulf Art Fair in 2007). As seen in different part of this thesis, these two events have:

- a- encouraged the emergence of private initiatives in art businesses, materialised by several art galleries in Al Quoz industrial area for example,
- b- inspired Abu Dhabi to move on and initiate massive cultural plans introducing its own international art fair (Art Paris Abu Dhabi which became later Art Abu Dhabi) and the globally renowned now Al Saadiyat Cultural District,

c- inspired the government in Dubai to embark on ambitious cultural initiatives starting with establishing Dubai Art and Culture Authority (Dubai Culture shortly) and announcing in March 2008 Al Khor Cultural District which aimed at transforming the historical core of Dubai into a buzzing art and cultural tourist destination.

As seen previously in this chapter and Chapter VI, four cultural and art districts emerged in the city of Dubai:

- 1- DIFC Gate Village inaugurated in 2008,
- 2- Al Fahidi District (and the larger area of Al Khor) whose evolution ran through a number of stages but came into light mainly with the announcement of Al Khor Cultural District in 2008, a project that was dropped later in the aftermath of the global financial crisis,
- 3- Alserkal Avenue which benefitted mostly from an organic concentration of art businesses in Al Quoz Area and from the entrepreneurial action of Alserkal owners that changed the district fate to become an exclusive art district after 2010, and finally
- 4- Dubai Design District (D3) which is a government-led urban development dedicated to mainly design-related industries, evolved in short time to cater for a significant art and cultural activity thanks to a rise of the number of art-related businesses choosing it as their address.

Given the small size of the first district and the incompletion status of the second, the discussion of these two tends to be light while more analysis is dedicated to Alserkal Avenue and D3.

DIFC Art Gallery Complex: Planned or Accidental

The involvement of Dubai International Financial District in the first two art market triggers in the city in 2006 and 2007, has no doubt shaped the role of the government in supporting the art businesses and profoundly influenced the emergence of collectors among the city elites as per some of the observers and art business owners in Dubai²⁶⁷. The opening of Christie's

²⁶⁷ Interview with Guillaume Cuiry, owner of La Galerie Nationale, Alserkal Avenue. June 2017

Dubai branch, its first in the Middle East, in April 2005 is a starting point²⁶⁸. Having chosen their office to be in DIFC (while their auctions took place at Jumeirah Emirates Towers) has probably affected the path of the art market in the city, for DIFC became the backbone of government involvement in art events. Two events are attesting to this strong link; the first is **a business venture** while the other is **an institutional involvement**. For the first, the DIFC announced in February 2007 that it had acquired a 51% stake in the forthcoming inaugural Gulf Art Fair, rebranding it as DIFC Gulf Art Fair. This venture, which was initially the idea of Marwan Bayat, Director of Art and Culture in DIFC²⁶⁹, which was then picked up and spearheaded by the DIFC governor at the time Omar bin Sulaiman, has proved successful in convincing the public of the importance of art and luring locals to start collecting artworks. The second link was through Omar bin Sulaiman who was appointed, in addition to his position in DIFC, as **the Managing Director of Dubai Cultural Authority** established in 2008.

However, this series of events has triggered in part and was paralleled in part with the emergence of the Gate Village, which became an art complex with several art galleries moving in early 2008. The first two movers into DIFC were Al Tabari Gallery, which was established by Maha Al Tabari back in 2003 at the Fairmont Hotel (across the street from DIFC), and Villa Moda, a Kuwaiti fashion retail group which was interested in venturing into an art gallery spearheaded by its owner Sheikh Majid Al Sabah.

In 2007, a Kuwaiti Sheikh, a businessman and an art enthusiast, Sheikh Majed Al Sabah, of the royal Al Sabah Family of Kuwait, approached DIFC for a business partnership to open a retail/art boutique in DIFC, Villa Moda, a branch of his luxury retail fashion boutique stores he established in Kuwait. For Myrna Ayyad, the previous Director of Art Dubai between 2016 and 2018, it is this event that triggered the idea of opening an art and cultural centre in Dubai International Financial District²⁷⁰. DIFC's Villa Moda venture is seen by some as a tactical move to "to use its Kuwaiti partner's skills to envisage different attractions for the brash new

 ²⁶⁸ Christie's later moved from its first office to where art galleries are located in the Gate Village building.
 ²⁶⁹ ALEF Magazine March/April 2008 page 88

²⁷⁰ Interview with Myrna Ayyad, 6 October 2018

location", for Dubai is "*looking for a cultural development beyond the high-rise towers and shopping malls with ski slopes*"²⁷¹.

Path constraints led to an accidental art hub: Art Fair, Government, Retail and Finance The Gate Village was envisioned as a boutique complex with branded luxury shops and restaurants in the ranks of luxury-niche boutiques, ("*this explains why spaces in this building look like boutique shops*", as per William Lawrie²⁷²). However, the idea of a complex of boutique shops was soon proved unfeasible. People working or visiting the financial hub were generally interested in shopping during their lunch break (the only time they are free in their work day). Quite quickly, the idea was to invite art gallery businesses instead of boutique luxury shops²⁷³. Thus, the mixed retail-art interest from Villa Moda has open the door for DIFC to invite more art galleries into their premises. It was Tabari Art Space that was the first to announce their interest to open 'a branch' in March 2008.

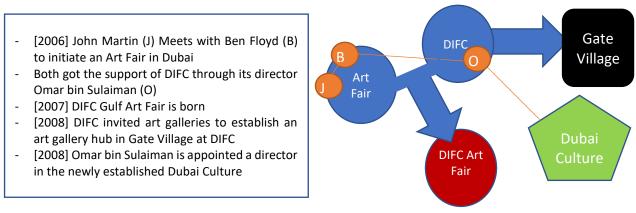


Figure 56 - Role of Individuals in Connecting Organisations

DIFC's Season of Arts was an off-product of the increased involvement of DIFC in the art scene emerging in the city. The 16-day event, which coincided with Art Dubai 2008²⁷⁴, evolved to be a city-wide art and cultural event in the next years.

²⁷¹ Menkes S. 2008 Dubai to finance Villa Moda growth. New York Times September 21, 2008. Online

²⁷² Interview with William Lawrie, June 2017

²⁷³ From interview with several art gallery owners in and outside DIFC. June 2017

²⁷⁴ Karam M. 2008 Dubai values artistic expression at DIFC's 'Season of Arts' debut. Business Intelligence Middle East. <u>Online</u>

Soon enough, the global financial crisis hit the world economies, and the news was troublesome for Dubai in particular. DIFC, coping with the sweeping decline of rental rates, offered low-rate with prolonged contracts as incentives to gallery owners moving to DIFC²⁷⁵.

In conclusion, the genesis of DIFC Gate Village complex is heavily influenced by small events that were a secondary product of the regional favouring winds. Mostly it was the interpersonal connections that triggered large events by institutional players including governmental agencies (DIFC and Dubai Culture) and private organisations (Art Dubai).



Figure 57 - Logo of Dubai Creek Project: Khor Dubai -Source: 2DayDubai.com

Al Khor (Creek) Cultural District: The drastic effects of bad times

As seen in the last chapter, Khor Dubai, (aka Al Khor Cultural District), was announced in March 2008. The announcement of the project was referenced under the accomplishment of the Dubai Strategic plan 2015²⁷⁶, and that when finished the project, stretching from Shindagha

old area to the newly developed Business Bay, will accommodate an opera house, 10 museums, 9 libraries, 14 theatres, 7 institutes for arts and culture and 11 art galleries²⁷⁷. Plans were also announced that the Khor Dubai zone would be accessed by a new line of Metro Dubai.

²⁷⁵ Interview with Mona Hausser, owner of XVA Gallery. June 2017

²⁷⁶ See the previous chapter of this thesis

²⁷⁷ 2DayDubai 2009 Khor Dubai Project Online [accessed August 2014]



Interestingly, the governmentspearheaded project was meant to bring many stakeholders around one table to build this 'mega-project'. As iterated by Omar bin Sulaiman, the Managing Director of the newly formed Dubai Culture and the Governor of the Dubai International Financial Centre (DIFC) at the time: "We will work closely with all

Figure 58- Old Dubai Area (Dubai Creek Front) with key cultural and historic landmark including Bastakia (Al Fahidi District) (source: Gulf News)

stakeholders including; private sector developers; major corporations; culture and art entities; and, communities living around Khor Dubai to see this project is implemented successfully."²⁷⁸

However, what seemed to be the biggest cultural development in the country didn't live long enough to see its completion. In 2009 the cultural project was deferred (but not officially cancelled) pending the passing of the drastic impact of the international financial crisis. Michael Schindhelm, a German writer and theatre director who was appointed as a consultant to Dubai Culture on the same project in 2007, recites the chronicles leading to the failure of the project in a book that first appeared in 2009²⁷⁹. His insights into the government bureaucracy and conflict cast a shadow over the rapid development style of Dubai. For example, he highlighted the fierce competition rather than collaboration between different government agencies or between different real estate developers to the extent that one plot can have two developers at the same time. Also, in light of the absence of such collaboration, the government announcements of new projects might and have in fact delayed an ongoing project. For example, the managers responsible for the Heritage Village found themselves not aware of the consequences of the new project on their responsibilities (Schindhelm 2011: p.

²⁷⁸ Gulf News 2008 Theatres, opera house and cultural institutes to adorn banks of Dubai Creek. March 26, 2008. Online.

²⁷⁹ First published in German in 2009 under the title "Dubai Speed: Eine Erfahrung [German for an experience]", the English version appeared in 2011 under the title: "Dubai High: A Cultural Trip" by Arabian Publishing.

106). However, also, the bureaucracy is manifested in the ambiguity of command chain in the same agency: "*It seems to me decisions are made in stages. There is approval, final approval and final, final approval. Initial approval is not enough.*" (Schindhelm 2011: p. 132). In another case, some projects are only boosted if interference is bestowed from higher levels (: p. 113).

Nevertheless, Al Fahidi district, remains a survival component from the greater masterplanned Al Khor project. While events in Al Fahidi Historical District are mainly managed by the Dubai Cultural Authority, there is not much of space for potential growth, either for private or public organisations, as spaces are limited, and existing cultural establishments and



recurrent events are already making the area crowded during the peak season (i.e. during the annual Sikka Art Fair every March).

Figure 59 - The entrance of Al Fahidi District during Sikka Art Fair 2016 (Source: Dubai Culture)

While the district

enjoys being the first organic emerging cultural district in the city since Al Majlis Gallery opened back in 1989, the government restoration projects and the annual events run by government entities saw the district management falling eventually into the hands of the government.

Since the early nineties, restoration plans were introduced over a number of years to rejuvenate not only Al Fahidi District but also the Bur Dubai area (the historical Creek district which includes the Dubai Museum, the old Souk up to Al Shindaga neighbourhood). These plans were the central part of Al Khor Cultural Development announced in 2008, which was shelved during the financial crisis years (debatably between 2009-2012).

Interestingly, the newly established Dubai Culture and Art Authority (DCAA) at the time has downplayed the effects of the financial downturn stating that their **adaptation strategy** is to

reschedule projects rather than reducing them²⁸⁰. Even more, the financial crisis opened the door for officials to discuss other cultural business ventures that seemed feasible despite the economic turmoil. Evidence suggests that the early concept of an art and design district that is focused on fashion and design businesses has emerged in 2009 from searching profitable alternative options to pure culture-led regeneration projects (i.e. Al Khor Cultural District). Judging from the news circulating in June 2009, the concept of what eventually became **Dubai Design District** was already in discussion in the management circles of Dubai Culture and Art Authority. Mishaal Al-Gergawi, Projects and Events Manager at DCAA at the time revealed *"plans to create a neighbourhood dedicated to fashion, high-end design and gastronomy"* which exactly fits a short description of D3 district (D3 was inaugurated in 2015, 5 years later).

The project of Al Khor Cultural District resurfaced again with the partial economic recovery of the city after 2012. However, the project was retouched to be downsized to several renovation elements rather than a complete revamp of the area. As per a 2015 statement from Dubai Culture, the project was focused on heritage and social targets rather than economic targets. The key targets of the new project revolved around five elements²⁸¹.:

- Tradition: Focusing on Emirati culture and drawing upon the stories of the area;
- Heritage protecting historical buildings;
- Trade preserving traditional 'souqs' (markets) and reviving and celebrating traditional trade;
- Community sharing cultural experiences through restoring squares as gathering places for residents, and promoting performance arts, and finally,
- Placemaking ensuring the original fabric of the area is preserved and made easy for visitors to navigate.

These heritage and social-related elements confirmed the commitment of the government to maintain the achieved objectives of the historic district and preserving it from decline in as an adaptive strategy. At the short to mid-term, a large-scale renovation of the area is not expected as the government expenditure priority was mainly directed to economic growth to restore its pace that was widely affected in the aftermath of the financial crisis.

²⁸⁰ Walid T. and Irish J. (2009) Dubai to build arts and fashion districts. Reuters 10.09.2009. Online

 ²⁸¹ Gulf News (2015) Shindagha, Bur Dubai, Deira and Al Fahidi to get a facelift. Gulf News Newspaper, February
 3, 2015. <u>Online</u>. Retrieved 10 December 2017

Strategic Adaptation, Institutional Change and Co-evolution

In conclusion, though a number of bureaucratic problems have been highlighted, it was the severe consequences of the financial crisis that diverted the attention and the resources of the country (and Dubai in particular) from cultural developments eventually deferring Al Khor Project. Nevertheless, the deferral of the mega-scale project has resulted in an adaptation strategy that led to several paths. Handing some components of the 'on-hold' project to private developers (such as Meraas who developed Al Seef, and Dubai Opera by Emaar), opening the door to a private non-profit organisation to develop an art complex (i.e. Jameel Art Centre on Dubai Creek), going forward in the plans for the **Dubai Design District** and bidding for Expo 2020 event emerged as the more viable options in the light of the drastic effects of the economic downturn of 2009. Figure 60 illustrates the different 'packages' which were originally included in Al Khor Cultural District and which were eventually completed though not as envisioned in the original 2008 master plan. For example, the island on which Art Jameel was developed in 2017 was part of a mixed-use (residential, hospitality and office development) called The Cultural Village. Dubai Opera was envisioned to be erected at the creek side but eventually the project was picked up by Emaar and the location was moved to a plot in Emaar's Dubai Downtown. Al Seef is eventually developed by Meraas as a residential, retail and hospitality real estate project.

A quote from Al-Girgawi reflects the overall philosophy of adaption adopted by the government entities at the time, he said: "I like the crisis ... it has really made you have to justify your existence"²⁸².

Deprioritising cultural developments in such uncertain times has no doubt been mirrored in the private cultural initiatives, nevertheless, a window of opportunity has opened for private entrepreneurs to come forward and adopt adaptive strategies in a sever market conditions.

²⁸² Walid T. and Irish J. (2009) Op. Cit.

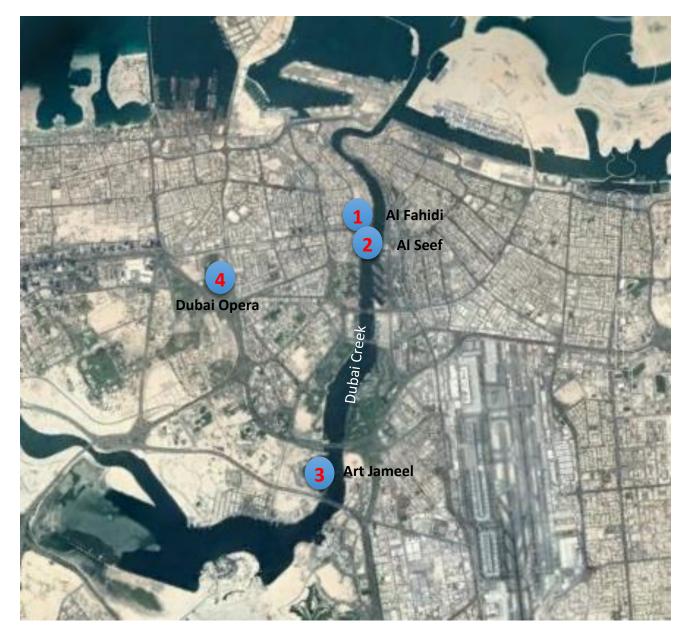


Figure 60 - Elements of the originally AI Khor Cultural District currently operational (as per 2018) (Image source: Google Earth) Between 2009-2011, the post-crisis years the most difficult in Dubai, art galleries continued to pop up in the city. Alserkal family, a business family well rooted in the industrial market of Dubai, found it feasible to turn their industrial warehouse property in Al Quoz area into an art gallery concentration. Building upon an already existing organic art activity in the area and an increased interest from local and regional art enthusiast for large space warehousing for art gallery projects, Alserkal Avenue came into existence in the least expected conditions.

Alserkal Avenue – Entrepreneurial Action in an Organic Evolution Context

In the Beginning, there was Al Quoz: The Dynamics of a Bottom-Up Art District

As seen from Chapter V, Al Quoz industrial area was one of the first urban expansions of the old city of Dubai along with Jumeirah back in the 1960's (the master plan of the city was prepared by British architect John Harris in 1960 (Elsheshtawy 2012²⁸³). While the opposite, sea-side Jumeirah neighbourhood was a residential area with mostly posh villas and low-rise residences, Al Quoz was meant to be the industrial nerve of the city.

The first introduction of commercial art galleries in the area was in 1998 when Dariush Zandi opened The Courtyard complex including an art gallery and a café. Many see this fact as the critical path constraint to define the history of the area in the years to come., as before this point the area was purely industrial in the middle of the desert. According to some interviewees, Dariush came to Al Quoz in an act of **seclusion from the busy life of the city** and as a place where he has **the freedom to design and to create**.

²⁸³ Elsheshtawy Y. (Ed.) 2002 Planning Middle Eastern Cities. An urban kaleidoscope in a globalizing world. Routledge. Taylor & Francis Croup. LONDON



Figure 61 - Map of Al Quoz Area with Alserkal Avenue (Own work based on Google Maps)

Furthermore, Dariush had a collection of furniture and artefacts that came into his possession while working as a municipality engineer on regeneration projects in old Dubai neighbourhoods (i.e. the Bastakiyah/Al Fahidi area)²⁸⁴. A personal enthusiasm to arts has motivated Zandi's act and as a business venture without intention to bring art to the area or to affect the industrial nature of the area. Seven years after the establishment of the courtyard, he said in an interview to a local newspaper: *"I did not imagine then that the neighbourhood around the Courtyard would turn out this way. I am pleased that I was at the forefront of this movement and would love to see this area transformed into an art quarter solely devoted to art where everybody can come, shop for art, talk art, interact with artists, take art lessons and enjoy other forms of art such as experimental theatre and music.²⁸⁵" The mere fact that an art space existed in Al Quoz has been for many a turning point on the path of the industrial area. Antonia Carver also refers to the mixed use of the complex by being an*

²⁸⁴ As relayed to me by an academic working on UAE heritage. Novembre 2017.

²⁸⁵ Kalsi J. 2006 The evolution of an art quarter. Gulf News August 24, 2006. Online

art gallery in the same time as an art café and an exhibition space: "The Courtyard, designed by Dariush Zandi, changed both Al Quoz and the way art was exhibited."²⁸⁶

In an act similar to Zandi's initiative, Jeffar Khaldi, a Palestinian-born artist rented a warehouse in Al Quoz as a hideout, and as a live-work space, however, he soon realised that he can capitalise on the location of his workshop to open a commercial art gallery "called Gallery b21" in 2005. He reflects on the early days of Al Quoz: "*Slowly, to my surprise, things started to develop. A real gallery, The Third Line, opened just across the gallery b21 that I had established a year earlier. My whole behind-the-scenes involvement in the art scene made me see through all the superficiality, how it built up so quickly here. It made me recognize who the sharks with new money and no taste are. Things started to get-overhyped and over-inflated quickly.²⁸⁷"*

In 2010, when Isabelle van der Ide split from B21 Gallery to open her own gallery at Alserkal (Gallerie IVDE), there were still galleries around such as The Third Line on Street 6th (opposite to Alserkal Avenue), The Jamjar (Street 17), Traffic and The Fridge on Umm Suqueim Rd., Art Sawa (which moved later to DIFC) and 1x1 Gallery on Marabea Street. Others still existing include Total Arts at the Courtyard, Cartoon Gallery, while the defunct galleries include 4Walls Gallery (street 4), Hamael Gallery (Street 6).²⁸⁸

Path Creation: The first movers



Figure 62 – The Gallery business brought different category of footfall to the industrial property. From Ayyam Gallery Dubai Grand Opening 31 May 2008 (Source: Ayyam Gallery)

Before being rebranded as Alserkal Avenue in 2010, the industrial hangar property owned by Abdulmonem Alserkal was leased on annual terms to selected tenants (small and clean industries), and a specialised real estate company managed it (called The Specialist Real Estate – Alserkal Properties). At the time Alserkal were racing to capitalise on high real estate market trends

²⁸⁶ Interview with Antonia Carver – Harper Bazaar Arabia 30 May 2017

²⁸⁷ Kalsi J. *Op. cit.*

²⁸⁸ ArtMap 2012

where prices were at its highest values. This was the time when Al Ayyam Gallery was inaugurated by mid-2008.

When asked about the first reason they chose Al Quoz when they first opened their gallery in the city back in 2008, Ead Samawi, the son of Khaled Samawi the owner and the founder of Al Ayyam Gallery, the first gallery in Alserkal Avenue, said:

- "Honestly, we needed a big space and we don't wanna drive far away. We don't wanna go to Jebel Ali and we don't wanna go to the other side of town [Deira] and we were looking for a place with big wide walls, so we kind of narrowed places down and Al Quoz is actually the most central place in town if you think about it.
- It has easy access, you mean?
- No, central. If you take Dubai, if you take [Dubai] Marina, if you take the airport, it [Al Quoz] is in the middle. And there would be [next to it] Dubai Downtown of course... It was at the centre."²⁸⁹

As deducted from Samawi's reply, the owner of the first gallery in what was to become Alserkal Avenue, the first reasons to choose Al Quoz was the **location**, the warehouse **size** and the **tag price** (i.e. rent). These were all available in Alserkal warehouses.

The Entrepreneurial Action: From a Martiallian District to a Porterian Cluster:

As mentioned before, till 2011, art gallery businesses were attracted to Al Quoz, and Alserkal Avenue in particular, because of its relatively low rents, its quality big-size warehouses on one hand and its location and easy access on the other – a typical agglomeration logic that fit into the Marshallian approach to industrial clusters. With the increase in a number of exhibitions, events and the consequent influx of visitors to Alserkal, other dynamics started to take place in attracting other players to find their space in the emerging district.

What made the change was in fact a number of observations that were made by the owner and the managers of this real estate company and the will of other art players in Al Quoz in addition to the low performing real estate market at the time.

270

²⁸⁹ Interview with Ead Samawi, June 2017



While business and individual network between art gallerists and artists had existed before moving to Alserkal, such network was enhanced by creating a dedicated art event management at Alserkal Avenue. One of the first events under the new management was Al Quoz Art Festival which took place in November 2012. The event has brought together Art Dubai, Dubai International Film Festival, Cinema Akil and ArtintheCity (an intitative managed by The JamJar and Dubai Culture)

to Alserkal Avenue and succeeded in engaging around 30 venues within the Avenue and in Al Quoz area to receive art and cinema enthusiasts over a full agenda of events for one day. The next versions of this annual activity extended over a weekend rather than one day.

Since its early days Alserkal management tried to brand itself as 'the' cultural district of Dubaireferring repetitively to its organic origin and the fact that it was the first of its kind in the country. In their promotional material the district is self-described as: The Cultural District, The Art District and the Hub for art and creativity²⁹⁰.

Alserkal Governance – Managing Path Constraints: Chance, Windows of Opportunity and Adaptation

William Lawrie, the co-founder of Lawrie Shabibi Gallery remembers the time when Alserkal warehousing project was rebranded into Alserkal Avenue, more or less an art district: *"Early in 2011, Alserkal Avenue, which at that time already had three galleries — Ayyam, Carbon 12 and Isabelle van den Eynde — suddenly got three more: Green Art, Grey Noise and us. It was a happy accident:* the Alserkal galleries soon became among the most active in the region. This was noticed by the landlord, who quickly re-strategised to expand Alserkal Avenue to what you see today.²⁹¹

 ²⁹⁰ In a 2012 promotional video on YouTube, Alserkal Avenue also branded itself as "Dubai's Cultural District".
 See: Cultural District by Alserkal Avenue. A Film on Youtube. Published online on 22 January 2014 <u>Online</u>.
 ²⁹¹ Harris, G. (2016) The rise of Dubai's Alserkal Avenue. Financial Times. <u>Online</u>

Lawrie's description acknowledges the strategical action that Alserkal management undertook to change its course of history making use of a particular set of initial conditions towards potentially exponential growth.

Evolution of Relations with Actors: One gallery owner in Alserkal noted that relationship with the district management was not always the same: "Alserkal only became Alserkal [as a brand] 2-3 years ago... The brand and Alserkal nights. Before, it was only landlords and tenants."²⁹²

This change in relation is emanating from the change in the characteristics of the audience mainly: *"Those galleries attracted a lot of people. Then all of a sudden, we [Alserkal Management] got to capitalise on this. How we capitalise on this? We need to create infrastructure around this,"*²⁹³. As such creating the brand was a consequence in part to the increasing interest from the public which is in itself a consequence of the organic concentration of art galleries – the first movers.

One important constraint of the evolutionary path takes shape through conflicts. One gallery owner at Alserkal said: "It is hard to get everyone on the same page because we are different. ... You were saying as a community Alserkal is trying to bring everybody together. [but] Not everybody is interested." The institutional change that Alserkal Avenue occupants went through was sometimes sudden and resulted at some instances in conflicts. Particularly for early movers, the change wasn't necessarily accepted immediately, and adaptation of tenants went through ups and downs.

Expansion – Path Evolution and adaptation: When Organic Became Planned

In 2010, an art community started to form in Alserkal property around the three art galleries existing at the premises at the time, C21, IVDE and Ayyam Gallery. The growing flow-in of visitors, combined with low real estate market activity in the aftermath of the financial crisis, encouraged Alserkal property owners (Abdulmonem Alserkal) and the real estate company responsible for managing the property (The Specialists Real Estate).

²⁹² Interview with anonymous gallery owner at Alserkal Avenue. June 2017.

²⁹³ Interview with Alserkal Avenue management team. June 2017.

Vilma Jukurte, Alserkal Avenue's Director, explained the expansion: "We had more and more galleries joining the community and reached the point where we had no space to accommodate the new creative businesses. The Alserkal family made an investment of Dh55 million to extend the neighbourhood by 76,200 square metres, to twice its former size. New galleries included the first international art spaces ever to open in the history of the Middle East, such as the Leila Heller gallery from New York and the Jean-Paul Najar Foundation (an art museum)."²⁹⁴



Figure 63 Alserkal Avenue in 2017 (Photo source: Alserkal Avenue)

To what extent this addition matters to the Dubai art market, she added: "it signifies the maturity of the art scene to have international galleries opening in this region for the first time. This is part of the synergy of what the UAE stands for in this region. In Sharjah, there's the Sharjah Art Foundation and in Abu Dhabi you have the Louvre, Guggenheim and Zayed National Museums all opening soon. That's probably why the international galleries are now opening in Alserkal Avenue, to get a foothold in this part of the world." (ibid)

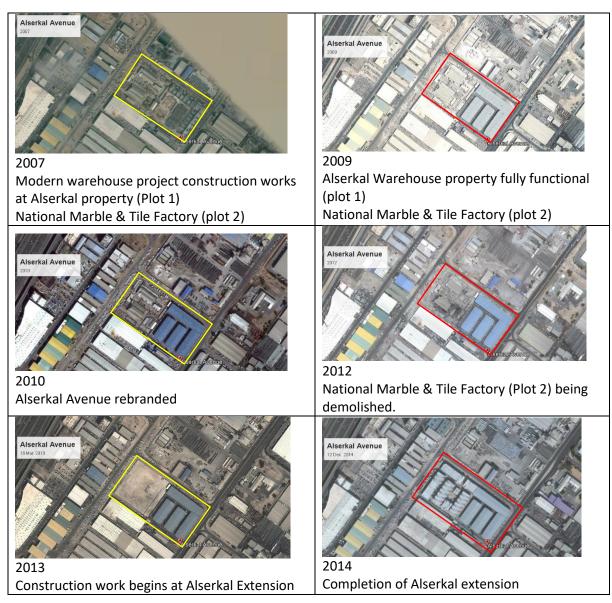
The plot next to Alserkal Avenue was occupied by National Marble & Tile Factory owned by Alserkal family (part of Nasser Abdul Latif Alserkal & Sons group, chaired by Eissa bin Nasser

²⁹⁴ Hill J. 2016 Alserkal Avenue director helps make a creative-type economy. In The National Newspaper Oct.
23, 2016. <u>Online</u>

Alserkal – father of Abdelmonem bin Eissa Alserkal, and Ahmed bin Eissa Alserkal) since the eighties at least ²⁹⁵ (the group itself was established by Nasser bin Abdul Latif in 1947²⁹⁶).

The table below illustrates the different stages Alserkal Avenue went through since its inception as an industrial warehousing property in 2007 until today.

Table 23 Alserkal Avenue Evolution - Satellite Images 2007-2015 (Source: Google Earth Historical Imagery)



²⁹⁶ Alserkal Group About Us: website: <u>http://alserkal-group.com/about-us/</u> [accessed Dec. 12 2017]

²⁹⁵ Giselle C Bricault (Ed.) 1988 Major Companies of the Arab World 1988. 12th Edition. (: p. 361). Graham & Trotman Limited, London.

Mutual interest – Co-evolution at the district / company scale

Hetal Pawani, the director of The Jamjar at Alserkal Avenue, reflected on the move of her organisation to Alserkal Avenue in 2016: "When we moved last year, this [Alserkal Avenue] was already a flourishing community. For them we have become like the learning component of their avenue. They also saw it was fit to bring a well-established brand in the art to the avenue. There were a lot of people who used to come to our old space who never came to Alserkal. So, we brought a lot of people to Alserkal as well. They brought a lot of people to us who didn't know about The Jamjar as well. It is kind of a **nice two-way relationship** you know."²⁹⁷

In 2012, Alserkal Avenue having established their brand with around 20 creative businesses, including some of the finest and the first art galleries in the area (namely Carbon 12, Gallery IVDE, Al Ayyam Gallery and Lawrie & Shabibi), they tried to attract some of the other established galleries in the town, except they were out of space, expansion was the solution.

Main galleries to be attracted were: The Third Line (the second commercial gallery in Al Quoz after Dariush Zandi's Total Arts at the Courtyard), The Jamjar, an art atelier / platform established in 2007 in Al Quoz, and Green Art which also was one of the first commercial art galleries in Dubai, established in 2005 in Jumeirah.

At least three of the interviewees who own or manage an art-related business in Alserkal Avenue have confirmed **preferential rental prices offered by Alserkal management** in their leasing contract to ensure bringing well-established art businesses to the district. One organisation that moved from Al Quoz area, two blocks away from Alserkal has justified the move using a cost-benefit analysis saying that joining an already established art community in a quality space with a year-round activity agenda has come for only a 20% increase in price from their previous space. This hints immediately at the incentive strategy Alserkal Avenue management is using to attract art business players, probably prioritising those with a long history in Al Quoz area.

As mentioned above, the early events that managed and created by Alserkal Avenue Management were partly targeting bringing new tenants to the complex. Most notably, Al

²⁹⁷ Interview with Hetal Pawani, June 2017

Quoz Art Festival that is an annual event that brings together venues in Al Quoz area to receive art and film enthusiasts for free over one or two days. Eventually, Al Quoz art galleries participating in these events were tempted to move to Alserkal. Of these were The Third Line, The Jamjar and Cinema Akil, all of which found their new place when Alserkal inaugurated its expansion by the end of 2014.

Financial incentives provided to occupants of Alserkal Avenue could also be in the form of partnership and sponsorship. In the first case, Alserkal enters into a partnership contract where they provide the space (at a low rental rate – None of the entities involved in a partnership with Alserkal failed to confirm the preferential rates). In return, Alserkal uses the partnership as a means of marketing, branding and community building, while the other party conforms with programs designed by Alserkal Avenue team themselves. The primary example of such partnership is Jean-Paul Najar Foundation managed by Deborah Najar.

Alserkal also paid attention to the growing interest from **international players** and sough attracting them to their premises. The art exhibitions (mainly Art Dubai) gave art galleries in UAE, Dubai and particularly in Alserkal Avenue the opportunity to explore attracting 'tenants' from beyond the local market. As seen in the previous chapter, the city image as an incubator for art and art businesses, evidenced by a growing reputation of its art fairs and events, is attracting more interest from international players. Alserkal Avenue made sure they relay the message that they target to host branches of art businesses that are already based abroad. As early as 2010, Grey Noise co-owner Umer Butt was their first out-of-town client. He moved his business from Pakistan. Other cross-the-border art galleries welcomed into Alserkal before it was rebranded in 2012 include Etemad Art Gallery from Iran, Barakat Gallery from Jerusalem and La Galerie Nationale, an artisanal furniture and art dealer based in Paris.

After that, the expansion plan was a true opportunity for Alserkal to capitalise on their nascent status as an emerging art district (the first in the country) to shift their strategy to develop a selection process by which they choose the best candidates for filling one of their spaces.

Managing the evolutionary path: Priority Selection List

As demand for exhibition space and art gallery space within their complex took a new turn with an increasing number of events collectively or individually planned among the complex tenants, the brand itself became a growth driver for Alserkal Avenue. Alserkal began to capitalise on its growing reputation to push forward their development plans and began to follow an adaptive strategy centered around selecting the prominent art players in the market, either locally or internationally. Alserkal Avenue Manager, Vilma Jukurte, descibed the dynamics of such an evolutionary stratgey: "Back in 2012 when we announced our expansion, we received almost 700 submissions for the space, and we only had 50 spaces available. The home-grown talent that we've met with in the past few years has demonstrated the level spreading within this region. And we still have new spaces opening as part of our community. Apart from Alserkal, there are very few places in Dubai where artistic entrepreneurs can see their businesses have a home. In emerging economies, the role of arts and culture really shapes the cultural geography of the country and the identity of the city itself. In the next five to ten years we foresee "cultural economics" playing a more significant role within the UAE and the region." (*ibid*)

Announcing the expansion plans in 2012, Alserkal was using brand awareness and reputation to drive growth and the targets were apparently driven by two motives: 1) increasing the strength of the brand: by attracting international players, reputable local players and more events and 2) generating more profit by increasing its leasing rates, offering retail and F&B spaces at above-average rates, dedicating more on-demand spaces for events.

International players were Leila Heller Gallery from New York and Custot Gallery from London, while local players included The JamJar and The Third Line, two of the earliest players in the art business in Al Quoz Area. Other tenants in the new expansion include two restaurants, one design furniture exhibition Ikon, among others.

Managing the evolutionary path: Partnership with non-profit organisations

Deborah Najar, the manager of JPN Foundation, a non-profit quasi-private museum, quasiexhibition space, is describing the mutual interest that brought her and the art collection of her father to Alserkal Avenue: *"They [Alserkal] expressed an interest in having a non-profit institution in Alserkal. My goal in the end is to have an exhibition seen by the largest possible number of people who'd learn to appreciate."*²⁹⁸

²⁹⁸ Interview with Deborah Najar, June 2017

Ramin Salsali, owner of Salsali Private Museum, the first of its kind in the UAE: "I had the choice between Berlin and Dubai and I decided upon Dubai. Dubai is not just a city – it's an amazing university and leader in the Middle East with technological advancement, tolerance and dynamism. In 2011, I selected Alserkal Avenue based upon its artisan flavour and authentic location. Today, I would do it again. Alserkal is the epic centre of creativity for the entire Middle East."²⁹⁹

For the diversity of businesses one interviewee highlighted: "we've Gulf Photos next door and everyone's doing something different. And there is an exhibition for furniture design. Yea design of furniture and art piece, the furniture that they get from Lebanon but I think at any place you have this community feeling when everyone is together on the same page. It is hard. It is going really well. I mean the weirdness of Alserkal is getting more and more."³⁰⁰

Public Policy and Alserkal District

It is noted that the emergence of Alserkal Avenue happened in the absence of governmentrelated entities taking part in the process. On the contrary, according to the observation of some interviewees, it seems like both parties, Alserkal and the government (mainly Dubai Culture) were acting deliberately in separate directions (or as Antonia Carver put it: *disjointedly*). While this is understood at the early days of Alserkal Avenue (before it was rebranded as an art district in 2012), the low collaboration is sometimes not entirely justifiable afterwards.

Before 2012, Alserkal was not presented as an art district, and the governing of the district was done in a pure tenant-landlord relationship style. Galleries were acting on their own without a central entity to manage their collaboration among themselves or with other parties out of the district. In brief, up to 2011, there were only six art galleries. It was the city's big cultural events, such as Art Dubai, Sikka Art Fair and Sharjah Biennale that brought private and public entities together. Support of the government was not realised mainly through the annual exhibitions, but it was manifested through individual initiatives such as in the case of art awards. For example, Ramin Salsali was awarded twice the Sheikh Mohammed bin Rashid

²⁹⁹ Interview with Ramin Salsali – Art Radar Online

³⁰⁰ Interview with Koroush Nouri, owner of Carbon 12 Art Gallery. June 2017.

Patrons of the Arts Awards, and his private museum project won praise from the Dubai Culture and Arts Authority³⁰¹.

Even after the area was rebranded as an art hub, it is the private initiatives of art galleries that brought Dubai Culture to Alserkal Avenue through dispersed and 'rare' events rather than Alserkal management. Nevertheless, starting in 2015 forward, this has seen some change.

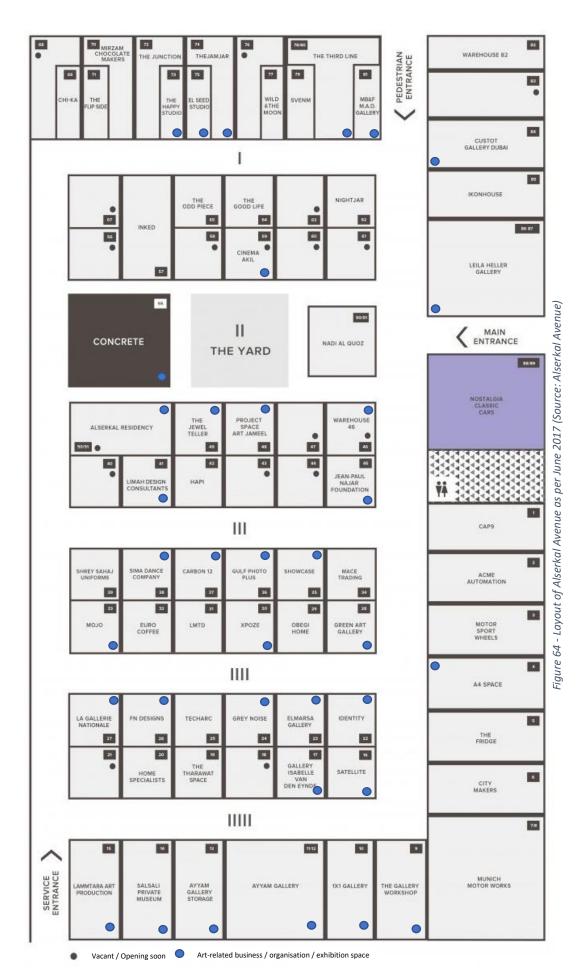
Inter-organisational Change: Alserkal – Government Relations

It is evident that with the increasing diversity of players involved with activities at Alserkal Avenue, the government entities (Dubai Culture) were also involved and collaborating. In 2015, **Creatopia**, self-described as *'the nation's first government empowered virtual community for creativity'* was launched by Dubai Culture and it involved artists and art businesses in the city including those in Alserkal. An 'Art Lab' to plan the activities of this project was held in Alserkal Avenue.

Another initiative has seen Sheikh Hamdan bin Mohammed, Dubai's Crown Prince, opening in April 2017 an office for one of the government initiatives (City Makers) in Alserkal Avenue, a step seen by some as a supporting gesture to the art community and to Alserkal itself. The mission of City Makers though is not related to creative business but is instead focused on improving the government customer services. Examining possible collaboration between Alserkal management and the government did not reveal any systematic or planned cooperation.

When asking about how Alserkal in the last 10 years of existence didn't manage to convince the government entities to participate in the beautification of the area and, at least, upgrade the condition of the surrounding streets, a manager at Alserkal Avenue highlighted industrial nature of the area is part of the attraction of the district, in a way to avoid admitting the lack of effective communication with the government. On the other hand, though, some of the complex tenants have highlighted the issue as evidence that the government is not putting much attention and resources to promote this area.

³⁰¹ The National Newspaper July 2011



CULTURAL AND CREATIVE CLUSTERS IN THE SPATIOTEMPORAL CONTINUUM: DUBAI ART & DESIGN DISTRICTS AS A CASE STUDY – DAMIEN NOUVEL. UNIVERSITY OF ANGERS 2018 However, Alserkal management stated that government individuals are present during different activities of the district as they are always invited. Thus, communications are established mostly through events and planning for them.

Nevertheless, Made in Al Quoz (written Alquoz), was a governmental initiative part of Dubai 2021 plan and its focus was in part to upgrade the condition of Al Quoz area. The participation of different entities was assured during the discussion. A possible outcome of this initiative is yet to be seen in the coming years.

More recently, art players in the city were invited to a brainstorming session in 2016 and in 2017 to enhance cultural planning of the city also as part of Dubai 2021 plan.

Dubai Design District: A Top-down Initiative with Multiple Objectives

"Let us work as one team to transform our city into a cultural hub that attracts creative artists. I want Dubai to remain a melting pot for peace, harmony and love, a vibrant place for all" - Sheikh Mohammad bin Rashed Al Maktoum, Dubai Ruler.

As seen from the previously in this chapter and in the previous chapter, developing a cultural



district was long planned to be included as an item on the agenda of the Dubai government. Such a project was materialised in Al Khor Cultural District plan back in 2008, however, the severity of the **financial crisis** that hit the world and Dubai in the fall of that same year has caused to shelve this project among many others, among also many other consequences. This had led, as we argued before, to the emergence of the organic cultural district represented mainly

by Al Quoz area and more specifically as the private initiative Alserkal Avenue as a concentration of art businesses. On the other hand, the financial crisis has led to the delay in Al Khor project and the segmentation the entire project into *packages* among different real estate developers. However, cultural facilities remain an essential part of these packages. These facilities are seen now in Opera District, Al Fahidi District and Al Seef Project.



Figure 66 - A Promotional poster of one residential tower at the Emaar Opera District (Source: Manzel Kareem Real Estate)

Once it is established that the government cannot afford a large-scale cultural development, it was real estate developers who saw opportunity in jumping in to initiate a similar project. First, it was Emaar, the largest real estate developer of Dubai, who announced Emaar Opera and Art District, then TECOM, the real estate development arm of the government-own global investment giant Dubai Holding, who announced Dubai Design District, and later Meraas, a private real estate developer funded by Dubai Ruler, planned an art district as part of Satwa Redevelopment but kept their plans unannounced mainly due to lack of financial feasibility.

In 2014, the government commissioned Meraas, a property development company to develop 1.8-kilometre plot extending from Al Fahidi area at an estimated cost of AED 2 billion (USD 0.6 billion)³⁰². In addition to a floating market, hotels and restaurants, the announcement also highlighted the cultural elements of the project that included art galleries and shops for local handicrafts. As such, Meraas's Al Seef (officially Marsa Al Seef) project is a tourism-led real estate development with cultural elements that connect to the historical characteristics of the area, however it is difficult to characterise the project as a culture-led project.

So far, the realised phase one of the project saw a retail and hospitality destination. Information about the cultural component in the next phases of the project is yet to be revealed.

³⁰² WAM (Emirates News Agency) 2014 Mohammed bin Rashid approves Dubai Creek front development project Online

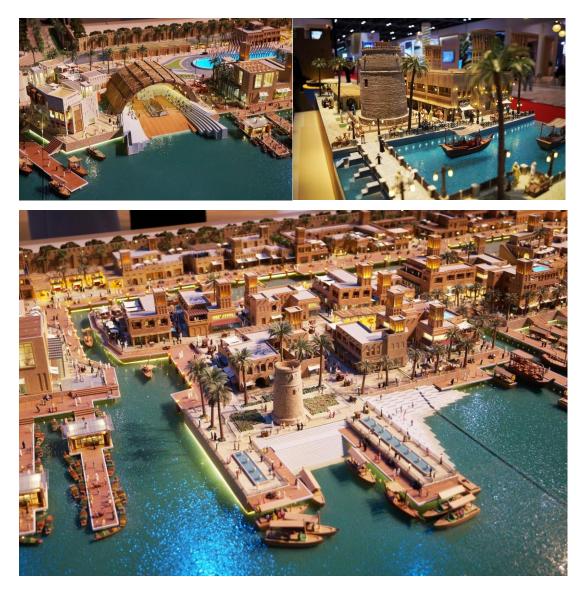


Figure 67 - Marsa Al Seef Development Model - Heritage led architecture with cultural elements (Source: prosearch.ae)

Though it is tempting to analyse the dynamics behind the three developments, and the motivation of their respective developers, we choose to focus on the most significant project, Dubai Design District, as it has materialised to be the biggest deaddition to the art completed in its first phase, while its next phase is to be started in 2019 and as it has the most variety of art and design businesses among the three and its culture-oriented nature.

TECOM, Emaar and Meraas: The Complexity of Private-Public Partnership

The three leading real estate developers interested in cultural and creative districts are linked strongly to the government in UAE and Dubai, though not exclusively as they share this characteristic with many other semi-private entities in the country. The relationship is seen from three dimensions: (a) either the company has been funded directly or owned (partially or entirely) by the government, which is the case of TECOM which is the real estate

development arm of government-owned Dubai Holding; (b) owned partially (in the form of shares) by the government entities and privates in the government including the royal families – which reminds of the double role of government officials as evoked in the previous chapter –which is the case of Emaar Properties PJSC; or (c) owned and funded by a selection of the elites in the city including the ruling family, which is the case of Meraas.

As such the three companies, though each represents a different governing structure, all share a strong influence of the government personalities including the ruler himself and the ruler's inner circle in both official and personal links. The question, hence, arises on how instructions, directions and information are passed through the three real estate companies in order to realise strategic projects (such as a cultural district). First and foremost, all three companies are profit driven and subject to strict financial auditing and decisions to initiate projects are based on immediate financial feasibility rather than long-term or strategic feasibility. To some extent, this mentality is mirrored throughout different real estate projects over Dubai and extended beyond (more on the Dubaisation concept in chapter V). However, the process selection and retention of projects is a complex series of an in-and-out flux of information within the company managerial and executive levels to the parent governmental bodies (Dubai Holding in the case of TECOM) and up to the Ruler's office.

It is noteworthy to highlight that the decision-making process for these urban initiatives is different in each of these companies. While the top official in all three companies has a direct relationship with the Ruler's office, decision-making and project discussion is not necessarily discussed at the top level, but rather in the middle management where the experienced professional teams balance different options and propose initiatives (based on interviews from senior managers³⁰³ from Emaar and TECOM). Nevertheless, it is noted that the three companies are referring consistently to the strategic plan of the city and the ruler's vision as their inspiration for projects.

For Meraas the decision influence is more apparent at the senior management level rather than at the middle management level according to a senior manager in Meraas. The chairman of Meraas Abdulla Ahmed Mohammed Al Habba enjoys a direct relationship of the ruler's

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³⁰³ Senior managers in this case are in the middle management (Department director and team)

office³⁰⁴, and he was appointed as the chairman of Dubai Holding in 2017. Meraas's CEO is also the Chief Executive Officer of the Engineering Office – The Private Office of Dubai Ruler, Mohamed Bin Rashid Al Maktoum, a post he has held since 2004.

In this regard, while Emaar and TECOM are relying mostly on official channels (yet not entirely as personal links take a partial role), other companies are using mostly personal channels to relay information aiding taking decisions over different layers of managing and with authorities.

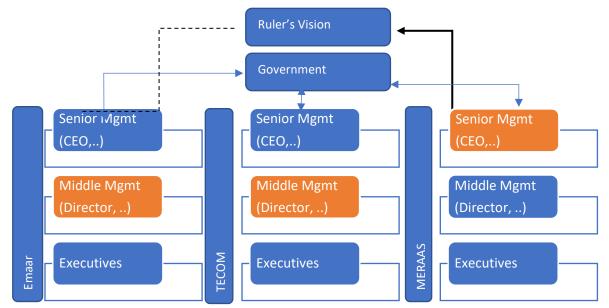


Figure 68 - Strategic Project Decision Making Sequence and Relation with Authorities for Three Key Dubai Developers (project initiating is marked in orange)

Dubai Design District: In the Beginning there was TECOM

Dubai Technology and Media (TECOM) Free Zone Authority, is a government entity responsible for the development of knowledge clusters like ICT, media, education, energy etc. Founded in 2005, TECOM took over the already established knowledge-led industrial district such as Dubai Internet City, the first of this type in Dubai, and Dubai Media City and Dubai Studio City. Most recently, TECOM inaugurated its most recent addition to its *'collection'* of

³⁰⁴ Nicolas P. (2014) Dubai Government-Owned Developer Meraas Holding Mulls IPO. In Wall Street Journal Aug. 7, 2014: <u>Online</u>

knowledge-based industrial districts; Dubai Design District (D3) – inaugurated in 2014 - the first of its kind in the region.



A MEMBER OF DUBAI HOLDING manage Dubai Design District. Without going through the history or the details of the company behind developing Dubai Design District, it is essential to understand the different entities and objectives that came together to initiate, create and

In 2013, a specialised entity to encourage fashion and fashion design in the country was proposed as part of the government strategy to diversify its economy. This was subject to intensive discussion at the highest levels including The Executive Council, TECOM and leading design business owners. The fruit of these deliberations was the Dubai Design and Fashion Council. Dubai Technology and Media Free Zone Authority (now Dubai Creative Clusters Authority) was brought on board to develop a roadmap for the design and fashion industry. Deloitte, a market research company was commissioned to study the design industry in the region and to establish key findings and recommendations upon which the newly incorporated council could establish a strategy. Amina Al Rustumani, the CEO of TECOM, was appointed as the president of Dubai Design and Fashion Council until 2018.

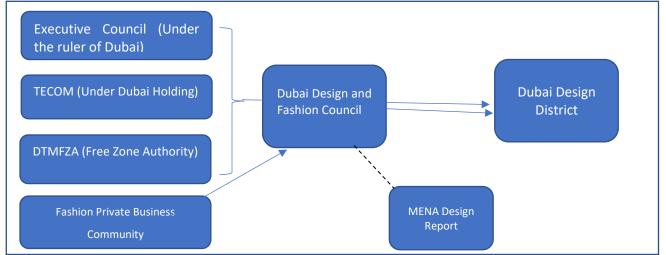


Figure 69 - The Birth of Dubai Design District

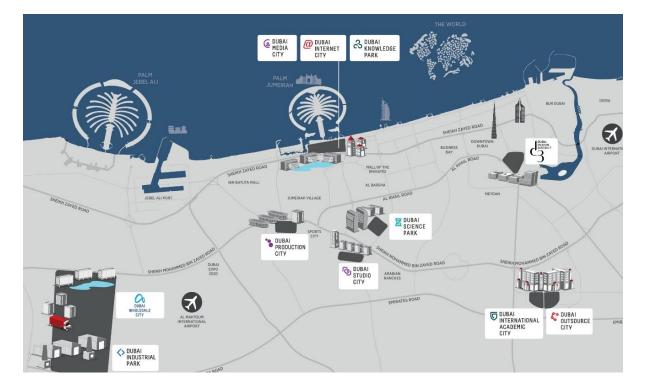


Figure 70 - Map of TECOM 'Business Communities" including D3 (Source: TECOM 2016)

Path Evolution of D3: Personal Networks and Incentives, (lots of both actually).

During an interview with the CEO of Chalhoub, (Chalhoub is the leading fashion manufacturer in the region and the key anchor tenant in Dubai Design District and the first occupant that took up two entire buildings), he revealed that the dynamics of interaction between different entities involved in the district and how the personal relations played an important role to bring Chalhoub to the district³⁰⁵. The next anchor tenant on the list was Art Dubai, D3 was able to secure the acceptance of Art Dubai management moving their headquarters from Dubai downtown to D3.³⁰⁶

Among the key actions taken by the newly-formed D3 inauguration team include liaising with potential international partners for identifying opportunities to promote the D3 brand across core industry events/ platforms globally. This included a partnership with Wallpaper Magazine at Milan Design Week and with Remix at their summits in New York, London & Sydney.

³⁰⁵ Interview with the CEO of Chalhoub. June 2017

³⁰⁶ Interview with Executive Director at Art Dubai. June 2017

Incentives included preferential prices to certain tenants, from specific categories such as pure fashion and design retailers, but selection criteria were gradually opened to include more categories (such as art dealers and art galleries) especially in the light of the market slowdown in 2015.³⁰⁷



Figure 71 - D3 Phase 1 Building Layout (Source: D3)

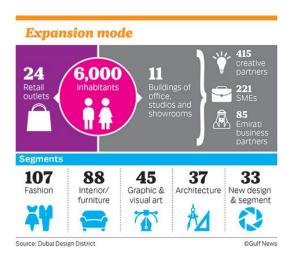


Figure 72 - Components of D3 as per July 2017 (Soucre: Gulf News)

³⁰⁷ Knight Frank was appointed the real estate agent of D3 in 2015.

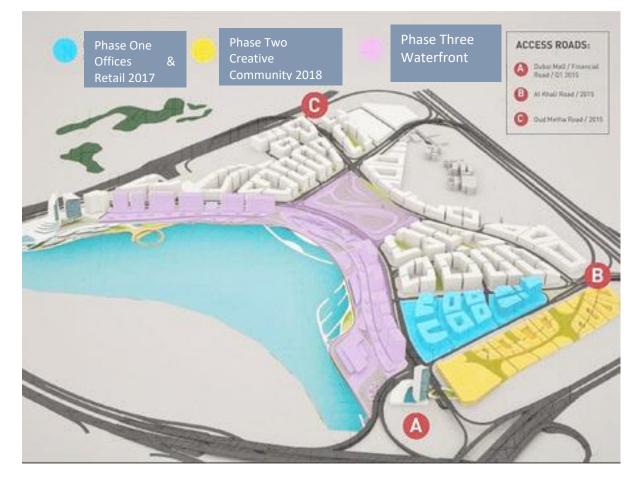


Figure 73 Dubai Design District Master Plan and phasing with their initial planned completion dates (source: ClassyDubai.com)

Going back to the vision of the ruler, he highlighted the role of the design industry in shaping the future, noting that the "economic sectors that depend on innovation and creativity are the actual movers of the economy. We must focus on encouraging talent and help them to blossom and become an active part of our economy and community."

"The UAE has become a global hub for diverse knowledge-based sectors. Our aim is to consolidate our status in the design sector, in which we have tremendous potential for growth, and make our country a preferred destination for global companies. We also aim to position the UAE as an incubator for creative ideas and professionals."

As per mid 2017, the design district hosts more than 415 businesses, of which 211 SMEs and 85 local Emirati companies, with more than 7,000 workers as per statements from the managemnt of D3³⁰⁸.

³⁰⁸ Gulf News 2017 Shaikh Mohammad visits Dubai Design District. July 12, 2017 Online

Path Evolution of D3: The Local Buzz and Community Building through Events

Since the early days of the district, even before it was officially launched, the organisers (the management of the district) was paying much attention to the importance of the local buzz in creating 'footfall' and consequently generating more interest from local and international design, art and fashion entrepreneurs. The launch event of D3 in April 2015 was called 'Meet D3' as it was meant to introduce the district to the public and the it was first to be organised by D3 management team. The event included street art shows, music performance and other activities curated by *"to feature a compelling mix of local, regional and international designers, artists, musicians, concept retailers and unique dining experiences"* as per the event's website³⁰⁹. D3 estimates the number of visitors at Meet D3 event by 30,000.



Figure 74 - Meet D3 Promotional Poster (Source: TheCulturist.com)

³⁰⁹ Meetd3.com

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However, even before that, the first public event on site was Sole DXB, an annual footwear, music, art, and lifestyle festival which was held in November 2014 before the district was publicly launched³¹⁰.



Figure 76 - Flyer of Dubai Art Season 2016 (Sponsored by Dubai Culture and D3)



Figure 75 - The logo of Dubai Design Week

Dubai Design Week was also inaugurated in November 2015 under the organisation umbrella of D3 as a means to emphasise the creative character of the district. The annual event is held every November at venues across the city, with the hub location of Dubai Design District. This event is a continuation of Downtown Design event which inaugurated in 2012 and it operates in

the same way as Operating in much the same way as Dubai Art Week, which takes place in March every year. The idea behind the event is to group a range of design-related events and exhibitions under a single banner at a centralised venue – in this case it is the newly inaugurated Dubai Design District (d3). At the heart of the event is Downtown Design, a bespoke trade fair where professionals in the region can discover original, high-quality designs from all over the world. However, just as Art Week pivots around Art Dubai, the fair is simply considered the starting point of the new event. On the other hand, Dubai Art Week, together with Art Dubai, and the many art and cultural activities around March every year are called collectively Dubai Art Season.

³¹⁰ McLaughlin-Duane R. 2014 Sole Dxb 2014 urban culture event taking place in Dubai's d3 design district. The National Newspaper 11 Nov. 2014. <u>Online</u>

Path Evolution of D3: The Next Phase

The success of the first phase of the district can be measured, according to the management of D3, by the number of creative businesses opening in the district and the number of visitors. Both of those measures are satisfied to the maximum level³¹¹. The success calls for expansion and that reminds of the other cultural district in the city, Alserkal Avenue. However, on one hand, Alserkal's expansion was not planned, while D3 original plans included such expansion since the project was announced in 2012. On the other hand, the large size of D3 meant a slower market absorption of spaces offered which in consequence would delay the execution of the next phase. The slowness of leasing D3 spaces was justifies by a slowdown in the real estate market in 2015³¹². On the contrary, Alserkal Avenue's performance showed less uncertainty as they had already a priority list to choose the potential tenants from³¹³. Nevertheless, D3 announced arriving at an occupancy of 95% in October 2017 with around 7000 'creative' workers³¹⁴.

The next phase of D3, labelled as The Creative Community, comprises low rise building with studios, art spaces and workshops, and was set originally to be inaugurated in 2019. However the on-site observation indicates that the delivery of the project might not take place before 2020.

The one million square foot Creative Community is designed to act as the district art and cultural production nerve (contrasted with the current concentration of design-intensive companies in the current phase). By attracting emerging designers and artists, the objective of D3 shifts from being a design district towards being a creative district through developing a self-sustained community with the 'creative class' at its epicentre. As per one of the managers of Foster + Partners, the district architects, the district is intended to be self-sustaining: *"We analysed the way that spaces were being used, and then brought a variety of functions together to encourage collaboration between disciplines. This, combined with the highly flexible modules, will help to create a thriving, self-sustaining community"*³¹⁵. As such,

³¹¹ Interview with Michela Celi, Strategy Manager, D3.

³¹² As evident from different property consultancy reports at the time (e.g. Knight Frank, Cluttons, etc.)

³¹³ Interview with Vilma Jukurte, Manager of Alserkal Avenue. June 2018

³¹⁴ Trade Arabia (2017) Dubai Design District posts solid growth, October 18, 2017. Online

³¹⁵ Nick A. (2015) Dubai Design District Phase Two by Foster + Partners revealed. In Design MENA Online

it is safe to state that the evolutionary perspective of community growth is considered well ahead in the planning phase of the district.



Figure 77 - Dubai Design District Phase 2: Creative Community (Source: D3)

While playing a central role in the tourism industry that complement the city's image fits in the outline objective of the government. D3 will also feature a 1.8 km waterfront development alongside the Dubai Creek, with international and design-led hotels, boutique retail concept stores and an outdoor events space, as well as a host of hospitality and leisure facilities. What has begun as a profit-generation strategy through mixed real estate dynamics with incentives for anchor tenants, has the potential to become a creative hub in the next phase. However, this functional 'upgrade' is yet to be seen on the completion of The Creative Community.



As per one manager in D3, the plan for the next phase of the district is to "offer flexible workspaces, workshops and galleries. All constructed around a central courtyard. We will offer them the chance to create a real community of architects, interior designers and artists of all types. We have already had

Figure 78 - Logo of Dubai Institute of Design and Innovation which is situated within D3

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a lot of interest and that is sure to grow as construction of Phase Two gets underway."³¹⁶

3. Conclusion: The Complexity of an Emerging District

"The arts scene here across the UAE has developed in quite a post-modern way – non-linear, circulatory, at speed, occasionally disjointed. In Dubai in particular, this growth has been organic in nature, and driven by a series of such dedicated and passionate individuals, working across the commercial and non-commercial sector"³¹⁷ – Antonia Carver – Ex-Director of Art Dubai

Antonia Carver is the previous director of Art Dubai and the current manager of Art Jameel, an upcoming art and cultural complex on the creek-side developed by the Saudi business mogul Abdul Lateef Jameel. She has summarised the complexity of the art development in Dubai. *"Rather than planned and controlled by the government, the art scene emerged in unpredictable way, from little or no predetermined conditions, in a series of 'non-linear' trajectory that comprises ups and downs at different levels"*. What applies to the art scene in the city as a whole could be extended to the art and cultural districts. The trajectory of evolution of these districts was, and still is, a multi-layer mesh of events that are mostly fragmentary and mostly unpredictable. Even though some actions are planned, the resulting status is achieved at a certain speed that is fuelled by 'passion' and 'persistence' whether at the collective level (government and institutions) or the individual level (companies and individuals).

What is interesting in the district level is to see how complexity works in favour (or sometime in disfavour) of building the district either as an organic phenomenon as the case of Al Quoz industrial area or by planned action as in DIFC and D3. However, complexity also means that changes applied or absorbed by agents might diverge the system away from the current status that is not necessarily stable or settled. A planned project is left for organic growth at some point, while on the other hand, an emerging organic development might be the target of strong intervention that constrains its trajectory and thus it falls into the hands of a controlling

 ³¹⁶ Brady A. (2017) In Conversation with Antonia Carver. In Harper Bazaar Arabia 30 May 2017 <u>Online</u>
 ³¹⁷ Ibid.

authority. Evenmore, the district can witness both cases over time; it evolves crossing borders of planning and organic development from time to time.

What Antonia Carver refers to in the organic growth of Dubai art scene is that it didn't fall into the typical growth logic of the city economy where an industry is capitalising heavily on governmental initiatives whether it be a government subsidy (in sectors such as real estate, financial services, logistics etc.) or a dedicated specialised industrial district (e.g. Media City, Internet City, Sport City etc.). Instead, the art scene was constructed in Dubai bottom-up driven by the market, by art businesses and artists.

As seen from the previous section, the government intervention was present as secondary and supporting to private initiatives, such as when the DIFC's patronage of Art Dubai was developed into a permanent partnership. While state-led initiatives dominate in Dubai DNA of the government, there was no state-led cultural district, and that has its anecdote in history. However, it is not precisely the case; it is the financial crisis in late 2008 that forced the government to cancel Al Khor Cultural District project.



WHO WE ARE

II

Situated within the industrial area of Dubai, we are a home to almost forty creative and industrial businesses within one block radius, and since 2007 grew to become **the only organic Arts District of Dubai** and the UAE. What at a first glance looks like a block of warehouse spaces, within we are a home to almost twenty arts spaces...

Figure 79 – An Excerpt from the first Alserkal Avenue website in 2013. It is self-described as an **Organic Art District**. (emphasis added) Similarly, Alserkal Avenue is self-claiming that it is an organic development. One art business owner in Alserkal described her idea of the organic development of the art district saying "[Alserkal] warehouses, it looks like warehouses, and it is really authentic.' She insisted on the particularity of the region as the origin of its cultural developments "We have to stop comparing this region to something that you cannot compare to and start looking at it as an opportunity to create our own definitions, to create our own terminology and models that work for us." As such, for her an organic development is not necessarily entirely organic 'by the books' but still is thus considered given the context of the city itself.

It is noted that using the organic development argument is more as a marketing tool to Alserkal Avenue, in the same way, they use the concept of the 'Eco-System'.

In a number of interviews with art market players (including the Manager of Alserkal Avenue, a government official and an urban developer), the question on their view on the organic evolution aspect of an urban district (i.e. a cultural district) is met with their understanding of the phenomenon as part of the ecosystem in general. Confusing the complexity interconnected scene of the city (the city as a complex adaptive system) with the organic dynamics of emergence of these districts might be part of this misconception. The concentration of art business in al Quoz happened in an organic way, but the development of Alserkal Avenue and the change in its identity from an industrial complex to an art district has happened by an entrepreneurial action aiming at benefiting from real estate logics (mainly leasing spaces) to generate profit.

In this context, we infer that it is the real estate logic that governs the urban economics of Dubai and that led a private entity to build on the organic development of an industrial district becoming an art district to initiate a cultural-industrial complex that follows in the same time a cultural agenda and a real estate business.

Similarly, the entrepreneurial rise in Dubai is fuelling the rise of these districts. Dubai is witnessing an increasing number of homegrown start-ups and attracting international players into the cultural scene, growing together with government-led initiatives to encourage a more vivid scene.

A real estate managers noted the interwined destiny of both Alserkal Avenue and D3 given the different offering of both districts which carters to different types and levels of creative talents. However, he also values the entrepreneurial trend that drives demand for both districts: "D3, with its investment grade offices, ateliers and retail outlets is a perfect example of blurred edges between spaces of work and play. Furthermore, regeneration activity across older industrial areas, such as Al Quoz, is leading to offbeat warehouse-based art centres, start-up incubators and gymnasiums increasing take-up in the district – for example Alserkal Avenue."

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He also added "Through the development of these pockets of art, design music and sport, integrated with retail and F&B, Dubai is learning to use urbanism as a powerful tool to enhance public interactions through built and particularly open spaces, a progressive shift from the dominant "build big" philosophy".³¹⁸

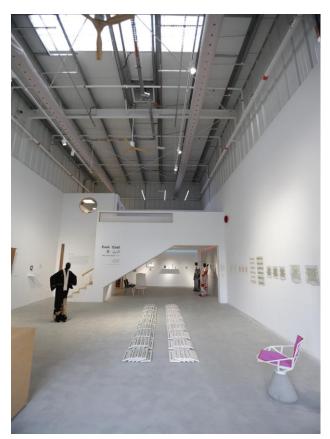


Figure 80 - Chi KA Art Space for Rent at Alserkal Avenue (Source: Chi-KA)

Chi-KA, for example, is offering their open space (Approx. 110 Sqm + 20 Sqm office) for rent at AED 20,000 (USD 5800) on a daily basis. Lower overheads help whereas Custot's Mayfair gallery costs \$500,000-\$600,000 per year in rent, the far larger space in Dubai costs \$150,000. 'In a way, it's a laboratory,' says Custot. 'The gallery I have in the UK is more established, so people expect more classic modern and contemporary art.' In Dubai he exhibits emerging artists whom he would not display in London and, in January 2018, he plans to mount an exhibition of artistdesigned jewellery. However, he is finding a market for higher-value works by more

established names, too: 'At Abu Dhabi Art, we sold a painting by Marc Quinn for over \$150,000. We've sold maybe five or six works here for over \$100,000.'³¹⁹

In conclusion, the evolution of these districts is neither organic nor planned, but a mix of both constrained by strong path dependency and a rise in entrepreneurial forces.

 ³¹⁸ City Scape Global (2017) Dubai office sector embraces the age of fitness. City Scape Global. <u>Online</u>
 ³¹⁹ Brady A. (2017) How sustainable is the art scene in Dubai? Apollo Magazine <u>Online</u>

GENERAL CONCLUSION

Just like any *journey* in an Evolutionary Economics dimension, which comprises *variety, selection and retention*, it is retention that defines the future path. This conclusion serves as the retention of this thesis's journey, an end of a stage, but only a transitional end that opens the door to another stage. What we might retain from this work of examining the evolutionary path of art and cultural districts in Dubai is not only a step towards understanding further one of the fastest growing cities in the world in the 21st century, but it is also a step towards further enhancing the theoretical approach into the dynamics of cultural and creative clusters in Evolutionary Economic Geography.

In concluding this work, three main outcomes can be extracted. We will first highlight some concluding remarks about the particular case of creative and cultural clusters in Dubai, and how its historical course made it possible for the genesis of these clusters. Second, these learned 'lessons' we will revisit the hypotheses introduced at the beginning of this thesis to show that though the spatiotemporal variation is path dependent. The results of our analysis of the four different cases of Dubai over more than a decade of time bring both empirical and theoretical advancements to light.

1. Learned Lessons

An accelerated evolution

"Dubai has managed to do in one decade what Hong Kong did in 25 years." Isabelle de la Bruyene, Christie's Dubai Director³²⁰

In less than two decades Dubai art and cultural scene has moved from a 'cultural slumber' to a full-fledged cultural hub with a year-round busy local and international agenda of events and activities. Not only Dubai managed to do things quicker but also in a more effective way

³²⁰ During the conference : La scène artistique des Emirats Arabes Unis aujourd'hui. Dans le cadre de la Rétrospective Abdulqader Al Rais. Institut du monde arabe. 26 septembre 2018

for Dubai now features four different cultural districts with different actors and different clustering dynamics that emerged from the same regional conditions, and for Dubai has a developed network of local UAE artists who managed to reach international art circuits. Such richness and variety wouldn't be found in other cases in such short time, even in the case of international capitals of art and culture such as in London, in New York or elsewhere. This can be justified by two things, first the small scale on which the network is functioning where all actors are connected (though to a different degree), and second the efficient role of government which serves as the central nerve around which events are woven and by which events are supported, something that is particular to Dubai, to its history, to its evolutionary trajectory. One can argue that it is the visionary role of elites that actors would more or less lean their actions to, and from which the city builds its cultural strategies. This vision not only gives actors the baseline, the general orientation, but also gives them a form of safety box that can refer to in their risk mitigation plans, similar to the general Dubai development model whether it be its real estate agenda, its financial agenda, or even the cultural agenda.

Temporal Continuum: Refuting the Ex-Nihilio evolution argument

*"We can't begin with nothing because, logically, nothingness is the culmination of something." Jean Baudrillard*³²¹

Even though many of Dubai's urban developments were created ex-nihilio in the middle of a nowhere desert by a top-down urban and economic strategy, these developments would have never happened if it was not for an economic, social and urban justification for their rise. Dubai's cultural evolution can be explained just within the same logic of reasoning. Our analysis of the cultural mutations of Dubai (at the city scale) shows clearly that the city has multiple historical milestones on which the seemingly abrupt cultural awakening was in fact being accumulated with time. The current busy art and cultural scene has its grounding in the small events when for example some UAE students were sent abroad as early as the late 70's on scholarships and who came back to become the nucleus for the local art movement. The entrepreneurial wave, especially in tourism, hospitality and entertainment, that accompanied

³²¹ Baudrillard, J. and Nouvel, J. (2006). Absolute Architecture. In F. Proto (Ed.), Mass. Identity. Architecture: Architectural Writings of Jean Baudrillard (pp. 19-35). Chichester: Wiley-Academy.

Dubai rise in the early 2000s is another factor. Individual expatriates moving to the country for family or professional reasons have their indispensable roles in triggering a demand and supply trend in art and culture. As such the scene is built upon this unique local-global continuous knowledge and learning circuits which are operated by creative class as well as art business enthusiasts and entrepreneurs. Art and cultural districts have emerged through building on the knowledge accumulated through historical milestones triggered by different actors.

Spatial Continuum: Towards a better understanding of the regional favouring winds

The flowering art cultural scene in Dubai is not only dependent on city-scale dynamics in the city itself, but also as a result of trigger-events that take place in other places such as the next-door Sharjah and Abu Dhabi, or even farther beyond such as Hong Kong and Singapore. The invisible dynamics of competition between regional cities is one dimension of this inter-scale dynamics, but the global pipelines through which knowledge and talent are continuously moving inwards and outwards is another critical dimension. Dubai leaned heavily to the cultural accomplishments of other cities in the region, profited from an active art scene in Sharjah with all its institutional supporting settings, from Abu Dhabi's ambitions to bring in world's top cultural institutions which set international eyes on the UAE, and not only Dubai, as a cultural tourist destination. Furthermore, Dubai placed itself as a cultural hub for both cities (and again farther beyond) thanks to its more developed art and cultural business networks with a large number of commercial galleries, local and international auction houses and established collectors.

The genesis of art and cultural districts in Dubai would not have been possible if not for such multi-scalar networks over which knowledge and capital flow in both directions.

Multiple Path Dependency

If path dependency can be summed up in one word, that would be '*options*', or in line with the evolutionary economics terms, it might be '*variety*'. Dubai's evolutionary path has produced a variety of cultural districts from the same regional path constraints, with the four healthily growing in a co-evolutionary path rather than being competing for a survival lockedin path.

Does that have anything to do with the particularity of Dubai socio-economic attributes? No doubt, it does. Dubai economy is built on the late-late, rapid economic development model supported with neoliberal market conditions, which is so unique to Dubai that is being copied by other cities, as nearby as Abu Dhabi and as far as Baku. *Dubaisation* became a world phenomenon with a best-practice guideline book that comes bundled together with it. The cultural districts are inscribed in such urban-socio-economic model, yet they are less explicit, less emphasised. While Dubai is rising as a new global city attractive to financial, real estate and tourism investments, and embroidered with superlative, starchitect icons and a diversity-friendly environment, Dubai is yet to be called a creative city. Dubai is thus an eventful city, focused on attracting visitors and businesses at the same time. However, the surge in creative industry-based events is also attracting creative talent, the core of the future creative city. Nevertheless, Dubai has built its creative capital in a way that was not imaginable one decade earlier. Creative and cultural districts emerged in Dubai are these possible options that path have created.

2. Further Research

This thesis has tackled the question of the genesis of art and cultural clusters in Dubai, which are now in the phase of maturation, however, further questions can be asked. The first question is the expectation of their decline, is it the variety that we will see a different lockin in the future; it can be only known with time. The consequences of the global-city dynamics affect the cultural production of these districts, but does that affect its accelerated or decelerated maturation?

Another question concerns the evolutionary path: while we have seen that the regional favouring winds have produced four art and cultural districts with a variance in their degree of success and maturation, but would there be other options in the future? All these questions need more time for an answer to be envisaged, Dubai cultural districts are still considered young.

Having explored the dynamics of the clustering of creative industries in Dubai, it is evident that the annual events including Dubai art season supported by the government, and Dubai Art fair and the other events, form the main thread of connection between all art and cultural actors in the city, on a year-round basis.

Beyond the city of Dubai, Abu Dhabi and Sharjah have hands in the cultural scene of Dubai as well. Sharjah Art Biennale and the year-round activities of Sharjah Art Foundation have been and are still a nurturing source for not only creative talents who participate, either individually or through their art galleries, in different events curated and sponsored by SAF, or other entities in Sharjah, or through having their works acquired by museums or by collectors in Sharjah. Similarly, the Abu Dhabi recent inauguration of Saadiyat Cultural District, with its main museum flagships, the Louvre Abu Dhabi, inaugurated in 2017, Guggenheim and Zayed Museum (currently still under construction), in addition to Art Abu Dhabi annual fair and the accompanying satellite cultural events provide exceptional opportunities to the Dubai market to thrive further. The Dubai art districts form the nuclei to the UAE art and creative industry network over which competition, cooperation and knowledge spillover are taking place year after year.

BIBLIOGRAPHY

- Abbott A. (1997) Of time and space: the contemporary relevance of the Chicago School. Social Forces. 1997; 75:1149–1182.
- Acuto, M. (2010) High-rise Dubai urban entrepreneurialism and the technology of symbolic power. Cities, 27(4), 272–284.
- Adorno, T. and Horkheimer, M. (1947) Dialectic of Enlightenment. Verso, London.
- Al Sadik, A and Elbadawi I.A. (Eds.) (2012) The Global Economic Crisis and Consequences for Development Strategy in Dubai. Palgrave Mac
- Ambrosino C. and SAGOT-DUVAUROUX D. (2018) Scènes urbaines: Vitalité culturelle et encastrement territorial de la création artistique. In : PECQUEUR B, TALANDIER M. Renouveler la géographie économique. [s.l.] : Economica-Anthropos,(2018).
- Ambrosino C., Guillon V., SAGOT-DUVAUROUX D. (2016), « Genius loci reloaded, The creative renaissance of Nantes and Saint Etienne ». In : LONG P, MORPETH ND. Tourism and the Creative Industries. Londres : Routledge, p. 116-133.ISBN : 978-1-13-883270-1.
- Amin A, Thrift N (1992) Neo-Marshallian nodes in global networks. Int J Urban Reg Res 16:571–587
- ANTONELLI C. (2000) Collective knowledge communication and innovation: the evidence of technological districts, Regional Studies 34, 535–547.
- Antwi-Boateng and Binhuwaidin (2017) Beyond rentierism: the United Arab Emirates' exceptionalism in a turbulent region. Contemporary Arab Affairs, 10:4, 522-536
- Aoun, O. and Farah, J. (2014) La "Dubaïsation", une métropolisation du zéro politique. In J. Dubois (Ed.) Aménager les métropoles : la réponse des urbanistes. La Tour d'Aigues : Editions de l'Aube.
- Asheim, B. Cooke P. and Martin R. (2006) The rise of the cluster concept in regional analysis and policy: A critical assessment. In B. Asheim, P. Cooke and R. Martin (Eds.) Cluster and Regional Development: Critical reflections and explorations. Routledge
- Asheim, B.T., R. Boschma and P. Cooke (2011), 'Constructing Regional Advantage: Platform Policies based on Related Variety and Differentiated Knowledge Bases'. Regional Studies, 45(7), 893-904.
- Audretsch, D. B. / Feldman, M. P. (1996): Innovative Clusters and the Industry Life Cycle. Review of Industrial Organization 11(2), 253-273.
- Baptista, R. (1998) Clusters, innovation and growth: a survey of the literature. In P. Swann, M. Prevezer and D. Stout (Eds.) The dynamics of industrial clusters: international comparisons in computing and biotechnology. Oxford University Press
- Basset K. (1996) Partnerships, Business Elites and Urban Politics: New Forms of Governance in an English City? Urban Studies, Vol. 33, No. 3, 539-555, 1996
- Bathelet H. (2004) Toward a multidimensional conception of clusters: The case of the Leipzig media industry, Germany. In Power D. and Scott A. (Eds.) Cultural Industries and the Production of Culture. Routledge.
- Bathelt, H. (2005) Cluster Relations in the Media Industry: Exploring the 'Distanced Neighbour' Paradox in Leipzig. In: Regional Studies (Vol. 39) pp. 105–127.

- Bathelt, H.; A. Malmberg; and P. Maskell (2004) Clusters and Knowledge: Local Buzz, Global Pipelines and the Process of Knowledge Creation. Progress in Human Geography 28:31-56.
- Baudrillard, J. and Nouvel, J. (2006) Absolute Architecture. In F. Proto (Ed.), Mass. Identity. Architecture: Architectural Writings of Jean Baudrillard (pp. 19-35) Chichester: Wiley-Academy.
- Beaudry C. and Schiffauerova A. (2009) Who's right, Marshall or Jacobs? The localization versus urbanization debate. Research Policy 38 (2009) 318–337. ELSEVIER.
- Becattini, G. (1990) The Marshallian industrial district as a socio-economic notion. In Pyke, F., Becattini, G. and Sengenberger, W. (eds) Industrial Districts and Inter-Firm Co-operation in Italy. Geneva, International Institute for Labour Studies, 37–51
- Beel D. Jones M. Jones I.R. (2016) Regulation governance and agglomeration: making links in city region research. Regional Studies, Regional Science, 3:1, 509-530
- Beinhocker, E. D. (2006) Origin of Wealth: Evolution, Complexity and the Radical Remaking of Economics. Harvard Business School Press.: p. 481)
- BELLANDI M. (2002) External economies and local public goods in clusters and industrial districts: some views. Paper presented at the 6th International EUNIP Conference, Turku, Finland, 5–7 December 2002.
- Bennett A. and Peterson A. P. (2004) Music Scenes: Local, Translocal and Virtual. Vanderbilt University Press, 2004
- Bergek, A. Onufrey, K. Is one path enough? Multiple paths and path interaction as an extension of path dependency theory. Industrial and Corporate Change, Volume 23, Issue 5, October 2014, Pages 1261–1297, https://doi.org/10.1093/icc/dtt040
- Bernela, B. Ferru, M. Depret. M-H (2017) When genesis shapes cluster life cycle? Applying mixed method on a French cluster case study. <halshs-01616929>
- Bharne V. (Ed.) (2012) The Emerging Asian City: Concomitant Urbanities and Urbanisms. Routledge.
- Bianchini 1991 The Third Italy: Model or myth? Ekistics. Vol. 58, No. 350/351, Urban networking in Europe I: concepts, intentions and new realities, pp. 336-345. Athens Center of Ekistics.
- Bianchini, F. and Parkinson, M. (Eds.) (1993) Cultural Policy and Urban Regeneration. Manchester UP, Manchester.
- Bilien, U., and Maier, G. (2008) The economics of regional clusters: Networks, technology and policy. Cheltenham, UK: Edward Elgar Publishing.
- Bontje M, Musterd S, Kova´cs Z, Murie A (2011) Pathways toward European creative-knowledge cityregions. Urban Geogr 32(1):80–104
- Borgatti SP. Mehra A. Brass DJ. and Labianca G. (2009) Network analysis in the social sciences. Science. 323(5916):892-5. AAAS
- Boschma R. and Frenken R. (2018) Evolutionary Economic Geography. In Clark, G. Feldman, M. Gertler M. and Wöjcik W. (Eds.) The New Oxford Handbook of Economic Geography. Oxford University Press.
- Boschma R. and Martin S.(2010) The aims and scope of evolutionary economic geography. Papers in Evolutionary Economic Geography (PEEG) 1001, Utrecht University, Department of Human Geography and Spatial Planning, Group Economic Geography,

- Boschma RA, Frenken K (2006) Why is economic geography not an evolutionary science? Towards an evolutionary economic geography. J Econ Geogr 6(3):273–302
- Boschma, R. and Fornahl, D. (2011) Cluster Evolution and a Roadmap for Future Research. Regional Studies, 45(10):1295-1298 ·
- Boschma, R.A., Lambooy, J.G. (1999) Evolutionary economics and economic geography. Journal of Evolutionary Economics, 9: 411–429.
- BOUBA-OLGA O. et GROSSETTI M.(2008), « Socio-économie de proximité »,Revue d'économierégionale et urbaine,nº3,p. 311-328
- Bouchenaki M. (2011) The Extraordinary Development of Museums in the Gulf States. Museum International, No. 251–252 (Vol. 63, No. 3–4, 2011) ^a UNESCO 2013
- Brenner, N. and Nik Theodore. 2002. "Cities and the Geographies of 'Actually Existing Neoliberalism'" Antipode. 34(3): 349-379.
- Brenner, T. (2004), Local Industrial Clusters. Existence, Emergence and Evolution, London: Routledge.
- Breschi, S. and F. Lissoni (2001), 'Knowledge spillovers and local innovation systems: a critical survey', Industrial and Corporate Change, 10 (4), 975–1005.
- Brones and Mogaddam (2017) Translocal dynamics and the shaping of urban art districts. In L. Vegnal (Ed.) The Transnational Middle East: People, Places, Borders. Routledge.
- Burt R. S. (2002) The Social Capital of Structural Holes. In M. F. Guillen, R. Collins, P. England and M. Meyer (Eds.) The New Economic Sociology: Developments in an Emerging Field.
- Burt R.S. (1992) Structural Holes: The Social Structure of Competition. Harvard Univ. Press, Cambridge, MA.
- Burt R.S. (2000) The Network Structure of Social Capital. Research in Organizational Behaviour, Volume 22, (345-423) Elsevier Science Inc.
- Butt, R. S. (1997) A note on social capital and network content. Social Networks, 19, 355-373.
- Carbonara, N., Giannoccaro, I., McKelvey, B. (2010) Making Geographical Clusters More Successful: Complexity-based Policies. Emergence: Complexity & Organization. 2010, Vol. 12 Issue 3, p21-45.
- Carlsson B. (2006) The Role of Public Policy in Emerging Clusters. In Braunerhjelm, B. and Feldman, MP. (Eds.) Cluster Genesis:Technology-Based Industrial Development.Oxford University Press.
- Caves, R E. 2000. Creative Industries: Contracts between art and commerce, Cambridge, MA: Harvard University Press.
- CHAPAIN C., SAGOT-DUVAUROUX D. (2020), "Cultural and creative clusters A systematic literature review and a research agenda, Urban Research and Practice, Volume 13, Issue 4 2020. DOI 10.1080/17535069.2018.1545141
- Chapain, C. and Stryjakiewicz T. (2017) Introduction Creative Industries in Europe: Drivers of (New) Sectoral and Spatial Dynamics. In Caroline Chapain, Tadeusz Stryjakiewicz (eds.) (2017) Creative Industries in Europe: Drivers of New Sectoral and Spatial Dynamics. Springer International Publishing
- Christensen K. S. (1985) Coping with Uncertainty in Planning. Journal of the American Planning Association. Volume 51, 1985 Issue 1. Pages 63-73.

- Coenen L. Asheim B. Bugge MM. and Herstad SJ. (2016) Advancing regional innovation systems: What does evolutionary economic geography bring to the policy table? Environment and Planning C: Government and Policy 0(0) 1–21. SAGE Publications
- Cohendet P. Grandadam D. and Simon L. (2009) Places, Spaces and The Dynamics of Creativity. the International Conference on Organizational Learning, Knowledge and Capabilities (OLKC), in Amsterdam, The Netherlands, 26-28 April 2009.
- Cohendet P. Grandadam D. and Simon L. (2010) The Anatomy of Creative City. Industry and Innovation Vol. 17, No. 1, 91-111.
- Cohendet, P., Roberts, J. & Simon, L. (2010) Créer, implanter et gérer des communautés de pratique. Gestion, vol.35(4), 31-35. doi:10.3917/riges.354.0031.
- COMUNIAN R. (2011), Rethinking the creative city: the role of complexity, networks and interactions in the urban creative economy. Urban Studies, 23 p
- COMUNIAN R. (2012), Complexity and Creative Economies, NESTA, Londres, 17 juin 2011: Report, Creative Industries Journal, 4 (2), p. 195---198
- Comunian R. and England, L. (2018) Creative clusters and the evolution of knowledge and skills: From industrial to creative glassmaking. Geoforum. https://doi.org/10.1016/j.geoforum.2018.02.009
- COMUNIAN R., CHAPAIN C., ALEXIOU, K. (2012), The role of complexity in the creative economies: connecting people, ideas and practices.
- Cooke P. (2014) Relatedness and transversality in spatial paradigms and regimes. In A. Torre and F. Wallet (Eds.) Regional Development and Proximity Relations. Edward Elgar
- Cotela Tanner, S. (2009) Contemporary Art in the Middle East. Art Book volume 16 issue 4 November 2009.
- Crojin E. (2009) Urbanity as a Political Project: Towards Post-national European Cities. In Kong L. and O'Connor J. (Eds.) Creative Economies, Creative Cities: Asian-European Perspectives. Springer.
- Cumming, G. S., and J. Collier. 2005. Change and identity in complex systems. Ecology and Society 10(1):
- Currid E. and Williams S. (2010) The geography of buzz: art, culture and the social milieu in Los Angeles and New York. Journal of Economic Geography 10 (2010) pp. 423–451
- Dang, RJ. Mortara, L. Thomson, R. and Minshall, T. (2011) Developing technology intelligence strategy to access knowledge of innovation clusters.: The case of KODAK in Cambridge. In Hülsmann M. and Pfeffermann N. (Eds.) Strategies and Communications for Innovations, SRINGER-Verlag, Chapter 1.4, 2010. <halshs-00504075>
- Davel, E. and F. Fachin (2010), 'Research on entrepreneurship within the creative industries: debates and trends', Paper presented at the Encontro de Estudos
- DAVIET, S. (2005), Industrie, Culture, territoire, L'Harmattan, 208p

DAVIET, S., LERICHE, F. (2008), « Nouvelle » économie culturelle : existe-t-il un modèle européen ? 17p

- Depret, M. and Hamdouch, A. (2007) Changements technologiques, logiques institutionnelles et dynamiques industrielles : Esquisse d'une approche co-évolutionnaire appliquée à l'industrie pharmaceutique et aux biotechnologies. Innovations, 25(1), 85-109. doi:10.3917/inno.025.0085
- Derderian, E. (2018) Arts Education: Resources and Options for the UAE and Ras Al Khaimah. Al Qasimi Foundation Policy Paper Series, 2018. Policy Paper No. 22. Sheikh Sultan bin Saqr Al Qassimi Foundation for Policy Research.
- Dopfer, K./Foster, J./Potts, J. (2004): Micro-meso-macro. In: Journal of Evolutionary Economics 14 (3): 263-279.
- Dosi, G. 1982 Technological paradigms and technological trajectories: a suggested interpretation of the determinants and directions of technical change, Res. Pol. 11 (3) (1982) 147–162.
- Dragićević Šešić, M. (2010) Les politiques culturelles dans les pays arabes : enjeux émergents, professions émergentes. Part 2/4 Complexité des politiques culturelles : un cadeau « empoisonné » de l'histoire. Association Marcel Hicter Pour La Démocratie Culturelle - FMH
- Dubois A. (2013) Managing Distance: Small Firm Networks at the Geographic Margins. Kulturgeografiska institutionen, Stockholm University
- Dubois A. Copus A. and Hedstrom M. (2012) Local Embeddedness and Global Links in Rural Areas: Euclidean and Relational Space in Business Networks. In Hedberg C. and Miguel de Carmo R. (Eds.) Translocal Ruralism: Mobility and Connectivity in European Rural Spaces. Springer
- Dumortier B. (2014) The Cultural Imperative: Saadiyat Cultural District in Abu Dhabi between Public Policy and Architectural Gesture. In Wippel S. Bromber, K. and Krawietz B. (Eds.) Under Construction: Logics of Urbanism in the Gulf Region. (Farnham: Ashgate Publishing, 2014), 186.
- Dumortier B. (2014) The Cultural Imperative: Saadiyat Cultural District in Abu Dhabi between Public Policy and Architectural Gesture. In Wippel, S., Bromber, K., Steiner, C. and Krawietz, B. (Eds.) Under Construction: Logics of Urbanism in the Gulf Region, (Farnham: Ashgate Publishing, 2014)
- Duranton, G., (2008) Spatial Economics. In S. N. Durlauf and L. E. Blume (Eds.) The New Palgrave Dictionary of Economics, Second Edition. Palgrave.
- Edwin R. (2000) Complexity: Life at the Edge of Chaos. University of Chicago Press; 2nd edition.
- Elsheshtawy (2010) Little Space Big Space, Brown Journal of World Affair
- Elsheshtawy Y. (2004) Planning Middle Eastern Cities: An urban kaleidoscope in a globalizing world. Routledge.
- Elsheshtawy Y. (2010) Little Space Big Space, Brown Journal of World Affair
- Elsheshtawy Y. (2012) Museums in Arabia and the Myth of Cultural Enlightenment. Traditional Dwellings and Settlements Review Volume XXIV Number I Fall 2012
- Elsheshtawy Y. (Ed.) (2002) Planning Middle Eastern Cities. An urban kaleidoscope in a globalizing world. Routledge. Taylor and Francis Croup. LONDON
- Elsheshtawy Y. (Ed.) (2011) The Evolving Arab City: Tradition, Modernity and Urban Development. Routledge.
- Elsheshtawy Y. (Ed.) (2002) Planning Middle Eastern Cities. An urban kaleidoscope in a globalizing world. Edited by. Yasser Elsheshtawy. Routledge. Taylor & Francis Croup. LONDON

- Elsheshtawy, Y. (2006) From Dubai to Cairo: Competing Global Cities, Models, and Shifting Centers of Influence? In Ammar P. and Singermann D. (Eds.) Cairo Cosmopolitan: Politics, Culture, and Space in the New Middle East, ed. (Cairo: American University in Cairo Press, 2006)
- Entwistle, J. and Rocamora, A. (2006), The field of fashion materialized: a study of London Fashion Week. Sociology, 40, 735–751.
- Essletzbichler and Rigby (2010) Generalized Darwinism and evolutionary economic geography. In Boshma R. and Martin R. L. (Eds.) The Handbook of Evolutionary Economic Geography. Edward Elgar.
- Evans G. (2002) Cultural Planning? An Urban Renaissance. Routledge.
- Evans G. (2009) Creative Cities, Creative Spaces and Urban Policy. Urban Studies (2009) 46: 1003
- Evans G. (2009b) From cultural quarters to creative clusters creative spaces in the new city economy.
 In Legner, M. (Ed.) The sustainability and development of cultural quarters: international perspectives. p. 32 59. Institute of Urban History Stockholm
- Exell K. and Rico T. (2013) 'There is no heritage in Qatar': Orientalism, colonialism and other problematic histories. World Archaeology, 45:4, 670-685.
- Exell K. and Rico T. (Ed.) (2014) Cultural Heritage in the Arabian Peninsula: Debates, Discourses and Practices. Routledge (2014)
- Farah and Aoun (2014) La Dubaisation : une métropolisation du zéro politique.
- Fatma Al-Sayegh (1998) Merchants' Role in a Changing Society: The Case of Dubai, 1900-90. Middle Eastern Studies.
- Feldman M. and Braunerhjelm P. (2006) The Genesis of Industrial Clusters. In Braunerhjelm and Feldman (2006) Cluster Genesis Technology-Based Industrial Development. Oxford University Press.
- Fleming, T. (2004) Supporting the cultural quarter: The role of the creative intermediary. In Bell D. and Jayne M. (Eds.) City of Quarters: Urban Villages in the Contemporary City.: p. 93-108.
- Flew T. (2010) Toward a Cultural Economic Geography of Creative Industries and Urban Development: Introduction to the Special Issue on reative Industries and Urban Development. The Information Society, 26: 85–91, 2010
- Flew T. (2012) The Creative Industries: Culture and Policy. SAGE Publications
- Florida, R. (2002), The Rise of the Creative Class, New York: Basic Books.
- Florida, R. (2003), "Bohemia and economic geography", Journal of Economic Geography, Vol. 2, pp. 55–71.
- Fonahl D. and Hassink R. (Eds.) (2017) The Life Cycle of Clusters. Edward Elgar Publishing
- Fornahl, D. Hassink, R. and Menzel, MP (2015) Broadening Our Knowledge on Cluster Evolution. European Planning Studies. 2015. DOI: 10.1080/09654313.2015.1016654
- Foster P. et al. (2011) Gatekeeper search and selection strategies: Relational and network governance in a cultural market. Poetics 39 (2011) 247–265
- Friedmann J. (1986) The world city hypothesis. Development and Change, 17 (1986), pp. 69-83

310

- Ghiglino, C. and Nocco A. (2017) When Veblen meets Krugman: social network and city dynamics. Economic Theory, Springer; Society for the Advancement of Economic Theory (SAET), vol. 63(2), pages 431-470, February.
- Giselle C Bricault (Ed.) (1988) Major Companies of the Arab World 1988. 12th Edition. (P. 361) Graham & Trotman Limited, London.
- Glaeser, E., Kallal, H., Scheinkman, J., Shleifer, A., (1992) Growth in cities. Journal of Political Economy 100, 1126–1152
- Gordon, I.R. and McCann P. (2000) Industrial clusters: Complexes, agglomeration and/or social networks? Urban Studies, 37(3): 513 532.
- Grabher, G. (2002) Cool Projects, Boring Institutions: Temporary Collaboration in Social Context, Regional Studies, 36 (3): p. 205 - 214.
- Grabher, G. (2004) Learning in projects, remembering in networks? Communality, sociality and connectivity in project ecologies, European Urban and Regional Studies, 11 (2), p.103-123
- Grandadam, D., Cohendet, P., & Simon, L. (2013) Places, Spaces and the Dynamics of Creativity: The Video Game Industry in Montreal. Regional Studies. Volume 47, (2013) Issue 10, p. 1701-1714
- Granovetter M. (2004) The Social Construction of Corruption. Paper prepared for the conference, "The Norms, Beliefs and Institutions of 21st Century Capitalism: Celebrating the 100th Anniversary of Max Weber's The Protestant Ethic and the Spirit of Capitalism", October 8-9th, 2004. Cornell University
- Granovetter, M. (1992a) Problems of explanation in economic sociology. In N. Nohria and R. G. Eccles (Eds.) Networks and Organizations: Structure, Form, and Action. Boston: Harvard Business School Press.
- Granovetter, M. (1992b) Economic Institutions as Social Constructions: A Framework for Analysis. Acta Sociologica. Volume: 35 Issue: 1, (3-11) Harvard University Press.
- Grodach C. (2011) Art Spaces in Community and Economic Development: Connections to Neighborhoods. Journal of Planning Education and Research 31(1) 74–85.
- Grodach, C. (2010) Beyond Bilbao: Rethinking flagship cultural development and planning in three California cities. Journal of Planning Education and Research, 29(3), 353–366.
- Hall, P. (2000) Creative cities and economic development, Urban Studies, 37(4), pp. 639–649.
- Hall, P. (2004) Creativity, culture, knowledge and the city, Built Environment, 30(3), pp. 256–258.
- Hamdouch A. (2010) Conceptualizing Innovation Clusters and Networks. In Laperche, B., Sommers P. et Uzunidis, D. (Eds.), Innovation Clusters and Networks. The Knowledge Backbone, Peter Lang, Brussels, Chapter 1, pp. 21-63.
- Hartley, J. (2004) The 'value chain of meaning' and the new economy, International Journal of Cultural Studies, 7(1), pp. 129–141.
- Hartley, J. (2010) Connected Communities and Creative Economy; Clash, cluster, complexity, creativity. In: Research Development Workshop Connected Communities, 6-8 December, 2010, Birmingham, UK. (Unpublished)
- Hartley, J. (2014) Urban semiosis: Creative industries and the clash of systems. International Journal of Cultural Studies, 18(1), 79–101. doi:10.1177/1367877914528120

- Haydn, F. and R. Temel. (2006) Temporary urban spaces. Concepts for the use of city spaces. Boston, MA: Birkhauser
- He J. (2014) Creative Industry Districts: An Analysis of Dynamics, Networks and Implications on Creative Clusters in Shanghai. Springer.
- Healey P. (2006) Relational complexity and the imaginative power of strategic spatial planning. European Planning Studies, 14:4, p. 525-546.
- Henn, S. (2013) Transnational Entrepreneurs and the Emergence of Clusters in Peripheral Regions. The Case of the Diamond Cutting Cluster in Gujarat (India), European Planning Studies, 21:11, 1779-1795,
- Hesmondhalgh, D. and Pratt, A. C. (2005) Cultural Industries and Cultural Policy. International journal of cultural policy, 11 (1): p. 1-14.
- Hoolbrook, M. B., & Hirschman, E., C. (1982) The experiential aspects of consumption: consumer fantasies, feelings, and fun. Journal of Consumer Research, 9, 132-140.
- Hoover, E. M. (1948) The Location of Economic Activity. New York: McGraw-Hill.
- Hourani NB. and Kanna A. (2014) Arab Cities in The Neoliberal Moment. Journal of Urban Affairs, Vol. 36/No. S2/2014
- Huault I. (1998) Embeddedness et théorie de l'entreprise autour des travaux de Mark Granovetter. Annales des Mines, juin 1998
- Hvidt M. (2009) The Dubai Model: An Outline of Key Development-Process Elements in Dubai, Int. J. Middle East Stud. 41 (2009), 397–418.
- Hvidt M. (2013) Economic diversification in GCC countries: Past record and future trends. Research Paper, Kuwait Programme on Development, Governance and Globalisation in the Gulf States.
- Hvidt M. (2016) The Role of 'Lavish Construction Schemes' in 'Late–Late–Late' Developing Societies: The Case of the Arab Gulf States. In Wippel S. Bromber, K. and Krawietz B. (Eds.) Under Construction: Logics of Urbanism in the Gulf Region. (Farnham: Ashgate Publishing, 2014)
- Iammarino, S. and P. McCann (2006), 'The structure and evolution of industrial clusters. Transactions, technology and knowledge spillovers', Research Policy, 35, (7), 1018–1036.
- Ibert, O., Hautala, J., and Jauhiainen, J. S. (2015) From cluster to process: New economic geographic perspectives on practices of knowledge creation. Geoforum, 65, 323–327.
- Isabelle Huault, « Embeddedness et théorie de l'entreprise autour des travaux de Mark Granovetter », Annales des Mines, juin 1998: p. 73-86.
- Jacobs, J. (1969) The Economy of Cities. New York: Random House.
- Jameson F. (1991) Postmodernism, or, The cultural logic of late capitalism. Duke University Press.
- Johansson B. and Forslund U. (2008) The analysis of location, colocation and urbanization economies. In Karlsson C. (Ed.) Handbook of Research on Cluster Theory. Edward Elgar.
- Jones C. and Lichtenstein B. (2009) Temporary Inter-organizational Projects. In Cropper S., Huxham C., Ebers M., and Smith Ring P. (Eds.) The Oxford Handbook of Inter-Organizational Relations. Oxford UniversityPress.

- Kanna A. (2010) Flexible Citizenship in Dubai: Neoliberal Subjectivity in the Emerging "City-Corporation". Cultural Anthropology, Vol. 25, Issue 1: p. 100–129. The American Anthropological Association
- Kanna, A (2011) Dubai: The City as Corporation. University of Minnesota Press.
- Karlsson C. (2008) Handbook of Research on Innovation and Clusters: Cases and Policies-Edward Elgar Pub (2008)
- Khalil, M.A. Al-Ruzouq, R. Hamad, K. and Shanableh A. (2017) Multi-Temporal satellite imagery for infrastructure growth assessment of Dubai City, UAE. MATEC Web of Conferences 120, 09006 (2017) DOI: 10.1051/matecconf/20171200. ASCMCES-17
- Kilduff M. and Krackhardt D. (2008) Network Dynamics and Organizational Culture: Cognition, Personality, Dynamics, and Culture. Cambridge University Press
- KLEPPER, S. (2007) "Disagreements, Spinoffs, and the Evolution of Detroit as the Capital of the U.S. Automobile Industry."
- Management Science, Vol. 53 (2007), pp. 616–631.
- Kluijver R. (2013) Introduction to the Gulf Art World. Self-Published. The Gulf Art Guide. Available from: http://gulfartguide.com/essay/
- Kong, L., (2012) Ambitions of a Global City: Arts, Culture and Creative Economy in "Post-Crisis" Singapore, International Journal of Cultural Policy, 18, no.3: 279-294
- Kong, L., (2012) Ambitions of a Global City: Arts, Culture and Creative Economy in "Post-Crisis" Singapore. International Journal of Cultural Policy, 18, no.3: 279-294
- Kovács Z. and Musterd S. (2013) Personal Networks. In Kovács Z. and Musterd S. (Ed.) Place-making and Policies for Competitive Cities. Wiley-Blackwell.
- Krugman P. (1991) Geography and Trade. Cambridge, MA: MIT Press.
- Krugman P. (1991b) Increasing Returns and Economic Geography. Journal of Political Economy. Vol. 99, no. 3. (483-499) The University of Chicago.
- Krugman P. (1996) The Self-Organising Economy. Blackwell Publishers.
- Krugman P. (1999) The Role of Geography in Development. International Regional Science Review 1999; 22; 142
- Krugman, P. (1991c) History Versus Expectations. The Quarterly Journal of Economics, 106(2), 651-667.
- Landry, C. (2006) The art of city-making. Earthscan
- Lange B. (2011) Professionalization in space: Social-spatial strategies of culturepreneurs in Berlin. Entrepreneurship & Regional Development. Vol. 23, Nos. 3–4, April 2011, 259–279
- Lange B. and Schüßler E. (2018) Unpacking the middleground of creative cities: spatiotemporal dynamics in the configuration of the Berlin design field. Regional Studies, DOI: 10.1080/00343404.2017.1413239
- Lange, B. (2005) Socio-spatial strategies of culturepreneurs. The example of Berlin and its new professional scenes, Zeitschrift für Wirtschaftsgeographie, 49, pp. 81-98.
- Lazzeretti, L. Sedita, S. R. and Annalisa, C. (2013) Founders and disseminators of cluster research. Journal of Economic Geography (2013): pp. 1–23.

- Lindsay, V. (2005) The Development of International Industry Clusters: A Complexity Theory Approach. Journal of International Entrepreneurship 3, 71–97. Springer Science + Business Media, Inc.
- Liu H. (2015) Creative Industries and Urban Spatial Structure: Agent-based Modelling of the Dynamics in Nanjing. Springer
- Lord G.D. (2007) The "Bilbao Effect": from poor port to must-see city. The Art Newspaper, No. 184, October 2007
- Lorenzen, M. (2018) The geography of creative clusters. In Clark, G. Feldman, M. Gertler M. and Wöjcik W. (Eds.) The New Oxford Handbook Of Economic Geography. Oxford University Press.
- Maggioni, M.A. (2002), Clustering Dynamics and the Location of High- Tech Firms, Heidelberg/New York: Physica- Verlag.
- Malmberg A., and Maskell P. (2005) Localized learning revisited. DRUID Working Papers 05-19, DRUID, Copenhagen Business School, Department of Industrial Economics and Strategy/Aalborg University, Department of Business Studies.
- Manson S.M. (2001) Simplifying complexity: A review of complexity theory. Geoforum 32 (2001) 405-414.
- Manson, S. M. and O'Sullivan D. (2006) Complexity theory in the study of space and place. Environment and Planning A 38(4): 677-692.
- Markusen A. (1996) Sticky Places in Slippery Spaces: Typology of industrial districts. Economic Geography, Volume 72, Issue 3 (Jul., 1996), 293-313.
- Markusen A. (2014) Creative Cities: A 10-Year Research Agenda. Journal of Urban Affairs, Volume 36, Number S2, pages 567–589.
- Markusen, A., & Gadwa, A. (2010) Arts and Culture in Urban or Regional Planning: A Review and Research Agenda. Journal of Planning Education and Research, 29(3), 379–391.
- Marshall, A. (1890) Principles of Economics. London: Macmillan.
- Marshall, A. (1898) Distribution and exchange. Economic Journal, 1898, vol. vol. 8 no. 29 (: p. 37-59)
- Marshall, A. (1920) Principles of Economics: Eighth edition. Reprinted by Palgrave Macmillan in 2013. [First edition 1890, Fourth Edition 1898]
- Martin and Sunley (2010b) The place of path-dependency in an evolutionary economic geography. In Boschma and Martin (2010) The Handbook of Evolutionary Economic Geography
- Martin R. and Sunley P. (2011b) Forms of emergence and the evolution of economic landscapes. Journal of Economics of Business and Organisation
- Martin, R. and Simmie, J. (2008) The theoretical bases of urban competitiveness: does proximity matter?, Revue d'Économie Régionale and Urbaine 2008/3 (octobre): p. 333-351.
- Martin, R. and Sunley P. (2003) Deconstructing clusters: chaotic concept or policy panacea? Journal of Economic Geography, 3(1): 5 35.
- Martin, R. and Sunley P. (2011) Conceptualizing Cluster Evolution: Beyond the Life Cycle Model? Regional Studies, Vol. 45.10: p. 1299–1318, November (2011)
- Maskell P. (2014) Accessing remote knowledge--the roles of trade fairs, pipelines, crowdsourcing and listening posts. Journal of Economic Geography, 14(5), 883–902. doi:10.1093/jeg/lbu002

- Maskell, P., Bathelt, H. and Malmberg, A. (2006), Building global knowledge pipelines: the role of temporary clusters. European Planning Studies, 14, 997–1013.
- Matrin R. and Sunley R. (2010) Complexity thinking and evolutionary economic geography. In Boschma R. and Martin R. (Eds.) Handbook of Evolutionary Economic Geography. Edward Elgar
- Matrin R. and Sunley R. (2010) Complexity thinking and evolutionary economic geography. In Boschma and Martin (ed.) Handbook of Evolutionary Economic Geography. Edward Elgar 2010
- McCann P. (1998) The Economics of Industrial Location: A Logistics-Costs Approach. Heidelberg. Springer.
- McCann P. (2008) Agglomeration Economics. In Karlsson C. (Ed.) Handbook of Research on Cluster Theory. Edward Elgar Publishing.
- McGlade, J. and Garnsey, E. (2006) The Nature of Complexity. In McGlade, J. and Garnsey, E. (Eds.) Complexity and Co-Evolution: Continuity and Change in Socio-Economic Systems. Edward Elgar.
- McKelvey, B. (1999b) "Complexity theory in organization science: Seizing the promise orbecoming a fad?," Emergence, 1(1): 5–32.
- McKelvey, B. (1999) Avoiding Complexity Catastrophe in Coevolutionary Pockets: Strategies for Rugged Landscapes. Organization Science, 10(3), 294–321. doi:10.1287/orsc.10.3.294
- Menzel MP. and Fornahl D. (2006) Cluster Life Cycles. Paper to be presented at the DIME LIEE / NTUA Athens (2006) Conference: Entrepreneurship, knowledge, learning and the evolution of industrial / territorial clusters and regions. Athens, Greece.
- Menzel, M.-P. & Fornahl, D. (2010) Cluster life cycles Dimensions and rationales of cluster evolution, Industrial
- and Corporate Change, 19(1), pp. 205–238.
- Menzel, M.-P., Fornahl, D. (2010) Cluster life cycles: dimensions and rationales of cluster evolution. Industrial and Corporate Change. 19, 205–238.
- Menzel, MP. Henn, S. and Fornahl, D. (2010) Emerging clusters: a conceptual overview. In Menzel, MP. Henn, S. and Fornahl, D. (Eds.) Emerging Clusters Theoretical, Empirical and Political Perspectives on the Initial Stage of Cluster Evolution. Edward Elgar.
- Mirgani S. (2017) Introduction: Art and Cultural Production in the GCC. Journal
- Journal of Arabian Studies: Arabia, the Gulf, and the Red Sea. Volume 7, (2017) Issue sup1: CIRS Special Issue
- Molho, J. and Morteau, H. (2016) « Du cluster culturel à la scène ? Glissements sémantiques dans le cas nantais », L'Observatoire, la revue des politiques culturelles 2016/1 (N° 47), p. 57-61.
- Molho, J. and Sagot-Duvauroux D. (2017) From global to local creative dynamics : the location patterns of art galleries.
- Mommaas, H. 2009. Spaces of culture and economy: Mapping the cultural-creative cluster landscape. In Kong and O'Connor 2009, 45–60.
- Monif A.R. (1984) Cities of Salt. Random House.
- Morgan, K. J. (2004) The Exaggerated Death of Geography: Learning, Proximity and Territorial Innovation Systems. Journal of Economic Geography 4(1):3-21
- Morin, E. (1977) La Methode. Vol. I. La Nature de la nature. Paris: Seuil.

- Morin, E. (1990) Introduction à la pensée complexe. Paris: ESF.
- Morteau, H. (2016) Dynamiques des Clusters culturels métropolitains : Une perspective évolutionniste - Analyse comparée de Québec, Quartier Saint-¬-Roch Barcelone, 22@ Nantes, Quartier de la Création. Thèse en Aménagement de l'espace et urbanisme. Université d'Angers
- Mould A. (2016) Mediating the City: The Role of Planned Media Cities in the Geographies of Creative Industry Activity. GaWC Research Bulletin 397. In S. Conventz, B. Derudder, A. Thierstein and F. Witlox (eds) (2014) Hub Cities in the Knowledge Economy: Seaports, Airports, Brainports. Farnham: Ashgate, pp. 163-180.
- Mould O. (2014) Mediating the City: The Role of Planned Media Cities in the Geographies of Creative Industry Activity. In Conventz S. Derudder B. Thierstein A. and Witlox F. (Eds.) Hub Cities in the Knowledge Economy: Seaports, Airports, Brainports. Routledge
- Muhammed, Sehba (2012) Why Grey Noise Gallery Moved from Pakistan to Dubai: Q&A with Gallerist Umer Butt. From http://in.blouinartinfo.com/news/story/797316/why-grey-noise-gallery-moved-from-pakistan-to-dubai-qa-with
- Murdoch, J. Grodach, C. and Foster N. (2015) The Importance of Neighborhood Context in Arts-Led Development: Community Anchor or Creative Class Magnet? Journal of Planning Education and Research 1–17
- Neff, G., Wissinger, E., & Zukin, S. (2005) Entrepreneurial Labor among Cultural Producers: Cool Jobs in Hot Industries. Social Semiotics, 15(3), 307-334.
- Nicolis, G. Prigogine I. (1989) Exploring Complexity: An Introduction. St. Martin's Press
- Njøs R. and Jakobsen SE. (2016) Cluster policy and regional development: scale, scope and renewal, Regional Studies, Regional Science, 3:1, 146-169
- Nonaka,I. and N. Konno. 1998. « The Concept of 'Ba': Building a Foundation for Knowledge Creation ». California Management Review, 40: 40-54.
- Ohlin B. (1935) Interregional and International Trade. Harvard University Press.
- Olson M. (1965/1971) The Logic of Collective Action: Public Goods and the Theory of Groups. Harvard University Press
- OUROUSSOFF, NICOLAI (2010) Building Museums, and a Fresh Arab Identity in The New York Times. NOV. 26, 2010
- Overman H.G. and Puga D. (2010) Labor Pooling as a Source of Agglomeration: An Empirical Investigation. In Glaeser E. L. (Ed.) Agglomeration Economics. (p. 133 150) University of Chicago Press.
- Overman H.G. and Puga D. (2010) Labor Pooling as a Source of Agglomeration: An Empirical Investigation. In Glaeser E. L. (Ed.) Agglomeration Economics. (p. 133 150) University of Chicago Press.
- Pareja-Eastaway M. and Pradel i Miquel M. (2017) Multiple Endeavours Towards New Patterns of Economic Growth: The Case of Creative and Knowledge Industries in Spain. In Chapain, C. and Stryjakiewicz T. (Eds.) (2017) Creative Industries in Europe: Drivers of New Sectoral and Spatial Dynamics. Springer International Publishing.
- Parrott, L. (2002) Complexity and the limits of ecological engineering. Transactions of the ASAE 45, 1697–1702

Pecqueur B. and Zimmermann J-B. (2004) Economie de proximités. Hermès – Lavoisier.

- Plaza B. (2000) Evaluating the Influence of a Large Cultural Artifact in the Attraction of Tourism: The Guggenheim Museum Bilbao Case. Urban Affairs Review 36, 264-274.
- Polanyi M (1966) The tacit dimension. Doubleday, New York
- Porter M. E. (1998) Clusters and Competition: New Agendas for Companies, Governments, and Institutions. Harvard Business School Working Paper, No. 98-080, March 1998.
- Porter M.E. (1998b) On competition. Boston: Harvard Business School Press.
- Porter M.E. (1998c) Clusters and the New Economics of Competition. Harvard Business Review November-December 1998 Issue. https://hbr.org/1998/11/clusters-and-the-new-economics-of-competition
- Potts J, Cunningham S, Hartley J, Ormerod P (2008) Social network markets: a new definition of the creative industries. J Cult Econ 32(3):167–185. doi:10.1007/s10824-008-9066-y
- Potts, J. (2000), The New Evolutionary Micro- economics: Complexity, Competence and Adaptive Behaviour, Cheltenham, UK and Northampton, MA, USA: Edward Elgar.
- Pouder, R. and St. John, C.H. (1996) Hot Spots and Blind Spots: Geographical Clusters of Firms and Innovation. Academy of Management Review, 21: p. 1192-225.
- Preissl, B., and Solimene, L. (2003) The Dynamics of Clusters and Innovation. Physica-Verlag. Heidelberg, New-York.
- Raines P. (2002) Clusters and prisms. In P. Raines (Ed.) Cluster Development and Policy. p. 159–177. London: Ashgate.
- Richards and Palmer (2010) Eventful Cities: Cultural Management and Urban Revitalisation. Butterworth-Heinemann
- Ridgeway, S., 1989. Artist groups: patrons and gate-keepers. In: Foster, A., Blau, J. (Eds.), Art and Society: Readings in the Sociology of the Arts. State University of New York Press, Albany, NY, pp. 205–220.
- Russo A.P. (2002) Cultural Clusters and Tourism Development: The Challenge of Venice. In Jelencic D. A. (Ed.) Culture: A Driving Force for Urban Tourism. Institute for International Relations. Zagreb.
- Rutten R. and Boekema F. (2007) Regional innovation clusters: evaluation of the South-East Brabant cluster scheme. In Cook P. and Schwartz D. (2007) Creative Regions: Technology, culture and knowledge entrepreneurship. Routledge. London.
- Rychen, F., and Zimmermann, J.-B. (2008) Clusters in the Global Knowledge-based Economy: Knowledge Gatekeepers and Temporary Proximity. Regional Studies, 42(6), 767–776.
- Sager T. (2011) Neo-liberal urban planning policies: A literature survey 1990–2010. Progress in Planning 76 (2011) 147–199.
- Sagot-Duvauroux, D. (2016) « Du cluster à la scène : l'encastrement des activités artistiques dans le territoire », L'Observatoire 2016/1 (N° 47), p. 9-13.
- Sampler J. and Eigner S. (2003), Sand to Silicon: Achieving Rapid Growth Lessons from Dubai (London: Profile,)

- Santagata W. (2002) Cultural Districts, Property Rights and Sustainable Economic Growth. International Journal of Urban and Regional Research. Volume26, Issue1. March (2002) Pages 9-23
- Sayed Worrell H. (2017) The UAE's Emergence as a Hub for Contemporary Art. Arab Gulf States Institute in Washington)
- Schindhelm M. (2011) Dubai High: A Culture Trip. Aurore Belkin
- Scott A.J. (2001) Capitalism, cities, and the production of symbolic forms. Royal Geographical Society (with The Institute of British Geographers)
- SCOTT A.-J. et LERICHE F. (2005), « Les ressorts géographiques de l'économie culturelle: du local au mondial », in L'Espace Géographique (3), pp. 207-222
- Shi L. and Ganne B. (2009) Understanding the Zhejiang industrial clusters: Questions and reevaluations. Asian Industrial Clusters, Global Competitiveness and New Policy Initiatives, World Scientific, p.239-266, 2009.
- Shin, H.B. (2013) Elite Vision before People: State Entrepreneurialism and the Limits of Participation. In Altrock, U. and Schoon, S. (eds.) Maturing Megacities: The Pearl River Delta in Progressive Transformation. Springer
- Smelser N.J. and Swedberg R. (2005) Introduction. In N.J. Smelser and R. Swedberg (Eds.) The Handbook of Economic Sociology, Second Edition. Princeton University Press.
- Smith B. (2010) Scared by, of, in, and for Dubai. Social and Cultural Geography, 11:3, 263-283.
- Sölvell, Ö. (2008) Clusters, Balancing Evolutionary and Constructive Forces. Ivory Tower Publishers, Stockholm.
- Sorenson O. (2013) Social Networks and Industrial Geography. Journal of Evolutionary Economics. Springer Verlag
- Staber U (2008) Network evolution in cultural industries. Ind Innov 15(5):569-578
- Staber, U. & Sautter, B. (2011) Who are we, and do we need to change? Cluster identity and life cycle, Regional Studies, 45(10), pp. 1349–1361.
- Stachowiak and Stryjakiewicz T. (2017) Specialisation as a Driver of the Development Dynamics of Creative Cities and City Regions. In Chapain C. and Stryjakiewicz T. (Eds.) Creative Industries in Europe: Drivers of New Sectoral and Spatial Dynamics. Springer
- Stern J. S. and Seifert S. C. (2010) Cultural Clusters: The Implications of Cultural Assets Agglomeration for Neighborhood Revitalization. Journal of Planning Education and Research 29(3) 262–279. Association of Collegiate Schools of Planning. SAGE Publications.
- Stern, M. J., and S. C. Seifert. 2007. Cultivating "natural" cultural districts. Philadelphia: Reinvestment Fund
- Storper M, Scott AJ (2009) Rethinking human capital, creativity and urban growth. J Econ Geogr 9 (2):147–167
- Storper, M., and Venables, A. (2004) Buzz: Face to face contact and the urban economy. Proceedings of the LSE Resurgent City Symposium, London. April 2004.

Straw W. (2001) Scenes and Sensibilities. Public, n°22-23(2001): p. 245-257

Straw, W. (2001) "Scenes and Sensibilities", in Public, n°22-23(2001), pp. 245-257

- Suire, R. & Vicente, J. (2009) Why do some places succeed when others decline? A social interaction model of
- cluster viability, Journal of Economic Geography, 9(3), pp. 381-404.
- Swann, G. M. P., Prevezer, M. and Stout, D., (Eds.) (1998) The Dynamics of Industrial Clustering -International Comparisons in Computing and Biotechnology. New York: Oxford University Press.
- Sydow, J. Windeler, A. Müller-Seitz, G: and Lange; K. (2012) Path constitution analysis: A methodology for understanding path dependence and path creation. Business Research 5(2): 155–176.
- Sydow, J., G. Schreyogg and J. Koch (2005), 'Organizational paths: path dependency and beyond', Paper given at 21st EGOS Colloquium 30 June–2 July 2005, Berlin, Germany.
- Talbot D. (2010) La Dimension Politique De l'Approche de Proximité. Géographie, économie, société 2010/2 (Vol. 12) Lavoisier.
- Tanimoto J. (2015) Fundamentals of Evolutionary Game Theory and its Applications. Evolutionary Economics and Social Complexity Science. Volume 6. Springer Japan.
- Ter Wal, A.L.J. and R.A. Boschma (2009), 'Co- evolution of firms, industries and networks in space', Regional Studies, Volume 45, (2011) Issue 7. (919-933)
- Thorsby D. (2008) Economics of Culture. Cambridge University
- Thrift N. (1999) Capitalism's Cultural Turn. In L. Ray and A. Sayer (Eds.) Culture and Economy After the Cultural Turn. SAGE Publications Ltd (1999)
- Thrift, N. (2002) The future of geography. Geoforum 33(3): 291-298.
- Todaro M. and Smith S. (2011) Economic Development. Addison-Wesley.
- Todeva E. (2006) Business Networks: Strategy and Structure. Routledge.
- Tolbet (2010) La Dimension Politique De l'Approche de Proximité. Géographie, économie, société 2010/2 (Vol. 12), pages 125 à 144
- Torre A. (2014) Proximity relations at the heart of territorial development processes: from clusters, spatial conflicts and temporary geographical proximity to territorial governance. In A. Torre and F. Wallet (Eds.) Regional development and proximity relations. Edward Elgar.
- Torre A. and Rallet A. (2005) Proximity and localization. Regional Studies 39, 47-59.
- Torre A. et Beuret JE. (2012) Proximités territoriales : Construire la gouvernance des territoires, entre conventions, conflits et concertations. Economica, collection Anthropos
- Torre, A., Melot, R., Magsi, H., Bossuet, L., Cadoret, A., Caron, A., Darly, S., Jeanneaux, P., Kirat, T., Pham, H. V., ... Kolokouris, O. (2014) Identifying and measuring land-use and proximity conflicts: methods and identification. SpringerPlus, 3, 85. doi:10.1186/2193-1801-3-85
- Trippl M. Grillitsch M. Isaksen A. and Sinozic T. (2015) Perspectives on Cluster Evolution: Critical Review and Future Research Issues. European Planning Studies. Volume 23, (2015) - Issue 10. (2028-2044)
- Trippl, M. and Bergman E. (2013) Clusters, local districts, and innovative milieu. In M. Fischer and P. Nijkamp (Eds.) A Handbook of Regional Science, (pp. 439–456) Berlin: Springer Reference.
- Trippl, M., Grillitsch, M., Isaksen, A. and Sinozic, T. (2015) Perspectives on Cluster Evolution: Critical Review and Future Research Issues. European Planning Studies, 2015. Taylor and Francis.

- United Nations Conference on Trade and Development., and United Nations Development Programme. (2010) Creative economy report 2010: Creative economy: a feasible development option. Geneva: United Nations.
- Van de Ven, A.H. and Poole, M.S. (1995) Explaining Development and Change in Organizations, The Academy of Management Review 20.3, pp. 510-540.
- Vishny (1989) See: Todaro & Smith (2011) Economic Development. Addison-Wesley. P:163
- Von Streit A. and Lange B. (2013) Governance of Creative Industries: The Role of Social and Professional Networks. In Musterd S. and Kovac Z. (Eds.) Place-making and Policies for Competitive Cities. John Wiley and Sons, Ltd 2013.
- Wakefield S. (2017) Contemporary art and migrant identity "construction" in UAE and Qatar. Journal of Arabian Studies: Arabia, the Gulf, and the Red Sea. Volume 7, (2017) Issue sup1: CIRS Special Issue. (99-111)
- Wakefield, S. (2015) Museum Development in the Gulf: Narrative and Architecture. Architectural Design, 85(1), 20–27
- Wang C. C. (2012) Upgrading China's Information and Communication Technology Industry.
- Weber A. (1947) The Theory of Social and Economic Organization. New York: Oxford University Press
- Wen, W., (2012) Scenes, Quarters and Clusters: The Formation and Governance of Creative Places in Urban China. Cultural Science Journal. 5(2), p.8–27.
- White G. and Wade R. (1988) Introduction. In White G. (Ed.) Developmental States and Markets in East Asia. Springer
- Wolfe and Getler (2006) Local Antecedents and Trigger Events: Policy Implications of Path Dependence for Cluster Formation. In Braunerhjelm and Feldman (2006) Cluster Genesis Technology-Based Industrial Development. Oxford University Press.
- Wolman, H., and Hincapie, D. (2014) Clusters and Cluster-Based Development Policy. Economic Development Quarterly, 29(2), 135–149.
- Wood S. and Dovey K. (2015) Creative Multiplicities: Urban Morphologies of Creative Clustering. Journal of Urban Design, 2015. Vol. 20, No. 1, 52–74,
- Worrell H. S. (2017) The UAE's Emergence as a Hub for Contemporary Art. Arab Gulf States Institute in Washington.
- Yin et al. (2015) The 798 Art District: Multi-scalar drivers of land use succession and industrial restructuring in Beijing. Habitat International, Volume 46, April 2015, Pages 147-155
- Yin, R. K. (2003) Case study research: Design and methods (3rd ed.) Thousand Oaks, CA: SAGE Publications Inc.
- Zimmermann, J. B, F. Deroïan, et A. Steyer. 2003. « Apprentissage social et diffusion de l'innovation: réseaux critiques et intermédiarité ». Revue d'Economie Industrielle 103 (1): 71–89.

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ANNEX 1 – DUBAI CURRENT ART MARKET MAP

The following table lists art galleries, art foundation, and art museums in the main three emirates of UAE: Abu Dhabi, Sharjah and Dubai as per 2017. The table lists their dates of establishment, their respective owner or manager and location.

	Туре	EST.	Owner / Director	Location /
Name	туре	LJI.		District
Guggenheim Abu Dhabi	(Museums)	2016	NA	Abu Dhabi
Louvre Abu Dhabi	(Museums)	2016	NA	Abu Dhabi
NYU Abu Dhabi Art Gallery	(Galleries)	2014	Maya Allison	Abu Dhabi
UAE Currency Museum	(Museums)	2013	NA	Abu Dhabi
Chaf Gallery	(Galleries)	2006	NA	Abu Dhabi
Salwa Zeidan Gallery	(Galleries)	1994	Salwa Zeidan	Abu Dhabi
Al Ain National Museum	(Museums)	1970	NA	Abu Dhabi
Manarat Al Saadiyat	(Cultural Institutions)	2015	NA	Abu Dhabi
NYUAD Art Center	(Foundations)	2014	Bill Bragin	Abu Dhabi
Warehouse421	(Galleries)	NA	Salama bint Hamdan Al Nahyan	Abu Dhabi
Etihad Modern Art Gallery	(Galleries)	NA	NA	Abu Dhabi
Zayed National Museum	(Museums)	NA	NA	Abu Dhabi
N2N Gallery	(Galleries)	2013	Natalya Muzaleva	Al Ain
Al Ain Palace Museum	(Museums)	1998	NA	Al Ain
Hili Archaeological Park	(Museums)	NA	NA	Al Ain
Al Qattara Arts Centre	(Non-Profit)	NA	NA	Al Ain
XVA Gallery	(Galleries)	2003	Mona Hauser	Al Fahidi
Majlis Gallery	(Galleries)	1989	Alison Collins	Al Fahidi
Tashkeel Al Fahidi	(Artists Studios)	2008	Lateefa bint Maktoum	Al Fahidi
Alserkal Avenue	(Non-Profit)	2007	NA	Al Quoz
Meem Gallery	(Galleries)	2007	Sultan Sooud Al Qassemi, Mishal Hamed Kanood, Charles Pocock	Al Quoz

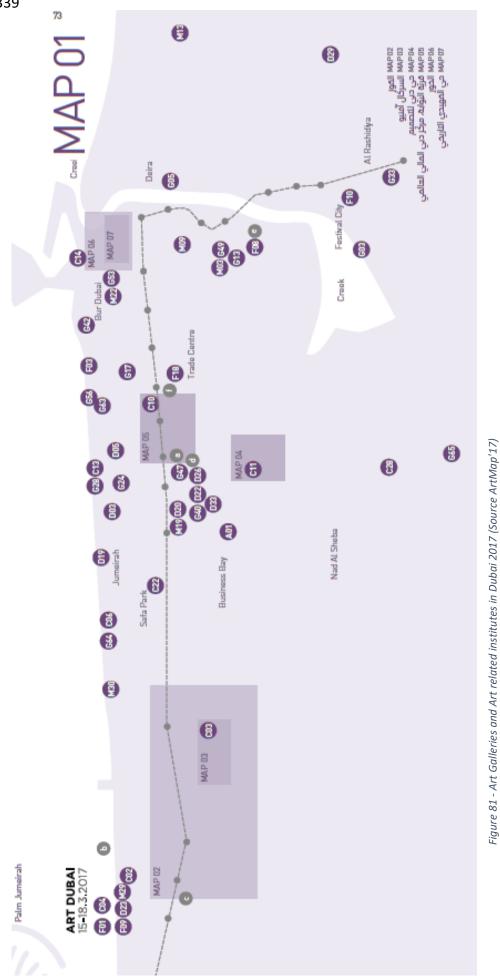
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Dubai Community Theatre & Arts Centre – DUCTAC	(Non-Profit)	2006	Hussain Moosa	Al Quoz
Empty 10	(Non-Profit)	2011	Mohammed Kazem, Cristiana de Marchi	Al Quoz
Create Hub Gallery	(Cultural Institutions)	NA	Lidija Khachatourian	Al Quoz
The Mine	(Galleries)	2013	Sanaz Askari	Al Quoz
Tech Arc	(Art Center)	2017	NA	Alserkal
Alserkal Residency	(Cultural Institutions)	2017	NA	Alserkal
Jean-Paul Najar Foundation	(Foundations)	2016	Deborah Najar, Wafa Jadallah	Alserkal
Custot Gallery	(Galleries)	2016	Stéphane Custot	Alserkal
MB&F M.A.D.Gallery	(Galleries)	2016	Maximilian Büsser	Alserkal
Leila Heller Gallery, Dubai	(Galleries)	2015	Alexander Heller , Leila Heller	Alserkal
The Junction	(Non-Profit)	2015	Arjun Burman, Gautam Goenka, Rashmi Kotriwala	Alserkal
1971 Design Space	(Non-Profit)	2015	NA	Alserkal
Cinema Akil	(Non-Profit)	2014	NA	Alserkal
Andakulova Gallery	(Galleries)	2013	Natalya Andakulova	Alserkal
Ayyam Gallery DIFC	(Galleries)	2011	Hisham Samawi, Khaled Samawi, Maymanah Farhat	Alserkal
Lawrie Shabibi	(Galleries)	2011	William Lawrie, Asmaa Al- Shabibi	Alserkal
Salsali Private Museum	(Museums)	2011	Liliana do Nascimento	Alserkal
Satellite	(Non-Profit)	2011	Rami Farook	Alserkal
FN Designs	(Artists Studios)	2009	NA	Alserkal
Art Sawa	(Galleries)	2008	Amel B. Makkawi	Alserkal
Mojo Gallery	(Galleries)	2008	Kurt Blanckenberg	Alserkal
Carbon 12	(Galleries)	2008	Nadine Knotzer, Kourosh Nouri	Alserkal
Grey Noise	(Galleries)	2010	Umer Butt, Hetal Pawani, Rehan B.Shah	Alserkal

Gallery Isabelle van den Eynde	(Galleries)	2006	Isabelle van den Eynde	Alserkal
The Third Line	(Galleries)	2005 Sunny Rahbar, Claudia Cellini, Omar Ghobash		Alserkal
Thejamjar	(Non-Profit)	2005 Hetal Pawani		Alserkal
1×1 Art Gallery	(Galleries)	1996	1996 Malini Gulrajani	
Green Art Gallery	(Galleries)	1995	Yasmin Atassi	Alserkal
Elmarsa	(Galleries)	<u>1994[1]</u>	NA	Alserkal
Showcase Gallery	(Galleries)	1990	Sharon Harvey	Alserkal
Nadi Al Quoz	(Art cluster)	NA	NA	Alserkal
The Tharawat Space	(Art cluster)	NA	NA	Alserkal
eL Seed Studio	(Artists Studios)	NA	eL Seed	Alserkal
La Galerie Nationale	(Galleries)	NA	Guillaume Cuiry	Alserkal
Abu Dhabi Art Hub	(Non-Profit)	NA	Ahmed Al Yafei	Alserkal
Gulf Photo Plus	(Non-Profit)	NA	Mohamed Somji	Alserkal
Sinyar Gallery	(Galleries)	2016	Salma Al Marri	D3
East Wing	(Galleries)	2014	Elie Domit	D3
Gallery Ward	(Galleries)	2010	NA	D3
Art Hub Gallery Dubai	(Galleries)	eries) NA Ahmed Al Yafei		D3
Citizen E Gallery	(Galleries)	NA	Jalal Luqman	D3
Art Jameel Project Space	(Non-Profit)	NA	NA	D3
The Empty Quarter	(Galleries)	2009	Reem Al Faisal, Lulwah Al Hamoud	DIFC
The Farjam Foundation	(Foundations)	2008	Marjan Farjam	DIFC
Cuadro	(Galleries)	2008	Bashar Al Shroogi, Alaa Al Shroogi	DIFC
Ayyam Gallery Al Quoz	(Galleries)	2008	Hisham Samawi, Khaled Samawi, Maymanah Farhat	DIFC
Tabari Artspace	(Galleries)	2003	Maliha Tabari, Sossy Dikijian	DIFC

AR Gallery	(Galleries)	NA	Amrish Patel / Darshan Soni / Anna Szonyir	DIFC
Mottahedan Projects	(Galleries)	NA	Mohammad Matt Mottahedan, Mojgan Endjavi-Barbé	Dubai
Tashkeel	(Non-Profit)	2008	Sheikha Lateefa Bint Maktoum	Nadd AlSheba
A4 Space	(Non-Profit)	2014	Vilma Jurkute	Sharjah
Maraya Art Park	(Non-Profit)	2013	Giuseppe Moscatello	Sharjah
Barjeel Art Foundation	(Foundations)	2010	Sultan Sooud Al Qassemi	Sharjah
Maraya Art Centre	(Non-Profit)	2010 Giuseppe Moscatello		Sharjah
Sharjah Art Foundation	(Non-Profit)	2009	Sheikha Hoor Al Qasimi	Sharjah
Sharjah Museum of Islamic Civilization	(Non-Profit)	2008	Manal Ataya	Sharjah
Sharjah Art Museum	(Museums)	1997	Manal Ataya	Sharjah
Emirates Fine Arts Society	(Non-Profit)	1980	NA	Sharjah
Sharjah National Theatre	(Cultural Institutions)	1978	NA	Sharjah
Sharjah Heritage Museum	(Museums)	NA	NA	Sharjah

The following map points out the locations of art galleries in Dubai and the art-related institutions and foundations. On the map, the Dubai four art and cultural districts are highlighted: Al Quoz Area (Alserkal Avenue within it), Dubai Down Town (DIFC), Al Bastakiyah and Dubai Design District (D3).



CULTURAL AND CREATIVE CLUSTERS IN THE SPATIOTEMPORAL CONTINUUM: DUBAI ART & DESIGN DISTRICTS AS A CASE STUDY – DAMIEN NOUVEL. UNIVERSITY OF ANGERS 2018

ANNEX 2 – LIST OF INTERVIEWEES

The following table lists interviews met during the course of preparing this thesis. All interviews were semi-structured (except for informal discussion whose duration is 15 minutes or less). Duration figures below are approximated to the nearest 15 minutes. All interviews, except those marked by (*) were held in June 2017. Positions and location of interviewees is correct as per the date of the interview.

#	Interviewee	Position	Firm / Organisation	Location	Interview Duration (min)
1	Jyrille Rose Nicolas	Coordinator	Etihad Modern Art Gallery	Abu Dhabi	30
2	Mohammed Al Kaabi	Head of Strategy	TDIC	Abu Dhabi	30
3	Camille Petit	Director	Institut francais Abu Dhabi	Abu Dhabi	30
4	Nour Saghbini	Director / Development	TDIC	Abu Dhabi	30
5	Marco Sosa *	Professor	Zayed Univesrity	Abu Dhabi	30
6	Mark Jonathan Beech *	Head of Archaeology	ТСА	Abu Dhabi	15
7	Minoti Shah	Co-Founder/Manager	Al Majlis Art Gallery	Al Fahidi	60
8	Idris Mears	Historian / consultant	Alserkal Cultural Foundation	Al Fahidi	30
9	Mona Hauser	Co-Founder/Owner	XVA Gallery	Al Fahidi	30
10	Maria Mumtaz	Director	Gallery Isabelle van den Eynde	Alserkal Avenue	30
11	Sharon Harvey	Director- Owner	Showcase Gallery	Alserkal Avenue	30
12	Kourosh Nouri	Co-Founder/Owner	Carbon 12 Art Gallery	Alserkal Avenue	75
13	Malini Gulrajani	Co-Founder/Owner	1x1 Art Gallery	Alserkal Avenue	30
14	Vilma Jukurte	Director	Alserkal Avenue	Alserkal Avenue	45
15	Alserkal Team		Alserkal Avenue	Alserkal Avenue	75
16	Deborah Najjar	Founder/Owner	JPN Museum	Alserkal Avenue	60
17	Josephine Mees	PR Manager	Third Line Art Gallery	Alserkal Avenue	30
18	Hetal Pawani	Founder/Owner	The JamJar	Alserkal Avenue	90
19	Guillaume Cuiry	Owner	Gallerie Nationale	Alserkal Avenue	60
20	William Lawrie	Co-founder	Lawri Shabibi Art Gallery	Alserkal Avenue	60
21	Jolaine Frizzel	Business Development Director	Leila Heller Art Gallery	Alserkal Avenue	30
22	Susana Martins	Co-founder	Factory/Design Studio/Gallery	Alserkal Avenue	15
23	Shereen El Agamy	Manager	Tharwat Family Business Forum	Alserkal Avenue	60

24	Daniel Hamparsumyan *	Director	Leila Heller Gallery	Alserkal Avenue	15
25	Ead Samawi	Manager	Al Ayyam Art Gallery	Alserkal Avenue / DIFC	60
26	Adam Hardy	Gallery Manager	Cuadro Art Gallery	DIFC	60
27	Amel Mekkawi	Founder/Owner	Sawa Art Gallery	DIFC	30
28	Fourie Mourné	Vice president	Merass	DIFC	75
29	Rashed Shabib	Owner	BrownBooks	DIFC	60
30	Hala Khayyat	Sales Manager	Christie's Dubai	DIFC	30
31	Luc Manther	Development Manager	TECOM	Dubai	45
32	Somesh Gour	Senior Manager	TECOM	Dubai	60
33	Myrna Ayyad *	Previous Director / Art Consultant	Art Dubai	Dubai	30
34	Phillipe Blanchard *	Consultant	Expo2020	Dubai	60
35	Shahin Pourmaleki	Owner	28 Fine Art (Consultants)	Dubai	15
36	Michela Celi	Director of Strategy	Dubai Design District	Dubai Design District	60
37	Benedetta Ghione	Executive Director	Art Dubai	Dubai Design District	45
38	Suheil Rumhein	General Manager	Chalhoub	Dubai Design District	30
39	Khalil Abdul Wahid	Head of Visual Arts	Dubai Culture	Dubai Design District	75
40	John Martin	Co-founder / Art Gallery Owner	Art Dubai	London	30
41	Lisa Ball-Lechgar	Deputy Director	Tashkeel	Nad Al Sheba (Dubai)	75
42	Farah Rahim *	Manager	Christie's Qatar	Qatar	60
43	Salwa Zidaan *	Founder/Owner	Salwa Zidan Art Gallery	Saadiyat Island- Abu Dhabi	15
44	Laura Metzler	Artist / Curator	Mazaya Art Centre / Sharjah Art Foundation	Sharjah	45
45	Karim Sultan	Manager/ Curator	Barjeel Art Foundation	Sharjah	75

UNIVERSITE BRETAGNE ECONOMIE LOIRE ET GESTION



Titre : Clusters culturels et créatifs dans le continuum spatiotemporel d'un point de vue évolutionniste. Le cas des districts du design et de l'art à Dubai)

Mots clés : Clusters Culturels et Créatifs, Géographie Économique Évolutionniste, Complexité, Dépendance au sentier, Districts d'art, Dubaï

Résumé : D'un village côtier du désert à une ville globale en seulement quelques décennies, et cela grâce à un mélange de politiques utopistes favorisant les développements néolibérales économiques et urbains superlatifs. Dubaï doit/devrait encore rivaliser pour son positionnement culturel régional courant les années 2000. À cette époque-là, les activités culturelles et artistiques, fortement liées une installation culturelle et nourries par institutionnelle fertile dans la ville voisine de Charjah, étaient déjà en plein essor à Dubaï. En 2006/2007 Les entreprises créatives et artistiques (galeries d'art et de design) ont connu une accélération soudaine menant à l'émergence de plusieurs quartiers artistiques et créatifs, dont certaines résultent d'initiatives top-down menées par le gouvernement. Les dynamiques d'agglomération des entreprises d'art et de culture à Dubaï ne sont pas seulement ancrées dans les dynamiques néo-classiques du district Marshallien mais bénéficient également de forces

institutionnelles, commerciales et personnelles à multiples facettes qui s'inscrivent dans les théories des clusters Porteriens et post-Porteriens. Voir l'émergence de ces districts au travers d'événements historiques appelle des concepts évolutionnistes tels que la dépendance du sentier, la co-évolution et l'auto-renforcement. Enfin, les réseaux multi-scalaires qui conduisent à une telle évolution imposent de considérer la complexité de ces réseaux et le rôle des agents dans la formation de l'image globale. En nous référant aux concepts de la complexité et de la géographie économique évolutionniste, nous introduisons un cadre d'analyse qui étudie l'émergence de clusters créatives dans un deuxième temps. Compte tenu du contexte historique particulier de notre cas d'étude, nous rechercherons ensuite des indices et des exemples issus qui représentent les principaux facteurs de changement pour l'émergence et l'évolution des districts d'art et de design.

Title: Cultural and Creative Clusters in the Spatiotemporal Continuum- An Evolutionary Perspective: Dubai Art and Design Districts as a Case Study

Keywords: Cultural and Creative Clusters, Evolutionary Economic Geography, Complexity, Path Dependency, Art Districts, Design Districts, Dubai

Abstract : Rising from a desert coastal village towards a global city in only a few decades thanks partially to a mix of utopian-led, neo-liberal policies that favoured speed superlative economic and urban developments, Dubai was still to compete for its regional cultural positioning through culture-led projects in the early 2000's. Cultural and art business activities, strongly linked and nurtured by a fertile institutional, cultural setup in the nearby Sharjah, were already on the rise in Dubai. By mid-2000's, the creative and art businesses (i.e. art and design studios and galleries) saw an abrupt acceleration leading to the emergence of a few clusters that continued to grow to form art and creative districts, namely Alserkal Avenue in Al Quoz Industrial Area, Al Fahidi Historical District, Gate Village at the Dubai International Financial Centre DIFC and later the Dubai Design District, some of which being the result of top-down dynamics government-led initiatives. The of agglomeration of art and culture businesses in

Dubai are not only inscribed into neo-classical Marshallian district dynamics but have also profited from multi-facet institutional, business and personal network forces that fit into Porterian and post-Porterian cluster theories. Seeing the emergence of these districts through the lens of historical events calls for evolutionary concepts such as path dependency, co-evolution and self-reinforcement among others. Similarly, the multi-scalar networks leading to such an evolution pronounces a need to examine the complexity of these networks and the role of agents in shaping the overall picture in the space-time continuum. Using complexity theory and evolutionary economic geography concepts we introduce an analytical framework to study the emergence of these clusters. Finally, we search for evidence and examples from our case study considering its particular historical context and the key game changers for the emergence and evolution of art and design districts.