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Reassembling audit around the jurisdiction of comfort : how to design and conduct performative experiments

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Ecole Doctorale de Management Panthéon-Sorbonne
ED 559

Reassembling audit around the jurisdiction of comfort
How to design and conduct performative experiments

THESE

En vue de l'obtention du
DOCTORAT ÈS SCIENCES DE GESTION

Par

François-René Lherm

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L'Université n'entend donner aucune approbation ou improbation aux opinions émises dans les thèses. Ces opinions doivent être considérées comme propres à leurs auteurs.

A mon père

Ils se reconnaîtront

A ma mère

Ils me reconnaîtront

A ma femme

Ma Reconnaissance

To my father

They shall know who they are

To my mother

They shall know who I am

To my wife

We know we are

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That, which is beyond knowledge, has to be acknowledged. The dedications therefore tried to convey, in their most familiar expressions, the multiple layers that likely compose the core of this thesis.

Partly in overlap, I now turn to elaborate a bit in these acknowledgments. There's hope in any experimentation. Maybe there's only hope. My most sincere gratefulness goes to all those who have fueled hope in the process.

Thanks to my three referees, who together embody the performative experiment and what I strive to become as a teacher and a researcher.

I would not be able to think as an accounting researcher had Kari Lukka not devoted his entire research life to offer to our field the most exacting analyses of its intimate workings and to all of us a true example of unwavering independence of mind. Just figure who would be the last captain standing to stay the course in the tempest.

There would be no place for this thesis to blossom (or not) had David Cooper not relentlessly worked to make it possible for the most radical research to be expressed and have whatever impact (or not) the accounting world would be able to receive. Just try and say "bullshit!" with nearly as benevolent a smile as he does.

There would be no "would", were it not for the incredibly subtle, always pertinent and sincerely dedicated supervision of Philippe Zarlowski. His mastery in actively standing-by truly consecrates the wisdom of bringing together modesty and determination. I wish a PhD student would feel that way about me some day.

Performative experiments can be interventionist only because they question what the world is claimed to be. And they can be critical only because they stand firm in their will to make a useful difference. As truth is both a rare and endless achievement, it requires modesty and determination to happen.

My most sincere gratitude also goes to my co-author Christian Mouillon. Our discussions revealed a depth of intellectual fit that made the development of audit as insurance possible, in a truly constructive and inspiring interaction.

Thanks to my jury and especially to my two rapporteurs, Philippe Lorino and Andrea Mennicken, whose comments on a first draft were key to point out major shortcomings and unlock untapped potential - as I am sure will their comments on this second draft.

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Thanks all and everyone for this wonderful opportunity to be part of it.

ABSTRACT

This thesis is composed of three articles which together contribute to enhance the relevance of audit as well as of research in accounting, based on the development of a new method of experimentation adapted to the management sciences.

First, it suggests the importance of two highly relevant “how to” questions: “how to make the use of comfort legitimate in the audit of estimates?” and “how to optimize the practical relevance of theoretically valid results in auditing research?”. Then, it develops the performative experiment, a method which makes it possible for the management sciences to address “how to” questions, and applies this method to the two questions raised.

In spite of limits, this research may contribute to, and open new perspectives for, practice and theory in three different fields. In audit, it indicates a new way to think of auditability, beyond reference to external benchmarks. In accounting research, it offers a step-by-step process to bestow experimental validity to theoretical results. In the science studies, it delivers fresh data and perspectives to rethink the management sciences.

Eventually, this thesis might indicate a not too hurtful way out of the very idea of modernity.

ABREGE

Cette thèse se compose de trois articles qui ensemble contribuent à améliorer la pertinence de l'audit et de la recherche en comptabilité, en s'appuyant sur le développement d'une nouvelle méthode d'expérimentation adaptée aux sciences de gestion.

Dans un premier temps, elle souligne l'importance de deux questions de type "comment faire pour": "comment faire pour rendre l'utilisation du confort légitime dans l'audit des estimations?" et "comment faire pour optimiser la pertinence des résultats de la recherche comptable pour la pratique?". Puis, dans un second temps, elle développe l'expérimentation performative, une méthode qui permet aux sciences de gestion de répondre à des questions de ce type, et qu'elle applique aux deux questions précédentes.

Malgré ses limites, cette recherche apporte des contributions et ouvre de nouvelles perspectives pour la pratique et la théorie dans trois champs différents. En audit, elle indique une nouvelle façon de penser l'auditabilité par-delà l'établissement d'une référence à des critères externes. Elle dote la recherche en comptabilité d'une méthode, détaillée étape par étape, qui permet de donner une validité expérimentale aux résultats théoriques. Pour la philosophie des sciences, elle offre des données nouvelles qui permettent de repenser les sciences de gestion.

Enfin, il se peut que cette thèse indique un chemin praticable pour sortir de l'idée même de modernité.

RESUME

“Agency is about the most difficult problem there is in philosophy”¹

(Latour, 2005, p.51)

Cette thèse n’a pas l’ambition de résoudre le problème le plus compliqué qui soit en philosophie. Mais elle a bien l’ambition de présenter une méthode qui pourrait permettre aux sciences de gestion de le faire - dans un perpétuel recommencement, avec modestie et détermination.

Comme souvent dans nos sociétés de l’audit (Power, 1997), tout a commencé avec un audit. Plus précisément, avec l’audit de l’audit des auditeurs. A travers le monde, les régulateurs ont observé une étonnante défaillance des auditeurs dans l’audit des estimations, qu’ils ont interprété comme indiquant un manque d’esprit critique de la part des auditeurs (par exemple, IAASB, 2012, and 2015; PCAOB, 2012b, 2012c, 2014a, and 2014b; IFIAR, 2012, 2013, and 2014).

L’étude empirique interprétative présentée dans le premier article de cette thèse traite de cette question. Je propose d’abord, en illustrant par les normes d’audit, qu’il est en soi paradoxal de certifier des estimations. Ensuite, en m’appuyant sur les “Economies de la grandeur” de Boltanski et Thévenot, j’analyse comment les auditeurs parviennent néanmoins à justifier leur opinion relative aux estimations les plus délicates.

J’observe effectivement que les auditeurs manquent d’esprit critique. Cependant, une analyse plus poussée suggère que cela peut être expliqué par l’adoption de comportements biaisés, qu’ils ont développés afin de contourner un paradoxe. Les estimations opposent une résistance insistante (“para-”) à l’approche certificatoire aujourd’hui prépondérante dans les normes d’audit (“-doxa”), parce qu’il est impossible de réduire leur incertitude inhérente au moyen de preuves appropriées et suffisantes. Pourtant, l’enjeu est tel que les auditeurs sont souvent tenus de donner leur opinion dans

¹ “Le problème de l’agence est peut-être le plus compliqué qui soit en philosophie.”

ces situations. Plutôt que l'indication d'un professionnalisme défaillant, le manque d'esprit critique indiquerait donc que la notion de preuve d'audit, qui a fait la fortune de la profession depuis au moins quatre-vingts ans, est devenue insuffisante pour émettre une opinion d'audit sur les états financiers.

Aujourd'hui, lorsqu'un auditeur émet un rapport sans réserve sur des états financiers qui comportent des estimations délicates, c'est qu'il est soit impertinent soit fou. S'il s'en tient au modèle actuel de l'audit comme certification par la preuve, il produit une certification inutile qui n'est adéquate qu'aux normes d'audit. Mais si, alternativement, il fait sincèrement de son mieux pour évaluer le caractère raisonnable des estimations les plus délicates, alors il est certain de se tromper et prend donc un risque potentiellement illimité pour avoir osé distinguer, seul, ce qui est raisonnable de ce qui ne l'est pas. Ainsi, quoi que l'auditeur fasse, la profession est en grand danger: elle risque soit de se diluer jusqu'à la plus complète inutilité, soit de s'effondrer sous le poids de la méfiance ou des procès.

Cependant, au milieu de cette crise profonde, mes résultats décèlent une lueur d'espoir. Dans certains cas, les auditeurs apportent aux audités une contestation à la fois externe et constructive de telle façon que les deux partis aboutissent à un sentiment de confort: l'estimation qu'ils donnent leur paraît bien la plus raisonnable qu'il se puisse faire au vu des circonstances. J'interprète cela comme l'expression d'une "juridiction du confort", qui indique un type de justification encore inexploré par Boltanski et Thévenot. Bien que ce confort n'ait pas le statut de preuve, c'est bien lui qui permet aux auditeurs de s'assurer que les comptes sont le plus juste possible. Mais comment faire pour rendre l'utilisation du confort légitime dans l'audit des estimations?

La recherche n'a pas encore trouvé de méthode pour se poser scientifiquement des questions du type "comment faire pour", dont la réponse permettrait ici aux auditeurs de traiter au mieux les estimations. Ainsi, l'incapacité de l'audit à certifier les estimations dévoile également de façon flagrante l'incapacité de la recherche à traiter ce genre de problèmes.

Les tentatives répétées des chercheurs (par exemple, Cannon and Bédard, 2014, p.2; Griffith, Hammersley, Kadous and Young, 2014, p.24; Glover, Taylor and Wu, 2014, p. 2; Christensen, Glover and Wood, 2012, p.129) pour fournir des explications positives aux normalisateurs n'ont servi à rien. Et trente ans de recherches interprétatives

fouillées, allant d'une analyse des paradigmes de la pratique (Dirsmith et al., 1985; Dirsmith and Haskins, 1991) jusqu'au rôle clef que jouent les émotions comme le confort ou la peur (Pentland, 1993; Guénin, 2007), n'ont eu aucun effet sur les politiques publiques.

C'est pourquoi, afin de rendre les résultats de ma recherche utiles aux normalisateurs, j'ai d'abord dû trouver une façon de poser des questions du type "comment faire pour". Dans le second article de cette thèse, je présente donc la méthode que j'ai développée pour ce faire, et l'exemplifie par l'application concrète que j'en ai faite dans l'étude de l'audit des estimations.

Afin de traiter des questions du type "comment faire pour", il me fallait passer des méthodologies objectivistes, qui prévalent d'ordinaire dans les travaux de recherche, à une méthodologie projectiviste. Cette évolution est très exactement ce que propose Bruno Latour dans son "Introduction à la théorie-de-l'acteur-réseau", qui donne à comprendre l'ANT comme un principe de projection abstrait qui a pour but de performer le social. Pourtant, bien que l'introduction de Latour nous apporte des principes méthodologiques très utiles, elle ne précise pas de méthode de recherche: qu'est-ce que le chercheur doit décrire exactement, et comment peut-il savoir que sa description est suffisante pour performer le social?

Je résous ces difficultés méthodologique en posant l'hypothèse que "la recherche est faite par des êtres humains". Bien que cela puisse paraître évident dans des approches objectivistes, dans le contexte de l'ANT il s'agit d'une entorse à la symétrie entre humains et non-humains. Cependant, en tirant les conséquences de cette hypothèse, j'ai pu compléter la méthodologie de Latour jusqu'à aboutir à une méthode d'expérimentation parfaitement symétrique: l'expérimentation performative, qui permet de résoudre des questions du type "comment faire pour".

Dans le reste de l'article, je me donne alors pour objet d'exemplifier la méthode d'expérimentation performative par la projection d'une nouvelle forme de légitimation en audit: le contrat d'assurance rendrait légitime que les auditeurs utilisent leur sentiment de confort dans l'évaluation des estimations. Concrètement, passer de la certification à l'assurance aurait pour conséquence que les auditeurs prendraient sur eux le risque d'erreur des états financiers qu'ils assurent, plutôt que de prendre un risque de réputation ou de contentieux relativement à leur certification. Cela leur donnerait la liberté d'utiliser le critère qui leur paraît le plus approprié pour savoir ce qu'ils décident

d'assurer ou pas - y compris leur sentiment de confort. Les nombreuses conséquences possibles d'un tel passage de la certification à l'assurance indiquent que les résultats de cette expérimentation pourrait être très pertinents pour la pratique de l'audit.

De ce fait, le passage des méthodes objectivistes à une méthode projectiviste, avec le développement qui s'ensuit d'une expérimentation performative qui rend possible de résoudre des questions du type "comment faire pour", contribue également à la pratique et à la théorie de la recherche en comptabilité.

La remise en question de la pertinence de la recherche en gestion a conduit à proposer des alternatives intéressantes, comme l'engagement intellectuel (Van de Ven, 2007), ou la problématisation (Alvesson and Sandberg, 2011). Ce débat a trouvé un écho dans notre champ, qui y a ajouté une crainte sur le caractère pérenne de la recherche en comptabilité (par exemple, Ahrens et al., 2008, ou Humphrey and Gendron, 2015).

Le troisième article présenté dans cette thèse réaffirme l'idée que des résultats théoriquement valides en recherche ne peuvent pas être en eux-mêmes pertinents pour la pratique et nécessitent donc un travail complémentaire en ce sens. Il amène alors l'idée que l'expérimentation performative, comme application concrète d'une méthodologie projectiviste et non plus objectiviste (qu'elle soit positiviste ou interprétative), est conçue très exactement pour optimiser la pertinence des résultats théoriques pour accompagner la pratique dans une réflexion à la fois profonde et tendue vers l'action.

Le processus d'expérimentation performative permet de satisfaire aux critères de validité, par ailleurs souvent incompatibles, d'authenticité, plausibilité, fiabilité et généralisabilité. Mais en sus, je suggère qu'il soit jugé en fonction du seul critère de validité qui vaille pour une expérimentation: est-ce que ça marche? Si ça marche, alors ce petit élément de méthode pourrait donner un argument majeur pour assurer la pertinence et la pérennité de la recherche en comptabilité. En effet, il rendrait possible de faire ce que Hopwood (2007) percevait comme étant en partie le rôle propre de notre discipline: changer à la fois la comptabilité et la connaissance que nous en avons.

Malgré ses limites, cette thèse apporte donc des contributions à la théorie et à la pratique dans trois champs: l'audit, la recherche en comptabilité, et l'étude de la science par les sciences sociales.

En audit, d'abord. A la pratique de l'audit, cette recherche suggère l'importance se

prendre en compte, dans l'approche des estimations, non pas une incertitude comptable inhérente mais plutôt d'une incertitude d'audit circonstancielle. Elle suggère aussi une conceptualisation nouvelle de l'esprit critique en audit, qui diffère à la fois du jugement et de l'indépendance. Ces suggestions sont susceptibles d'informer les efforts des régulateurs internationaux pour repenser les normes actuelles (IAASB, 2015). Elles indiquent à la profession un renouveau possible de son identité, dans son intérêt et celui de la société tout entière. Pour la théorie, la recherche met en regard l'impossibilité de certifier et la nécessité d'auditer les estimations, qu'elle résout dans la "juridiction du confort". En effet, en dépassant l'auditabilité comme référence à des critères externes, ce concept permet d'envisager l'audit comme assurance et de réduire de façon sensible les différentiels d'attente et d'information, mieux connus sous les noms de "expectation et information gaps", qui séparent aujourd'hui la profession de ses parties prenantes.

Ensuite, la pratique de la recherche en comptabilité se trouve dotée d'une méthode d'expérimentation détaillée étape par étape, qui permet de maximiser la pertinence de la recherche en optimisant la portée pratique des résultats théoriques existants. La théorie de la recherche en comptabilité peut être augmentée d'un critère de validité expérimentale, qui ne remplace pas mais complète de façon utile les critères habituellement utilisés. Une validité expérimentale serait en mesure d'améliorer de façon significative la pertinence de la recherche en comptabilité, et donc sa pérennité.

Enfin, la pratique de l'étude de la science par les sciences humaines, communément appelée "science studies", est enrichie de données empiriques qui peuvent soutenir un questionnement des antagonismes actuellement prévalants. En effet, d'un point de vue projectiviste, les méthodologies positivistes et interprétivistes sont surtout caractérisées par leur point commun: elles sont objectivistes. Elles doivent encore passer par un processus d'expérimentation qui va déterminer si ces résultats valides théoriquement permettent de construire un prototype qui "marche". Par ailleurs, dans l'expérimentation même, la critique et l'intervention sont indissociables. La critique est nécessaire pour révéler un paradoxe qui pourra mener à une intervention dans un laboratoire et au-delà. Mais sans la validation de son impact dans l'application concrète d'une forme sociale nouvelle, la critique resterait vaine. D'un point de vue théorique, la méthodologie projective expérimentale développée dans cette thèse donne à voir les sciences de gestion sous un nouveau jour. Il ne s'agit plus pour le scientifique de l'action de contrôler la réalité de phénomènes propres à la gestion, mais d'être vigilant, afin d'aller

planter son laboratoire de campagne à chaque endroit où le social se met en mouvement, pour y développer un prototype capable d'accompagner ce mouvement.

En conclusion, grâce à leur situation privilégiée entre la pratique la plus crue et la théorie la plus sophistiquée, les sciences de gestion, et parmi elles, les sciences comptables, et particulièrement l'audit, ont formé un terrain naturel pour l'émergence de l'expérimentation performative. Cependant, pour s'enrichir du potentiel inexploité de ce processus d'expérimentation et assurer la pertinence et la pérennité de leur profession, les auditeurs comme les chercheurs en gestion devront accepter une condition nécessaire: la vérité n'est que transitoire. C'est pourquoi, tout comme les auditeurs vont devoir abandonner l'idéal d'une auditabilité absolue, les chercheurs en gestion vont devoir renoncer à l'idéal d'une validité éternelle.

Cette condition est-elle acceptable? Ce n'est pas à moi de le dire. Cependant, apporter une réponse intéressante au problème fondamental de l'agence, expérimentation après expérimentation, vérité après vérité, d'une façon modeste mais déterminée: qu'est-ce que les sciences de gestion pourraient-elles faire de mieux?

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INTRODUCTION

How can management researchers make a difference?

“Agency is about the most difficult problem there is in philosophy”

(Latour, 2005, p.51)

This thesis does not ambition to address the most difficult problem there is in philosophy. But it does ambition to introduce a method that may make it possible for the management sciences to do so - forever again, with modesty and determination.

As often in our audit society (Power, 1997), this all began with an audit. More precisely, with the audit of auditors’ audits. Regulators all over the world have observed a puzzling failure of the practitioners to audit estimates, which they have interpreted as indicative of a lack of professional scepticism among auditors (e.g. IAASB, 2012, and 2015; PCAOB, 2012b, 2012c, 2014a, and 2014b; IFIAR, 2012, 2013, and 2014).

This matter is addressed in an interpretive empirical study presented in the first paper of this thesis. First, based on an analysis of the auditing standards, I propose that assuring estimates is paradoxical as such. Second, using the theoretical lens of Boltanski and Thévenot’s Economies of Worth, I analyze how auditors nonetheless manage to justify their opinion on highly challenging estimates.

I do observe a lack of scepticism among auditors. However, closer analysis suggests that this may be explained by biased audit behaviors, which have been developed to address a paradox. Estimates insistently resist (“para-”) to the currently prevailing approach in the auditing standards (“-doxa”), because their inherent uncertainty may not be reduced by obtaining sufficient appropriate evidence. Instead of a failing professional consciousness, lack of scepticism may rather indicate that evidential assurance, which has made the fortune of the profession for at least 80 years, has become insufficient to assure the financial statements.

Today, whenever auditors issue an unquestioned report about financial statements that contain challenging significant estimates, they are being either useless or crazy. If they

stick to the current model of audit as evidential assurance, they produce useless verification only adequate to the auditing standards. But if, alternatively, they sincerely strive to assess the reasonableness of challenging estimates, they are sure to fail and take possibly unlimited liability for daring to tell alone what is reasonable from what is not. Whatever the auditors may do, audit is jeopardized: it risks either slow dilution into uselessness, or collapse under massive litigation and distrust.

However, my results point to a possible way out. In some instances, auditors oppose a constructive challenge to auditees in such a way that they achieve mutual comfort as to what may best constitutes reasonableness in the highly specific estimate at hand. I interpret this as the expression of a “jurisdiction of comfort”, which points to a type of justification as yet unexplored by Boltanski and Thévenot. Even if that comfort has no evidential status, using it allows auditors to achieve the best possible representation in the financial statements. But how to make the use of comfort by auditors legitimate in the audit of estimate?

Research has yet to develop a way to scientifically address that kind of “how to question”, and help unlock auditors’ actual potential to address estimates. Indeed, the persistent failure of audit to assure estimates also blatantly reveals the failure of research to address that problem.

To no avail, researchers have already attempted to inform standard-setting through positive explanations (e.g., Cannon and Bédard, 2014, p.2; Griffith, Hammersley, Kadous and Young, 2014, p.24; Glover, Taylor and Wu, 2014, p.2; Christensen, Glover and Wood, 2012, p.129). And thirty years of rich interpretive studies, reaching from an analysis of the core paradigms of the practice (e.g., Dirsmith et al., 1985; Dirsmith and Haskins, 1991) up to the key role of emotions such as comfort and fear (Pentland, 1993; Guénin, 2007), has failed to influence policy-making.

Thus, in order for the result of my research to inform standard-setting, I first had to find a way to address “how to” questions. In the second paper of this thesis, I introduce the method I have developed to be able to address this kind of questions, and then illustrate it by its application to the audit of estimates.

The challenge of addressing “how to” questions required a shift from the objectivist methodologies in which accounting research is usually framed, to an unusual projectivist methodology. To do so, I relied on Latour’s “Introduction to the Actor-Network-Theory”, which understands ANT as an abstract projection principle to

perform the social. However, though Latour's introduction gives useful methodological principles, it does not elaborate on any specific method: what exactly should the researcher describe, and when should he feel that the description is enough to perform the social?

I address these implementation difficulties by assuming that "research is conducted by human beings". Though this may seem obvious in objectivist approaches, in the context of ANT this is a dared breach of symmetry between humans and non-humans. But unrolling the consequences of this assumption allows me to extend Latour's methodology into a perfectly symmetrical experimentation method: the performative experiment, which makes it possible to address "how to" questions.

I then turn to illustrate how I applied the performative experiment method to project a new form of legitimation in audit: the insurance contract, that would make it possible to make the use of comfort legitimate in the assessment of estimates. Concretely, shifting audit from assurance to insurance would have auditors take the misstatement risk of the financial statements they insure, rather than taking the reputation or litigation risk with regard to an assurance opinion. This makes them free to use any factor they deem appropriate to decide what to insure or not - including comfort. The numerous potential impacts of such a shift from assurance to insurance indicate that the result of this experimentation might be highly relevant to audit practice.

The shift from the objectivist methods to a projectivist one, and the ensuing development of the performative experimentation that makes it possible to address "how to" questions, also contributes to both research practice and theory.

Questioning the relevance of research in management has led to interesting alternatives such as engaged scholarship (Van de Ven, 2007) or problematization (Alvesson and Sandberg, 2011). Voices have relayed that concern within the field of accounting, adding up a concern for the sustainability of the accounting research (e.g., Ahrens et al., 2008, or Humphrey and Gendron, 2015).

The third paper presented in this thesis first asserts the rather mundane idea that theoretically valid results in accounting research may not, in themselves and if not otherwise mediated, be relevant to practice. Then, it proposes that performative experiments, as a concrete implementation of a projectivist methodology instead of the objectivist (positivist or interpretivist) methodologies, is designed to optimize the relevance for practice of existing theoretically valid result.

The process of performative experimentation does fulfill the otherwise often conflicting validity criteria of authenticity, plausibility, reliability and generalizability. But on top of that, I propose that it should be judged by the only validity criteria that befits an experimentation: does it work? If it does, then this tiny piece of a method would give a sizable argument to ensure the relevance and sustainability of accounting research. Indeed, it might realize what Hopwood (2007) viewed in part as the very role of our discipline: to make both accounting and our knowledge of it different.

Thanks to their invaluable location between the crudest practice and the most elevated theory, the management sciences, and among them, the accounting sciences, and especially audit, were a natural breeding ground for the performative experimentation to emerge. However, to thrive from the untaped potential of the experimentation process and ensure the relevance of their profession, both auditors and management researchers still have to accept one key condition: truth is transient. Therefore, just as auditors will have to let go of the ideal of absolute auditability, management scientists will have to renounce the ideal of everlasting validity.

Is this condition acceptable? It is not me to say. Nevertheless, offering an interesting answer to the fundamental problem of agency, experiment after experiment, truth after truth, in a modest but determined way: what more could management scientists do?

FIRST PAPER

The jurisdiction of comfort: auditing beyond auditability

An investigation into the use of scepticism in the audit of estimates

“[F]reedom is getting out of a bad bondage, not an absence of bonds.” (Latour, 2005, p. 230)

1. Introduction

In recent years, regulators over the world have reported failures in the audit of accounting estimates and this has been widely interpreted as caused by a lack of professional scepticism among auditors (e.g. IAASB, 2012; PCAOB, 2012b, 2012c, 2014a, 2014b, IFIAR, 2012, 2013, 2014). To judge by the PCAOB’s reports on two audit firms, the non-public part of which have been published (PCAOB, 2014a, 2014b), these failures are indicated by the existence of evidence, or of elements of context such as historical trends that should have been known to auditors, which were found to be conflicting with assumptions or models used in the computation of estimates in the audited statements. This has lead the International Auditing and Assurance Standard Board to launch a consultation focused on professional scepticism the audit of estimates (IAASB, 2015).

To date, regulators’ interpretation seems to be warranted by the auditing standards. In their approach of audit as evidential assurance, the standards provide that auditors should obtain sufficient appropriate evidence that the estimate is reasonable in the circumstances (AU 342.08² and ISA 540.06³). Estimates are meant to be particularly difficult to audit because of their inherent uncertainty, which makes room for management bias. Auditors are therefore expected to use professional scepticism to adapt their procedures accordingly and obtain objective evidence (AU 342.04, ISA 540.A40). However, this assurance approach leads to a paradox: if there exists objective evidence to narrow the range of estimation reasonableness, how come that this estimate

² PCAOB, 1988

³ IAASB, 2009b

may be inherently uncertain? And if not, how is auditors' scepticism meant to do anything about it? I turn to research to understand how that matter may be dealt with.

A review of the academic stances about professional scepticism shows that a common understanding of this notion has yet to be achieved. Moreover, the currently prevailing notion has been left largely unquestioned. For lack of an empirical understanding of the actual use of scepticism in audit, theoretical attempts have failed to distinguish this notion from independent competent judgment. As a result, while there is no reason to doubt the observations of the regulators, their interpretation that a failure to audit estimates is caused by a lack of professional scepticism appears to be much less substantiated.

Further, in spite of a growing body of research on the audit of estimates, academics have not satisfactorily addressed the paradox I raised. Some authors (e.g. Griffith, Hammersley, & Kadous, 2014; 2015; Rasso, 2015) ignore this paradox and explain the observed deficiencies by a tendency to verify management's numbers instead of noticing and processing inconsistencies and/or preparing independent expectations. They recommend that a superior audit method be developed, or claim that better staff training could enhance scepticism. Other authors (e.g., Christensen, Glover & Wood, 2012; Bell & Griffin, 2012; Glover, Taylor & Wu, 2014; Cannon & Bedard, 2014) do acknowledge the paradox, but choose to avoid it as they propose that the audit opinion on those estimates be negative ("there is no reason to doubt reasonableness") rather than positive ("the estimate is reasonable").

Here again, though, a closer look finds the extant literature to be wanting. The validity of those studies needs be sharply restricted and the solutions they suggest may prove to be of limited impact - or even detrimental to audit practice. Moreover, I find that the collection as well as the interpretation of data in two empirical investigations with contradicting results are significantly influenced by their underlying framings, which are unacknowledged and contradict each other.

However, those framings do have one thing in common: they share the standards' approach of audit as evidential assurance. Sticking to their core assumption that the audit opinion should be based on sufficient appropriate evidence, neither the standards nor research may address satisfactorily the deficiencies observed by regulators.

Interpretive insights are therefore highly needed to account for the failure in auditing estimates as well as for the role that anything we might call scepticism could play in it.

This is why I sought to investigate the following question: “how do highly experienced auditors justify their opinion as to the reasonableness of the most challenging estimates?” What makes a good auditor goes just as unexplained as what makes an estimate challenging to audit. I therefore trusted the global management of TP, one of the four largest audit networks worldwide, to pick up the most challenging cases and give me access. I then conducted an interpretation of the difficulties encountered in those cases during two years of common work with TP at a global level.

As the aim of the study was to understand how auditors justify their opinion, I used “On Justification: Economies of Worth” (Boltanski & Thévenot, 2006) as a method theory to guide interpretation. Boltanski and Thévenot devise a philosophy of justice comprising six orders of worth (or polities) according to which one may tell the fair from the unfair. However, to be set into practice, this model of polity requires a capacity to make a situated judgment. From a philosophy of justice addressing what makes a valid polity, the authors therefore turn to an ontology of judgment, matching each of the six polities with a world.

I observe that the currently prevailing approach of audit as evidential assurance actually bases on only one such world among the six possible: the industrial world, “the one in which technological objects and scientific methods have their place” (p.203), in which the common principle to order things is efficiency, based on cause-effect relationships. Evidential assurance relies on an industrial auditability: audit evidence is any formally identifiable cause, the agreed effect of which is to justify the fairness of the audited financial statements.

What made the cases I studied so challenging for auditors was not inherent accounting uncertainty, but rather what I call “audit uncertainty”. Those cases would not fit into this industrial auditability, because the specific business circumstances made that auditors were dependent on management’s input and there was no agreed definition or technology to assess appropriateness of evidence (“audit subjectivity”), and/or sufficiency of evidence (“audit complexity”).

And yet, auditors are expected to audit, and not doing so would harm their credibility. But sticking to the industrial ideal of independent judgment leads to biased behaviors. Auditors may try to mitigate the inspection risk in an “arrangement”, a pretense of industrial legitimacy which prevents them from litigation but fails to address the risk of misstatement. Or, based on their experience and an intimate knowledge of the firm, they may assess the trustworthiness of management’s estimate in risky “compromises”, which have them take high inspection risk though it may limit the audit risk.

Alternatively to arrangements or compromises, auditors may try and make sense of the circumstances as they offer external constructive challenge to the auditees. At first, it seems that the auditors enter a typical deliberation process oriented towards a legitimate independent judgment. But on a closer look, the justification of the audit opinion ultimately relies on mutual comfort, which indicates a practical alternative to the ideal of audit as assurance and may complement a conceptualization of justice in action.

I call “jurisdiction of comfort” the area in which comfort has alone the authority to tell the most reasonable representation in the financial statements. In a jurisdiction of comfort, reasonableness ultimately emerges from the processual space created by the encounter of scepticism and knowledgeability and differs from unreasonableness only in the comfort that closes the dispute between the auditee and his auditor. This jurisdictional space extends Boltanski and Thévenot’s pragmatics of reflection, for it unveils the existence of places of judgment where reflection and action are conflated.

These insights into how auditors actually address estimates may usefully contribute both to audit practice and theory. They point to the shortcomings of assurance and indicate practical venues to amend the standards relative to the audit of estimates, clarify the notion of skepticism, and make a lagging profession legitimate again. They unveil a notion of auditability that goes beyond reference to external benchmarks, which suggests a theoretical alternative to the structure/judgment feud, and reintroduces the centrality of language in an hermeneutic approach of audit.

The interpretation delivered in this study consecrates the fall of audit as an enterprise of objectification. When regulators conducted their first inspections, the ideal of audit objectivity met with audit as it is, and blaming auditors for “lack of professional scepticism” now appears as a desperate attempt to safeguard that ideal. Industrial

auditability has already been superseded by a practice of reflexive auditability which stripped itself from the necessity of conformity to external benchmarks - be they presented as objective or subjectively constructed.

The task that lies before us is to construct an audit system where auditors could legitimately resort to professional scepticism in order to resolve the most intricate estimates below the level of judgment, for there is no safer place for society in those high-risk areas than in the mutual comfort of the two most knowledgeable actors: the auditor and the auditee. What we need now is to find a way to bestow societal legitimacy to the jurisdiction of comfort.

2. Analysis of extant sources: the inescapable paradox of estimates in evidential audit

The auditing standards provide that auditors should use scepticism to audit inherently uncertain estimates, which leads to a paradox (2.1). To investigate into this paradox, I review research about professional scepticism (2.2) and its use in the audit of estimates (2.3). This analysis reveals that sufficient appropriate evidence may not be gathered to assure estimates (2.4). So, how do auditors actually audit them?

2.1 The paradox of estimates in the standardization of audit as evidential assurance

2.1.1 Scepticism as a safeguard against subjectivity in audit as evidential assurance

The auditing standards largely relay the approach of audit as evidential assurance, according to which the purpose of an audit is to provide an opinion, based on reasonable assurance, “on whether the financial statements are presented fairly, in all material respects” (AU 200.04⁴ and ISA 200.03⁵). Reasonable assurance “is obtained when the auditor has obtained sufficient appropriate audit evidence to reduce audit risk” (AU 200.06 and ISA 200.05). Whether sufficient appropriate evidence has been obtained is a matter of professional judgment (XYZ and ISA 500.A6).

Professional judgment should be based on, appropriate in the light of, and consistent with the facts and circumstances known to the auditor (XYZ and ISA 200.A25, .A26 and .A27). It is assumed that the reasonableness of judgment and the adequacy of audit decisions to the facts and circumstances unfold from auditors’ knowledge, training and experience (ISA 200.13.k, .A23 and .A A24).

It is further required that the auditor be independent of mind (XYZ and ISA 200.08 and .A14 to .A17), a state of mind which prevents his opinion to be compromised by influences from audit clients (AU XYZ and ISA 200.A17; IESBA, 2015).

In invoking professional judgment and independence of mind, the assurance standards

⁴ PCAOB, 2012a

⁵ IAASB, 2009a

assume that auditors are able to know what constitutes evidence appropriateness and sufficiency in the circumstances, without being influenced by management.

Within that general framework, the notion of professional scepticism first appeared in 1988 in the standardization of the audit of accounting estimates (SAS 57, now codified as AU 342.04⁶) and was mentioned as “due professional care” only as late as 1997 with its introduction in a standard relative to fraud (SAS 82, superseded by SAS 99, now codified as AU 316⁷).

Professional scepticism is defined as: “[a]n attitude that includes a questioning mind, being alert to conditions that may indicate possible misstatement due to fraud or error, and a critical assessment of audit evidence in the circumstances” (AU 200.14, ISA 200.13.1). This critical assessment “includes questioning contradictory audit evidence and the reliability of [information obtained]. It also includes consideration of the sufficiency and appropriateness of audit evidence obtained in the light of the circumstances” (AU 200.A24, ISA 200.A20).

Auditors’ scepticism is intended as a safeguard against subjectivity or bias in the financial statements, as is well summarized in the title of a presentation made by a board member of the PCAOB at the 2013 annual meeting of the AAA: “Auditor Objectivity and Skepticism” (Franzel, 2013)⁸.

The standards thus make professional scepticism an indispensable feature of audit as evidential assurance, and they seem to warrant that regulators interpret the observed deficiencies in auditing estimates as a lack of it. The IAASB’s staff questions and answers (2012) as well as the PCAOB’s SAPA 10 (2012c) therefore merely recall that auditors should use scepticism to gather and evaluate evidence adequately, and make suggestions to help auditors and audit firms improve in doing so.

However, on a closer look, this understanding of the role of auditors’ scepticism in audit as evidential assurance appears to be paradoxical.

⁶ The latest codification, which will be effective as at December 31, 2016, is not used in this paper.

⁷ PCAOB, 2002

⁸ In that respect, the purpose of scepticism in fraud (AU 316 and ISA 240) is similar to its purpose in the audit of estimates, only applied to intentional fraudulent bias as opposed to unintentional erroneous bias.

2.1.2 The paradox of using scepticism to mitigate estimates' inherent uncertainty

The auditing standards⁹ define accounting estimates as approximations of financial statement items that cannot be measured precisely (ISA 540.02). They deem estimates particularly challenging to audit because their inherent uncertainty makes room for management bias (ISA 540.02, .07c, and .A1 through .A11), i.e., lack of neutrality in management's judgment (ISA 540.07d).

Auditors are therefore required to obtain sufficient appropriate evidence to conclude on estimates' reasonableness or the adequacy of related disclosure (ISA 540.06). They should evaluate the risk of material misstatement based on an evaluation of the degree of an estimate's inherent uncertainty (ISA 540.10 and .11). Inherent uncertainty may be "low" or "high" according to the complexity of business, the extent to which the estimation model is generally accepted and the subjectivity of assumptions involved (ISA 540.A2, .A3 and .A4).

The standards do acknowledge that a reasonable estimate may not be made when accounting uncertainty is too high (ISA 540.A49). But otherwise, auditors should use professional scepticism in order to adapt their procedures in the circumstances and obtain sufficient appropriate evidence to attest to the reasonableness of estimates (ISA 540.A40 and AU 342.04) - even when confronted to significant assumptions (ISA 540.A108).

Thus, consistently with the assurance approach in audit, the audit mechanism proposed in the standards rests on the assumption that the auditor is able to obtain sufficient appropriate evidence to single-handedly narrow the uncertainty inherent to a given estimate to below a reasonable range. This assumption makes it difficult to understand how skepticism may help auditors address estimates' inherent uncertainty:

- If sufficient appropriate evidence may be obtained to narrow down the estimation range to below materiality, then how could the estimate be assessed as inherently uncertain?
- And if not, then how could even the most skeptical auditor give assurance as to the reasonableness of the estimate or the related disclosure?

⁹ For the purpose of auditing estimates, ISA 540 illustrates "the standards". It is more detailed than PCAOB's AU 342 and AU 328, and very close to the AICPA version of those same standards.

This is the paradox of uncertain estimates in audit as assurance. Assurance should be based on sufficient appropriate evidence. But auditors cannot obtain sufficient appropriate evidence as to the reasonableness of estimates with significant accounting uncertainty - for if they could, those estimates would not be uncertain in the first place.

To investigate into this paradox, I now turn to review how researchers have addressed the use of scepticism in auditing estimates.

2.2 Looking for professional scepticism in audit as evidential assurance

The IAASB has noted that “it is difficult for a single definition to capture fully the meaning of professional skepticism. Further, there is no single way in which professional skepticism can be demonstrated.” (IAASB, 2012, p. 3). A review of current research suggests that academic studies have failed to reach a common understanding of scepticism and agree only on the necessity for auditors to apply it in gathering and evaluating objective evidence.

2.2.1 Nelson’s seminal view: scepticism and obtention of a persuasive set of evidence

In his review of professional scepticism, Nelson (2009) notes that it “is a concept that is discussed frequently in professional standards, but with little precision” (p.2). He himself advocates a “presumptive doubt” (as opposed to neutral) approach of scepticism as “indicated by auditor judgments and decisions that reflect a heightened assessment of the risk that an assertion is incorrect, conditional on the information available to the auditor”. Accordingly, “an auditor who has high PS needs relatively more convincing (in the form of a more persuasive set of evidence) before concluding that an assertion is correct” (p. 4). Nevertheless, as one auditor may be too sceptical, which would lead to unnecessary high audit costs, scepticism should be restrained to the right amount. The author then provides a model where auditor’s experience, knowledge, traits, and incentives combine in this quest for evidence to produce “skeptical judgment” and “skeptical action”.

Impressive literature review and insight depth made Nelson’s piece a seminal work that has profoundly influenced the debate around professional scepticism.

2.2.2 Studies based on scepticism as obtention of evidence

Hurttt (2010) elaborates on Nelson's "trait skepticism" to devise a measurement scale based on "six characteristics that comprise professional skepticism: a questioning mind, a suspension of judgment, a search for knowledge, interpersonal understanding, self-esteem, and autonomy" (p. 151). Noting "the lack of clear understanding about what constitutes professional skepticism" (p.150), she defines "professional skepticism as a multi-dimensional construct that characterizes the propensity of an individual to defer concluding until the evidence provides sufficient support for one alternative/explanation over others" (p. 153).

Hurttt, Brown-liburd, Earley and Krishnamoorthy (2013) also find that "professional skepticism remains a hard concept to define and measure" (p.45). They elaborate on Nelson's distinction between sceptical judgment, or recognition "that a problem exists before he/she can take appropriate skeptical action"(Hurttt et al., 2013, p. 63) from sceptical action, signaled by "an increase in audit evidence gathered and auditors standing up to clients" (p.47). Though they complement Nelson's analysis of auditors' characteristics with evidential characteristics, client characteristics, and environmental influences, their recommendations focus solely on how improving auditors' characteristics may maximize the gathering and evaluating of sufficient appropriate evidence.

In spite of alternative trials and criticism, this line of understanding seems to remain a milestone for a common understanding of the notion.

2.2.3 Tentative alternatives and criticisms

Based on a review of those academic works, the FRC (2010, 2011, 2012) tries to establish a common understanding as they reach deeper into the very roots of both audit and scepticism in Greek philosophy. Nevertheless, their proposal is aligned with the above stances as they find that "scientific scepticism and the scientific method" is best adapted to audit as it provides "evidence that will prove the superiority of one theory over all the other competing theories" (2012, p.6).

Griffith, Hammersley, Kadous and Young find that Nelson and Hurttt tend to restrict scepticism to auditors obtaining "larger (more persuasive) set of evidence" (Griffith et

al., 2014, p. 5). They prefer address critical thinking, “a key aspect of professional skepticism”, which addresses “how auditors use the evidence that they possess” (p.25). But it is unclear how this focus on evaluation rather than gathering of evidence creates a concurrent “common understanding” to Nelson’s notion of persuasiveness or to Hurrts’ analysis of auditors’ “questioning mind” (Hurrts, 2010, p. 152), which are actually not restricted to how large a set of evidence is but also to how relevant it is.

Finally, the very purpose of Nolder and Kadous (2014) is “to develop a universal definition of professional skepticism to help distinguish the professional skepticism literature from other auditor judgment and decision making research.” (p.2). They see “professional skepticism as an unobservable, latent attitude construct [...] which determines the ultimate persuasiveness of the evidence supporting the audit opinion” (pp. 3-4). They introduce the Judgment and Decision Making (JDM) framework, which comprises two complementary attitudes that address distinct targets: scepticism is directed to “management’s assertions and the evidence gathered”, whereas independence addresses “the client and the auditor’s relationship with the client” (p.23). With that model in mind, the authors mean to better predict “whether an auditor will get sufficient, appropriate evidence in a specific audit setting, and this is our ultimate goal” (p.7) and eventually aim at “correcting auditors’ failure to exhibit skeptical behavior” (p.34).

This original focus on scepticism as an attitude meaningfully contributes to the discussion. Nevertheless, Nolder and Kadous also define scepticism in relation to the gathering and evaluation of sufficient appropriate evidence - with the same eventual interest in correcting auditors’ flaws.

2.2.4 Questioning regulators’ interpretation that auditors lack scepticism

At the time of writing, the IAASB is looking for answers to “[w]hether it is clear what is meant by “professional skepticism” and [...] whether the links between the term professional skepticism and other concepts (such as professional judgement, integrity, independence of mind, objectivity, and sufficient appropriate audit evidence) are clear and well-understood” (IAASB, 2015, p. 15).

My analysis reveals that a common understanding of professional scepticism has yet to be achieved, and that the currently prevailing notion has been left largely unquestioned.

For lack of an empirical understanding of the actual use of scepticism in audit, theoretical attempts have failed to distinguish this notion from independent competent judgment.

Standard-setters have designed a notion of professional scepticism that matches their conception of audit as evidential assurance. Auditors are meant to justify their opinion as to the fairness of the statements through gathering and evaluating sufficient appropriate evidence, and “professional” scepticism was introduced in the standards to make this possible even when the circumstances imply potential for management bias and subjectivity.

The research reviewed here has merely debated how this may be achieved without questioning whether standard-setters’ stance made sense in the practice of audit. In their effort to define professional scepticism and optimize its use in subjective audit areas, academics reduced the notion to auditors’ decision about whether sufficient appropriate evidence have been duly obtained. Indeed, though Nolder and Kadous vividly resist depicting scepticism as independent competent judgment, they themselves merely depict judgment as independent competent scepticism.

As a result, nobody knows what professional scepticism actually is, and no empirical evidence of how it is used in the audit have been gathered. Consequently, while there is no reason to doubt regulators’ observations of failure in the audit of estimate, their interpretation that it reveals a lack of professional scepticism is far less substantiated.

We may expect to find some more insight in research that addresses the observed failure in auditing of estimates, which has been so readily explained by a lack of scepticism.

2.3 Research on estimates: the dangers in trying to escape the paradox

A first stream of research (e.g., Christensen et al., 2012; Glover et al., 2014; Cannon and Bédard, 2014) acknowledges the paradox of estimates in evidential assurance but they merely propose to avoid it by shifting from a positive to a negative opinion in cases of extreme accounting uncertainty. In so doing, those authors risk making audit irrelevant to stakeholders (2.3.1).

A second stream of research (e.g., Griffith et al., 2014; Griffith et al., 2015; Rasso,

2015) ignores that paradox and claims that estimates could be audited within the assurance framework if a superior audit method was developed or if auditors were better trained in scepticism. In so doing, those authors risk have audit down in litigation or distrust (2.3.2).

Here again, it appears that a necessity to hold to objective assurance prevails over the necessity to deal with uncertainty in estimates (2.3.3).

2.3.1 Research trying to avoid the paradox: the danger of audit uselessness

Taking two real cases from publicly available data, Christensen, Glover and Wood (2012) convincingly demonstrate the existence of situations where auditors are required by auditing standards to give an opinion as to the reasonableness of an estimate, although the reasonable estimation range exceeds overall materiality. They advocate deep-reaching changes to the financial statements, such as introducing ranges of reasonable estimation in place of point estimates to remove the misleading illusion of accounting exactitude. They also suggest that the audit report provides negative assurance on the estimation process rather than positive assurance on a point estimate.

In their surveys, Glover, Taylor and Wu (2014) and Cannon and Bédard (2014) find further support for this idea of audit impossibility even to “the best and brightest” auditors (Glover et al., 2014, p. 29) and the need for profound changes in standards. This first stream of research undeniably raises an important point (see the commentary by Bell and Griffin, 2012). They provide very interesting data and insights which lead to question regulators’ stance that auditors lack professional scepticism.

In spite of the very insightful analysis delivered in these pieces of research, three important caveats should not be overlooked.

First, while those authors point to a lack in objective evidence, they fail to address the PCAOB’s concern with auditors not taking into account negative evidence already gathered (e.g. PCAOB, 2014b)¹⁰.

Second, the changes in standards they recommend may prove difficult and even counter-productive: coupling more imprecision in the financial statements with less

¹⁰ Glover et al. (2014) report auditors’ disagreement with the PCAOB’s inspection results as a whole, but not the rationale behind this objection which is specifically addressed in studies based on experiments (see below).

liability for auditors may lead readers to question even more the already embattled relevance of standardized financial communication and audit.

Third, does extreme accounting uncertainty really make audit impossible? 40% of respondents to Glover, Taylor and Wu (2014)'s survey still think that extreme uncertainty has always been part of audit. The authors themselves re-quote a partner saying that "there's always a way to get there. If there isn't, you shouldn't be issuing an opinion." (Glover et al., 2014, p. 29, fn 6).

In summary, there are most certainly situations where audit of estimates is impossible. But these situations alone cannot fully explain audit failure and it is still unsure whether they should be blamed on the sheer accounting uncertainty in a statement item. If it were, the relevance of audit might get questioned.

2.3.2 Ignoring the paradox and the danger of auditors' excessive liability

At the opposite end of the analysis of the failure to audit estimates, experiments take on the very problem left aside by the authors reviewed above: how to explain that auditors have been observed to fail to take into account conflicting evidence? Ignoring the paradox of estimates in evidential assurance, they suggest that easily implementable manipulations should improve how auditors evaluate evidence and thus increase their performance in auditing estimates.

Griffith, Hammersley, Kadous and Young (2014) show that prompting in auditors a mindset that orients them to a careful, balanced analysis alternatives improves their critical thinking, "a key aspect of professional skepticism" (p.25), as they consider a broader set of already gathered evidence, including the negative. Rasso (2015) proposes that minor changes in audit instructions which promote broad, abstract interpretations of evidence, enhances auditors' processing and assimilation of all information, both positive and negative evidence, leading to improved professional scepticism (understood as appropriate suspension of judgment).

Though the results of those experiments are strong¹¹, I argue that their validity should be restricted threefold, which limits their ability to address the PCAOB's concerns as they claim to do.

¹¹ For methodological concerns with Rasso's results, see Frank and Hoffman (2015) as well as the next footnote in this paper.

First, the results should be limited to cases for which a straightforward audit solution exists, as opposed to the situations that Christensen, Glover and Wood (2012) observe. Indeed, as those studies are testing the quality of audit response to initial input (the type of mindset prompted, the type of instruction given), there must pre-exist an audit solution against which to assess participants' response.

Second, those experiments are testing only unexperienced participants: below 30 months, and on average 5,4 years of experience¹², and a high proportion manage to find out the "right" audit solution. One may therefore question whether experienced auditors would have missed an audit point that unexperienced auditors were able to see - whatever the prompted mindset or the audit instructions¹³.

Third, the experiments do not take into account audit firms review process. Griffith, Hammersley, Kadous and Young (2014) argue that they check whether the unexperienced auditors would ask more experienced team members for review. But if the estimate were somehow difficult, it would not be left to unexperienced auditors to audit in the first place¹⁴.

Notwithstanding the difficulty to deal with the notion of "professional scepticism" (see 2.2 above), those validity restrictions drastically limit the claims of these experiments with regard to auditors' failure to take into account negative evidence. This suggests that, at the very least, their relevance for regulation work should not be as readily accepted by the PCAOB as Frank and Hoffman mention it is (2015, p. 58).

2.4 The inescapable framing of audit as evidential assurance

Two studies mean to analyze empirically the failure in auditing estimates. Griffith, Hammersley and Kadous (2015) conducted 24 interviews with experienced auditors and Cannon and Bédard (2014) surveyed 99 managers and senior managers. Their

¹² Standard deviation for participants' years of experience in Rasso's study is very high (4,17 year), reflecting that results come from 2 partners (out of 58 participants) as well as from completely unexperienced auditors - a meaningful distinction not addressed in the study.

¹³ Schaub and Lawrence (1999)'s claim that partners are less sceptical than junior auditors should be subject to extreme caution given the lack of clarity of the notion: how can anyone be said to be more or less sceptical than anyone else if nobody agrees as to what scepticism means (see above, 2.2)?

¹⁴ Here again, observations to the contrary by Griffith et al, 2015, are highly questionable (see discussion below)

respective results verify the two stances already presented: either there is technical deficiency in the obtention of evidence (Griffith et al., 2015), or extreme accounting uncertainty makes it impossible to obtain evidence (Cannon & Bedard, 2014).

Surprisingly though, not only do they differ in their explanations, but also in their very observations. I analyze that these contradictions actually reveal two different ways to frame the studies, which impacts on their respective data collection (2.4.1) and interpretation (2.4.2). The common point of these two different framings is to stick to the understanding of audit as evidential assurance, which I suggested makes the audit of estimates impossible (2.4.3).

2.4.1 Conflicting observations: the impact of framing on data collection

Griffith et al. (2015) observe that auditors fail to follow the required audit steps and only rarely develop independent expectations. They interpret it as a result of both audit firms' and standards' tacit approval of a traditional verification process instead of independent development of an alternative evaluation in auditing estimates¹⁵.

On the contrary, Cannon and Bédard (2014) observe that auditors do perform each of the multiple substantive procedures listed in the standards, and very often develop independent estimates.

More than mere “differences in methodology”¹⁶, I propose that this contradiction expresses differences in the very framing underlying the two studies.

Indeed, Cannon and Bédard (2014) are concerned with the “environmental factors surrounding FVMs” which “present major difficulties to auditors” (p.2). They therefore collect only data relative to “a specific engagement experience involving the audit of a highly challenging FVM” (p.13).

On the contrary, Griffith, Hammersley and Kadous (2015) are concerned with the failure of audit to tackle “[t]he increasing importance of complex estimates and the opportunity for management bias” (p.833). They therefore collect “information on how

¹⁵ Even though their data do not provide context for the choice of audit decision.

¹⁶ See Cannon and Bédard, 2014, p.24, fn.24 . The authors analyze that “certain procedures (e.g., developing an independent estimate) are used more often in highly challenging situations” but do not address differences in underlying framings

auditors *generally* audit estimates and the problems they *generally* encounter” (p.8), which includes cases unchallenging for audit.

The analysis of this first contradiction therefore indicates that the authors are framing their studies very differently: to the ones, the problem in auditing estimates comes from environmental factors; to the others, it stems from audit’s performance failure.

2.4.2 Conflicting explanations: the impact of framing on data interpretation

Griffith, Hammersley and Kadous (2015) observe that auditors admit to have difficulties in assessing the reasonableness of assumptions underlying estimates. They identify auditors’ lack of valuation knowledge as a likely cause, which they explain by audit firms’ structural separation between auditors and valuation specialists.

In a sharp contrast, Cannon and Bédard (2014)’s auditors seem to be unhindered by this division of labour. They routinely engage specialists, which leads to confrontational situations where “dueling specialists can disagree in their findings without an objective means to resolve the dispute” (p.33). Auditors do experience difficulties in justifying adjustments, but the authors do not explain it by a lack of technical knowledge. Instead, those difficulties are meant to arise “when the FVM has a wide range of reasonable values and a lack of objective evidence”¹⁷ (pp.33-34)

In both studies, observations are well substantiated: auditors do find it hard to assess the reasonableness of assumptions or to justify decreasing adjustments. The contradiction arises from the authors’ interpretations of those observations, which, again, are deeply influenced by the framing of their study.

On the one side, verbatim reproduced by Griffith, Hammersley, and Kadous (2015) states that clients’ superior understanding of their own business is a major concern in assessing assumptions’ reasonableness. Nevertheless, in accordance with the framing of their study (see first contradiction above), the authors interpret auditors’ difficulty by

¹⁷ Note that the sentence attributes “a lack of objective evidence” to “the FVM”, which can be argued to illustrate an overlap between the “accounting” and “auditing” uncertainty (see below).

their lack of technical valuation knowledge¹⁸. They seem to ignore the possibility that appropriate justification of assumption's reasonableness may require a business intimacy which auditors cannot possibly achieve.

On the other side, Cannon and Bédard (2014)'s results show that "the test variable *UNCERTAINTY* is not significant" (p.30) - not that it is significantly associated with less adjustment. Nevertheless, in accordance with their own framing, the authors interpret that "auditors may have difficulty justifying an adjustment proposal given the high level of estimation uncertainty"¹⁹ (p.30). Tellingly, they also interpret the lower risk rating of 30% of extremely uncertain estimates as a possible sign for auditors' lack of scepticism. They seem to ignore the possibility that uncertainty may not be the only cause for the answers they analyze²⁰.

The analysis of this second contradiction suggests that the assumptions ingrained in the framing of those studies significantly influences authors' interpretation, to the point that they may have ignored indications for alternative explanations (Griffith et al., 2015) or evidence against their initial assumption (Cannon & Bedard, 2014).

The only feature common to those two framings is that they hold to the understanding of audit as objective evidential assurance. This points to an interesting missing piece in extant research.

2.4.3 The inescapable paradox of estimates in assurance: devising the research question

My analysis of standards and research uncovers an unexpected weak point: there may be no way to audit estimates within the currently prevailing frame of audit as evidential assurance.

¹⁸ The logical leap is striking in this quote "A partner (P4) noted that auditing assumptions requires "directly challenging management's assumptions," and a manager (M4) observed a reluctance to do so because of the perception that the "client knows their situation best and therefore has [the] best information about assumptions." Collectively, auditors' descriptions of problems with evaluating assumptions suggest that auditors' lack of knowledge or experience with valuation models contributes to these problems and makes it easy for management to influence their judgments." (Griffith et al., 2015, p. 849)

¹⁹ Though the authors make other conclusions from the analysis of their results, this is the only one pertaining to an explanation of the difficulty in justifying adjustments.

²⁰ For example, valuations of option through the Black and Scholes model are significant estimations and they may be a challenge for a young manager, but they are low inherent risk because a known method is generally agreed as giving appropriate and sufficient evidence of fair representation

a. The inescapable paradox of estimates in evidential assurance

The standards provide that auditors should use professional scepticism, but scepticism can be useful only as far as estimates are not truly inherently uncertain. Academics have yet to achieve an operationalizable conceptualization of scepticism that would be able to address the paradox of estimates in audit as evidential assurance, and their investigations into the audit of estimates have also failed to address that paradox.

Instead, research either avoids or ignores it, leaving standard-setters and regulators with two equally lethal choices:

- Either decrease auditors' liability and risk audit becoming irrelevant;
- Or make auditors responsible for an impossible assurance evidentiatioin, and risk have them fall under the weight of litigation or incur irreparable reputation loss.

As a result, as long as they hold to a necessity for audit to assure the reasonableness of estimates based on sufficient appropriate evidence, standard-setters, regulators and academics may not find a satisfactory way to address estimates in audit.

b. Research question: investigating into how auditors address the paradox

Consequently, interpretation is needed to try and propose an understanding of how auditors actually audit estimates. This review has further indicated three important aspects to be taken into account in the design of the research question.

First, as Power (2003) indicates, in the sociological approach of audit "researchers need to be reflectively vigilant about the inherited stock of concepts which they use" (p. 392). Research has yet to find empirical data that indicates auditors' use of scepticism - other than the use of this notion in the standards. Thus, an interpretive field study might best contribute to this debate by avoiding to restrict investigation to such an elusive concept: rather, data alone shall indicate if there is anything we might call scepticism.

Second, it does matter whether the estimates investigated are indicated as "challenging" by auditors or not. Like Cannon and Bédard (2014), I chose to study only the estimates that auditors found challenging. I even wish to analyze the most challenging estimates of all, for I figure that extreme cases shall allow observation of fully deployed processes of justification. Unlike them, though, I do not presume that any accounting

characteristic may make an estimate more or less challenging than another and, therefore, I do not restrict my analysis to fair-value measurements.

Third, in order to describe the process of auditing estimates, the degree of experience and ability of the auditors that researchers observe or survey does matter too. Like Griffith et al. (2015), I chose to study how auditors address estimates. Unlike them, however, I do not assume that their audit is deficient and that we have to find the causes for that deficiency. Rather, I aim to understand what makes estimates so challenging to audit in practice, and how auditors actually deal with the most challenging cases where Glover, Taylor and Wu indicate that even “the best and brightest” (2014, p. 29) may not be able to give an opinion. I therefore wish to observe only highly experienced auditors who have a very strong reputation.

Considering the above, I therefore set up to observe the following:

“How do highly experienced auditors justify their opinion as to the reasonableness of the most challenging estimates?”

3. Methodology

To answer this question, I conduct an interpretive study. Two aspects of this study are therefore of particular interests: the collection of data and the theory I use to conduct an interpretation and give an ordered view of my observations.

3.1 Collection of data

How to define audit quality in a research which questions the very approach of audit as evidential assurance? This goes just as unexplained as what makes an estimate challenging to audit. Therefore, I trusted the global management of TP, one of the four major audit networks, to select and give me access to the cases they found were the most challenging, and were being dealt with by some of their most regarded partners.

3.1.1 The context of data collection

Within TP, the practice expertise department handles the most difficult cases. They are the “experts” that the engagement teams call to when they have specific difficulties in the conduct of audit, or need to back up their interpretation of a specific accounting point. This department is under the supervision of the Global Vice-Chair for the audit activity of TP, who was the sponsor for this study. I have been employed for two years within the practice expertise department taking care for an international sub area and based in one European country. Originally, my job consisted exclusively in sharing the advances of my research with the Global VP. Over the months, though, it has developed into drafting proposals for communication to the attention of standard-setters about professional scepticism and the audit of estimates. An extensive research contract was underwritten that guaranteed access to TP’s resources in four countries (The US, France, Germany and Italy), to engagement partners as well as the audit teams and to the audit files²¹ of the cases selected. All this was, of course, in exchange for the strictest of confidentiality agreements, which made it sometimes difficult to convey in this paper the depth of the cases studies in all their specificities.

²¹ Though in practice I had use of the files for only one of the cases studied, as very little is left in the files of the actual auditing process regarding challenging estimates. Nevertheless, that extensive access was granted illustrates the rare depth of the investigation allowed by the audit firm.

3.1.2 Data collected and the process of collection

a. 5 cases relative to extremely challenging estimates

The heads for the practice expertise department for two international areas were asked to provide me with cases of estimates which had proven to be highly challenging to audit. Two interesting cases were filtered out because of their political sensitivity within and outside the firm. Otherwise, I encountered no obstruction.

TP selected 8 cases, including one of fraud and one of going concern, which they found would be of particular interest for the observation of professional scepticism. Increasing their understanding of the notion of scepticism was important as the firm stood under pressure from the US regulators in this respect. Of the 6 cases relative to estimates, 5 cases are described in the next section of this paper. The sixth case was at a too early stage of development and no audit solution had been found before I left the firm.

The functioning of an audit firm is surprisingly informal, and the underwriting partners who agreed to speak to me and give me access to their teams were in a trustful relationship with the practice expertise departments' heads who had selected them for their reputation and trusted professionalism within the audit firm, often at an international level.

b. Getting at the edge of edge cases

In spite of this trustful relationship, one great risk was that those experts in financial communication would find it easy to give the interviewer what they think he would like to hear. This risk was all the higher as the cases we discussed were among the most challenging to audit. Therefore, my intent when interviewing the most experienced auditors on each of the cases (the underwriting or managing partners) was to push them to the limits of how they accounted for the justification of their opinion.

To do so I would prepare my interviews with the greatest of care. As estimates may be impacted by evolutions in the business and management decisions just as well as by valuation methods, for each of the engagement selected by TP I would consult extensive sources of information about the auditee and the case at hand, usually reaching several hundreds of pages of documentation.

This proved to be very useful. One striking example was how the interview with the underwriting partner of “Impairment” unfold, as he would concede to what I shall later call an “arrangement” only after a bitter argumentation that was entirely fueled by the documentation I had consulted. Documentation allowed me to counter-argue the partner’s arguments using the example of another company in the same sector.

This engaged process of collection is instrumental in the validity of the results. It ensures that what gets acknowledged as “justification of the audit opinion” is not the first answer made by the interviewee, but the reason why he ultimately felt comfortable underwriting the audit report.

3.2 Interpretation of data: the use of a method theory

Lukka and Vinnari (2015) expose the roles of and relationships between domain and method theories in management accounting: “[d]omain theory refers to the body of knowledge concerning a certain substantive field, while method theory may be defined as a meta-level conceptual system for studying the substantive issue(s) at hand.” (p.2).

In order to contribute to our understanding of the audit of estimates, and possibly to our conceptualization of professional scepticism, I chose to observe how highly experienced auditors manage to justify their opinion pertaining to the reasonableness of challenging estimates. Boltanski and Thévenot’s “On Justification: the Economies of Worth” seems to be a particularly appropriate meta-level conceptual system for studying the justification of the audit opinion.

The purpose of Boltanski and Thévenot’s “On Justification” (2006/1991²²) is “[t]o deal with the question of equity and the relation between the general and the particular within a single framework” (2006, p.150). To do so they devise a philosophy of justice comprising six orders of worth according to which one may tell the fair from the unfair. Each of those forms of worth, or polities (for example: industrial, inspired or market polities), relies on a higher principle (for example: effectiveness, inspiration or desire) that allows rank people and things according to a specific order of worth.

²² I refer to the 1991 second edition as the postface added to the 1987 first edition is central to the argument made here. English excerpts are quoted from the 2006 translation by Catherine Porter and signaled as “Boltanski and Thévenot, 2006”. When relevant, I give my own translation under brackets within Porter’s quotation and explain this choice in footnote.

To be set into practice though, this model of polity requires a capacity to make a situated judgment.

The authors find an elegant solution to this difficulty, as they bring together the concepts of “commonplace” (ancient greek: *topos*, *τοποι*) and “prudence” (ancient greek: *phronesis*) traditions. The very orders of justice are simply understood as commonplace principles one may refer to in the justification of an action. The authors then define practical reason, or prudence, as the ability to choose the one principle of order among the six possible ones which is best adapted to the circumstances. Their system is not relativist. Rather, it proposes a plurality of principles of justification, which may be conceived as political grammars.

Nevertheless, the capacity to make a situated judgment rests upon the existence of natural objects.

From a philosophy of justice addressing what makes a valid polity, Boltanski and Thévenot therefore turn to an ontology of judgment, matching each of the six polities with a world that forms a coherent nature where judgement may take place: “Each of the sets of objects associated with the various higher common principles forms a coherent and self-sufficient world, a nature” (2006, p.40). The very “ability to deliberate, a marker of the prudent man” ensures that the most adapted nature be picked up in order to make sense of the situation. This allows make a legitimate judgment, based on the reliability of those natures: “in order to judge justly, one must be able to recognize the nature of a situation and adapt to it” (2006, p.144).

The way auditors are currently meant to justify the fairness of the financial statements offers a concrete example of how justification may take place within one of the six worlds described by Boltanski and Thévenot: the industrial world. Illustrating this now allows me to anchor the method theory into the data collected from which the interpretation shall unfold.

4. Interpretation of empirical data

“Reality is not always on one side or the other. This is also an opportunity to tell them ‘well, here are some risks which do not seem to be dealt with today’ they may say ‘ok but given our mastery of the business, and so on...’, hum, which by the way will always be a hundred times better than ours no question about that, ‘...we think there are actually no risk’, well the goal is then to try and find a common ground for agreement, we gonna wait for six more month to see how a project evolves or we increase a bit one reserve. The dialogue may get tough sometimes but we always end up with a solution. It is always a compromise because, by definition, it is not black or white.”

Very far from a focus on “audit evidence”, this audit partner is not able to tell between truth and falseness and has to rely on subjective aspects. As for judgmental competencies, she admits to the client’s superiority due to expert skills she herself lacks - by far. Finally, in a dodgy independence, she appears ready to wait 6 more months even though she thinks adjustment should be made. Using the theoretical lens of the Economies of Worth to analyze the data gathered about highly challenging audit engagements, the kind of engagement this partner was referring to, will allow make fully sense of that quote, which breaks many audit codes.

4.1 “Welcome to the plant!”: the uncertainty of industrial audit confronted to critical circumstances

The first time we met, the professional practice director for an international area, greeted me with a resounding “Welcome to the plant!”. In so doing, he immediately clarified, he sought to make me aware of “the industrial nature of day-to-day audit practice”. This came as no surprise as, to many auditors, “the plant” is a familiar nickname for their office. The mechanical metaphor of audit has long been debated in academic papers (e.g. Dirsmith, Covalleski, & Mcallister, 1985; Dirsmith & Haskins, 1991; Dirsmith & McAllister, 1982) and Pentland famously reported auditors taking pride in calling each other “regular audit machines” (Pentland, 1993, p. 614).

To illustrate how Boltanski and Thévenot’s worlds allow make legitimate judgment, I now elaborate on the world pertaining to the industrial form of legitimacy. Indeed, while

Power has proposed that “[t]he auditing system exports and imports legitimacy” (2003, p.392), reading audit through the lenses of the Economies of Worth indicates that this legitimacy is of an industrial kind (4.1.1). Then, I’ll highlight why the challenging cases selected for study cannot fit in this ideal world of industrial auditability: they are uncertain audit situations caused by audit (as opposed to accounting) difficulty, subjectivity, and complexity, (4.1.2).

4.1.1 Appropriateness and sufficiency within the framework of industrial auditability

a. The industrial world

Just like in any of Boltanski and Thévenot’s worlds, “objects” making up the industrial world are not given in a reality or nature existing out there. Instead, for any given world, the quality of being an object (called “objectivity”, or “naturalness”) and the principle of their ordering are coexistent. In the industrial world, which gathers beings around a superior principle of effectiveness²³, objectivity is “inscribed in a regular bond between cause and effect” (p.205) aimed at a given functional effectiveness.

Therefore, “[t]he industrial world is the one in which technological objects and scientific methods have their place” (2006, p.203). The reality test, that is, the test revealing if a being has objectivity in this world, is based on “a canonical judgment as to the quality of a scientific [fact]²⁴” (p.203): a being is an object if it enables “to establish scientific proof” (p.204). The acknowledgment of the industrial quality thus “presupposes a capacity to define that is equipped with a measuring instrument” (p. 207).

Very concretely, the test establishing objectivity is a production launch: if you push that button, a chain of cause-effect reactions gets you that product with those characteristics: - it works. Each of those cause-effect relationships had previously been acknowledged as an object by a similar test, and any newly appointed object may now serve in the demonstration of the objectivity of other beings.

²³ Catherine Porter translates “efficacité” in “efficiency”. I prefer “effectiveness” as existence arises first from the acknowledgement of an effective cause-effect relationship, which then makes possible the concern for efficiency.

²⁴ Catherine Porter chose to translate “fait scientifique” as “scientific phenomenon”. I chose to keep “fact” to behold the etymological depth of this word. Hence, I put it under brackets.

Consequently, worthy beings (whether subjects or objects) really are those able to “*integrate themselves* into the *machinery*, the *cogwheels* of an organisation” (p.205): they enable the extension of a systemic coherency - either directly as worthy objects, or indirectly as worthy subjects able to tell what is objective from what is not. Once a system of objects is established according to a canonical judgment of objectivity, “[p]roduction is carried out in a deployment of objects of an industrial nature that is extended from tools to procedures” (p.206), and such an “industrial arrangement²⁵ presupposes adjustments in the environment, adaptations, redefinitions” (p.209).

In order to realize the test as to what constitutes a reliable tool for production, one therefore needs to rely on already existing tools. So, what is constitutive of the very first tool, the first acknowledged cause-effect relationship? There is no answer to that question. Objectivity itself, that is, the very ability to order, understand, and justify, has to be assumed: “the understanding of the industrial order [...] fails to examine the conventions supporting agreement about the scientific [fact] in question” (p.204).

This primordially of objectivity explains why, in the industrial world, “the distinctive dignity of humanity is threatened by the treatment of persons as things”. Indeed, in this world the subjects are embodied in the figures of experts or professionals, and they exist only in terms of the reliability of their own integration to the coherent system of production, that is, of their potential for activity and professional qualification to manipulate the tools. The “fall” from the “paradise” of a perfectly ordered industrial nature, would be to “become frozen in the monumental order that is regularly depicted in critiques of technology” (p.211)

b. Auditability as industrial jurisdiction of the auditor

To audit regulators and standard-setters all over the world today, justification should take place within the industrial order of worth. The function of an audit is to gather and analyze sufficient appropriate evidence in order for the auditor to give an opinion as to the fairness of representation in the financial statements.

“Auditability” thus assumes the possibility of objectivity. It presupposes a capacity to define what is the correct application of the accounting framework, including the

²⁵ “Industrial arrangement” here translates the French “dispositif industriel”. It bears no relation to what we shall call “arrangement” below which is also called “arrangement” in French.

reasonableness of an estimate. The opinion relies on an ability to measure the fairness of the financial statements by a reliable instrument to measure the concordance of the financial statements, as well as the expertise of the professional auditor, who is able to handle that instrument.

As an illustration, auditors routinely conduct confirmation of accounts receivables. In order to ensure that receivables are fairly represented in the financial statements, they simply send a letter to the customer asking to confirm the amount they owe to the auditee firm.

Here, the answer from a customer to the confirmation letter constitutes the appropriate evidence to be gathered, and the (matching vs mismatching) type of the answer is the reliable measurement of whether the auditor should give a (pass vs fail) opinion as to the fairness of the representation of accounts receivables in the auditee's balance-sheet. Sufficiency of evidence is achieved in a process of statistical sampling to select which amounts in accounts receivables should be confirmed, in a scientific legitimation typical for audit (Power, 1992; Francis, 1994; Carpenter and Dirsmith, 1993). In an inspection, any regulator around the world would validate the use of answers to confirmation letters as sufficient appropriate evidence for the fair representation of accounts receivables.

But the acknowledgement of the evidential character, the test for "objectivity" in the industrial world of audit, does not always come so easily. For example, Power (1996) describes how making brand value auditable had requested progress in brand valuation theory to characterize what may justify the value of a brand, as well as the emergence of reliable valuation expertise to indicate that value in real-life cases. Only then would the nascent figure of the valuation expert be able to push the right buttons in order to produce reliable brand valuation that "works", as Boltanski and Thévenot say.

While establishing legitimacy of an accounting practice and of the audit of this practice are closely related, they remain different. In that example, the very acknowledgment of the reliability of expert brand valuation makes possible a definition of "sufficient appropriate" audit evidence, and the measure of the fairness of the valuation in the statements is the observation by the auditor that a reliable valuation process has duly been conducted by a qualified valuation expert.

Once audit stakeholders had acknowledged its reliability, the brand valuation expertise

“being” became an “object” of industrial auditability and extended the system of audit knowledge in a coherent way. It had become part of an array of instruments, that is, cause-effect relationships, which can be used to demonstrate appropriateness and sufficiency of audit evidence in case of inspection.

This dynamism made the expansion of audit possible at a vertiginous rate (Power, 1992, 1997). Just as “[a] situation that holds together, a [...] situation in which beings from the same world are arrayed in natural relations compatible with their states of worth, naturally demonstrates its own justness” (2006, p.133), those audit tools, protocols and listings make possible a legitimate audit judgment as to the fairness of representation of accounts receivables, or the reasonableness of brand value estimates in the financial statements.

In this opening consideration, I have proposed that audit and auditability are generally accepted as based on the industrial legitimacy of audit evidence. Audit evidence is any cause, the effect of which is agreed to justify the fairness of the accounting representation made in the financial statements in a “situation that holds together”. I now turn to illustrate that the audit situations chosen by the “best and brightest” auditors as being particularly challenging share the peculiarity to not “hold together” anymore. Instead, they are characterized by audit circumstances of difficulty, subjectivity and complexity which made them unauditably within the frame of the industrial legitimacy. They appear to be beyond the current jurisdiction of auditors.

4.1.2 Characterizing audit uncertainty: situations that cannot be made to hold together

The valuation of patents in a highly innovative industry where emerging products bear the immediate future of the activity (hereafter, this situation is referred to as “Patent”). Several hundreds of million dollars turnover accounted for through a home-devised formula (“Formula”). Dire managerial projections that trigger an impairment of assets many times greater than materiality (“Impairment”). An industrial failure that may impact earnings very significantly, or not, depending on an unpredictable resolution time (“Technical”). Finally, a sudden evolution in the market for a raw material which happened to impact significantly the value of a whole range of activity in unexpected ways (“Out of the Blue”). Those are the five audit situations selected for study by TP. Why? What made them so troublesome to the network’s best and brightest auditors?

Those cases are situations of audit “uncertainty” which are made “difficult”, “subjective” and “complex” by the specificity of the business circumstances. These audit notions are independent from the usually mobilized notions of accounting subjectivity (e.g., the span of inherent uncertainty), complexity (e.g., the number of assumptions involved) and difficulty (e.g., the technicalities in a valuation model).

Rather, I define uncertain audit situations as follows: first, auditors need to rely on management to make sense of the situation (difficulty); second, the situation cannot be justified in the industrial world because there is no agreed way to decide on what constitutes appropriateness (subjectivity) or sufficiency (complexity) of evidence. And yet, auditors have to audit those situations.

a. Difficulty: needing management to make sense

While they despise the idea of any collusion or lack of independence, each and every interviewee does agree that, as a former partner in charge for professional practice with an international area and former or current underwriting partner for seven major listed groups puts it: “To the contrary of what people usually say, we are very dependent on management’ assumptions, even extremely dependent. If a client lies to you, you cannot work anymore”²⁶. This is particularly true in the five cases studied.

Indeed, who better than top management may know whether a patent is going to be successful or not given a firm’s specific assets and its business environment (Patent), or tell about the actual prospects of a very specific line of production (Impairment), or know the strategic risks to a very specific activity, even the most unlikely ones, than the firm itself (Out of the Blue)? Who would be better than the auditee’s own engineers to approximate turnover in a formula that requires mastery of a specific business as well as of mathematics (Formula), or to tell how long it will take to solve an unprecedented technical problem in a very specific industry (Technical)?

To all those questions there is only one answer: the immediate competitors of the audited firm, had they unlimited access to all the information regarding those highly sensitive matters. As no auditee would share this kind of information with their competitors, the auditors are left alone with confronting technical or business difficulties they cannot master, nor expect any external expert to master, better than the

²⁶ Many excerpts are a translation into English (mostly from French or German).

auditees themselves. They need to rely on the management of the audited corporation to make sense of the situation.

For example, during the audit of Technical, the managing partner recalls that the client “did try and say ‘this is not a business, not a subject-matter you can handle, thank you...’”. The underwriting partner for Out of the Blue even recognizes that: “the firm itself has not enough information to make up their minds”. As to Formula’s auditor, she admits that “we do not know what they specifically put in this equation”, and smiles - of an assertive smile which will appear “natural” to us later on, albeit not in an exclusively industrial “nature” of judgment.

This dependency makes it impossible for the auditor to characterize appropriateness or sufficiency of evidence in the case at hand without referring to management’s superior knowledgeability. This may threaten to undermine auditors’ objectivity, one of the core principles of their professional practice (see IESBA, 2015, paragraph 120, and ISA 200.15.b). Hence, it threatens auditors’ credibility.

b. Subjectivity and complexity: the absence of industrial objects in the circumstances

Subjectivity, as well as complexity, of the audit circumstances are not inherent but implied by the circumstances: in the five cases, business specificities made it impossible to assess appropriateness and/or sufficiency of audit evidence to justify the opinion without resorting to management’s understanding of their business.

First, an audit situation is subjective when there is no external benchmark to assess the appropriateness of evidence - such as historical trend, coherency with market or competitors, or expert opinion. The auditor thus has to rely on management’s input to determine what constitutes appropriateness in the circumstances.

For example, patent valuation (in the case of Patent), or turnover approximation (in the case of Formula), cause no trouble as long as they remain within the routine of agreed valuation or computation techniques, or may be validated by external experts. However, they may be made subjective by the circumstances. In both cases, auditors needed management’s own understanding of the business to make sure that the evidence obtained in assessing the reasonableness of the estimation was appropriate.

In the case of Patent, the best experts to determine what future economic benefits may come from the patent were Patent’s own scientists (who know the potential

applications of their patented product) and top-management (who know the market). the product was brand new, highly specific, and had no direct competitor yet. In the case of Formula, turnover approximation necessitated mastery of both the production process and mathematics to translate this technical knowledge into a reliable formula. The only people to bring together those skills were Formula's own engineers - or the engineers working with their direct competitors. History could not be considered a reliable indicator for the future.

Second, an audit situation is complex when there is no external benchmark to assess the sufficiency of evidence - such as acknowledged trend evolution, active market or comparable competitors, or a number of concurring expert opinions. The auditor thus has to rely on management's input to determine what constitutes sufficiency in the circumstances.

For example, the estimation of a reserve for the compensation of delivery delays triggered by a technical failure (Technical), or a sudden change in the price of a raw material (Out of the Blue), are not in themselves troublesome when they remain within the routine of production or the expected span of price variation in key raw materials. However, they may be made complex by the circumstances. In both cases, auditors needed management's experience of their business to make sure that sufficient evidence had been obtained in assessing that all the low-signaled factors with potentially significant impact had been duly pondered in the estimation.

In the case of Technical, the technical failure was new and still only partly explained, leaving myriads of unknown low-signaled factors to potentially impact on the resolution time, with a significant impact on a reserve for compensation payments. In the case of Out of the Blue, a sudden change in a raw material, even though this raw material was not part of any production process, had an unexpected significant impact on the value of production assets, as could have had a myriad of other undetected low-signaled factors.

The case of Out of the Blue further illustrates that the audit circumstances, rather than the accounting nature of an item, causes audit uncertainty. Indeed, the estimation of a raw material price could foster uncertainty, even though it was a level 1 fair value estimate quoted on an active market.

How can auditors audit when they have to rely on a superiorly knowledgeable management to tell what constitutes sufficient or appropriate evidence?

c. Having to audit when you cannot audit anymore

“We could not”, the managing partner in charge of Technical’s audit says. “It was just too intricate for anybody to calibrate”. Out of the Blue’s underwriting partner also sees lack of calibration, due to the specificities of business, as the main source for lack of reliability: “The calculative aspects (I happen to be an actuary myself...) in retirement computation for example, well, forecasts are much more... parameters, hypotheses are much narrower than in the computation of business plans or the valuation of intangibles. All the more as we are dealing with a world of statistics: actuaries and insurers have been working with mortality tables for years, there is a kind of reliability - it is calibrated. Whereas here, it is not a matter of actuarial computation: it is about the substance of what happens in [this business]”.

This is surprising: why would auditors feel compelled to be specific about these imprecise figures, even as the accounting standards provide that they only be mentioned in a note to the financial statements?

“But of course, we are compelled!”, says one partner, “Everybody is expecting us on this! We have to give our reading of that situation and formulate our opinion”. Another partner explains: “we had no time left [...] Newspapers were replete with speculations about their ability to [quickly get profitable]. Analysts and investors were lurking around, posted behind every corner”. This verbatim indicates that pressure from auditees and investors, rather than regulators, urges auditors to act, which seems to confirm an increasingly commercial turn of the profession (Suddaby et al, 2007).

However, the major reason why these situations have to be audited is that, as internal control has become much more effective, they constitute the bulk of the value of an audit today: “When I was a young assistant”, says a now about 60 year old underwriting partner for major listed groups and a specialist in professional practice and audit standards, “when I came back having spotted a cut-off error I was the king. Nowadays such errors do not exist anymore. It would almost be fraud”. The same goes for another partner, soon to retire after having been the underwriting partner for major listed groups and in charge for audit expertise in an international area: “I can remember the misstatements I could find at the beginning of my career. Now it would be impossible to find this kind of errors even in the small firms”. Technical’s partner sums it up: “we

used to have a real value added correcting accounting errors, that really used to be helpful, but in ten years the world has completely changed you wouldn't believe this and today the level of expertise of the people we deal with is tremendous [...] Nowadays [our clients] are so well organized that we really need to find other ways to bring them value”.

Difficulty, subjectivity, complexity: it is important to note that the surrounding circumstances in the case-at-hand (as opposed to an assumed accounting inherent uncertainty), make the estimate-at-hand uncertain in audit (rather than in accounting).

Audit uncertainty is characterized when the business situation, which has to be represented by an estimate in the financial statements, is so specific that there is no acknowledged cause the effect of which would be sufficient appropriate evidence as to the reasonableness of this estimation. The management of the audited corporation is the most knowledgeable expert to make sense of these situations.

This can be expressed in the concepts of the Economies of Worth: an uncertain audit situation arises when, due to the circumstances, there is no qualified industrial object anymore that the auditor may refer to in order to make a judgment as to the fairness of the financial statements. The audit situation cannot be made to “hold together” in the industrial world to which auditability pertains when conceived as evidential assurance.

Now that, based on Boltanski and Thévenot's analysis of justification, we have a clearer understanding of what makes estimates so challenging to audit, we may try and clarify how auditors practically address these situations.

4.2 The “new Pythia”: assuaging critique by ignorance or avoidance of the paradox

Even estimates of an otherwise unproblematic accounting nature may be made utterly unauditably by the circumstances. And yet, auditors do have to audit them. As the underwriting partner of Out of the Blue puts it: “The shape of our report, of our opinion, what regulators are expecting from us is that we should tell a truth, that we should have a truth. I don't see why we should be the new Pythia.”

Difficult, subjective and complex audit circumstances are indeed “critical”, in Boltanski and Thévenot's meaning of “critique”, as they denounce the deficiency of audit as

evidential assurance, i.e., of using the industrial polity to express a judgment as to the fairness of the financial statements (4.2.1). To assuage this critique against the industrial world, auditors may resort to a “compromise” with the inspiration world (4.2.2) or pretend to achieve an industrial justification in an “arrangement” (4.2.3). Seeing in this impossibility to make a situation hold in the industrial world the expression of the paradox of estimates in audit as evidential assurance (4.2.4), will open new venues to venture the interpretation further.

4.2.1 The critique against the industrial world in audit

“This operation of reversal consists in showing that false worth conceals deficiency; it corresponds to the first stage of unveiling, which we shall call a critique. [...] The parties involved disagree about the world in which the test must be carried out if it is to be legitimate” (Boltanski and Thévenot, 2006, p. 224). Thus, the critique exposes the inadequacy of a test, downgrades what passed as a natural reality into a mere interpretation and denounces the vested interests at play behind it.

Auditors do question the adequacy of applying an industrial test to audit practice based on their expert ability to handle proven audit techniques in order to come to the one right solution.

“Every year, I am confronted with matters which have never been dealt with before and nothing to tell me what is expected of us”, says a partner underwriting the audit reports for several listed groups. A former professional practice director for an international area with TP goes further: “It is always possible to force our way through pretending that we can evaluate those things, but the truth is that we do not know how to evaluate them”.

These quotes illustrate the practical incoherency of the standards’ assumption that auditors, by exercising professional judgment, be able to know what constitutes evidence appropriateness and sufficiency in the circumstances, without being influenced by management (see above, 2.1.1). This can be traced to the two features that we observed make estimates challenging to audit.

First, we observed that audit uncertainty rests in the absence of external benchmark as to what constitutes evidence appropriateness or sufficiency in the first place. The assumption that auditors are able to know what constitutes evidence appropriateness and

sufficiency in the circumstances would thus make auditors liable for deciding themselves on the relevant benchmarks.

ISA 540 does mention that estimation uncertainty may be so high that a reasonable estimate cannot be made, in which case the focus of the audit should be limited to the adequacy of the related disclosure (See paragraph A49). But this does not resolve audit uncertainty as it merely shifts the question of evidence appropriateness and sufficiency from the demonstration of the reasonableness of the estimate to the demonstration of the adequacy of the related disclosure.

Second, we further observed that, as audit uncertainty rests in the specificity of the underlying business, management is the most knowledgeable in the circumstances. The requirement that auditors' judgment should not be compromised by management influence would imply that auditors should oppose their own estimate (see ISA 540.13.d) to management's even though they lack their intimate business knowledge.

ISA 540 does address two cases where auditors are meant to find support in management input to mitigate significant risk²⁷. However, in a context where management bias is seen as the primary risk, it is unclear to what extent the consideration of management input may constitute sufficient appropriate evidence as opposed to a compromising influence.

This critique downgrades industrial auditability from a reality objectified in the industrial nature of audit technics and instruments into a mere interpretation that regulators impose on them violently in order to favor their own interests. As Out of the Blue's partner puts it: "The regulator is in a very cosy place, all the more since he comes and asks the Pythie why she augured something, when something else has happened instead". Recalling a recent inspection, he goes on to openly question the capacity of the regulators to tell what is best adapted to conduct an audit: "I don't know what the regulator expects, but if they expect to see any adjustment, any clash, or an auditor openly disagreeing during the meeting with the audit committee, well they won't ever see that, it's just not how it works [laughs]!".

²⁷ First, it may not be possible to narrow down the estimation range to below audit materiality (see ISA 540.A94), in which case the auditors should consider whether and how management has assessed how uncertainty may affect the accounting estimate (see ISA 540.A103 to .A105). Second, the estimate may rely on significant assumptions (see ISA 540.A83), in which case the auditor should assess whether support may be found in management's continuing processes of strategic analysis or risk assessment (see ISA 540.A108).

In such cases, auditors may opt for relativization: “In relativization, the reality test is abandoned in favor of a return to the circumstances” of a situation “in which the question of agreement is suspended” (2006, p. 339). It is thus not rare that, in uncertain situations, auditors accept to “wait for 6 more months”, as many of them testify they routinely do. Nevertheless, as a seasoned audit partner reminds: “big problems actually are a matter of timing”, and there comes a time when auditors have to confront those circumstances, instead of using them to relativize the situation.

When urged to act, because not giving an opinion would threaten their credibility, auditors tend to adopt biased audit behaviors, which are also coherent with the theoretical framework of the Economies of Worths. They may strike a compromise between the industrial and inspiration worlds, or arrange a way out while remaining within the ideal of industrial auditability. But it will soon appear that these behaviors may only weaken audit’s credibility as a whole.

4.2.2 Striking a risky compromise for the sake of financial communication

In two cases, auditors assuaged critique through what boltanski and Thévenot call a “compromise”, that is, a composition between different orders of worth. Though “not entirely defensible in logical terms”, the authors see it as “preferable to any other solution” (1991, p.278) when a judgment may not be made by resorting to a test in a single order of worth.

In striking a compromise, the partners to a dispute take into account not only theirs, but also other stakeholders’ interests. Compromises are “easily breakable because they entail the coming together of two competing orders of worth” (Thévenot, 2001, p.411) and imply that each of those orders sacrifices one central aspect to make the compromise acceptable to all parties.

Patent and Formula illustrate auditors’ behavior when they strike a compromise to give a pass audit opinion. But doing so, auditors take a high risk.

a. Patent and Formula: smiling gently at having to rely on management’s input

Elaborating on the formula case may explain the broad smile on the face of the auditor when she admitted to not understanding the equation used to compute hundreds of million dollars turnover. To her, the equation was not the point: “On the face of it, at

[Formula] the audit of turnover seems to be straightforward: to sum up, it's about price and volume. We can handle price quite easily: we have forward markets, we have historical trends, and so on. The question of volume, though, is much more difficult. There are independent experts, but it is uneasy to give them access to [Formula]'s [sensitive sources of information], and anyhow they wouldn't know better than [Formula]'s engineers themselves".

In order to take a stance as to the fairness of this computation, she admits that management's input is the best available, and turns to find evidence not for the computation itself but rather for management's integrity: "This figure is very important to them. It impacts on a lot of operative indicators, on the computation of bonuses for people who otherwise have divergent interests in the firm. It is closely followed by investors. In short: it is too important for their business for them to play around with it. The only way for management to cheat would be to maintain shadow accounting. I know the guys well. I just can't imagine... No, really: I don't see that happening".

Ultimately, her argument as to the fairness of the computation thus relies on her experience and an intimate knowledge of the audited corporation. She finds the estimate by management to be adequate because achieving an accurate number was key for the business of the auditee and cheating on it not only seemed to be highly unlikely given her belief in management honesty, but would also have necessitated that a vast array of users plays along, though these users may have antagonistic interests.

To her, the compromise was largely in the interest of investors: "[t]here was no better way to provide a more accurate figure to investors". But the computation turned out to be wrong and Formula had to post a significant correction of error. Would she know better today? "On the contrary: the mistake was revealed by [an unexpected business change], we would never have found that, but they did! And they did chose to change the formula even if that meant posting a significant correction. If anything, this is further evidence that I was right to trust them!" - and she smiles again.

Turning to Patent, the root of the difficulty in accounting for acquired patents was to develop a reliable business plan. Nevertheless, just as the point was not to understand the computation in the audit of Formula, in the audit of Patent the point was not to investigate the detailed forecasts: "I know the top management well, I've been dealing with them for years: nobody knows better than they do what are the actual perspectives of their products", the auditor says.

So, instead of trying to top management's guess, he turned to make sure that they really stood behind their business plan: "Patent's marketing department really has big fire power: if the chief marketing officer puts that much money in [the product], eventually he'll get result. [...] If they invest so much in it, that must be evidence that they believe in it". Then, he suggests that the amount of money invested in the product, together with the CMO's historical track record to make things happen, are a sure measure of management's honesty.

Here again, the auditor relies on his intuition, informed by experience and an intimate knowledge of the firm, to assert that he has enough evidence of management's honesty. Honesty, together with competency, are thus elevated into appropriate and sufficient evidence that the estimate computed by management is the best possible in the circumstances. And, again, the compromise between the inspiration and the industrial world is justified with reference to investors' interests: "my goal really is to find out what would best represent the position of the firm to investors".

b. The riskiness of striking a compromise

In the words of the Economies of Worth, the auditors of Patent and Formula thus stroke a compromise between the industrial and the inspiration worlds. Objects of compromise such as "This is further evidence that I was right to trust them" (Formula), or "If they invest so much in it, it must be evidence that they believe in it, that they are not tricking us" (Patent) are "specific formulations and designations that establish references to the worlds of origin in a single utterance" (2006, p.281).

The effectiveness of a strong argument based on sufficient appropriate evidence is guaranteed to the regulator (industrial world), but it only guarantees management's honesty, and is based on the auditor's experienced intuition (inspiration world). In the two situations, auditors invoke investors' interests, to the expense of objectivity (i.e., against regulators' interests), and even though it increases their own liability risk (i.e., against their own interest).

The use of objectivistic elements, as well as their anchoring in the seasoned experience of the auditor, makes it difficult to denigrate them. Patent's and Formula's cases are illustrative of a micro-jurisprudence that experienced auditor can establish as they recognize when management has an interest in manipulating the figures and know how

to cross-check management's assertions. That way, experienced auditors can take a bet on trusting management's competency and honesty, without taking much risk.

Nevertheless, however evidenced may auditors' belief in management's integrity be, it remains a belief that is ultimately based on their inner intuition, experience, and intimate knowledge of the audited corporation.

As such, it is in contravention with both the US and the international standards: "[a] belief that management and those charged with governance are honest and have integrity does not relieve the auditor of the need to maintain professional skepticism or allow the auditor to be satisfied with less than persuasive audit evidence when obtaining reasonable assurance" (ISA 200.A22 and AU 200.A26 share that wording).

Thus, should anything go wrong, the regulators would understandably see it as their duty to denounce an auditor ready for that kind of compromise as if he was a compromised auditor.

As a result, even experienced and well-intentioned auditors would take a huge risk persisting in a compromising attitude and the sensible practitioner would rather opt for arrangement to mitigate the risk associated with regulators' inspections.

4.2.3 Making an irrelevant arrangements to mitigate their own risk

The arrangement differs from a compromise in that the two partners only ambition to satisfy each other's vested interest, with no regard to others' interest.

In situations when the auditor seeks to minimize his liability risk while the regulator demands that audit be presented as completely objective, uncertain estimates may not be audited without impeding on the one or the other's vested interest. Either auditors have to accept to take the risk of saying that they were objective while they actually had to rely on management's input, or the regulators have to renounce the ideal of auditors' complete objectivity in evidential assurance.

Two cases illustrate how auditors may try and make an arrangement between these conflicting interests.

Aware of the risk of relying solely on his specific knowledge of the firm and its management, Patent's auditor also referred to studies by financial analysts: "they know much better than we do the macro-economical perspectives of [Patent]'s strategy". The result of those studies were the only elements to be found in the audit files that

supported his opinion relative to patent valuation.

Though this documentation was presented as “inspection proof” by the partner, and even if it does make sense for him to benchmark his own analysis, relying solely on studies by financial analysts still introduces circularity in the financial information. Indeed, the next study by analysts would be based on audited statements, which were actually validated based on their own figures, leaving no opportunity for disruption of the narrative line of the financial statements.

In the case of Impairment, the auditor did not feel at ease with management. A huge impairment based on grim management forecast as to the auditee’s activity would allow display worryingly negative net earnings and certainly legitimate top management go through a tough redundancy program while leaving cash untouched. Average future rates for bonds in the industry indicated that the market shared those gloomy outlooks but with no more precision.

Impairment’s underwriting partner first mentioned a whole list of macro-economical reasons that were registered in the audit files as to why the impairment was vindicated. But as I observed that those reasons would have warranted a similar impairment at one of Impairment’s sister-subsiary, he yielded: “All right, I must admit that this was not self-evident. [...] But we documented management’s argument in the presentation to the audit committee, which was validated. We could not do better, that’s inspection proof. The audit committee had to take their responsibilities and we have a representation letter by management”.

Ironically enough, representations may not provide sufficient appropriate audit evidence on their own²⁸, and it is unlikely that discussing a point before the audit committee was a proper “industrial” way (in regulator’s interest) to minimize liability (in auditor’s interest).

But even if it was, arrangements remain devastating for the statements users. Not only do they bring no safety: they are actually misleading, as the financial statements are presented as if they were duly verified whereas they are only lawfully verified. There was nothing in the audit report to signal to Patent’s analysts that the figures pertaining to the one big issue of the year were actually audited by themselves.

²⁸ See ISA 580.04, though the American standards, to which the Impairment engagement was subjected, are more contrasted (see AU 333.03).

4.2.4 The mixed cause for biased assurance behaviors and the lack of skepticism

While compromises are bound to increase auditors' liability risk dramatically, arrangements will achieve to deprive audit from any value for its stakeholders. But are auditors really the only one who should be blamed for it?

a. The dire consequences of compromises and arrangements

"Inspection proof" should therefore not be mistaken with "risk safe". In the long run, both adventurous self-appointments to making compromises as well as attempts to secure a pretense of industrial legitimacy in arrangements are likely to prove counter-productive in audit:

- The next economical downturn may prove auditees' forecasts wrong and have stakeholders attack auditors for failing to see flaws which, by then, will have become "obvious" even when considered with the elements available at the time of the audit. If auditors strike compromises between the inspiration and the industrial worlds without regulators' approval, they will find themselves unable to answer those attacks and will have to endorse a role of scapegoats, as was arguably the case when Arthur Andersen was swept away in the Enron scandal (Gendron and Guénin-Paracini, 2010).
- If auditors seek to minimize their legal liability through aligning their opinion with the ideal of industrial auditability, other stakeholders may find that there is only limited value in an audit. During roundtables organized by the Center for Audit Quality in 2011 (CAQ, 2012), investors and analysts alike already expressed their discontent against the "boilerplate" aspect of audit reports and auditors' expertise in protecting their liability rather than give value-adding information.

These biased audit behaviors can therefore only be temporary patches to the problem of audit in uncertain situations, and may soon become detrimental to audit. They were blamed on auditors' lack of scepticism, but may also find their roots in structural aspects of the approach of audit as evidential assurance.

b. Lack of skepticism: a failure in auditors professionalism, or in audit as assurance?

In arrangements, auditors avoid audit uncertainty and make audit irrelevant to stakeholders as they mean to use evidence to disengage their liability instead of

critically assessing it. In compromises, they behave as if they ignored audit uncertainty and take a huge risk as they engage their liability that the estimate is reasonable based on a belief in management honesty. Those behaviors are in blatant contravention with the standards²⁹ and have been rightly interpreted by regulators as a lack of skepticism.

However, auditors have developed these biased assurance behaviors to bring together two conflicting institutional demands. On the one hand, the regulators expect that they apply independent judgment to achieve complete evidentiating of their audit opinion. But on the other hand, investors urge them to give an opinion about significant estimates, even though they are dependent on management's input to judge not only whether the evidence obtained is appropriate and sufficient, but also what exactly constitutes appropriateness and sufficiency in the first place.

Releasing the first demand is very risky for auditors who cannot find shelter in conformity anymore. But releasing the second makes audit increasingly irrelevant in proportion to the importance of significant estimates in the financial statements. As a result, it is unclear who or what is to blame for this lack of skepticism: auditors' failing professional awareness, or the current structuring of audit as assurance which proves to be dangerously counter-productive in addressing estimates?

In the cases reviewed so far, auditors have made their best to stick to an ideal of audit as evidential assurance, which could be depicted as a lack of scepticism. In the absence of competent objects to make judgment pursuant to the industrial polity, critiques have been expressed and assuaged through compromises and arrangements.

However, auditors' behavior in the cases of Technical and Out of the Blue gives to think that there does exist an alternative audit approach, which is much better adapted to the audit of challenging estimates but does not meet the requirements of the currently prevailing approach of audit as assurance.

²⁹ See ISA 200.A20 and ISA 200.A22, with very close wordings in AU 230.07 and .09

4.3 The jurisdiction of comfort: making sense of uncertainty below judgment

Technical and Out of the Blue have been addressed in a genuine deliberation, but which only partially fits the notion of judgment (4.3.1).

It is best explained as the expression of a “jurisdiction of comfort”, which may extend audit theory as well as Boltanski and Thévenot’s “pragmatics of reflection” (4.3.2).

4.3.1 Making sense in uncertain circumstances to settle the dispute below judgment

At first, it seems that the auditors entered a typical deliberation process oriented towards achieving a truthful judgment. But on a closer look, the justification of the audit opinion ultimately relied on mutual comfort, giving up an elusive quest for truth.

a. The situation at Technical and Out of the Blue

Technical is a major public transportation vehicles manufacturer³⁰. The latest innovation is very promising, some pieces have already been delivered and several dozens others have already been sold before completion. Of course, contractual provisions stipulate that, in case of delivery delay, Technical should pay a compensation proportional to the delay.

Among the vehicles already delivered, a technical incident has repeatedly occurred that could become a life-hazard to passengers, to the point that the transportation authority have decided to withdraw their approval for commercial use until Technical finds a solution to that technical problem.

One of the manyfold impacts of this decision on the financial statements at year-end is the writing of a reserve for contractual compensation to be paid because of the potential delivery delays. Auditors had to assess the reasonableness of the delivery delays taken into account by Technical to compute the reserve. Depending on how long it takes for Technical to solve the problem to the satisfaction of the authorities, which could run anywhere between a few weeks and many months, the reserve could range from several hundreds of millions up to several billions dollars, and engineers from the authority do not provide an independent analysis as they rely on Technical’s tests and figures.

Out of the Blue caused similar difficulties. The trigger event was the unexpected (post audit) evolution of the price of one row material, which, if rightly anticipated, should

³⁰ As details were needed to make sense of that case, I have changed it in order to make it impossible to recognize. This apocryphal case nevertheless takes into account all the salient aspects of the original one.

have caused impairment of assets for a whole line of assets-heavy business. Having discovered a plausible pattern of interest for management to differ impairment at this very moment of the firm's life, the regulator has suspected the auditor to have been complacent almost to the point of connivance in not impairing those assets.

For contractually binding reasons, I may not disclose the specificities of these two cases. In what follows, I illustrate the argument using only general comments or comments from which taking out any reference to specific circumstances was sufficient to preserve confidentiality.

b. Providing external challenge to make sense of the circumstances

In a judgment, the partners not only have divergent interpretations of the situation (externality): they do express that divergence (challenge) in a deliberation about the appropriate action. This "shift to debate" is accompanied by a halt to action in what the authors call a "crisis", that is, a moment "in which the partners agree to define the reality that they have to take into account" (p.350).

At first sight, it seems that the auditors used just that kind of deliberation in their audit of Technical and Out of the Blue. The auditors made it their duty to challenge the auditees' interpretation from their external point of view, which put action to a halt as the financial statements had to be justified anew.

Auditors see it as their role to challenge the auditee's interpretation, or as Technical's auditor puts it: "being a watchdog": "When I say watchdog, well yes, this is our role and honestly, I could feel it in [Technical's matter]: sometimes we would say 'wait a minute here, pffff well I can hear what you're saying, but really, this goes too far'. So that's what I mean, I mean we have to say 'now, really, given [this], given [that], and given what we've heard [there], this is not possible. We just can't buy this story". This is not only good for society, but a huge value-added for the auditee: "The client's expectations is really there: getting some perspective about everything we can see and telling them what our opinion is. They trust us, that's why our opinion is important to them".

This view is vindicated by Formula's partner, who sees challenge as audit's greatest asset: "my role is to challenge them. They really expect me to challenge them. My role is to prevent them from crossing the lines in the communication to investors, and in their own representations. Just that one guy be there not yielding an inch, well, that

compels them to refine their argument”.

Even accounting experts, a rather cerebral kinship, testify to some hardness: “explaining facts and circumstances, how we interpret the IFRS, well sometimes, it does get very hot!” as well as relief: “well, as we often arrive miles away from the initial position of [the client], we do not merely challenge: we destruct and rebuild! Most of the time the client understands that it was for their own good given the circumstances”.

The possibility of a divergent interpretation, and of the ensuing challenge, is brought about by auditors’ very externality - of mind as well as of organization.

First, externality of mind: even though he is no expert in the business, the auditor does offer a fresh look into the auditee’s affairs, as Out of the Blue’s partner states: “Quite often the auditor is less engaged in the myopia of the firm’s life, well in the end he has got a view that, I mean he may say well all right what’s happening? How do you do that? Are you sure that it works? and so on...”.

Second, externality of organization also makes it easier for the auditor to put things into perspective, as Technical’s managing audit partner remembers: “[t]hinking back of [this matter], I think the big advantage we have, but only if the client plays along, is to be at the cross-roads of quite a lot of different departments of the firm, and to have analysis skills above average [...] as a result, we were able to put things into perspective”. In this specific engagement, “[o]f course we discussed with our usual interlocutors at the financial department. But those are no financial matters. So we went down in the plants to meet with operationals, project managers and even guys working on the grounds [...] you have to build up a coherent picture of the problem through different perspectives”.

But in spite of this partial concurrence of the behavior of auditors with Boltanski and Thévenot’s analysis, there also are substantial differences.

c. Agreeing on reasonableness: closing the dispute below the truth of judgment

To avoid that actors “indefinitely prolong the moment of crisis by continually introducing new interpretations”, it is important that the debate “be oriented toward closure in the form of a coherent decision” (p. 351). To reach closure, a judgment must be a “moment of truth” (p. 351) that satisfies both “argumentative coherence” (p. 351) and “the test of facts” (p. 352) - to the expense of the circumstances. Argumentative coherence is not obtained “by adapting [the decision] to the circumstances but by giving

it a general import that allows its validity to be transported to other times and other places” (p. 351). The facts must be accounted for in a way “detached from local contingencies so that they can be transported beyond the limits of the situation” (p. 352).

However, this is not what could be observed. The actual closing of auditors’ vivid external challenge strikingly differs from Boltanski and Thévenot’s settlement. Auditors discard the notion of objective truth: instead, they focus on *ad hoc* factors, not detached from the contingencies but on the contrary adapted only to the circumstances, to agree on the most reasonable solution in the circumstances.

“The dialogue may get tough sometimes but we always end up with a solution”, Technical’s partner says, “[w]hat is important is to be able to tell what really matters [...] to correctly identify where are the risk zones, what are the important matters, and who are the people with whom to discuss because we feel they have the proper feeling and insight”. Finding the right interlocutor with the proper feeling is essential because the representation of the underlying business situation has to take into account what she calls “the narrative line”, that is, the line of the construction of the auditee’s self representation in the financial statements: “it is always very complicated to tell what they believe in and what they don’t and... there is the firm’s reality and there is another layer, which is, well, the structuring of the history of the firm, which is what we are going to reflect to the outer world, to analysts [...] there is no truth as such: there is a narrative line that holds together, an appropriate discourse”. According to her, the auditor should therefore “try that the discourse be the closest possible to reality”.

Similarly, in the case of Out of the Blue, the external challenge by auditors was not closed by a generally valid objective solution, but simply because auditors and auditees reached mutual comfort, as the partner for the engagement recalls: “[i]n actual practice, there are discussions again and again, ever heavier ones, we may even call each other names, and in the end everybody cools down. There are discussions all the time and in the end everybody just feels more comfortable impairing an asset rather than not”. He adds up: “I do not think there is any truth: I think there are more or less acceptable scenarios. Really, if we could quit this debate as to who possesses the truth, we would already make a great step forward”. To him, “our role was to make sure we do not drift too far away from what is acceptable”

The actual behavior of auditors thus cannot be adequately interpreted as a process of judgment according to Boltanski and Thévenot. Rather, it indicates what I call the “jurisdiction of comfort”, which opens the way to another auditability principle as it makes it possible to settle disputes below the moment of truth in judgment.

4.3.2 The jurisdiction of comfort: extending audit theory and the Economies of Worth

Auditors’ behavior reveals a practice which brings auditability beyond reference to external benchmarks, indicates a “jurisdiction of comfort” as a welcome alternative to the current paradigm of assurance in which scepticism is key, and suggests a promising extension of Boltanski and Thévenot’s “pragmatics of reflection”.

a. When only comfort may give comfort: auditability beyond external benchmarks

“Understanding the way that formal thought is made to appear formal is the essence of the sociological project” (Power, 2003, p.389, fn 6). This study partakes to all those which have denounced the fallacy of restricting auditors’ professional inference to an objective (technical) assessment of the fairness of the financial statements. Specifically, it joins forces with two ethnographic studies which have already reported the importance of comfort, emotion as a whole, and bodily intuition in the practice of audit.

Pentland (1993) finds that the work of auditors is actually about generating comfort. In spite of the insufficiency of any “rationalistic analysis” (p.619), auditors achieve comfort by carefully following rituals: “To reach a conclusion (even a qualified one) in the face of an essentially unknowable situation, auditors must rely on the emotional resources generated by the audit ritual: *gut feel*.” (p. 619).

Guénin-Paracini, Malsch and Marché Paillé (2014) call audit “an ‘impossible’ task” (p. 272) because auditors have to give an opinion with no objective way to be sure that they did not miss a significant error. Auditors assuage the fear of error by using either defensive strategies or their practical intelligence, “an intelligence of the body which helps them handle that which, in their mission, cannot be obtained through the strict execution of standardized procedures” (p. 264), which eventually leads to the bodily pleasure of comfort. Yet, this “pleasure usually remains incomplete as long as the work has not been validated by a peer, who will often be more experienced.” (p.281).

However, those two pieces of research seem not to question the authority of external benchmarks in the practice of audit. Instead, they replace generally agreed audit objective procedures with generally agreed socially constructed ones. While in a positivist view comfort is made possible by conformity with established ways to gather evidence, in their constructivist view it is made possible by conformity with established rituals, or expert judgment by more experienced auditors.

On the contrary, this study has investigated into situations which may not be dealt with in reference to any external benchmark, which makes the usual approach of audit as assurance impossible. The auditor's posture of external constructive challenge offers a most innovative and interesting solution to that problem: the authority of mutual comfort. The very interaction between the auditee and the auditor creates the possibility for a gradual acknowledgment of the most reasonable estimate in specific circumstances. Auditors' assessment of estimation reasonableness is not achieved through a matching of the situation with any external benchmark, be it objective (sufficient appropriate objective evidence) or socially constructed (sufficient appropriate rituals of verification). Rather, reasonableness is acknowledged in the mutual comfort of the auditee, who is the most knowledgeable in the specific matter at hand, and the auditor, who is expert in sceptically challenging the auditee's representation.

While confirming the utmost role played by comfort in audit, this reading differs from the organized collective belief depicted by Pentland. In the cases I studied, auditors would not get comfortable about an estimation of "high-risk mortgage-backed securities" merely by "selectively copying numbers onto a computer spreadsheet" (Pentland, 1993, pp.611-612). Rather, in order to settle the dispute with the auditee as to whether an estimate is reasonable or not, the auditor would ultimately rely on the concurrence of both his and management's comfort as to what constitutes appropriateness and sufficiency in the specific auditing circumstances. To build on Pentland's example, the "essentially speculative" estimations by a New York office of external valuation specialists could make the audit partners I observed comfortable not because of the ritualistic copying by a senior, but more plausibly³¹ because agreement

³¹ Though this may not be verified as Pentland only observed on-the-job engagements and could therefore not witness the upper-level interaction between audit partners and CFOs.

had been previously reached between the audit partner and the CFO that this expert estimation constituted a reasonable estimation in the circumstances.

b. The jurisdiction of comfort: the role of scepticism in another paradigm of auditability

I call “jurisdiction of comfort” the area in which comfort has alone the authority to indicate the most reasonable representation in the financial statements. This one kind of a place does not exist on any map: rather, it takes place wherever no external benchmark can be found to allow a satisfactory assessment of fairness in the financial statements., and thrives from a collective ability to make sense of specific circumstances.

Thus defined, the jurisdiction of comfort is not limited to an item’s accounting characteristics, nor to any audit technics. Rather, it offers an alternative to evidential assurance as a ground for making things auditable³². This alternative is already being practiced, albeit only in situations below judgment, when the auditor and the auditee have to agree as to what is the most reasonable representation in the circumstances, such as was the case in Technical and Out of the Blue.

In those cases, as auditors are unable to find shelter in conformity, they engage in a constructive external challenge with the auditee which creates a space where reasonableness may be approximated. During dire fighting in a debate marked by uncertainty as to what constitutes the reality of the specific case at hand, auditors and auditees are driven by a necessity to close their dispute.

But they shall never reach a point where the chaos of their individual interpretations is actually elevated into the natural order brought about by a settlement by way of judgment. In practice, the settlement is but a temporary comfort that “the best possible solution” was achieved in the circumstances, and remains subject to future adjustment as those circumstances evolve.

While this allows auditors to best address challenging estimates, it requires that they renounce the assurance ideal of independent professional judgment. Their externality makes them able to offer a fresh look and apply their expertise in challenge, but it falls

³² For example, though a positive answer to a confirmation letter may validate due diligence with regard to the audit of accounts-receivables, it may be flawed by a fraudulent agreement between the auditee and its customer. In the framework of auditability as conformity to an external benchmark (be it objective or socially constructed), the confirmation technique makes accounts-receivables auditable: a positive answer is appropriate and sufficient to acknowledge the fairness of this item in the financial statements. But in the jurisdiction of comfort, the same positive confirmation is of no interest as long as there is no mutual comfort as to the actual correspondence between the auditee’s accounts and its client’s.

short of the assurance ideal of independence of mind, for the auditor has to acknowledge management's superior knowledgeability. Their constructiveness helps them close the phase of challenge and make an opinion they are comfortable with, but it falls short of judgment for it is based on subjective benchmarks for comfort which have no general validity and may not be opposed to third parties.

This external constructive challenge may be what comes closest to professional scepticism. The sceptical challenge by auditors certainly confronts the position of the auditee to all the objective elements available and checks (scepticism against the auditee), but it also strives, together with the auditee who is the most knowledgeable in the circumstances, to achieve the best solution in a situation which departs from anything known to date (scepticism against the situation).

This practice thus reveals a radically different paradigm of audit. Ontologically, reasonableness rests not in a pre-existing world anymore, be it objective or socially constructed, but rather in the processual space created by the encounter of scepticism and knowledgeability, as embodied in the interaction auditor/auditee. Epistemologically, reasonableness may be told from unreasonableness not on the ground of any external benchmark anymore, be it duly gathered evidence or rituals of verification, but rather on the ground of the very feeling of comfort in the circumstances. In this new paradigm, auditors' competence of scepticism, i.e., in opposing an external constructive challenge, is just as key to the audit quality as independent judgment used to be in the paradigm of evidential assurance.

This paradigmatic shift in audit, and the practice of sceptical challenge by auditors, indicate a possibility to settle a dispute in the circumstances and confront public judgment without referring to an established relation between the specific and the general, which informs Boltanski and Thévenot's program of "pragmatics of reflection".

c. A jurisdiction to settle dispute below judgment: conflating action and reflection

In their conclusive argument, Boltanski and Thévenot disclose their research program to achieve a "pragmatics of reflection" (2006, p. 347). In observing human activities in moments of correction, which indicate a reflective return by actors, they aim to conduct "a more general analysis of the relation between action and reflection" (p. 357). Noticeably for the argument, they conceive of the reflective return by actors only in a

dichotomy of reflection and action: “[i]n fact, in order to face the world, people have to shuttle continually back and forth between reflection and action” (p. 357)³³.

Based on their ongoing work, the authors introduce figures that differ from judgment.

First, two figures make it possible to settle a dispute locally, without stopping the action to proceed to a deliberation: either a “snag” (p. 348) can be repaired with success even without sharing the divergences in interpretation, or one interpretation may be imposed on the others in violent “anger” (p. 350). However, without due deliberation, these figures remain at the local level and may not be confronted to public judgment.

Second, two figures make it possible to resume action after a deliberation while staying below the level of judgment, i.e., without settling the dispute: one may either chose to not put to use the lessons from deliberation and favor pardoning in “oblivion” (p. 354), or to postpone the moment of testing in patient “tolerance” (p. 355). However, as the dispute remains unsettled, these figures make no difference in the course of action.

However, none of these figures applies to auditors’ sceptical challenge.

First, as an external challenge, it entails a deliberation between the auditor and the auditee as to what constitutes the reality of the judgmental situation. Second, as a constructive endeavor, it does settle the dispute as both partners are comfortable that they have come to the best possible solution in the circumstances.

Like a judgment, a settlement by way of sceptical challenge can be confronted to public judgment and does change the course of action. However, unlike a judgment, the solution that settles the dispute does not have any general value transportable in space and time: it is valid only in the specific circumstances, at the time of the settlement.

Therefore, it seems that the actual behavior of auditors in the jurisdiction of comfort indicates a figure not yet considered by Boltanski and Thévenot, which may inform the theoretical underpinnings of their pragmatics of reflection.

Indeed, the interaction between the auditee, who is the most knowledgeable in the circumstances, and the auditor, who is expert in sceptically challenging him, illustrates a reflective return where action and reflection are conflated.

³³ Note that the subsequent works by the authors do not invalidate this remark. Luc Boltanski (with Chiapello, 2001) had to develop another polity to make sense of human activity in capitalism, rather than envisaging an alternative model to this dichotomy of reflection and action. Laurent Thévenot (1990, 2001) did describe three pragmatic regimes governing the engagement with the world, but they remain essentially differentiated by the degree of convention needed in judgment, rather than envisioning a settlement below judgment that would resist confrontation to public judgment.

In the absence of reliable external benchmarks, auditors' sceptical challenge is not just a typical audit deliberation about whether the financial statements are presented fairly or give a true and fair view of a graspable business reality.

It also is about determining what constitutes reality itself, as well as a fairness in the circumstances, which is a typical accounting action necessary to represent the firm and its activity in the form of a balance-sheet and a profit-and-loss statement.

This conflation of reflection and action allows to achieve some certainty in situations where neither action (representing reality) nor reflection (is the representation fair?) is possible alone, for lack of any certain knowledge as to what may constitute reality.

5. Discussion and conclusion

This investigation into how highly experienced auditors actually audit challenging estimates yields insight for practice (5.1) and theory (5.2), and contributes back to the sociological method theory it mobilizes for interpretation (5.3).

5.1 Redrafting standards: the role and limits of scepticism in the audit of estimates

This study might inform the IAASB's current efforts to redraft the standard relative to the audit of estimates and clarify its stance on scepticism (IAASB, 2015).

The currently prevailing assurance approach to audit is geared towards the evidentiating of the conformity of the financial statements to an applicable accounting framework. The standards assume that auditors have the ability to achieve an evidenced opinion (professional judgment), in an uninfluenced manner (professional independence).

Specifically, ISA 540 provides that auditors should adapt their procedures as a function of estimates' inherent uncertainty, and use professional skepticism to identify conditions for management bias in the computation of an estimate and adapt their procedures accordingly, with a view to achieve adequate independent evidentiating.

However, I observed that estimates are challenging to assure not because of inherent accounting uncertainty, but because of circumstantial audit uncertainty. Auditors are dependent from management to make sense of specific business circumstances, and their opinion cannot be fully evidenced, for lack of adequate external benchmarks.

In practice, experienced auditors do not use skepticism to evidence their audit opinion, but rather as an external constructive challenge to achieve comfort that the estimate is the best possible - so that actual estimation uncertainty begins only where auditors' comfort ends.

As a result, the standards may find advantage in addressing circumstantial audit uncertainty rather than inherent estimation uncertainty.

For example, whether an estimate is measured at fair value or not is of limited impact on audit uncertainty. On the contrary, the discussion on how to address significant risks is most relevant and may be underdeveloped.

Organizing a systematic analysis of challenging audit cases could help foster

improvement, even though it is unclear to what extent such an analysis may detail, and help reproduce, auditors' predominantly tacit professional behavior.

Further, it appears that skepticism has a deeper purpose of allowing the gradual creation of comfort in the challenge of management estimates, in cases when sticking to the ideal of independent professional judgment would merely lead to biased assurance behavior. Rather than a mark of auditors' failing professionalism, the observed lack of skepticism in the audit of estimates may therefore be a consequence of the structural inadequacy of assurance.

However, renouncing the assurance requirement of independent judgment to favor external constructive challenge also comes with two shortcomings which have yet to be removed if standard-setters and regulators wish to make skeptical challenge auditors' default behavior. First, externality falls short of independence because management is acknowledged as a major partner in assessing reasonableness. So how could investors trust that auditors' comfort comes from skeptical challenge, instead of making arrangements or compromises? Second, constructiveness falls short of judgment because the audit opinion cannot be completely evidenced. So in case of significant misstatement, how could auditors mitigate the risk that their liability be engaged for lack of skepticism though they have done their best?

The theoretical insights offered by this study may pave the way to address these questions.

5.2 Discussion with audit research

5.2.1 Reintroducing the centrality of language in audit as hermeneutic

In his forward-looking (see 5.3 below) understanding of audit as normatively hermeneutic, Francis saw an alternative to overly technical audit in auditors' phronesis-like ability to judge the veracity of the financial statements in a given situation according to the traditions of GAAP and GAAS. What I observe is rather an ability to enter into a posture that favors the elaboration of the best possible solutions in the circumstances, below the level of judgment and in close interaction with the auditee.

Engaged in a debate over what constitutes reasonableness in the circumstances, the auditor and the auditee address both an accounting problem (how to represent the matter at hand) as well as an auditing problem (how to justify this representation?). Comfort about the reasonableness of an estimate in the circumstances is therefore the expression of the merged phronesis of the auditor and the auditee.

The definition of professional scepticism as a posture to act below judgment in interaction with the auditee reintroduces a Gadamerian notion Francis himself found missing in his account: the “centrality of language” (Francis, 1994, p. 240, fn10). In line with Gadamer’s “Truth and Method” (1960), the agreement reached by the auditor and the auditee is an act of language because it creates language, the “horizon of a hermeneutical ontology”, where there was none before ³⁴.

5.2.2 The sceptical auditor as a professional in intersubjective valuation

The present study offers the perspective of renewed professional identity to a lagging profession: auditors’ professional scepticism is key to move into, and occupy, the jurisdiction of comfort.

The auditor’s professional posture of external constructive challenge makes it possible to question the auditee’s understanding and belief they use in the making of assumptions. It is not an “attitude” either, i.e., “an **evaluation** of a **target** [...] on a scale reflecting **some degree of good or bad**” (Nolder and Kadous, 2014, p.2, emphasis in the original). Rather, it is a posture which allows to define, in the relationship with the auditee, the very scale of good and bad which may allow conclude as to reasonableness in specific circumstances. This posture gives an adequate definition of professional scepticism, which differs from both independence and judgment, as it acknowledges the auditee as an indispensable partner in the making of an audit opinion below judgment.

Smith Lacroix, Durocher and Gendron find that the transition from historical cost to fair value accounting has implied “a significant erosion of professional control over jurisdictional work” (2012, p.51), as “[t]he auditor’s role nowadays resembles that of an arbiter having to mediate discrepancies over subjective values – a number of which being produced by highly specialized valuers” (p.36). But mediating discrepancies

³⁴ See the part “Sprache als Horizont einer hermeneutischer Ontologie” (1960, p.442 and following)

over subjective values depicts well what sceptical auditors actually do when they have to make an opinion below judgment, and doing so they add most value to the audit.

I proposed that the dyad auditor-auditee is the best able to accompany the emergence of meaning and create order out of chaos. The intimate business knowledge of the auditee makes him the best possible expert to appraise the situation at hand. But his obvious vested interests, as well as the possible one-sidedness of his expertise, makes it necessary to equip him with the scepticism of the auditor. Together, they may find the best possible solution in the circumstances and extend the realm of nature over chaos - were it only temporarily, and with no resort to a general notion of truth.

Professional scepticism may therefore be the surest way for society to keep safe from the risk of misstatement in the era of fair value accounting. Elucidating the components of this posture is a challenge worthy of future research in audit.

5.2.3 Neither objectivity, nor social construction: what validity for mutual comfort?

In the current literature on auditing estimates, the audit opinion is meant to be legitimated by the gathering and evaluation of sufficient appropriate evidence. This representation of audit has been questioned by tenants of a sociological approach, who argue that the acknowledgment of appropriateness or sufficiency of evidence rests on social mechanisms as diverse as the construction of rituals of comfort (Pentland, 1993), the use of practical reason in an hermeneutical interpretation (Francis, 1994), or auditors' practical intelligence (Guénin-Paracini et al., 2014). However, the array of situations analyzed in this study suggest that, in situations of audit uncertainty, appropriateness and sufficiency are neither objective nor socially constructed.

On the one hand, the validity of a settlement by way of sceptical challenge may not rest in a strong "argumentative coherence", or a "test of facts" that would give the logical consequences of a pure characterization of the reality. But on the other hand, this does not mean at all that audit boils down to a mere appetite for legitimacy and a need for image management (Power, 2003): the mutual comfort between management and the auditor simply rests in a weak acknowledgment that their interaction may best alleviate uncertainty in the circumstances.

But in its current state, the practice of audit is unlikely to grant these conditions of validity. First, the necessary acknowledgment is bound to be plagued by the expectation gap. Second, the currently prevailing approach of audit as evidential assurance is ill-adapted to give a situated account based on local contingencies.

In order to best address challenging estimates, we would need an approach of audit where the “test of facts” takes place continuously and really is a test of time. This would mean that the audit opinion should be authorized to continuously evolve, or authorized to clarify the conditions of its validity.

In both cases, the pass/fail nature of the audit opinion should be questioned.

5.3 Conclusion: reinventing audit after the fall of industrial auditability

At least since the McKesson and Robbins scandal back in 1938, auditors have been summoned to give evidential account for their opinion. This approach has paved the way for the irresistible rise of audit as assurance for half a century. However, as business models have grown ever more complex, and as the accounting frameworks have tried to keep pace, achieving complete evidential account of the audit opinion has become increasingly difficult. The current quandary about auditors’ lack of skepticism in the audit of estimates thus merely epitomizes a deeper embattlement of the legitimacy of audit.

This study has proposed that the currently prevailing notion of auditability, and the associated audit-system of knowledge (Power, 1996, 1997), is a system of justification best approached by Boltanski and Thévenot’s industrial world. Thus, it could locate the institutional root cause for audit failure, beyond a tendency to “verifying” rather than “evaluating” (Griffith et al., 2014), in the very assumption that audit should be about gathering and evaluating external evidence.

This assumption, and the difficulty to relieve it, may embody what Boltanski and Thévenot called the fall of the industrial world: “In the industrial world, the distinctive dignity of humanity is threatened by the treatment of people as things. [...] Deprived of tests, protected from the risk of contingencies that can call the order of competencies into question and allow new objects to emerge, industrial worth can become frozen in the monumental order that is regularly depicted in critiques of technology” (2006, p.

211). It seems that audit has achieved becoming a sterile technostucture, exactly as Francis has already warned it would in his 1994 paper.

But analysis also suggests that, under the pressure of their stakeholders, auditors manage to strip themselves from the necessity of relying on external benchmarks - be they objective or socially constructed. In situations of uncertainty, the industrial auditability has thus already been superseded by the reflexive auditability offered by auditors' sceptical challenge.

From this point on, we had to depart from the thread offered by the Economies of Worth, and coin the self-standing concept of the jurisdiction of comfort. In the jurisdiction of comfort, reasonableness ultimately emerges from the processual space created by the encounter of scepticism and knowledgeability, and may be told from unreasonableness only in the comfort that closes the dispute between the auditee and his auditor.

As it conflates both reflection and action, the interaction of auditors and auditees in uncertain audit situations suggested an alternative way to conceive of Boltanski and Thévenot's pragmatics of reflection. Thus, though this bold assertion should be granted enormous caution, the audit concept of "jurisdiction of comfort" (domain theory) might contribute back to the sociological lens used for interpretation (method theory). It might also inform the work of philosophers relative to Boltanski and Thévenot's theoretical anchoring in the conceptualization of rhetoric as inquiry from a pragmatist point of view (see, e.g., Marshall, 2010).

When the PCAOB inspected the work of the largest audit networks, the scientific ideal of an audit "as it should be", objective and evidential, suddenly encountered audit "as it is": reaching for the best possible solution in highly subjective and complex circumstances, in order to put some order in chaos. In a move reminiscent of the scapegoating analyzed by Gendron and Guénin Paricini (2010), auditors have been blamed as lacking scepticism. But the risks run much deeper than that. This study vindicates long-held calls that the current system of risk protection our societies rely on is obsolete (e.g. Power, 2004, 2009 and 2010).

However, in spite of its usefulness in addressing challenging estimates and more generally uncertain audit situations, there is nothing to legitimize that comfort would make a legitimate jurisdiction. This limit is represented by a question mark in table 1,

which summarizes the displacement of auditability observed in the study. Therefore, instead of forcing auditors into yet more idealism, it is high time academics and regulators set the right conditions for auditors and auditees to achieve the most reasonable estimates, even though imperfect ones, and bring trustworthy information to the readers of the financial statements.

Structure	Audit as evidential assurance (objective / socially construed)	Audit in the jurisdiction of comfort
Role of scepticism in the audit of estimates	Conducting adequate procedures to gather sufficient appropriate evidence in spite of estimates' inherent uncertainty	Conducting external constructive challenge of auditees' representation in uncertain situations with no external benchmark
Difficulty in the audit of estimates	Inherent accounting uncertainty in estimates leaves room for management bias and subjectivity	Estimates are not a cause for difficulty: their reasonableness is acknowledged in mutual comfort
Epistemological assumption	Fairness of representation in the statements may be accessed through external benchmark, be they objective evidence or rituals of verification	Fairness of representation in the statements is indicated by a mutual feeling of comfort that the best solution has been achieved
Ontological assumption	Fairness of representation in the statements, whether objective or socially constructed, exists independently of the auditor and the auditee	Fairness of representation emerges from the interaction between the sceptical auditor and the knowledgeable auditee
What does make auditors' opinion legitimate?	<ul style="list-style-type: none"> - The assurance report makes auditors legally liable for due professional care - Negative inspection results threaten their reputation 	?

Table 1: From Audit as evidential assurance to the jurisdiction of comfort

Only once an answer is found to this question will we have an opportunity to get freed from the “bad bondage” of evidential assurance (see opening quote). This may not be achieved theoretically, for it demands that we take into account thinking in action (as opposed to already existing language), nor practically, for it demands that we may inquire into the roots of current practitioners' action. It demands what I will call, in the second paper of this thesis, the development phase of a performative experimentation, of which this paper was the preparatory phase.

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SECOND PAPER

From assurance to insurance: reassembling audit around the jurisdiction of comfort

“The field of economic sociology has been unable or unwilling to translate its insights in a manner which might inform and influence policy.”

(Power, 2009, p. 854)

“It’s not for me to say if anyone will end up using these tricks in any trade.”

(Latour, 2005, p.262)

1. Introduction

In the aftermath of the 2008-2009 financial turmoils, professional scepticism and the audit of estimates has been a growing concern (e.g. IAASB, 2012, and 2015; PCAOB, 2012b, 2012c, 2014a, and 2014b; IFIAR, 2012, 2013, and 2014). In spite of vivid debates between audit practitioners and regulators, an agreement as to how estimates may be satisfactorily audited and professional scepticism validly demonstrated has yet to be achieved.

The persistent failure of audit to assure estimates also blatantly reveals the failure of research to address that problem. Researchers’ sincere intent to inform standard-setting through positive explanations (e.g., Cannon and Bédard, 2014, p.2; Griffith, Hammersley, Kadous and Young, 2014, p.24; Glover, Taylor and Wu, 2014, p.2; Christensen, Glover and Wood, 2012, p.129) has yet to yield practical results.

My own analysis of how auditors justify their opinion as to the reasonableness of challenging estimates does indicate that research could be relevant in that matter if it could find a way to bestow societal legitimacy to comfort (Lherm, 2016). But thirty years of rich interpretive accounts, reaching from an analysis of the core paradigms of the practice (e.g., Dirsmith et al., 1985; Dirsmith and Haskins, 1991) up to the key role

of emotions such as comfort and fear (Pentland, 1993; Guénin, 2007), have already failed to make similar insights heard by the standard-setters.

As a result, not just economic sociology but auditing research as a whole “has been unable or unwilling to translate its insights in a manner which might inform and influence policy” (see quote at the top of this paper). In order to unlock auditors’ actual potential to address estimates, research first has to find a way to answer “how to” questions. That is, to scientifically address a project of study, rather than an object of study.

This challenge required a shift from the usual analytical stance in accounting research, including when the analysis is conducted by means of what is usually called an experiment, to an unusual experimental stance; from usual objectivist methodologies, including when the object is meant to be socially constructed, to an unusual projectivist methodology. Latour’s “Reassembling the Social: An Introduction to Actor-Network-Theory” (2005) provided a relevant basis to achieve such a shift: “ANT is first of all an abstract *projection* principle for deploying *any* shape” (Latour, 2005, p.178).

Latour’s introduction gives us the two fundamental ontological (the social is a movement of associations) and epistemological (epistemology is political) assumptions necessary to conduct such a scientific endeavor. He also provides us with useful methodological principles (flatness and symmetry). Nevertheless, it fails to address two major implementation difficulties.

In order to make the concrete setting of experimentation possible, I therefore had to make a third assumption: “research is conducted by human beings”. This assumption of method may seem obvious in the objectivist methodologies, be they positivist or constructivist, because they are only concerned with the building of theory. But with Latour, the experimenter enters the vaster realm of agency, where there is no clear distinction between humans and non-humans.

Only by drawing the consequences of this third assumption could the two difficulties unaddressed by Latour be unlocked, and his introduction to ANT be turned into a fully-fledged projectivist methodology, that I was able to implement in a concrete experimental setting: the performative experimentation.

In the first part of this paper, I will detail this methodological construction. In the second part, I will relate how I set up a laboratory to address the conundrum of auditing estimates in an experimentation process, from considering the matter of concern to the development of a prototype and its testing in real conditions.

To begin with, I reveal how my empirical interpretive study of how auditors justify their opinion as to the reasonableness of highly challenging estimates (Lherm, 2016) really was the first phase of an experimentation, from the setting of a laboratory up to the generation of the hypothesis of “the jurisdiction of comfort”, which has lead me to the current research question: how to legitimate the use of comfort in the audit of estimates?

To find out how to make comfort legitimate, I proceeded to develop the prototype of audit as insurance. Instead of an assurance report which makes them legally liable for due professional care, the auditors would publish an insurance contract which engages them financially to hedge for the misstatement risk. The concrete workings of contractual insurance make auditors’ comfort the surest proxy for the quality of the financial statements. As a result, comfort becomes legitimate and estimates may be audited.

Eventually, the prototype of audit as contractual insurance is streamlined in order to be tested in real-life conditions. Gathered around their concern for auditing estimates, the actors will have to choose between assurance and insurance. Whatever the result, this performative experimentation, which has been built on the accounts delivered in thirty years of interpretive research, will have had a sensitive impact on how the audit collective makes sense of estimates, and of itself. In doing so, it addresses together these two conundrums: how to make comfort legitimate in the audit estimates and how to answer that kind of “how to” questions in a scientific endeavor.

2. Reassembling audit: applying Latour's ANT in the audit field

The methodology in which this study was framed is based on the inquiry principles set up in Latour's "Reassembling the social: An introduction to Actor-Network-Theory" (2005)³⁵. I first overview the consequences Latour draws from his ontological and epistemological assumptions to construct his methodological theory of ANT (2.1). Then, in order to meet some key unaddressed implementation challenges, I introduce an assumption of method from which I develop the experimentation process applied in this paper (2.2).

2.1 Reassembling the social: a pragmatist reading of Latour's ANT

In his "Introduction to Actor-Network-Theory", Latour's ambition is to "renew from top to bottom the very scene of empiricism" (p. 114). He reformulates both what is the social (2.1.1), and what is science (2.1.2), and draws the methodological consequences of his assumptions - thus getting back to the original purpose of ANT.

2.1.1 Ontology of the social as movement

a. Actors as explanations and existence as difference: the social makes the actors act

To Latour, the social is not made up of social stuff. Rather, it is a movement assembling together many non-social entities. Whatever the shape it takes at any given moment, this assemblage may best be pictured in an actor-network: "ANT is first of all an abstract *projection* principle for deploying *any* shape" (p.178). The notion of actor-network is therefore key to propose a reading of Latour's methodology.

An actor is "any thing [sic] that does modify a state of affairs by making a difference" (p. 71). In the pragmatist tradition³⁶, explanative factors are "things that made a difference" (Kakkurri Knuutilla et al., 2008, p. 284, see also Peirce, 1997/1903). As a result, actors are explanations. However, no explanation may hold on its own.

³⁵ When not otherwise stated in this part, quotations are from Latour (2005)

³⁶ Latour's ambition warrants a pragmatist reading, for renewing empiricism is one of the original purposes of pragmatism - see e.g. Dewey's "immediate empiricism" and James "radical empiricism". Nevertheless Latour's writing is multi-faceted and warrants many other readings. For example, Gadamer's "Horizont" (2010/1960), Foucault's "episteme" (1990/1966), Derrida's "DifferAnce" (1982/1968) and Deleuze's "Ploy" (1988) are alluded to in this article. For a comprehensive Heideggerian reading, see Harman's book "Prince of Networks" (2009).

Rather, actors are given their active, explanative status only as far as they “make others do things” (p.107), that is, in their very relation to other actors. What exists in Latour’s ontology is the very relation created by a difference active in effect.

This is why actors are always already networks, and networks always already actors. In an “actor-network”, there is no two distinct beings. Rather, the methodological principle of ANT is the very intertwining of the notions of actor and network, the recognition as well as demand that each explanation be both explanans and explanandum and exist only in this very relation. In a postmodernist perspective, existence, fact, is the very difference created by otherness, and this difference is *de facto* a relation, that is, a comparison according to some sort of dimension³⁷.

Social as a movement of association binds together the actor and the network, purporting their very ability to relate and make an active difference, that is, to explain. The social gives the dimension which characterizes difference. In other words: the social is what makes the actors act.

b. Objects, assemblies, and the political virtue of things: building forms and standards

Latour expresses this as a process of calibration: the social traces “tiny conduits” (p.5), which “are the very acts of giving something a dimension” (p.220). What is constitutive of objectivity of the social is the very process of debating and constructing this dimension. In this renewed, dynamic ontology of the social as movement, “objects have now become things again: the disputed topic of a virtual assembly.” (p.119).

“Thing” indeed comes from the German “Ding” which originally designated an assembly, and then came to indicate a matter discussed in this assembly. In an interview (Fossier and Gardella, 2006), Latour reminds that a category is the judgment passed by such an assembly, the agora³⁸. As “‘Matter’ [...] is a highly politicized interpretation of causality” (p. 76), The result of the debating, which constitutes the object of the social sciences, really is a category.

Categories allow to sort and order according to a form, they are a standard to proceed to comparisons and achieve satisfactory explanation. No need for an assembly to dispute

³⁷ “As Deleuze said, ‘Relativism is not the relativity of truth but the truth of relation.’” (p.95, fn.119)

³⁸ Kata - agorein means “to speak before the agora - against”, i.e., an act of accusation.

anything anymore: everybody bows to the predicative power of the category. The social as movement may therefore only be studied when the existing category does not make common-sense anymore, thus calling for the gathering of an assembly. “It’s traceable only when it’s being modified” (p.159). This is achieved through locating the inquiry in what Latour calls “Matters of Concern” (thereafter, MoC).

2.1.2 Political epistemology and methods to resume the movement of the social

Political epistemology concretely consists in separating the two following stages of the inquiry, which Latour calls deployment and unification: “register the novelty of associations and explore how to assemble them in a satisfactory form.” (p.261). The “controversial building sites of matters of concern” (p.125) allow do just that.

a. Register the novelty of associations through deployment

“Controversial” (p.125), the MoC is “highly uncertain and loudly disputed” (p.114). In a MoC the movement of the social is stalled in a debated controversy that holds open alternative possibilities of making sense, alternative categories. It is a “gathering” as the assembly (Ding) is gathered to decide what category shall make sense. Studying a MoC is therefore a good place to start for the social researcher to register novelty of association.

Latour indicates that the researcher should hold open the controversies at play in the MoC³⁹, in a phase he calls “deployment of the controversies”. “To deploy” means “to make flat”. As the social makes actors act, it gives them a dimension. The researcher should therefore resist convey powerful theoretical dimensions with him into the study. Instead, he should “follow the actors themselves or rather that which makes them act” (p.237). As what “makes them act” is the social itself, the researcher should be content with this powerlessness.

Tellingly, “to make flat” also is the meaning of “to explain” (ex-plicare is exactly de-
ploy). Latour indicates that deployment really is an effort of de-description in Akrich’s meaning: it expresses what constitutes the relation of actors to each other. As actors are

³⁹ That is: not indulge too quickly in preformed categories, thinking he knows what a group is, because group is always grouping; what is acting when we are acting because agency is dislocated; what the social is made up of because the object is a surprising gathering, what we want because matter is always indicative of an unresolved choice and what sort of world we are ready to share as this is the ultimate goal of the inquiry.

explanations, it follows that "[t]he opposition between description and explanation is another of these false dichotomies that should be put to rest" (p.137)⁴⁰.

The quality of a de-scription can therefore be measured in its ability to make a difference: "Either your explanation is relevant and, in practice, this means you are adding a new agent to the description [...] or it's not an actor that makes any difference" (p. 147). A good de-scription shows strong performance: "To deploy simply means that through the report concluding the enquiry the number of actors might be increased" (p.137). But in order to perform the social through de-scription, the researcher has to be politically engaged in the process of unification.

b. Explore how to assemble a satisfactory form in unification

"Unification" is the calibration to a common unit, "a shared definition of a common world", i.e., what Latour calls not a society but rather "a collective" (p.247). As they are controversial, MoCs indicate that there is no common-sense, no shared definition any more: the collective is dislocated. Causality has no place to stay and the movement of associations is stalled. The purpose of the social sciences is precisely to assist in constructing a satisfactory dimension or standard in order for the movement of the social to be resumed: "social sciences are part of metrology" (p.227).

Reassembling a collective around a new shared definition is a political engagement. The researcher does his part as the "artificial site" of his textual account offers "a provisional staging of the connections it has managed to deploy" (p.139, emphasis added). This account is "the social scientist's laboratory" (p. 127), it is "a precious little institution to represent, or more exactly to re-represent—that is, to present again—the social to all its participants, to perform it, to give it a form." (p.139, emphasis added).

While deployment may be validated only through unification into an actor, unification itself needs a valid deployment to achieve that performance. As a result, in social just as in natural sciences, "truth [is] slowly achieved in breathtaking episodes without being sure of the result" (p.90). Truth is not socially constructed, as what is being projected is the social itself. Neither is it a correspondence to a reality out there. Rather, truth is the very process of its achievement, of its stabilization into satisfying new standards.

⁴⁰ From now on, in this paper, "de-scription" indicates the concatenation of description and explanation, as opposed to "sheer description" (see, e.g., p.136)

This is why the mechanisms of its stabilization are so important: “Our distinctive touch is simply to highlight the stabilizing mechanisms so that the premature transformation of matters of concern into matters of fact is counteracted.” (p.261). The ANT inquiry neither activates the stabilization process, nor does it rigidify the collective into a satisfactory form. At best, it may create a place where the collective can be dimensioned by the participants themselves: “sociology is best defined as the discipline where participants explicitly engage in the reassembling of the collective” (p.247). Hence, the title of the book.

2.2 Designing an interpretive experiment to reassemble audit

Latour’s introduction to ANT opens fascinating new ways of thinking and expanding the notion of validity in the social sciences. Nevertheless, it leaves many practical implementation questions unanswered, which leads me to complement the methodology with one assumption to develop a method of performative experimentation (2.2.1), and design the actual experimental process I used to accompany the reassembling of audit (2.2.2).

2.2.1 Implementing ANT’s abstract principle in an experimentation process

a. From ANT principles to a projectivist methodology: What to de-cribe effectively?

We can now make better sense of Latour’s definition: “ANT is first of all an abstract *projection* principle for deploying *any* shape” (p.178, emphasis in the original). As an “[a]bstract principle”, ANT draws the consequences of ontological and epistemological assumptions (social as movement and political epistemology) up to the methodological guideline of keeping apart the two tasks of deployment and unification. In deployment, the researcher projects a new association (“*projection*”) without activating novelty from his own will. In unification, he explores how to assemble a satisfactory form without rigidifying it to his own satisfaction (“*any*”).

The researcher is thus simply asked to stick to ANT’s principles to “highlight the stabilization mechanisms” for the “premature transformation” to be “counteracted” (p.

261). Now, Latour does provide us with useful projecting tools⁴¹. But he does not tell us where we should cast the spotlight and begin de-description, nor how de-description is meant to enable counteraction - two points especially difficult in audit, as we shall see.

To address those questions left unanswered in Latour's Introduction, I had to complement his ontological and epistemological assumptions with one assumption of method: "research is conducted by human-beings".

This assumption of method is obvious in objectivist methodologies because they are only concerned by the building of theory. However, within the frame of Latour's political epistemology, the experimenter now enters the vaster realm of action, where being human or non-human makes no difference.

But in spite of this principle of symmetry, this assumption remains true to Latour's "introduction". Indeed, there is a fixed point in Latour's own writing: he uses the words "inquirer" or "researcher" only to designate human-beings, as opposed to "actor", "participant", or "author"⁴² which are equivocal.

Human-beings can have access to the social because the social goes through human beings to have them think and act. This simple assumption makes it possible to acknowledge a difference between the language and non-language elements of action, and aim for its resorption in a powerless and symmetrical process of experimentation.

Only so could the two difficulties unaddressed by Latour get unlocked, and the implementation of his principles made possible, within a fully-fledged experimentation process.

b. What de-description? Rehabilitating theory, not power

Where to start is a difficult point in audit, for the practice is in a state of perpetual agitation which should not be mistaken with activity: agitators are not actors, just as "intermediaries" are not "mediators" (p.37). So, how may the researcher tell an object-

⁴¹ For example the very notion of "clamps" (p.174), such as oligoptica and panoramas, and "articulators" (p.194) culminating in the idea that identity is constituted by plug-ins: "No place dominates enough to be global and no place is self-contained enough to be local" (p. 204). Those tools are very concrete and useful concepts to train in ANT's "calisthenics" (p.51).

⁴² For example, "things might authorize" (p.72). Note that nothing indicates clearly in the book that readers may be non-humans. The answer only depends on what one calls a "text" and the act of "reading".

matter, a MoC indicating novelty worth being investigated, from yet another subject-matter⁴³?

My answer was that it takes a reference to know a difference. Even though I assumed that “agency is not reducible to human textual de-scription”, de-scription remains the essential goal of the sociological inquirer and language still remains necessary for de-scription. De-scribing actors “that make a difference” therefore necessitates a referential language, that is, a theory⁴⁴.

To register novelty in the deployment process, I use theoretical referentiality in three ways. First, to find out where to conduct de-scription, I refer to the existing corpus in the domain of interest: a MoC is indicated by a “paradox”, that is, a problem that may not be resolved (“para-”) in the domain as we account for it today (“-doxa”). This translates into a question that is fit for empirical study⁴⁵. Second, I use a theoretical “reference frame”⁴⁶ to achieve an account of the mechanisms enacted at the site of the paradox that is as coherent as possible. Then, I again refer to the corpus in order to extract what is new from what is already known in this analytical account. Reference to the existing corpus and to existing frames thus allows extract novelty from a very specific situation: the building site of a MoC.

Latour has long warned against the power abuses of theory⁴⁷. The use of theoretical reference may therefore look like a blatant breach of ANT’s flatness principle. But it is not, for it rehabilitates only theory, not power. Even though the de-scription should be able to claim validity in the methodological framework it used⁴⁸, this does not give it a compelling “truth” status at all. There is no such thing as a powerful theoretical result:

⁴³ For example, during my two years in accompanying the audit firm, major changes and investments were made to devise and implement automatized analytics. Should one take this as a MoC on the ground that it involved hundreds of millions dollars in investment?

⁴⁴ If to nothing else, language in a theory refers at least to the underlying theory and is thus referential. Non-referential language would be useful only if the researcher was an actor himself. This question is not developed here.

⁴⁵ For example, “How do auditors justify their opinion on highly challenging estimates?”

⁴⁶ For example, “On Justification” by Boltanski and Thévenot (1991) to analyse data gathered from observation and interviews. This frame may also be a statistical analysis of historical data.

⁴⁷ “There should be no powerful explanation without checks and balances.” (p.261). And indeed, indulging into theoretical preconceptions is what distinguishes the sociology of the social from ANT’s sociology of associations.

⁴⁸ For example, authenticity and plausibility in an interpretivist framework, reliability and generalizability in a positivist framework.

there are only useful theoretical tools in the pursuit of experimental validation. Theory, be it interpretivist or positivist, is merely useful to generate hypothesis for further in-lab testing (see below the notion of “laboratory of interlocution”).

c. How may de-description be effective? Ensuring symmetry between text and action

How to lead to counteraction is also difficult in audit, for the audit stakeholders are particularly keen to undertake action on the ground of their own descriptions. So, how may action be “overtaken” (p.43) in a satisfactory form through de-description, rather than undertaken unsatisfactorily on the ground of usual descriptions⁴⁹?

My answer was to introduce a strict distinction between the roles of practitioners and researcher. As I assumed that “agency is not reducible to human textual de-description”, I elevate practitioners’ intuition of action (not only language) as an indispensable partner in the construction of the projection. But I do not infringe on the principle of symmetry, for I make it the very goal of a perfectly symmetrical experimentation process to assuage this distinction.

To achieve satisfaction in the unification process, the experiment is organized along a symmetrical axis between theory and practice. Whereas “theory” is the de-description of action in a referential language, “practice” is its intuited actualization. I call “researchers” the human-beings best able to de-cribe de-scribable actors, and “practitioners”⁵⁰ those best able to intuit the actualized ones. In their interlocution, competent researchers and practitioners are able to articulate the conditions for satisfaction of nearly all actors. The experiment may move on from one step to the next each time they agree that the conditions of the actors they represent are satisfied.

Making such a strong distinction between theory and practice may therefore look like a blatant breach of ANT’s principle of symmetry that Latour so consistently applied in his writings. But it is not, for the laboratory is organized around this dissociation only to strive and achieve their association. As an institution of representation, the laboratory reproduces the assembly of actors gathered around the MoC in the very interlocution between researchers and practitioners. The whole experiment is designed to achieve a

⁴⁹ For example, during the study, the IAASB has issued new standards to have auditors report on key audit matters on the basis of their own analysis.

⁵⁰ I use labels from the management sciences on purpose. You may as well call them “de-scribers” and “actualizers”, or “human authors” and “human readers”. They are the human representatives of actors.

“connivence” between theory and practice that enables the performance of the social in a moment of truth about the social.

Now that the methodological underpinnings of the experiment I conducted are exposed, I may briefly elaborate on each of its concrete steps.

2.2.2 Reassembling audit: the concrete steps towards experimental validity

The concrete steps of the experimentation process aim to generate an hypothesis that will be used as the basis for the development of a prototype. It is designed in *four tipping points* and aims to bring together theory and practice in achieving a form satisfactory to all existing actors. Only then may practitioners resume action, and researchers claim they know. The reader may refer to illustration 1 below, which sums up the symmetrical functioning of the experimentation process⁵¹.

a. Deploying from wonder: preparatory phase and hypothesis generation

“Like all sciences, sociology begins in wonder” (p.21). As the goal of the experimentation is to associate theory and practice in the projection of a satisfactory form, it must begin in the wonder of both researchers and practitioners. This wonder is expressed very differently: on the researchers’ side, theory fails to make sense; on the practitioners’ side, action is stalled. The very first step in experimentation therefore consists in considering whether the matter-at-hand may bring together a practical and a theoretical concern.

In case they may, we reach the *first tipping point* of the experiment: a MoC worth being described that can be translated into a research question.

For example, the question “How do auditors justify their opinion on estimates” brings together auditor’s concern with demonstrating professional scepticism and researchers’ concern that audit as structure around evidential objectivity may not be designed to minimize audit risk. This plausible community of interest⁵² marked the set up of the laboratory of interlocution between the “researchers” (me) and the “practitioners” (the Global VP for audit with one of the major networks, also a participant to the IFIAR). Who, as human-being, is used as a representative is key to the success of the

⁵¹ To facilitate the reading, the newly coined concepts are put in quotes (”) and a lexical is provided in annex (see Annex 1).

⁵² The MoC is “above all, interesting” (p.114)

experiment. The Global VP had extensive experience of action in both his craft and the functioning of the audit institution and could therefore adequately represented nearly all actualized actors.

An empirical (practice) study (theory) is then conducted to address the research question which is also of interest to practitioners. The critical point here is to extract plausible novelty through the use of a coherent theoretical framework equipped with established criteria of validity. To interpretive researchers, “plausible novelty” would mean an acceptable interpretive account; to positivist researchers, it would mean a result within an acceptable range of possible error. Nevertheless, achieving “plausible novelty” is no powerful experimental result, but merely gives a tool to pursue the experiment.

The *second tipping point* is reached when what constitutes “powerless plausible novelty” for the researchers also intuitively strikes a chord among practitioners who want to investigate more into a “potentially useful innovation”. Both researchers and practitioners are wishing for “more details”⁵³.

For example, my conceptualization of the “jurisdiction of comfort” following an interpretive study (Lherm, 2016) lead me to discuss the empirical equivalent of “external constructive challenge” in brand new situations of estimation, as well as how this challenge may contribute to construct audit as insurance. This appealed to the Global VP who revealed that he himself had been contemplating the possibility of issuing “Auditors’ Default Swaps” as a hedging instrument. We now could proceed to the development phase to try and fine-tune the following hypothesis at the basis of our cooperation: the audit of estimates would be best achieved in auditor’s comfort, based on a posture of external constructive challenge (the powerless plausible novelty of the theoretical “jurisdiction of comfort”) in audit renewed as insurance (potentially useful innovation in practice).

b. Unifying up to wonder: the development of a testable prototype

Once they agree on a theoretical hypothesis that has a potential for practical innovation, the researchers, who represent the de-scribable actors, and the practitioners, who represent the actualized actors, intensify their interlocution to develop a prototype. The

⁵³ “A good text should trigger in a good reader this reaction: ‘Please, more details, I want more details.’” (p.137)

development phase really is an iteration of deductions and inductions in “conception” and “feasability” phases. In conception phases, the researchers conceive an innovative practical product that is theoretically coherent with an assemblage of the describable actors including the hypothesized novelty. In feasibility phases, the practitioners test-proof the researchers’ proposal as they try to make sense of it, that is, achieve an intuitively coherent assemblage of the actualized actors including the proposed innovation.

If the proposition is not feasible, the practitioners strive to articulate what conditions were not satisfied among the actualized actors, and this very articulation *de facto* induces another de-scribable actor. If it is feasible, then the prototype is ready for testing. As it is theoretically conceived, the prototype is a scriptural report (whatever the aspect⁵⁴) that satisfies the conditions of the de-scribable actors. But, as it has passed the feasibility test, it also satisfies the conditions of the actualized actors and has high potential for practical impact. Therefore, the prototype is never only a written report: it is always already an action-in-waiting, ready for testing in real-life conditions.

The *third tipping point*, which closes the development phase, is the “satisfaction” of the “conditions” of all the actors represented in the laboratory through the human interlocutors. That is, enough has been done (satisfaction) for the representatives to speak together (conditions), so that there is no reason for interrupting locution (interlocution) anymore. As their interlocution wanes down, a common horizon is reached and the prototype is achieved in the agreement between the practitioners and the researchers - in their conformity. But the infinite totality of actors that constitute agency may not be represented. Therefore, the proto-type is really just that: something that comes before the form that the whole experiment aims to project.

For example, after numerous meetings that totalized over twenty hours of discussions about the feasibility of several successive designs, the Global Vice-Chair and myself would agree that we could not achieve a better proposal than the audit insurance contract. The concept would fit in my theoretical assemblage, and appeal to his intuition of practice. It was therefore decided to share it with influential personalities in audit and financial regulation (further test-proof with practitioners) before we bring it to the Chairman of the IAASB (test in real conditions with all potential actors).

⁵⁴ “I use report as a generic term. It might be an article, a file, a website, a poster, a PowerPoint presentation, a performance, an oral exam, a documentary film, an artistic installation.” (p.123, fn 172)

The *fourth tipping point* is the acknowledgment, beyond words, of a new category. It is beyond the reach of the experimenter. Will the audit collective be reassembled around the jurisdiction of comfort applied in audit as insurance rather than assurance? Nobody may know before it gets obvious. Though this fourth tipping point is the pass to ultimate experimental validity, one may learn from an experiment even without reaching performance.

Being able to conduct a test in real conditions is in itself an achievement: if not of validity, then at least of insights to inform research; if not of performance, then at least of experience to inspire practice. The intuition here is one of a “moving social as a movement”: nobody has control over the formation of a collective. That a prototype would not work at this point does not mean that it will never work. Just as it was not for researchers or practitioners to begin the experiment, it is not for them to end it. During the test, they are merely left to wonder at the spreading of a myriad of interconnections into a reassembled collective around the category they initiated - or left to wonder why this did not happen. Just as Latour intuitively of his sociology, performative experiments will “not only begin, but also *end* in wonder” (p.220).

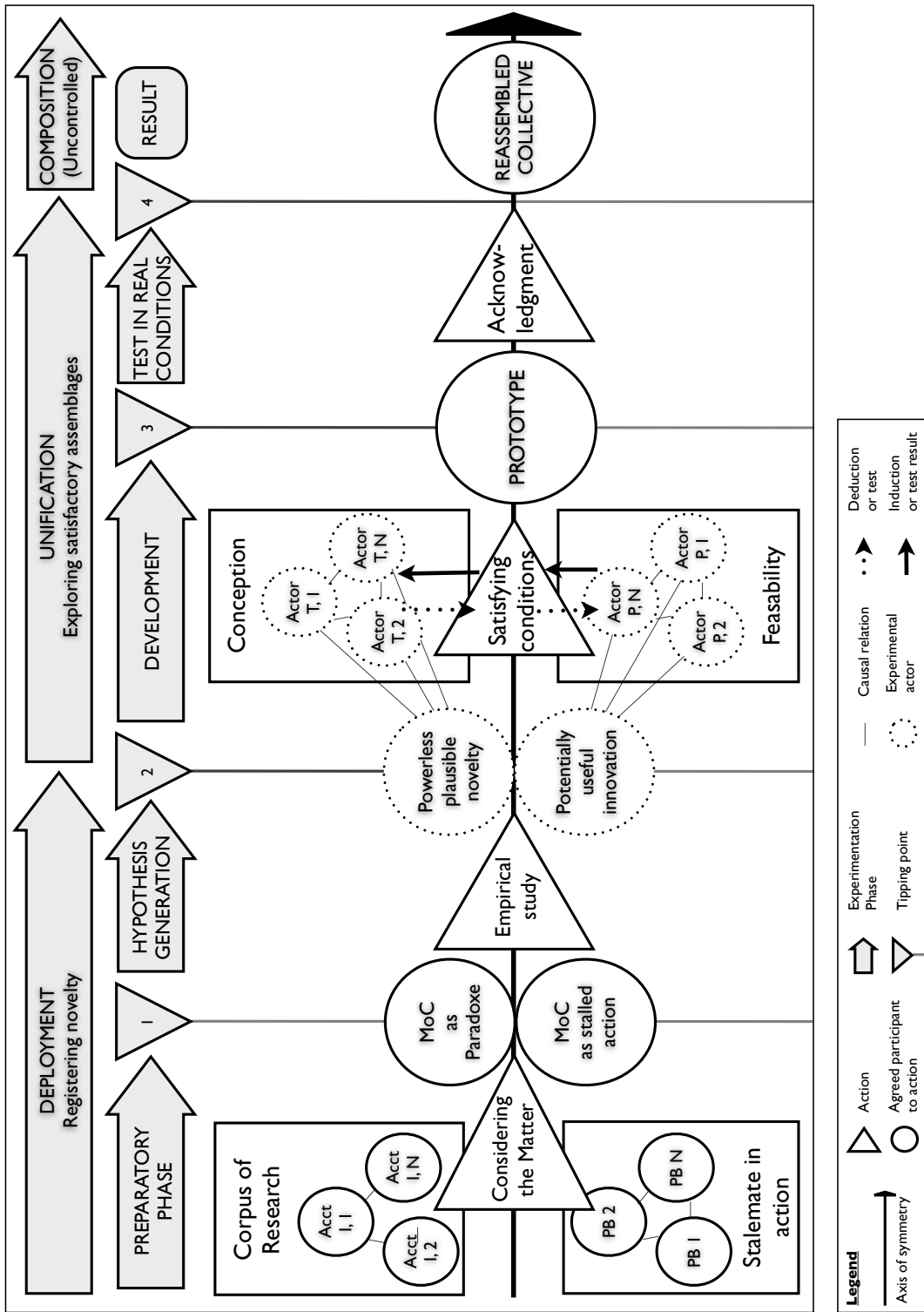


Illustration 1: the experimentation process

3. From assurance to insurance: a performative experiment in the audit collective

I now turn to illustrate in details how I designed and applied a performative experiment with the collective of audit.

As hypothesis generation has been elaborated on in another paper ("Lherm, 2016", area circled in blue on illustration 2), I merely reveal how what may look like a typical interpretive study really was the deployment phase in an experimental process (3.1).

Then, I document the unification phase of the experiment up to the achievement of a prototype, that is, agreement among the representatives in the laboratory of their interlocution (3.2).

Finally, I reveal how I fine-tuned the prototype to make it ready for testing in real-life conditions, as I projected how standard-setters and regulators may help audit achieve full relevance in a reassembled collective (3.3).

Note that what is being reviewed in this paper (area circled in green on illustration 2) does not include the actualization side of the experiment, for by definition this side is out of the reach of de-scription.

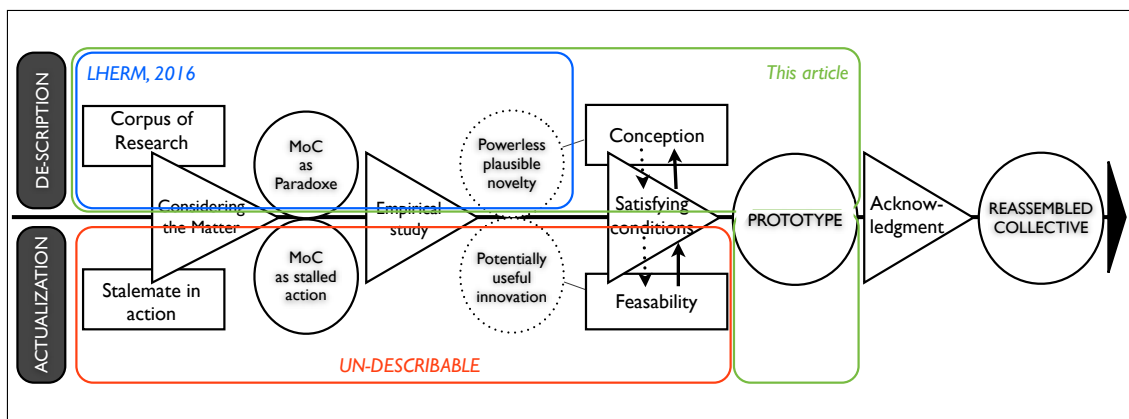


Illustration 2: How the experiment process is illustrated in this paper

3.1 Registering novelty in deployment: the jurisdiction of comfort

The seemingly mundane interpretive study on the audit of estimates (Lherm, 2016) really was the de-scription part of the deployment phase in a performative experimentation on the audit collective, from the setting up of the laboratory through hypothesis generation.

3.1.1 Setting up the laboratory: from scepticism to estimates

It takes two things to set up a laboratory in line with the assumption of method (see 2.2.1.a). First, symmetry, that is, active interest among practitioners that triggers sincere cooperation. Second, theory, that is, a corpus of research.

a. Symmetry: practitioners' demand for a conceptualization of professional scepticism

Symmetry is indispensable in order to take into account the actualized actors (see 2.2.1.c). The experiment therefore has to be set in an area of direct concern to practice. Professional scepticism provided the opportunity to anchor the experiment in audit.

Since 2009, regulators have repeatedly reported failures in the audit of estimates which, in line with the auditing standards, they interpreted as an indicator that auditors lack professional scepticism. Among others, the PCAOB was pushing hard for auditors to demonstrate that they had taken appropriate remediation steps. In that context of vivid debates, one of the four major network asked the dean of my University for a research project about scepticism, which was already an area of interest to me.

Amidst the minutes of institutional meetings, reports by regulators and interviews with the firms' specialists that were appointed to discuss the matter, it appeared to me that there actually was no such thing as professional scepticism. Nobody had ever been able to conceive a coherent, encompassing definition of the concept. As I shared those first findings with him, the Global VP said: "Well, now that you say so, when we speak of scepticism, I really have the impression that nobody knows what we really are speaking about".

This testimony confirmed that the vivid row around scepticism might merely be artefactual of a deeper concern which I had to find out, for this might be a matter of concern.

b. Corpus of research: the production of legitimacy in the legitimate audit collective

While one does not need theory to tell a subject-matter from a MoC, one does need it to tell a MoC from yet another subject-matter (see 2.2.1.b).

There is a very dense corpus of research in audit. Among others, interpretive studies, whose “methodological and theoretical task is to express the Field as social” (Ahrens and Chapman, 2006, p.819) have for over 30 years sketched audit as a practice that produces legitimacy, itself being legitimated by a proven system of knowledge that relies on evidential objectivity. This analysis constitutes the closest that theory has to offer for “a shared definition of a common world” in audit, that is, the audit collective. A theoretical MoC would therefore be constituted by the failure of evidential objectivity to legitimize audit. Was there any legitimacy question behind the row over professional scepticism?

Professional scepticism appeared in the auditing standards in 1988. It was meant to assist the auditor in deciding on the most adequate procedures to find out appropriate and sufficient evidence and mitigate subjectivity in the computation of accounting estimates. Tellingly, every time I would come and ask any practicing⁵⁵ audit partner about “scepticism”, he would answer “estimates” without me giving the slightest hint for it. It seemed that practitioners were having a hard time auditing some challenging estimates. Maybe there was being a legitimacy problem with estimates after all?

I was getting ever more curious, and the Global VP decided to give me a chance. The laboratory was set up, complete with action stalled, theoretical corpus, and a trustful relationship.

3.1.2 Finding the MoC: the inescapable paradox of estimates in evidential assurance

There is a paradox in how the problem of estimates is currently addressed in audit (1.1). As long as they stick to the understanding of audit as evidential assurance, standard-setting, regulation and research may not find a way out (1.2). Not only action is stalled in the audit of estimates: theory finds itself in a dead-end as well - indicating a potential MoC.

⁵⁵ As opposed to technical partner who specialize in regulation, accounting standards and methodology.

a. The paradox of estimates in the auditing standards

The solution proposed by the standards to audit estimates is coherent with audit as evidential assurance, that is, the demand that reasonable assurance be achieved by auditors through the obtention of sufficient appropriate audit evidence. Professional scepticism is meant to assist the auditor in achieving evidential assurance. However, the standards' solution rests on the assumption that there exists sufficient appropriate evidence to narrow the uncertainty inherent to a given estimate to below a reasonable range. This is problematic:

- If sufficient appropriate evidence may be obtained to narrow down the estimation range to below materiality, then how could the estimate be assessed as inherently uncertain?
- And if not, then how could even the most skeptical auditor give assurance as to the reasonableness of the estimate or the related disclosure?

Thus, auditors may not rely on objective evidence to give an assurance on the reasonableness of truly uncertain estimates - whatever their level of professional scepticism. This is the paradox of estimates in audit as evidential assurance.

b. The dangers in avoiding or ignoring the paradox

Research in the audit of estimates either avoid or ignore that paradox. As a result, their current recommendations for change in auditing standards are unsatisfactory and may even prove detrimental for the audit practice.

A first string of research avoids that paradox as it argues that evidential audit is impossible only in cases of extreme accounting uncertainty. Those authors propose that the audit opinion on those estimates should be negative ("there is no reason to doubt reasonableness") rather than positive ("the estimate is reasonable").

This stance is dangerous for it fails to show how audit would remain useful to stakeholders if auditors' liability was significantly decreased.

A second string of research ignores that paradox and assume that estimates may be audited based on sufficient appropriate evidence. Those authors suggest that the audit of estimates is deficient because today's audit follows a verification pattern instead of

providing relevant independent valuation, and propose that standards-setters and regulators should merely develop and impose a superior audit method.

This stance is dangerous for it fails to demonstrate that such a “superior” method be possible, or how audit may resist overwhelming litigation or fall in reputation in case it is not.

c. Estimates as a MoC in the audit collective

This quick overview of standards and research reveals that, if we stick to the legitimacy of audit through evidential objectivity, we are left with two equally lethal choices: either decrease auditors’ liability and risk audit becoming irrelevant; or make auditors responsible for an impossible objective evaluation, and risk have them fall under the weight of litigation or incur irreparable reputation loss. It therefore seems that theory, too, is stalled with regard to the audit of estimates.

While the stalling of action had been expressed among practitioners in the row about professional scepticism, this stalling of theory had been expressed among sociological theorists in their concern that audit achieved little more than a pretense of objectivity that only marginally addressed the actual misstatement risk⁵⁶.

Those established practical and theoretical stallings together indicate with almost certainty a MoC. Thus, I conducted an empirical study to investigate into how auditors actually justify their opinion as to the reasonableness of highly challenging estimates.

3.1.3 The jurisdiction of comfort as powerless plausible novelty

To conduct interpretation, I used Boltanski and Thévenot’s theoretical reference frame “On Justification”. This provided me with putative explanations of how auditors legitimize estimates’ reasonableness, from which I selected the one that did not establish any relation with evidential assurance. Unfolding the consequences of this last approach, I could extract a new putative explanation, or actor: the “jurisdiction of comfort”.

a. Extracting novelty out of the MoC

⁵⁶ Which is why Michael Power wishes this field had been able to prevent the financial turmoils (see top quotation)

The problem caused by estimates is not *inherent accounting* uncertainty, but rather *circumstantial audit* uncertainty: highly specific estimates may not be audited because, due to highly specific business circumstances, there is no external benchmark to establish appropriateness of evidence (subjectivity) and/or sufficiency of evidence (complexity).

As a result, when auditors try to stick to the collective of audit as evidential assurance, they have to do it through “arrangements” or “compromises”.

In arrangements, auditors aim to achieve a pretense of evidential assurance. This is the worst way to audit estimates as auditors certify without verifying and thus fail to address the actual risk of misstatement while giving to think that they do. Yet, this is how the interviewed auditors mean to mitigate the litigation and reputation risks in dealing with extremely uncertain audit situations.

In compromises, auditors acknowledge that they cannot do better than management, and use their experience and their intimate knowledge of the auditee to find evidence that management’s estimate may be trusted in the circumstances. Compromises are far better than arrangements to address the actual risk of misstatements. Yet, auditors take huge inspection and liability risks as the standards provide that a belief in management’s integrity is not enough to substantiate the audit opinion.

But the most interesting and promising way to address estimates is auditors’ external constructive challenge of auditees’ representations.

In external constructive challenge, auditors do not aim at pretending they have obtained sufficient appropriate evidence for the sake of mitigating their own risks, nor do they use their belief in management’s honesty to make their audit judgment. Instead, they use their experience and intimate knowledge of the auditee in order to engage in vivid debates during which they challenge auditees’ position from their own external perspective, while intending sincerely to be constructive and find an agreement.

While auditees best master the technicalities of the case at hand (e.g., business perspectives and product knowledge), auditors are expert in challenging them and won’t accept the estimate unless they really feel comfortable with it. Therefore, the most appropriate accounting representation in the circumstances is likely indicated by their mutual comfort, as achieved in this process of external constructive challenge.

b. Renewing audit assumptions to foster constructive challenge: the jurisdiction of comfort

Closer analysis indicates that auditors' posture of external constructive challenge is very novel.

As they may not achieve evidential assurance anymore, they reveal a practice of audit that radically differs from what has been practiced and studied, and therefore indicates a radically different audit paradigm. Ontologically, reasonableness does not rest in a world out there anymore, but rather in the processual encounter of scepticism and knowledgeability, as embodied in the interaction auditor/auditee. Epistemologically, reasonableness may be told from unreasonableness not on the ground of objective evidence anymore, but rather from the mutual feeling of comfort.

This renewal of assumptions called for a displacement of the audit collective from evidential objectivity to what I call the jurisdiction of comfort. The jurisdiction of comfort is the area in which comfort has alone the authority to indicate the most reasonable representation in the financial statements. It takes place whenever no external benchmark is found to allow a satisfactory assessment of fairness in the financial statements. It has the sizable advantage over evidential assurance that it fits the practice of external constructive challenge, which seems to be the only one yielding some strong results in the audit of challenging estimates.

But comfort has no evidential currency. So, how to legitimate the use of comfort in the audit of estimates? What should convince audit stakeholders that auditors truly challenge their clients even though they may not be proven wrong against a set of evidence pertaining to a world out there? Those are the key "how to" questions that a classical data analysis may not address, for it requires projection. As the litigation or reputation risks may not be used to legitimate audit practice in the jurisdiction of comfort, we have to invent a way to do so.

Invention is exactly where the development phase begins.

3.2 Achieving a satisfying assemblage during unification: reinventing audit as insurance

The purpose here is not to detail the entire process of development which lasted over two years. Rather, in order to illustrate the development phase, I introduce the final agreement reached between practitioners and researchers: the audit insurance contract.

3.2.1 De-scriptable actors and the goal of conception

The development phase consists in successive loops of conception and feasibility (see 2.2.2.b). The concept must be developed into a prototype that satisfies the conditions of both actualization and de-description. Nevertheless, by definition the actualized actors may not be de-described⁵⁷. Therefore, only the de-described actors and their assemblage into a satisfactory concept are presented in this section.

On the building site of the MoC of estimates in audit, my empirical study (Lherm, 2016) has highlighted an assembly of innumerable actors, of which the major de-scriptable ones are depicted in table 1. Two categories are competing to make sense, two candidates for giving a shared definition to audit, two possible audit collectives: “Evidential assurance”, or “Jurisdiction of comfort”.

Table 1 (next page) depicts the most important de-scriptable actors gathered in this building site. The column “Evidential assurance” indicates what conditions have to be satisfied by any concept to be assembled together with the actors associated to this category - which is *not* our purpose here. The column “Empirical newness” indicates what observations from the empirical study are at odds with the category of “evidential assurance”. Finally, the column “Jurisdiction of comfort” summarizes what actors are composing this new category, the conditions of which have to be satisfied in order to assemble a valid concept. In practice, the concept developed in the experimentation will have to fill in the one missing case: “What does make auditors’ opinion on estimates legitimate?” in the “Jurisdiction of comfort”.

⁵⁷ At best, I may mention that the development included over twenty hours of meeting with the Global VP as well as about ten interviews with investors (hedge fund, private equity fund and fund specialized in middle caps from emerging countries) and members of financial directions with listed preparers.

Structure	Evidential assurance	Empirical newness	Jurisdiction of comfort
Role of professional scepticism in the audit of estimates	Conduct adequate procedures and gather sufficient appropriate evidence in spite of estimates' inherent uncertainty	- No agreement as to what scepticism means. - Role of PS leads to internal incoherency in standards.	Conducting external constructive challenge of auditees' representation in uncertain cases when there may be no objective evidence
Difficulty in the audit of estimates	Inherent accounting uncertainty in estimates leaves room for management bias and subjectivity	In subjective or complex audit cases opinion may not be based on evidential objectivity	Estimates are not a cause for difficulty: their reasonableness is discovered in the mutual comfort between knowledgeable auditees and their sceptically challenging auditors
Epistemological assumption	Auditors may tell fairness from unfairness based on appropriate sufficient evidence	Auditors may not assess the reasonableness of truly uncertain estimates through objective evidence	Auditors may tell reasonableness from craziness through a feeling of mutual comfort with auditees
Ontological assumption	Fairness of representation in the statements is objective	That their reasonableness is not objective is precisely what makes estimates uncertain	Reasonableness is achieved in the sceptical challenge of knowledgeability, embodied in the interaction auditor/ auditee
What does make auditors' opinion on estimates legitimate?	The assurance report makes auditors legally liable for due professional care => <i>Auditors have interest in gathering sufficient appropriate evidence to mitigate reputation or litigation risk</i>	Auditors' wrongdoing may not be demonstrated based on the evidence gathered, making reputation and litigation risks useless to stakeholders	<i>Object of experimental development</i>

Table 1: illustration of de-scriptable actors for two different categories

3.2.2 Reinventing audit: the theoretical purpose and principle of the audit insurance contract

To develop a working product able to legitimate the jurisdiction of comfort, we have to meet two key aspects: the conceptual goals indicated by the novelty extracted during the empirical study, and the conditions for satisfaction which in practice are users' specifications.

a. Clarifying the conceptual goals based on the de-scribable actors

Invention has to satisfy the conditions of the novelty extracted during the empirical study. In this experiment, this means that it has to establish a relation between the actors assembled in the jurisdiction of comfort and any new product.

Now, the as yet unclarified and almost infinite set of characteristics of the sceptical challenge I observed in situations of uncertainty entirely belongs to the wider set of the ontological and epistemological assumptions (see 3.1.3).

Consequently, my analysis of the jurisdiction of comfort indicates two de-scribable actors, the conceptual goals, to which legitimacy has to be related:

- As reasonableness may only be discovered in an interaction of knowledge and challenge (ontological assumption), the sceptical auditor needs the concurrence of the knowledgeable auditee⁵⁸
- As reasonableness may only be known through comfort (epistemological assumption), the auditor's engagement should be limited to the areas of the financial statements he is comfortable with.

Taking into account these two actors causes evident feasibility challenges: how could investors trust that auditors' comfort comes from skeptical challenge, instead of making arrangements or compromises? And how could auditors mitigate the risk that their liability be engaged for lack of scepticism though they have done their best?

The conceptual goals therefore take a more practical shape:

- making it auditors' own vested interest to conduct sceptical challenge,

⁵⁸ Only regulators are legitimate to impose any procedure to the auditee, as shall appear below (see 3.:

- making the limitation of their responsibility possible, albeit with an economical cost.

b. Clarifying the conditions for satisfaction which stand for actualized actors

While the representative of actualized actors may not describe them, their intuition does impose barriers and wishes that the product under conception should meet. These conditions for satisfaction are the users' specs for the product under development.

In the case of audit, the profession had been struggling with the following matters for years, as was apparent in the public discourse of regulators and standard-setters: audit loss of relevance, the expectation and information gaps, and the related need to increase stakeholders' confidence in auditors' challenge of management as well as enhance the value of auditors' communication in the report.

The profession is concerned by audit's looming loss of relevance⁵⁹, which it expresses under the form of two main challenges: the expectation gap, defined as the difference between what users expect from the auditor and the financial statement audit, and the information gap, defined as the difference between the information users believe is needed to make informed decisions, and what is available to them (see IAASB, 2011, pp. 7-8).

The expectation gap finds its most concrete expression in demands by the stakeholders that the auditors address fraud and do not assume management's integrity. The standard-setters have tried to meet these demands by enhancing users' confidence that auditors challenge management. They reminded of the need to apply professional scepticism, which implies that auditors should be alert to fraud and critically assess evidence even though they assume management's integrity (See, e.g., ISA 200.A22, .07, and .13.1).

The information gap finds its most concrete expression in demands by the stakeholders that the auditors stop hiding behind boiler-plate formulation and give their qualitative assessment of key matters. The standard-setters have tried to meet these demands by enhancing auditors' communication. They proposed that auditors should list the key audit matters in the audit report, and explain their choice in specific terms without disclosing original information. (see, e.g., ISA 701, and PCAOB, 2016)

⁵⁹ This fear was most clearly expressed by Arthur Schilder, the Chairman of the IAASB, in an audition before the Board of the PCAOB on April 2, 2014.

After several trials in the laboratory of our interlocution, the representatives for the actualized actors and myself came to conclude to the feasibility of audit as insurance⁶⁰, which is likely to address these challenges.

3.2.3 The final design of audit as insurance: principles and concrete workings

Developing the product of audit as insurance made it possible to achieve the conceptual goals and meet the specs.

a. The principles of audit as insurance: issuing a hedging derivative

In audit as insurance, the audit opinion is expressed in an insurance contract that may be sold to investors as a hedge against the misstatement risk. Auditors' interest therefore is to sell the insurance contract at the highest possible price (incentive), under the constraint of avoiding excessive misstatement risk that could trigger insurance losses (penalty). This core principle has two important consequences, which address our two conceptual goals as well as the current challenges in the profession.

First, insurance increases stakeholders' confidence in the audit. Indeed, auditors have a vested interest in conducting a truly skeptical challenge of the auditees to reach the finest grain of understanding and make it possible to:

- Achieve greater comfort than investors in significant matters of interests to them, which they can sell as a hedge against the misstatement risk (= gain incentive);
- Exclude from insurance the areas of the financial statements they are not comfortable with, in order to limit exposure to uncontrolled misstatement risk (= avoid penalty).

Note that, as the auditors aim to reach the highest possible price of the insurance contract for any given degree of comfort, they have no interest in withholding insurance when they feel comfortable, so that they should avoid risk averse behavior.

Second, insurance brings relevant information to stakeholders. Indeed, in order to limit their exposure to areas of discomfort, auditors write covenants to the insurance contract. These covenants indicate accurately what areas of the statements are excluded from

⁶⁰ The design of the concrete workings of this product has passed through many stages, but the very concept of "insurance" immediately stroke a chord in the Global VP who had already played with the idea of "auditors' default swap". This commonality in our thinking was very important to pursue development up to the whole idea of the insurance contract along the years.

insurance, but they indicate nothing positive as to the statements' content.

Thus, if the contract were published together with the financial statements in place of today's assurance report, the covenants would provide highly relevant information to stakeholders about which areas auditors are uncomfortable with, without denigrating auditees or revealing sensitive information.

Note that, as the auditors aim to limit their misstatement risk, they have an interest in avoiding "boiler-plate" formulation and instead write covenants that are as clear-cut as possible.

As a result, the principle of issuing an audit insurance makes sure that either the misstatement risk is insured, or the areas where auditors are still uncomfortable are precisely indicated to stakeholders.

Not only is it a vested interest to challenge management, but what auditors do or do not gets clarified in a detailed contract that replaces the audit report. Further, the value of auditors' communication gets enhanced as the covenants to the contract indicate to investors what matters they should engage management with.

Together, these advances should help reduce the expectation and information gaps.

While audit as insurance meet the conceptual goals and conditions of satisfaction, how should it work in practice?

b. The concrete workings of audit as insurance: delineating the insurance engagement

I clarify the process of audit as insurance in the following simplified decision tree (see illustration 1). For each step, I mention the interests at stake in the interaction auditor/ auditee and how they balance each other in the process, thus making apparent how the insurance contract satisfies the conceptual conditions set in 3.2.2.a.

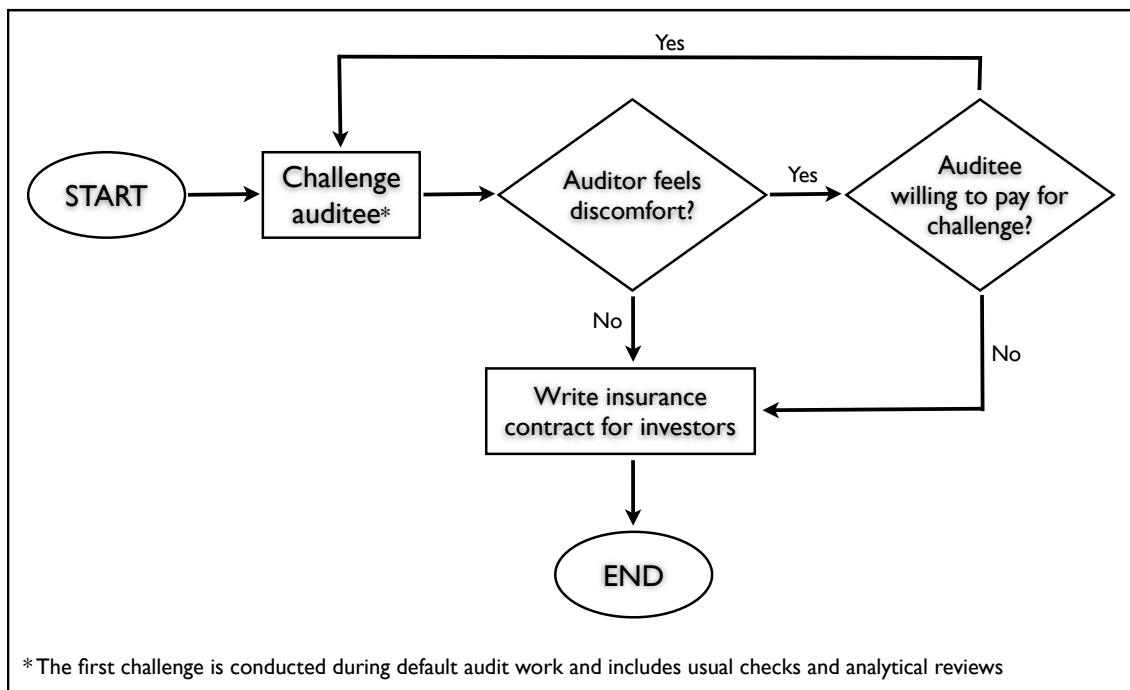


Illustration 1: Decision tree in audit as insurance

When starting the audit, auditors make the usual checks, analytical review and automatized analytics as part of their regular work.

However, while the audit *assurer's* goal is to achieve conformity in order to mitigate his inspection and litigation risks, the audit *insurer's* goal is to achieve actual comfort with the statements to issue a valuable hedge. Indeed, the value of the contract for investors, and thus its price, depends on the comfort that the audit insurer may add to investors' comfort.

The first decision in our tree is therefore whether the auditor feels *uncomfortable* with any significant item.

- If not, the auditor simply issues a default insurance contract with no specific clause and therefore insures any loss due to a noted misstatement.

=> Note that if auditors feel uncomfortable with an item they have a vested interest to challenge management, for the only alternative would be to insure the misstatement risk relative to this item.

- If yes, we proceed to the second decision.

As management often is the most, and in some cases the only (see above, 2.1), knowledgeable party in the circumstances, active concurrence of the auditee is mandatory to achieve comfort in difficult estimates. The second decision is therefore whether the auditee agrees to get further challenged with regard to the matter that causes discomfort to the auditor.

- If not, the auditor writes covenants⁶¹ to the contract in order to exclude the area of discomfort from insurance.

=> Note that auditees have a vested interest in cooperating to genuinely increase auditors' comfort, for the only alternative would be disclosure of discomfort in explicit covenants to the insurance contract, which would likely send an adverse signal to investors.

- If yes, the auditor conducts further challenge.

=> Note that auditors have a vested interest to question auditees' self-confidence with any significant matter in order to make challenge appear useful.

This decision tree goes on in further loops until:

- The auditor does not feel any discomfort with a significant item any more, or

- The auditor still feels discomfort, but the auditee does not see an interest in further challenge, as he himself feels comfortable and is confident that the auditor's remaining areas of discomfort expressed in the covenants to the insurance contract will not significantly impact on investors' decisions.

As a result, the inner logics of contractual insurance should balance auditors' and auditees' interests so that any significant caption in the financial statement be either covered by auditors' insurance against misstatement, or publicly signaled as an area of auditors' discomfort. Box 1 (next page) provides a simplified example of covenants to the insurance contract.

⁶¹ Annex 1 provides a simplified example of covenants to the insurance contract.

3.3 Reassembling audit: how standard-setters and regulators may make audit relevant again

In order to be ready for testing, the prototype of the insurance contract has yet to be streamlined for the audience it targets.

3.3.1 Fine-tuning the prototype to address standard-setters and regulators

Chief among them are the standard-setters and regulators, who will have to acknowledge that they need to take into account the paradox caused by estimates in assurance and redraft accordingly ISA 540, AU 328, and AU 342.

To do so, I assumed from the reading of interviews, reports and calls for paper that regulators are concerned by audit's looming loss of relevance⁶². Getting from assurance to insurance would make it possible to achieve the most reasonable estimates and make audit relevant again to investors, auditees, and society as a whole - thus alleviating regulators' potential concern.

This acknowledgement allowed me relate regulators' concern about audit relevance to the prototype being developed (a), complete the prototype of the insurance contract as I *projected* how standard-setters and regulators may help audit achieve its full potential as insurance (b), and, from there, propose two practical implementation examples (c).

Importantly, many other proposals were considered, such as the opportunity to organize an audit jurisprudence system or a detailed scheme to ensure further spreading of the misstatement risk among the most knowledgeable actors. But only those which were convincing both to practitioners and theorists were included in the final report.

a. The high relevance of audit as insurance: creating comfort in areas of uncertainty

Even though the most uncertain estimates may not be fully assured, auditors do create highly valuable comfort in uncertainty as they skeptically challenge preparers. Indeed, in the process of achieving comfort, auditors provide reflectivity to preparers, financial analysis to investors, and a true protection against risk to society as a whole.

⁶² This fear was most clearly expressed by Arthur Schilder, the Chairman of the IAASB, in an audition before the Board of the PCAOB on April 2, 2014.

First, audit as insurance provides a welcome opportunity for reflectivity to auditees. Really uncertain estimates are not challenging to auditors only: they often indicate important business aspects that are closely watched by investors. Therefore, the preparers interviewed find they benefit from constructive challenge by auditors to put their own understanding in perspective and make sure they communicate adequately on it.

Second, it bestows to audit a value as financial analysis. Since estimates have to take into account actual business expectations, hedging for misstatement also hedges for part of the investment risk. As a result estimation uncertainty, and with it investors' risk, first begins where auditors' comfort ends. The covenants to the insurance contract, which are published together with the statements, not only limit investors' possibility to sue: they also give them a clear idea of auditors' areas of discomfort even if they don't buy the hedge.

Third, it best protects society as a whole. There is no better way to make sense of highly uncertain situations than to equip the preparers, who are the most knowledgeable in the case-at-hand, with skeptical auditors, who are experts in constructively challenging them. The audit insurance system is designed to make sure that auditors and preparers have a vested interest in achieving the most reasonable estimate even in the most specific circumstances.

Furthermore, audit as insurance fits the purpose of the current objectives of standard-setting: increase skepticism, deliver useful information to financial statements readers without revealing sensitive points, and address estimation uncertainty meaningfully. Standard-setters and regulators therefore have high interest in the development of audit as insurance - and a key role to play.

b. The organic role of standard-setters and regulators in audit as insurance

For all those advantages, audit as insurance relies on a simple observation: uncertainty in the financial statements may best be alleviated in the interaction between the auditee, who is the most knowledgeable in the circumstances, and the auditor, who has both the expertise and interest to skeptically challenge him.

The three conditions for success therefore are that a highly knowledgeable auditee (1) and a truly skeptical auditor (2) sincerely strive to achieve mutual comfort as to estimates' reasonableness (3). What can standard-setters and regulators do about that?

Whether auditees are highly knowledgeable in the circumstances is beyond their power and likely motivated by the necessity to perform in their business. Likewise, whether auditors are truly skeptical is motivated by the financial engagement they take in issuing an insurance contract. As a result, well-balanced markets should theoretically provide for the success factors (1) and (2): poorly achieving actors shall simply be selected out.

Sanctioning being left to markets, the organic role of standard-setters and regulators in audit as insurance is to ensure success factor (3), i.e., that the actors sincerely strive to achieve actual comfort. On top of facilitating the structuring of audit as insurance, they should therefore watch over market-disturbing behaviors in the interaction auditor/auditee, and help continuously improve the insurance system as independent facilitators.

The following proposal is intended to help achieve this goal.

c. Watching over extreme prices: correcting rogue behaviors and fostering improvement

Standard-setters and regulators should structure and apply mechanisms to watch over rogue behaviors. In an insurance market, rogue behavior or a defective auditor/auditee interaction will be indicated by either extremely low or extremely high price of the insurance contracts.

A contract trading at extremely low price may indicate that investors think there is no area of discomfort in the underlying financial statements (which is unproblematic) or that they think there are areas of discomfort but the insurance does not cover them.

This second case may indicate either that auditors are extremely risk-averse and won't insure items in spite of having achieved comfort, in which case they merely lose an opportunity to sell hedging to investors. Alternatively, it may indicate that auditors were not able to achieve comfort.

When the auditor was not able to achieve comfort because the auditee was unwilling to get challenged, regulators could threaten to restrict the auditee's access to the stock exchange. When the auditor could not achieve comfort in spite of the auditee's willingness to be challenged, regulators should investigate on a case-by-case basis.

Conversely, a contract trading at extremely high price may indicate that investors think the areas they are uncomfortable with are well insured and wish to buy that insurance (which is unproblematic), or that speculators think they are overinsured.

This second case indicates either that auditors are complacent and will insure items in spite of being uncomfortable, in which case they merely take excessive risk and shall be automatically sanctioned as they incur insurance losses. Or it indicates that auditors were not able to achieve discomfort.

When auditors repeatedly fail to achieve discomfort, this likely indicates incompetence and regulators should contemplate barring them from exercising as professionals. When auditors failed to achieve discomfort only sporadically, regulators should investigate on a case-by-case basis.

Watching over extreme prices also offers an opportunity to foster continuous improvement. Indeed, case-by-case investigations aim to tell misbehavior from mishaps. From a systematic analysis of cases may emerge a progressive categorization of mishaps into known errors.

The anonymized results of those investigations could be shared with auditors to make them aware of known errors, enhance overall professional capacity for skeptical challenge, and avoid recurrence.

Such a database would systematize the efforts of standard-setters to provide insights for the conduct of an audit, for example as to how auditors should test management's estimate and the data on which it is based, and help make it even more detailed and useful to auditors.

3.3.2 Reassembling audit: from one collective to another

The experimentation has now reached the phase of testing in real-life conditions.

Table 2 (see below) summarizes the two actors-networks between which the assembly in its entire extended shape will have to pick-up the next audit collective. In the right-hand column, the greyed areas are the actors de-scribed during the registering of novelty in the deployment phase (Lherm, 2016), and the framed ones are those de-scribed during the exploration of satisfactory assemblages in the unification phase.

The two-dimensional aspect of table 2 might make it look like the perfect ANT "flat map". But this is only partly true.

On the one hand, one may not achieve flatter or more symmetrical than a table. In each column (including the left title column), actors are perfectly coherent vertically, and the title of the column itself is but an actor, expressing the notion of actor-network: just take out any one actor from a column, including its very title, and the whole network remains a virtuality that may never get actualized⁶³. This “vertical” ontological unity is substantial to the Latourian actor-network and should be systematically strived to by the experimenter.

But, on the other hand the two-dimensional aspect makes it impossible to show the myriad of other such tables that allow table 2 to exist. The actors are also perfectly coherent horizontally, and this coherence is made possible by other actualized virtualities: both assurance and insurance “have to” rest on ontological and epistemological assumptions, they “have to” address what makes the audit opinion legitimate. But this wider logical structure could be different and might even not “be” at all. This “horizontal” metaphysical multiplicity is also substantial to the Latourian actor-network and may not be opted out.

Table 2 encompasses the most relevant de-scribable actors that have made the conception of the prototype of audit as insurance and the audit of estimates possible, and contrasts them to those who have made audit as assurance such a success: it is therefore our best approximation of what is going on in the row over estimates today. But, it does not encompass the endless number of actors (de-scribable or actualized-only) which are currently assembled around the MoC of auditing estimates judging in myriads of connections which one of assurance or insurance shall be the next active category, the next shared definition, the next reassembled audit collective.

For an encompassing - i.e., encircling - depiction of all those actors is impossible. In spite of the real and objective insights this on-going experimentation has already achieved, it is still waiting for the flash of connivance between theory and practice that may, for a moment only, perform both existence and knowledge and thus allow comprehension in theory as well as in practice - as I now conclude.

⁶³ “The second solution, the one preferred by ANT, pictures a world made of concatenations of mediators where each point can be said to fully act. [Here: reference to footnote 64]” (p.59) and the associated footnote: “In Deleuze’s parlance, the first has ‘realized potentials’, the second ‘actualized virtualities’.” (p. 59, footnote 64)

Structure	Audit as assurance based on external evidence	Audit as insurance based on the jurisdiction of comfort
Role of professional scepticism in the audit of estimates	Auditors use PS to conduct adequate procedures and gather sufficient appropriate evidence in spite of estimates' inherent uncertainty	Auditors use PS to conduct external constructive challenge of auditees' representation in uncertain cases when there may be no objective evidence
Difficulty in the audit of estimates	Inherent accounting uncertainty in estimates leaves room for management bias and subjectivity	Estimates are not a cause for difficulty: their reasonableness is discovered in the mutual comfort between knowledgeable auditees and their sceptically challenging auditors
Epistemological assumption => concrete consequence	Auditors may tell fairness from unfairness based on appropriate and sufficient objective evidence => <i>Auditors' assurance report is either 'pass' or 'fail'</i>	Auditors may tell reasonableness from craziness through a feeling of mutual comfort with auditees => <i>Auditors' engagement should be graduated according to their comfort</i>
Ontological assumption => concrete consequence	Fairness of representation in the statements is objective => <i>Auditors conduct independent investigation to assess the fairness of representation in the statements</i>	Reasonableness rests in the sceptical challenge of knowledgeability, embodied in the interaction auditor/auditee => <i>The sceptical auditor needs the knowledgeable auditee to discover reasonableness</i>
What does make audit opinion legitimate to stakeholders?	The assurance report makes auditors legally liable for due professional care => <i>Auditors have interest in gathering sufficient appropriate evidence to mitigate reputation or litigation risk</i>	The insurance contract has auditors hedge against misstatement risk for areas they are comfortable with => <i>Auditors have financial interest in challenging auditees and clarifying areas of comfort</i>
Purpose of audit	Audit assures the fairness of the financial statements based on the gathering and evaluation of sufficient appropriate evidence	Audit insures the misstatement risk of the financial statements based on the actual comfort achieved through external constructive challenge
Regulating audit	Regulators issue auditing standards and ensure that auditors' assurance fulfills the expectations set in those standards	Regulators structure a well-balanced insurance market, continuously improve it, and watch over rogue behaviors

Table 2: Reassembling audit - From one collective to another

4. Conclusion: Reassembling Latour's ANT in management accounting

We may now come back to the opening quotes of this paper. In order to address Michael Power's observation that "[t]he field of economic sociology has been unable or unwilling to translate its insights in a manner which might inform and influence policy." (Power, 2009, p. 854), I ended up using Bruno Latour's "tricks" in the "trade" (p.262) of accounting research.

To do so, I had to equip Latour's theoretical methodology with the practical method of the performative experimentation (4.1), and bring interpretive audit research from an ambition to inform policy to a relevance in performing practice (4.2). In the process, I hope to have illustrated that there may be such a thing as knowledge in the accounting sciences (4.3) - be it "only a brief flash which may occur everywhere like a sudden change of phase." (p.79)

4.1 Equipping Latour's ANT with performative experimentation

As any introduction, Latour's gives but an encompassing foretaste of what Reassembling the Social might actually look like. He sets the guidelines of ANT as an abstract projection principle that makes a good job at highlighting stabilization mechanisms. But this does not tell us where to cast the spotlight nor how abstraction may enable a concrete projection - two points of major interest when studying a field like audit.

The performative experimentation I developed clarifies those aspects of Latour's ANT while obsessively sticking to the core principle of the methodology: flatness and symmetry. In order to render visible the stabilization mechanism, it stages a difference between powerless de-scription and wordless actualization. The experimentation process consists in wearing off that difference in a strictly symmetrical interlocution which maximizes the chances to enable the reassembling of a collective.

This first implementation yields encouraging results. The prototype developed would address matters that the audit profession has been struggling with for years: audit loss of relevance, the expectation and information gaps, and the related needs to increase stakeholders' confidence and enhance the value of auditors' communication.

4.2 Using Interpretive Audit Research to perform the practice of audit

Interpretive theory has proved key in the conduct of this performative experiment. Using Latour's tricks in the trade of audit enabled to articulate interpretive research into a practical theoretical proposal for action, that is now entering the public debate.

The theoretical proposal of audit as insurance could become practical only because my own empirical study was situated in the building site of a MoC, where abstraction may play a very practical role. Now, this MoC could be spotted only thanks to existing interpretive accounts.

For example, Dirsmith's work on the audit paradigms (e.g., together with Covalleski and Mcallister, 1985 or with Haskins, 1991) disentangled theory from practice. Francis (1994)'s normative stance of audit as hermeneutics signaled the dangerous shift towards technical legitimacy. Power's "Audit Society" (1997) provided a ready-to-hand expression of audit as a collective assembled around the notion of evidential assurance. Further, only previous accounts of comfort (Pentland, 1993), peer-relationship (Richard, 2006) and fear (Guénin-Paracini, 2007) could bring me to conceive of the Jurisdiction of comfort and anchor it in the very relationship between the auditor and the auditee.

Nevertheless, action may not be achieved from theoretical power only. To "actualize the virtuality" of audit as insurance, those accounts had to be taken as means, not as ends. To ensure relevance, interpretive as well as positivist accounting research have to accept that there is no such thing as a powerful theoretical result: there are only indispensable theoretical tools in the pursuit of projective experimental validity.

In the end, whether audit shall reassemble around insurance based on the jurisdiction of comfort, or assurance based on external evidence, really is a political decision. It belongs to be the Assembly gathered in the building place of the MoC. A decision really has to be made between making audit able to address reasonableness and take the risk to hedge against misstatement, or sticking to an ideal of evidential auditability and take the risk to become useless or drown in litigation and distrust.

This untechnical judgment call will likely bear important consequences: the last one might be dated back to the McKesson and Robbins ruling in 1938, when the S.E.C. decided that auditors should be able to justify what they did with regard to inventory counting - thus opening the era of audit as assurance.

4.3 The potential and limit of the performative experimentation in accounting research

As implemented in the method of the performative experimentation, the projectivist methodology bears interesting opportunities both for positivist as well as interpretive accounting research, which I may only briefly mention here⁶⁴.

On the one side, it can bestow to interpretive research a generalizability that may otherwise not be achieved, for acknowledgment may not be the same as knowledge.

On the other, it can bestow to positivist research an authenticity that may otherwise not be achieved if the “everything else remaining equal” assumption gets challenged.

However, in a performative experiment, knowledge, or performance, is merely *made to happen* in a flash of complete connivence between de-scription and actualization.

If it ever happens, this connivence bestows experimental validity to the form achieved in the deeply political yet (or: therefore) scientific process of experimentation. It demonstrates the usefulness of theoretically valid (constructivist or positivist) accounts - by which I mean the usefulness of their results just as well as of their shortcomings.

Such an experimentally valid form shall also have lasting consequences on how we make sense of both practice and theory. For example, if the whole audit system gets rebuilt around the notion of the jurisdiction of comfort, theorists will have to readjust to this new reality and practitioners of audit, and the financial world as a whole, will take years to follow through the multiple consequences of such a move.

But in spite of these long-range implications for theory and practice, experimental knowledge as such, that is, connivence between theory and practice, may not last longer than the winking of an eye.

Concluding this very first (intended) performative experimentation, my hope is that it may contribute to the longer-term trajectory set by Latour in thirty years of writing, in a very modest but quite assertive way - “The way of an ANT”.

⁶⁴ But which are elaborated on in the third paper presented in this thesis

Annex 1: Simplified example of covenants to the insurance contract

Example of contractual clauses and their effects for a manufacturing auditee

This example is only intended for illustration of the writing and consequences of covenants to the contract. It trades off complexity and precision for the sake of clarity.

In his basic work during the audit of a manufacturing corporation, the auditor has grown uncomfortable with the value-in-use of production assets because of uncertainties relative to future cashflows (loop 1, decision 1 in the decision tree = “yes”, see b above). The auditee agreed to be challenged and pay the corresponding fees (loop 1, decision 2 = “yes”).

Future cash-flows in a manufacturing context depend on future expenses and future sales, which themselves depend on the number of units sold and the cost or price per unit. Proceeding to further inquiry, the auditor becomes comfortable with projections of cost and price per unit, as they follow an easily identifiable historical trend and that everything indicates that this pattern may not be changing¹. But there remains discomfort as to the number of units sold (loop 2, decision 1 = “Yes”). As the auditee is now unwilling to face further challenge (loop 2, decision 2 = “No”), this area of discomfort has to be disclosed as covenant to the audit insurance contract.

Assume that management expects to sell 1,5 million units (MU) next year, even though independent expertise forecasts MU 1,3. Note that the auditor may achieve a more intimate understanding of the circumstances than the independent market expert², which enables him to tell whether management is reasonable to believe that MU 1,5 will be sold next year in spite of overall market trends.

To exemplify how the auditor may choose to express his degree of comfort into clauses to the insurance contract, the following cases may be contemplated among many others (everything else remaining equal):

- From his challenging interaction with the auditee, the auditor feels fully comfortable with the reasonableness of the auditee’s assumption in spite of the independent expertise and issues unrestricted insurance.

Then, if only 1,1 Million vehicles were actually sold, the auditor would have to take the loss for 100% x total impact on the P/L of a shortfall of 400 000 units in sales (= MU 1,5 - MU 1,1)

- The auditor feels that it is slightly more likely than not that the assumption is too optimistic and insures only 40% of the losses due to misstatement.

Then, if only 1,1 Million vehicles were actually sold, the auditor would have to take the loss for only 40% x total impact on the P/L of a shortfall of 400 000 units in sales (= MU 1,5 - MU 1,1).

- The auditor feels it is very likely that the auditee’s assumption of MU 1,5 is too optimistic, but not altogether unrealistic, and that it is very likely that the independent expertise of MU 1,3 is reasonable in the circumstances. He decides to insure only 10% of the losses due to misstatement relative to the auditee’s assumption, but feels comfortable enough to take 95% of the losses due to misstatement relative to the independent expert’s assumption.

If only 1,1 Million units were actually sold, the auditor would have to take the loss for 95% x total impact on the P/L of a shortfall of 200 000 units (= MU 1,3 - MU 1,1), plus 10% x total impact of a shortfall of 200 000 units (= MU 1,5 - MU 1,3).

Box 1: Simplified example of covenants to an audit insurance contract

Note 1 in box 1: An assertion very different to “nothing indicates that the pattern may change”, as it implies the existence of external benchmark for this forecast. In the end, “discomfort” is characterized by a necessity to bet that may only be alleviated in the intimate interaction of the auditor with the auditee.

Note 2 in box 1: For example, through access to multiple sources of information within the audited corporation and almost continuous contact with management

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THIRD PAPER

From objective to projective methodology: the missing piece to relevance in accounting research

“There were then, there have been in the intervening period, and there are now people who think that they know what accounting—and auditing for that matter—is. How wrong these people are. [...] Indeed the very role of accounting research is in part to make both accounting and our knowledge of it different”

(Hopwood, 2007, p.1367)

1. Introduction

The relevance of research in management has been questioned, leading to interesting alternatives such as engaged scholarship (Van de Ven, 2007) or problematization (Alvesson and Sandberg, 2011). That concern has recently been voiced within the field of accounting (e.g., Ahrens et al., 2008), sometimes expressing fears that the sustainability of the accounting discipline might not be ensured (e.g., Humphrey and Gendron, 2015). Therefore, it makes sense to ask to ourselves: how to make accounting research relevant again?

In order to clarify the methodological vocabulary used in this paper, and provide a theoretical framework to analyze data, I introduce a normative nomenclature, and propose an analysis of the objectivist empirical methodologies, that is, the methodologies that assume that reality is objective and may be known through data collection and analysis. With exception to some essays, most of the research in accounting is framed in an objectivist empirical methodology, of which I see two kinds: interpretivist, and positivist.

Based on that analysis, I develop the expectation that theoretically valid results in (accounting or else) research may not be relevant for practice if nothing is done to make them relevant. While a rather mundane observation, this may be a cause for concern in accounting research because practical relevance may bestow legitimacy to our discipline at least as much as theoretical contribution. So, how does theoretical accounting research achieve relevance to practice?

Conducting an empirical analysis of the methodologies, postures, and contributions of research on the role of scepticism in the audit of estimates, I find that, whenever audit research achieves relevance to the audit practice, it is unlikely caused by the scientific validity of theoretical results. So should accounting research renounce practical relevance of theoretically valid research? Quite the contrary.

In my own study about auditing estimates, I conducted what I called a performative experiment, meaning that it aimed for an experimental validation of accounting theory, or auditing theory for that matter, in the very performance of what “auditing” means. This allowed me propose a concrete alternative to audit: getting from an assurance to an insurance practice would allow best address estimates.

This alternative proves to be both theoretically valid and being practically discussed among practitioners and regulators at a global level. To demonstrate that this result may not be discarded as mere chance, I clarify where and how in the process this performative experiment achieves the four usually distinct validity criteria of authenticity, plausibility, reliability and generalizability - which concretely translates as a performance of reality itself.

Performative experimentation thus may be a tiny but possibly decisive missing piece of method that would allow the otherwise formidable machine of accounting research to achieve significant relevance, by addressing “how to” projective questions - such as the ones addressed in audit as well as in this study.

Because it is based on a projective experimental methodology rather than on an objective empirical one, performative experimentation offer a complementary way to validate theoretical results in accounting research, asking just one question: “does it work?”. This helps address two pressing issues for the discipline today, as exposed in two special issues of *Critical Perspectives in Accounting*: the identity of accounting research, and the hegemony of journal rankings.

Eventually, in a circularity that will be slowly unveiled as the paper unfolds and fully revealed only in the last words of the conclusion, I will claim that only accompanying accounting in the constant project of its continuous change may make both it and our knowledge of it different - thus fulfilling the role Anthony Hopwood ascribed to it.

2. The inherent practical irrelevance of theoretical validity

First, I propose a normative nomenclature of theory building in accounting research (2.1). I then observe that a theoretically valid result, whether in positivist or in constructivist methodological settings, may not be immediately relevant for practice (2.2). So, how does accounting research achieve relevance?

2.1 Normative nomenclature and related notes

2.1.1 Normative nomenclature of theory building in accounting research

For reasons that will be clarified in the conclusion of the paper, the following nomenclature is left unillustrated.

As both the constructivist and positivist methodologies assume there exists a reality, be it socially constructed, they imply a relationship of research to that reality. This normative nomenclature is meant to clarify the concepts used in this paper to depict the most important aspects of this relationship:

- “Ontological and epistemological assumptions” respectively set the nature of the reality that should be taken into account in theory building, and through what ways.
- A “methodology” (e.g. positivist or interpretivist⁶⁷) is a set of ontological and epistemological assumptions, associated with a purpose of scientific research and the corresponding validity criteria.
- The “purpose of research” (e.g., accurate explanation or plausible understanding) indicates how reality is intended to influence theory-building.
- “Validity criteria” (e.g. reliability, generalizability, authenticity and plausibility) indicate whether the purpose of research has been met within a specific methodology.
- A “research posture” (e.g. prescriptive or unveiling) is the reverse intended influence of theory building on reality. It underpins discourses about the usefulness of research.

⁶⁷ It is not my purpose to question or validate the labels “positivist” or “interpretivist”. I prefer the word “interpretivist” rather than “constructivist”, because the difference I make between the two approaches is related to the purpose of the research, not to their ontological assumption. Both deem reality to be objective, be it socially constructed or not.

- “Fitability criteria” (inexistent) would indicate whether the research posture is adapted to a specific methodology.
- A “method” is the actual tool used in the conduct of research (e.g., in data collection such as surveys or interviews, or in data analysis such as a statistical tool like ANOVA or a sociological lens like the economies of worth)⁶⁸.

2.1.2 Notes relative to the above nomenclature

First, the critical or interventionist strategies are out of scope, for, in spite of their genuine importance in the conduct of a study, research mindsets are unlikely to have any influence on, nor be influenced by, any other element in this nomenclature. Establishing a valid relationship between the unveiling/prescribing postures and the critical/interventionist strategies would require extended argumentation.

Second, even though this nomenclature is left unillustrated, I nevertheless deem it to be as compatible as possible⁶⁹ with current methodological landmarks in the field about generalizability (Lukka and Kasanen, 1995), plausibility (Lukka and Modell, 2010), interpretive research (Ahrens and Chapman, 2006), critical research (Chua, 1986), interventionist research (Jönsson and Lukka, 2005), as well as diverse approaches used in positivist accounting research (Bloomfield, Nelson and Soltes, 2016)

This being clarified, I now proceed to elaborate on why theoretically valid (accounting) objectivist empirical research is necessarily irrelevant in practice as long as nothing is done to make it relevant.

2.2 Irrelevance of theoretical validity: the limits of objectivist empirical research

For reasons that will be clarified in the conclusion of the paper, the following analysis of the positivist and interpretivist methodologies is left undemonstrated.

⁶⁸ Any method may be used in any methodological frame. For example, it is theoretically possible to conduct a study in an interpretivist frame, using only surveys to collect data and applying only statistical models to analyze data. Indeed, this happens every time a causality is inferred from mere correlations.

⁶⁹ Given that some of them may have irreconcilable standpoints

Both the positivist and interpretivist methodologies are objectivist empirical methodologies⁷⁰: they assume that reality is objective and can be known through data collection and analysis. Even though they differ in their purpose, and thus, in the criteria they use to assess validity, in both cases theoretically valid results may not influence reality by prescription or unveiling.

2.2.1 Purpose, validity, and posture of research using a positivist methodology

The purpose of positivist research is to achieve positive explanations. Within an assumed understanding, which reduces reality to a set of observable characteristics, it seeks to test an expected relationship by means of an acknowledged analytical frame (e.g., a statistical model, or a sociological theoretical lens⁷¹). Validity is assessed through reliability and generalizability.

Reliability affords a claim that the analytical frame, and its application to analyze the data, are accurate. Generalizability indicates that the accuracy of the analysis can be extended from the data analyzed (e.g., a sample, or a case⁷²) to a wider category (e.g., a population, or a situation) that encompasses other objects sharing the same observable characteristics.

However, as the validity of the explanation thus achieved is dependent on the frames used, it may only be valid “everything else remaining equal”. As this condition is rarely met in the complex social life, positive explanations as such have little lever for prescription or unveiling.

Thus, breaking down reality into observable characteristics makes it possible to achieve logical relationships that are reliable and generalizable. But it also misses real-life complexity (not authentic), which makes any causal interpretation of these relationships questionable (not plausible).

⁷⁰ Objectivity may be socially constructed, as Schutz, as well as Berger and Luckmann, have insisted.

⁷¹ Note that the use of a sociological theory as an analytical frame indicates a positivist methodology and may have positive explanation power.

⁷² When using cases, generalizability might be problematic but not impossible. - just as correlation tables may have encompassing interpretative power.

2.2.1 Purpose, validity, and posture of research using an interpretive methodology

The purpose of interpretive research is to achieve comprehensive interpretations. Assuming that the researcher did not introduce subjectivity during the collection of data, it seeks to deliver an understanding that best makes sense, within a given community of researchers, of the data gathered (e.g., observations, or correlation tables⁷³). Validity is therefore assessed through authenticity and plausibility.

Authenticity affords a claim that the data is suitable to achieve an understanding of almost real-life complexity. Plausibility indicates that a given community of researchers can acknowledge that the understanding is “convincing”⁷⁴ (Ahrens and Chapman, 2006, p.834) or matches “ways sanctioned by the relevant community”⁷⁵ (Lukka, 2014, p.3), i.e., that it best makes sense of the reality.

However, the validity of the interpretation thus achieved is restricted to the inner acknowledgment of a research community. This does not yet imply that it may be acknowledged within a community of practice, so that comprehensive interpretations as such inform only researchers. Prescription or unveiling have yet to be achieved.

Thus, acknowledgment within a community of researchers makes it possible to achieve insights in a complex reality that are authentic and plausible. But it also restricts these understandings to the community addressed (not generalizable), which makes any claim of accurate analysis weak (not reliable).

2.2.3 The merits and limits of objectivist empirical research

Positivist research is generally deemed interesting if it bridges a gap in an existing understanding of reality, while interpretivist research is deemed interesting if it brings new insights about reality. These goals are largely achieved, making objectivist empirical methodologies extremely valuable for research.

⁷³ Note that the correlation tables issued from positivist research yearn to be used for interpretation, as this is precisely what the positivist methodology is unable to do with them.

⁷⁴ “[the qualitative researcher] has done well when she has developed a convincing account of the ways in which meanings and purposes relate to patterns of activity.” (p.834)

⁷⁵ Lukka relies on Wittgenstein’s definition of understanding as “the ability to employ acquired information in action and reasoning in ways sanctioned by the relevant community” (p. 3)

However, this analysis has suggested that the knowledge they deliver, in spite of its validity, is inherently irrelevant to practice:

- Either they are reliable “everything else remaining equal” condition, but then they may not be appropriate to inform action in a complex reality.
- Or they yield plausible insights into the complexity of reality, but then this insight is restricted to the community of researchers.

The practical irrelevance of theoretically valid accounts is not specific to accounting research, but commonplace to any research conducted within an objectivist methodological frame, be it positivist or interpretivist.

However, this problem is particularly acute in accounting research, and especially so in auditing, because the legitimacy of research in those fields arguably ultimately rests more on impact on practice than on the theoretical acumen it generates for the theoretical endeavors of other fields of research.

So, how does theoretical accounting research actually achieve relevance for practice?

2.3. Achieving relevance: the impact of postures in audit research

2.3.1 Interest of audit research to conduct a case study

The question of practical relevance has been especially acute in audit research, where researchers openly wish their research could inform practice.

Constructivist researchers wish their insightful research, which had heralded ill-bearing audit mechanisms, could have helped prevent the 2008-2009 financial turmoils⁷⁶. Positivist researchers have long tried to become instrumental in the construction of robust regulation and standards, up until now seemingly to no avail, in spite of signs of interest by the regulators⁷⁷.

⁷⁶ For example, Michael Power regrets that “The field of economic sociology has been unable or unwilling to translate its insights in a manner which might inform and influence policy.” (Power, 2009, p. 854)

⁷⁷ For example, a statement by PCAOB member both praises the potential importance of auditing research for regulation and, doing so, underlines its current irrelevance (Franzel, 2016)

I now turn to analyze the posture of researchers in studying the role of scepticism in the audit of estimates. That is, I analyze though what ways they intended that their theoretical endeavor may influence practice. For each posture, I distinguish the studies according to the methodologies they are set up in, in order to test the expectation that a study should align at least posture and methodology (see above, 2.1.2)

2.3.2 Prescription: is the difference really made by theory?

Some studies adopt a prescriptive posture, that is, they aim at using scientific results to inform the very conduct of practice. The picture is that of a surgical intervention.

a. Positivist methodology

As auditors have been observed by the regulators to fail to take into account conflicting evidence, Griffith, Hammersley, Kadous and Young (2014) and Rasso (2015) develop and experimentally test easily implementable manipulations to improve how auditors evaluate evidence and thus increase their performance in auditing estimates.

Tellingly, the reviewers of Rasso's study indicate numerous deficiencies which question the reliability of Rasso's study (Frank and Hoffman, 2015). However, they reveal as a very positive feature of the paper that some PCAOB staff, who had attended an earlier presentation, could find interest in it.

However, as those studies are testing the quality of audit response to initial input (the type of mindset prompted, the type of instruction given), there must pre-exist an audit solution against which to assess participants' response. Their results may therefore not be generalized beyond cases of estimates for which there already exist an audit solution, and for younger auditors only⁷⁸.

This restriction makes it unlikely that implementing the manipulation they indicate would solve the problem caused by possibly unauditably extremely uncertain estimates (Christensen et al., 2012). It follows that, whatever the PCAOB staff would find interesting in Rasso's study, this may not indicate an inherent ability of theoretically valid results to be prescriptive.

One may therefore only guess what caused the interest of PCAOB staff in those results.

⁷⁸ The experiments do not satisfactorily control for auditors' experience effect (for details, refer to Lherm, 2016a)

b. Interpretivist methodology

I could not find interpretivist studies adopting a prescriptive stance regarding the role of professional scepticism in the audit of estimates. The audit research that uses an interpretivist methodological framework tends not to engage in prescription.

Typically, Michael Power, as he sets up to depict audit as a practice of legitimation abiding by rituals of verification, an interpretation which has had a decisive impact in the theory of audit, warns the reader “So what, after all, is the ‘relevance’ or ‘use-value’ of this book? [...] The answer is that I really do not know” (1997, p xiii).

2.3.3 Unveiling: does theory really make a difference?

Other studies adopt an unveiling posture, that is, they aim at using scientific results to make practitioners aware of the workings of an underlying pattern, which embeds their action. The picture is that of a mirroring effect, and takes the form of resistance and possibly denunciation.

a. Positivist methodology

In order to investigate how estimates are actually being audited, Griffith, Hammersley and Kadous (2015) conduct 24 interviews with experienced auditors and Cannon and Bédard (2014) survey 99 managers and senior managers. Even though Griffith, Hammersley, and Kadous, collect data through interviews, a method usually associated with interpretivist studies, elements indicate the positivist character of their study. They gather data through interview of auditors in order to compare the answers with what the standards prescribe. They use interrater agreement measure (Cohen’s kappa) to control for human bias in the coding of this data, which indicates a will to achieve the reliability and generalizability of an accurate explanation of how auditors actually audit estimates, as opposed to formulating a plausible interpretation of what underlies auditors’ action when auditing estimates.

In a typical unveiling posture, both studies conclude that the deficiencies found in the audit of estimates are the consequence of an underlying pattern, that escapes practitioners’ understanding, and the workings of which they try to mirror to practitioners. Griffith, Hammersley and Kadous denounce that auditors tend to focus too much on verification rather than on evaluation. Cannon and Bédard suggest that the

difficulty in auditing estimates is due to an extreme accounting uncertainty which is ultimately unauditible.

However, closer analysis suggests that the assumed understanding ingrained in the framing of those studies significantly influences the interpretation of their authors, to the point that they may have ignored indications for alternative explanations (Griffith, hammersley and Kadous, 2015) or evidence against their initial assumption (Cannon and Bédard, 2014)⁷⁹. Thus, it is unlikely that their results may embrace the complexity of reality and provide a comprehensive understanding that may be mirrored to practitioners.

b. Interpretivist methodology

Though they do not focus on our subject-matter, Guénin-Paracini, Marché Paillé and Malsch (2014) resist regulators' stance on scepticism: "our observations of public accountants as fearful professionals contrasted greatly with official accounts suggesting auditors' negligence and lack of skepticism." (p.269). They also denounce regulators' endeavor to write more explicit standards about scepticism: "No normative approach will increase significantly auditors' level of skepticism." (p.284)

In an interpretive study aimed at understanding how the most experienced auditors actually address highly challenging estimates (Lherm, 2016a), I unveiled a paradox of auditing estimates in the approach of audit as evidential assurance, denounced the current conception of scepticism in the standards, and suggested an alternative one.

But none of these studies could trace back any mirroring effect to practitioners - neither do they claim a mirroring effect at all. So that it is unclear how their unveiling posture is relevant for practice.

However, one of the participants to a "polyphonic debate" (Ahrens et al., 2008), referring to Interpretive Accounting Research (IAR), notices that "there is a growing audience of practitioners to whom the findings of IAR are of interest. Maybe I should be more specific: their interest lies in selective, filtered-through-IAR findings" (p.861). This observation indicates both that an interpretivist methodology may be relevant to

⁷⁹ For details, see Lherm (2016a).

practice, and that this relevance is not to be found in the scientific interpretation but rather in the sheer description of alternative practice.

2.3.4 Is the irrelevance of theoretically valid accounting research unescapable?

This analysis suggests that, whenever practical relevance is achieved by accounting research, it is unlikely caused by the scientific validity of theoretical results (whether in the prescriptive or in the unveiling posture).

This analysis may not be explained away by the weakness of the empirical case made here, for it is vindicated by the theoretical impossibility to achieve practical relevance with scientifically valid results (see 2.2 above). Nonetheless, accounting research should not give up the idea of having practical relevance.

In studying the role of scepticism in the audit of estimates, I found that research could become help unlock auditors' actual potential to address estimates if it managed to answer a key question: how to make the use of comfort legitimate in the audit of estimates? We are but one tiny step away from relevance.

But how to address such a how to question? That is, how to scientifically address a project of study, rather than an object of study? The projective experimental frame and the method of performative experimentation, which I now introduce, have been designed to do just that.

3. Achieving practical relevance through projective experimentation

In order to accompany the audit collective in the development of a new form of legitimacy that would make the audit of estimates possible, I developed and applied an experimentation process that allows answer “how to” questions. For example: how to make the use of comfort legitimate in the audit of estimates?

I first introduce the assumptions and principles underpinning the concrete experimentation process I developed (3.1). Then, I briefly illustrate the concrete steps of the experimentation process in order to analyze its scientific structure using the nomenclature (3.2)

3.1 Assumptions and principles underpinning the methodology

3.1.1 Ontological, epistemological and method assumptions

The underlying assumptions for the experimentation process come from Latour’s introduction to ANT as a projectivist methodology. To Latour, “ANT is first of all an abstract projection principle for deploying any shape” (2005, p.178). The goal of the study is therefore the projection of a new shape, or form, able to perform how a collective makes sense, how it is dimensioned according to “a shared definition of a common world” (p.247).

Latour’s ontological assumption is that the social is a “movement of association”, understood as the very act of giving something a dimension, of making sense. The epistemological assumption is that the social is accessible only when it is stalled, and may only be resumed in a political endeavor. Note that those complex concepts, particularly the notion of “political epistemology”, significantly differ from the usual meaning of the words they are depicted with⁸⁰.

But Latour does not address two difficulties which are key in the study of audit. First, if one may know the social only when it is being stalled, how to know that it is stalled in the first place, and what would constitute a “new” shape? Now, the field of audit is

⁸⁰ As they are not elaborated on in this paper, caution is needed. At best, the reader may wish to read Latour (2005). A quicker but incomparably less enriching solution to fix the meaning of those concepts would be to read my own study (Lherm, 2016b)

replete with adjustments within the longer-standing idea of audit as assurance⁸¹. A reference of what the non-stalled social looks like is required to tell genuine stalling from mere adjustment, as well as acknowledge novelty. Second, there are many audit institutions in charge of addressing potential stalling⁸², how exactly should we help them achieve a satisfactory political resolution? To engage in political epistemology, both practitioners and researchers should be able to make a difference.

In order to address those difficulties, I had to make a third assumption: action may not be entirely described in language⁸³. This assumption of method is useless in the interpretivist and positivist methodologies because the concern of those methodologies relates only to the building of theoretical language. But within the frame of Latour's political epistemology, the experimenter now enters the vaster realm of action.

Once this third assumption was set, I could proceed to address the two difficulties and draw the concrete consequences of Latour's "methodological principles" of flatness (3.1.2) and symmetry (3.1.3).

3.1.2 No such thing as a powerful result: flatness and the usefulness of powerless theory

Latour's principle of "flatness" implies that the researcher should resist convey any powerful theoretical dimension into the study - such as "audit society" (Power, 1997), "rituals of comfort" (Pentland, 1993), or De Angelo's definition and proxies for audit quality (1981). But with no dimension, how to know when the movement of association, the act of giving a dimension, is stalled, or what constitutes novelty in the social?

My answer was to reintroduce theory, not power. I use theory in three ways. First, I refer to the existing corpus of theoretical results (positivist as well as interpretivist⁸⁴) to

⁸¹ For example, during my two years in accompanying the audit firm, major changes and investments were made to devise and implement automatized analytics. Should one take this as a matter of concern on the ground that it involved hundreds of millions dollars in investment?

⁸² For example, during the study, the IAASB has issued, on the basis of their own analysis, new standards to have auditors report on key audit matters.

⁸³ To be more exact, this assertion is a consequence from the actual assumption that "research is conducted by human-beings" equipped with a rejection of the proposal that human text may be infinite or total.

⁸⁴ While the comprehensive understanding in interpretivist accounts gives a whole picture of the field as social (e.g. "the audit society"), positivist explanations may highlight some inadequacies that are revealed in how researchers fail to achieve coherent explanations within their understanding of the field.

indicate a matter of genuine interest, or “Matter of Concern” (MoC). A MoC is indicated by a “paradox”, that is, a problem that may not be resolved (“para-”) in the domain as we account for it today (“-doxa”). This translates into a question that is fit for empirical study⁸⁵. Second, I use a theoretical “reference frame”⁸⁶ to achieve an account of the mechanisms that make the social stall because of this particular MoC. Then, I again refer to the corpus in order to extract what is new from what is already known in this analytical account.

Reference to the existing corpus and to existing frames thus allows extract novelty from a MoC, while holding to the principle of flatness. To find and keep this balance, the experimenter has to consider that, whatever their validity in the frame of other methodologies, there is no such thing as a powerful theoretical result - only potentially useful theoretical tools, which have yet to pass a test in real-life conditions.

In short: it works only if it works. Anything short of that is not knowledge, only potentially very useful acknowledgment⁸⁷. This is not to deny the validity criteria of other methodologies, quite the contrary. With no “valid” theoretical results, no experimentation may be possible. But experimental validity demands more than theoretical validity achieved within a given methodological frame. Considering theory powerless is precisely what makes it useful to the experimentation process, as well as what makes the experimentation process useful to theory.

3.1.3 Nobody may know truth alone: symmetry and the advantages of scientific diversity

The principle of “symmetry” implies that both practitioners and researchers⁸⁸ equally participate to achieve the goal of the study. But how exactly should that peer relationship be achieved? My answer was to introduce a strict distinction between

⁸⁵ For example, “How do auditors justify their opinion on highly challenging estimates?”

⁸⁶ For example, Boltanski and Thévenot’s sociological analysis of Justification according to orders of worth (1991) or an ANOVA (ANalysis Of VAriance) to give a coherent interpretation of data and/or elucidate some interesting structure in the data.

⁸⁷ While this may seem acceptable and almost self-evident in the case of interpretivist research (see above, 2.2.2), this is less so in positivist research. But even in positivist studies, positive “knowledge” may only be claimed within an acceptable margin of errors. This margin of error indicates a degree of acknowledgment.

⁸⁸ In this paper, I use those two words both in their literal meaning and in their general definition (see Lherm, 2016b)

practitioners and researcher, while making it the very goal of the experimentation to assuage this distinction along a perfectly symmetrical process.

As we assumed that language is not sufficient for action, achieving a new form necessitates to take into account something else. The distinction I introduce is simply to have researchers take care of the describable part of action that pertains to language, while practitioners take care of the non-describable part, that we might call “actualized”.

Their only meeting point is the laboratory of their interlocation. If carefully selected, researchers and practitioners actually reproduce the conditions of the whole action, in its describable as well as its actualized parts, within the frame of their interlocation. The experiment may move on from one step to the next each time they agree that the conditions of the parts they represent are satisfied. Illustration 1 (see below) gives a clear picture of this symmetry along the arrow which represents both the axis of symmetry and the linear unfolding of the experimentation process.

As the experimentation process is built around the assuaging of a distinction between theory and practice on a specific matter of concern, it therefore requires a relevant research field able to stand firm to practice in the resolution of concern. But I suggested in part 1 that neither the interpretivist, nor the positivist methodologies may achieve relevance based on their theoretical acumen alone.

I now propose that the projectivist methodology, defined as the merging of the three assumptions (see 3.1.1) and the purpose of projecting a new shape through the method of a performative experiment, may be able to do just that. As it mobilizes the extraordinary strength of powerless scientific diversity, it achieves the four validity criteria of authenticity, plausibility, reliability and generalizability.

3.2 Achieving experimental validity in a new audit form

Using the example of my study I now illustrate briefly how the experiment process achieves authenticity, plausibility, reliability and generalizability in both the preparatory and hypothesis generation process (3.2.1), and the development and testing process (3.2.2).

The experimentation process is summarized in illustration 1 (see next page), to which the reader may refer all along the elaboration that follows⁸⁹.

The interlocution is punctuated by four meeting points, where researchers' and practitioners' agreement makes it possible to bring the experiment to the next step, up to the final achievement of the projection of a shape.

The black arrow represents the axis of symmetry along which the experiment unfolds linearly. The upper side of the arrow depicts the "description" ability of the researchers involved in the laboratory, that is, the ability to translate part of the action into human language. The lower side depicts the "actualization" ability of practitioners involved in the laboratory, that is, the ability to feel part of the action in their experienced intuition.

In what follows, I only relate what happens in the upper "description" side of the arrow and at the meeting points with the lower side, for what happens in the lower side of "actualization" may by definition not be described but only intuited by the practitioners.

⁸⁹ For a detailed description of the experimentation process, see Lherm (2016b).

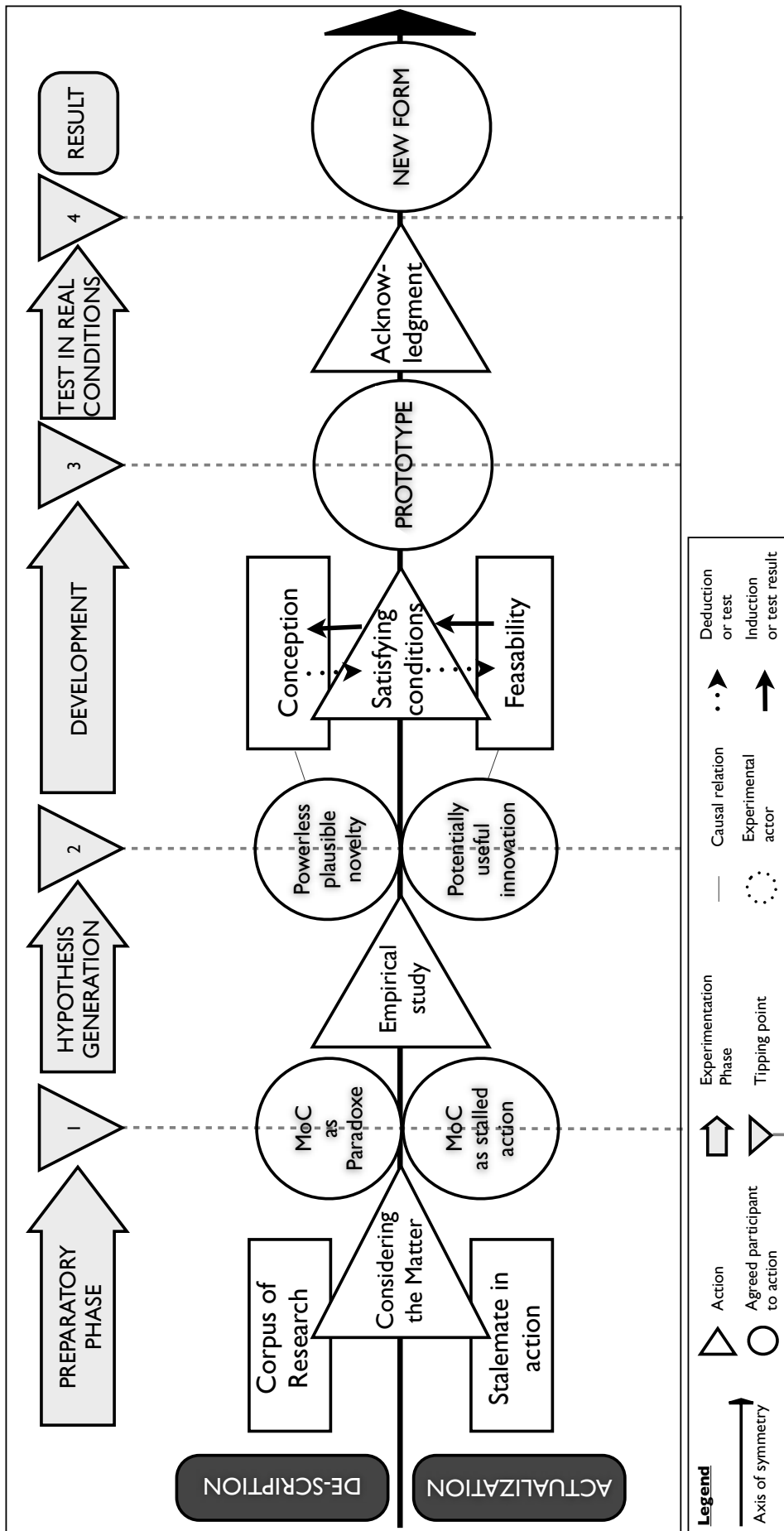


Illustration 1: The experimentation process

3.2.1 The preparatory phase up to hypothesis generation: authenticity and plausibility

To the experimenter, there is no such thing as a powerful theoretical result. This is in line with the irrelevance of theoretically valid results in those methodologies (see 2.1.2). Nonetheless, valid theoretical results, whatever the methodological frame, proved highly useful to achieve authenticity in the preparatory phase, as well as plausibility when generating an hypothesis.

a. Achieving authenticity in the preparatory phase: the paradox of estimates

The very purpose of the preparatory phase is to position the experiment on a genuine MoC. As a MoC indicates the assembly of the participants to action, it gives access to the complexity of reality. Thus, it ensures the authenticity of the experiment.

Concretely, a MoC is indicated by the conflation of a theoretical paradox with a practical stalemate. In the performative experiment conducted in audit, the practical stalemate was the starting point: for years, regulators had observed deficiencies in the audit of estimates, with no signs of improvement. Finding a MoC thus implied to find a theoretical paradox. This would have been almost impossible without a critical analysis of theoretically valid results, which nevertheless failed to account properly for the difficulty caused by the audit of estimates.

b. Achieving plausibility in the hypothesis generation: the Jurisdiction of comfort

Once a MoC has been found, the phase of hypothesis generation begins. An empirical study (positivist or interpretivist) is conducted to analyze action confronted to the MoC with the aim to find out any clue that may indicate novelty and become the basis for an hypothesis of how the MoC may be solved. Thus, the validity of the theoretical result of the empirical study are key to ensure the plausibility of the hypothesis - and hence, of the experiment.

In the performative experiment conducted in audit, an interpretivist study had to meet the usual validity criteria of authenticity and plausibility.

First, authenticity was granted through access to five cases and to the top management of one of the four largest audit network, as well as in-depth reading of existing theory,

of the auditing standards, and of innumerable reports. Authenticity not only made a comprehensive understanding of real-life complexity possible. This also made it plausible, to a community of researchers, that the experiment could rely on the ample access afforded by this empirical study to extract an interesting novelty.

Second, plausibility. The use of a theoretical lens, the “Economies of Worth”, as a thread to construct the analysis, allowed propose to a community of research that auditors’ comfort based on a process of external constructive challenge might indicate an alternative to our current concept of auditability. But it also made this very alternative, the “jurisdiction of comfort”, a plausible basis on which to proceed to the development phase of the experiment.

3.2.2 The development phase through to testing: reliability and generalizability

a. The development process

The development process consists in successive loops of conception and feasibility. In a conception phase, the researchers strive to conceive an innovative practical product that satisfies the conditions of the (language) describable part of action they represent in the laboratory. In a feasibility phase, the practitioners test-proof the researchers’ proposal as they try to make sense of it, that is, intuit whether the product satisfies the conditions of the (non-language) actualized part of action they represent in the laboratory.

If the proposition is not feasible, the practitioners strive to articulate what conditions where not satisfied among the actualized part of action. This very use of language in the expression of their intuition *de facto* increases the describable part of action. On the contrary, if the proposition is feasible, then the prototype is ready for testing in real-life.

The development phase is closed in the “satisfaction” of the “conditions” of almost the whole of action as represented in the laboratory of interlocution between researchers and practitioners. That is, enough has been done (satis-faction) for the representatives to adhere to a common expression (con-ditions), so that there is no reason for interrupting locution (interlocution) anymore.

As their interlocution wanes down, a common horizon is reached and the prototype is achieved in the agreement between the practitioners and the researchers. This prototype proposes the new shape they agree on: it is con-form.

b. Illustration of achieving reliability and generalizability in audit research

Given their importance in the representation of action as well as in the development of a new form, reliability is ensured through very careful selection of the researchers and the practitioners.

On the one side, practitioners should be able to adequately represent the actualized part of action. In my study, the Global VP for audit of the network had extensive experience of action in both his craft and the functioning of the audit institution (as he was a member of the IFIAR, the International Forum of Independent Audit Regulators) and could therefore adequately represent the actualized part of action.

On the other side, the researcher is not as important as research itself. What proved to be key was the coherency of the audit research corpus - both in the specific positivist accounts of it, or in the comprehensive interpretivist understandings of it. This corpus offered a picture of practice that was both deep and detailed, and could be made to bring some conditions in the laboratory of interlocation.

As to generalizability, as long as the practitioners and the researchers selected as representatives together reproduce almost all the conditions of action, then the prototype that satisfies those conditions is generalizable to almost all of action. But this generalizability alone is something of a pun, for the laboratory alone may not reproduce action in its entirety.

Thus, in the experimentation process, only reality is generalizable, and the proto-type is really just that: something that comes before (proto) the new form (type) that the whole experiment aims to project. It has yet to be tested in real conditions.

3.2.3 Testing in real-conditions: the ultimate validity of an experiment

After numerous meetings that totalized over twenty hours of discussions about the feasibility of several successive designs, the Global Vice-Chair and myself agreed that we could not achieve a better proposal than the audit insurance contract. The concept would fit in my theoretical understanding, and appeal to his intuition of practice. It was therefore decided to share it with influential personalities in audit and financial regulation (further test-proof with practitioners) before we bring it to the Chairman of the IAASB. This is an on-going experiment and this test has not yet been completed.

Being able to conduct a test in real conditions is in itself an achievement: if not of validity, then at least of insights to inform research; if not of performance, then at least of experience to inspire practice. The intuition here is one of a “moving social as a movement”: nobody has control over performance, that is, over how a prototype will fare in real conditions. That a prototype would not work at this point does not mean that it will never work. Just as it was not for researchers or practitioners to begin the experiment, but for the existence of a MoC, it is not for them to end it, but for a general acknowledgment that the prototype they suggest *makes sense* - that is, achieves a form, performs.

During the test itself, the researchers as well as the practitioners are merely left to wonder at the spreading of a myriad of interconnections into a reassembled collective around the new product they initiated - or left to wonder why this did not happen. Truth, as well as performance, is merely *made to happen* in a flash of complete connivence between description and actualization, theory and practice, indicating, as well as making exist, the validity of a very scientific yet deeply political process.

If it ever happens, this connivence shall have lasting consequences on how we make sense both in practice and theory. But it may not itself last longer than the winking of an eye.

4. Conclusion: Reassembling accounting research around a tiny missing piece

4.1 Bringing a tiny missing piece into the formidable research machine

Thanks to its invaluable location at the cross-roads between the crudest practice and the most elevated sociological thinking, the accounting discipline was a natural ground for the performative experimentation to emerge. In return, the experimentation process has the potential to bestow the highest validity possible to theoretical results in accounting research: it works! This feature offers new perspectives to help address some insistent difficulties in the field, as indicated by the concerns voiced in two special issues of *Critical Perspectives on Accounting*.

First, the apparent antagonisms of the interpretivist and positivist methodologies vanish as experimentation brings those two stances under one and the same umbrella. Indeed, experimental performativity requires theoretical validity (authenticity, plausibility, reliability and generalizability), but it also complements it with an experimental validity: the test of a prototype.

Thus, using a projectivist experimental methodology in accounting would manage to establish “connections between relevance and experimentation, rigour and activism, embedding in wider literatures and discipline, translation and the accumulation of knowledge, teaching and identity formation, action and critique.” (Ahrens et al., 2008, p.865).

Second, the possibility to experimentally test the theoretical results of accounting research may offer a welcome alternative to the pretense of objective indicators for research quality and the hegemony of journal rankings (Humphrey and Gendron, 2015). This way of measuring quality would be much more likely to ensure the relevance, and thus, the sustainability, of our discipline.

Indeed, by positioning our theoretical results on “matters of concern” to both action and thinking, the experimental test makes it more likely to contribute back to practice, as well as to the theoretical lenses. Who could seriously consider getting rid of a discipline able to reinvent audit and prevent society from some of the most significant

misstatement risks? Who would doubt the scientific relevance of contributing to Boltanski and Thévenot's pragmatist sociology?

However, this potential may only be unleashed at one condition: the accounting researchers should admit that, in an ontology of the social as movement, truth is transient. This means renouncing the elusive ideal of everlasting validity. As soon as audit will be practiced as insurance (or anything else) rather than assurance (see Lherm, 2016b), then R.I.P evidential assurance, and R.I.P the obsolete corpus of past audit theory - but long live accounting research.

But do we really need everlasting validity to establish accounting as a legitimate discipline? Do we really need to think we know “what accounting - or auditing what that matter - is”⁹⁰? Acknowledging that truth is transient indeed means that “the very role of accounting research is in part to make both accounting and our knowledge of it different”, and performative experiments offer a way to do just that.

Only solid theoretical constructions may offer a coherent alternative to practitioners' view of the world, and thus create a potential for inquiry on which the experimentation thrives. The experimentation process merely is a tiny missing piece to get an otherwise formidable research machine working. But this tiny little piece might guarantee our independence as researchers and ensures the sustainability of our discipline.

Bringing in such a tiny missing piece changes nothing - yet it may change everything. The field of accounting may be ripe for such a beneficial incremental change that leaves untouched the already existing communities.

4.2 Improving the feasibility of projective validity to reach testing in real conditions

As alluded to in the last words of the introduction, this paper itself is a prototype. Or rather, it will become a prototype the day of publication, when it will be tested in real conditions.

⁹⁰ See quote at the top of this paper

Indeed, publication likely indicates agreement between both highly experienced researchers (the jury of my PhD thesis and the reviewers), who adequately represent the (non-language) actualized part of the practice of research, and a PhD student (myself), who has strived for years to represent to himself the (language) describable part of research practice.

The publication decision therefore signals that the paper-product satisfies the (language or not) conditions of action as reproduced in the laboratory of our interlocution and indicates that it is ready to be tested in real conditions⁹¹. For the time being, though, this paper-product is still only a conceptual proposal that I submit to you, reader, to receive your experienced judgment as to its feasibility, in an effort to take into account a bit of the ungraspable actualization part of research practice.

This is why the nomenclature of theory building I used in this article, as well as the analysis of the positivist and interpretivist methodologies, did not have to be demonstrated. Rather, they had to be left wanting in order for me to understand from your feed-back what may satisfy the very conditions of your (intuitive or already well clarified) satisfaction - that is, some, or most, but never all, of the conditions for satisfaction of research practice itself.

In this paper, I have suggested that the use of performative experiments to accompany accounting in the constant project of its continuous change may make both it and our knowledge of it different, thus ensuring the relevance and sustainability of our discipline. So, how do you feel about this?

⁹¹ However, not any review process constitutes a laboratory for a performative experiment. In the usual reviews, theorists speak with theorists thus remaining within a community of research. In reviews of methodological papers, empirical objectivists speak with empirical objectivists. As a PhD student new to the practice of research, I had yet to acknowledge the sway of empirical objectivism, which made for the difference necessary to clamp a laboratory of interlocution (see conclusion of the thesis).

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CONCLUSION

Making a difference as a management scientist

The argument of this thesis can be summed up in a three-column table (1). Each column indicates a contribution, indicates its limits, and opens perspectives, respectively for audit (2), accounting research (3), and the science studies (4). Together, these considerations might indicate a not too hurtful way out of the very idea of modernity (5) - but this is another matter of concern.

1. Summary of the argument

Experimentation Process	Collective of audit - From assurance to insurance	Collective of accounting research - From objective to projective validity
Ground for study	Audit relevance => a need to audit the reasonableness of significant estimates	Sustainability of accounting research => A need to demonstrate the relevance of accounting research
Current assemblage	Assurance is legitimated by external benchmark	Accounting research is geared towards achieving theoretically valid results, be it in a positivist or an interpretivist methodology
Matter of Practical concern (Stalling)	Failure to assure the reasonableness of estimates through external benchmarks threatens the relevance of audit	Failure to demonstrate adequately the relevance of accounting research might threaten sustainability of the discipline
Participants gathered	Use more scepticism in assuring estimates VS change the way assurance is conducted	Use journal rankings VS resort to innovation to achieve theoretical legitimacy
Matter of theoretical concern (Paradox)	Estimates reasonableness may not be assured through external benchmarks	The relevance of accounting research may not be demonstrated by theoretical legitimacy alone - whether interpretivist or positivist
Objective empirical study	<u>How do</u> auditors justify their opinion as to the reasonableness of estimates?	<u>How is</u> audit research relevant in the problem of auditing estimates?

Experimentation Process	Collective of audit - From assurance to insurance	Collective of accounting research - From objective to projective validity
Powerless account of novelty	Jurisdiction of comfort: only comfort, not external benchmarks, may indicate the most reasonable representation in the circumstances	Projective relevance: only by enabling deep evolutions in accounting practice as well as achieving scientific validity may accounting research demonstrate its relevance.
Projective development	<u>How</u> to make the use of comfort legitimate in the audit of estimates' reasonableness?	<u>How</u> to make both accounting and our knowledge of it different?
Laboratory (Reproduced assembly)	Interlocution of researcher (coherent externality of the corpus) with experimented auditors, investors, and financial managers	Interlocution of a PhD student (coherent externality of ignorance) with experimented accounting researchers
Plausible assemblage (Prototype)	From assurance to insurance: To audit the reasonableness of significant estimates, auditors may legitimately use comfort because they take misstatement risk in an insurance contract - not because they take litigation or reputation risk in an assurance report.	From objective to projective validity: To demonstrate its relevance, accounting research may make both accounting and our knowledge of it different because it conducts performative experiments which achieve projective validity - not only because they achieve theoretically valid results.
Main condition	Evidence is relative => Renounce ideal of unquestionable auditability	Truth is transient => Renounce ideal of everlasting validity
Test in real-life conditions	Introduction into the ongoing debate about assurance quality. Regulators can help restore trust in a value-adding audit as they assist to the creation and watch over a market for audit insurance.	Introduction into the ongoing academic debate about research sustainability. Academics can help make diversity and academic freedom sustainable as they mobilize theoretical results in performative experiments.

Table 1: Summary of the thesis

2. Contribution, limits, and perspectives in audit

The second column of this table sums up the performative experiment conducted in audit.

Addressing insistent concerns with auditors' lack of scepticism in the audit of estimates, this thesis has suggested that the deficiencies pointed out by the regulators of the profession actually reveal the obsolescence of the currently prevailing approach of audit as evidential assurance.

The analysis of how highly experienced auditors justify their opinion on challenging estimates has indicated a practice of external constructive challenge which made it possible for the auditor to reach mutual comfort with the auditee that an estimate is the best possible in a highly specific situation.

This behavior has been interpreted as indicating a "jurisdiction of comfort", which indicates an alternative to evidential objectivity in audit. This hypothesis has then been developed into a prototype of audit as insurance, which makes it possible for auditors to best address estimates through their comfort.

This work contributes to both audit practice and theory.

To practice, it unveils the importance of audit uncertainty instead of inherent accounting uncertainty, which may prove helpful in the current efforts to redraft the auditing standards. Further, it has coined a definition of scepticism that differs from both professional judgment and independence, and indicates a way to renew audit's professional identity in the best interest of the profession and society as a whole.

To theory, it has unveiled a paradox in the audit of estimates which concretely illustrates the inadequacy of evidential assurance to assure the financial statements. Further, the interpretation of the jurisdiction of comfort indicates a new way to think of auditability, which goes beyond the reference to external benchmarks. This has led to the proposal of audit as insurance, which would arguably address the long-standing expectation and information gaps.

These results may be claimed to have validity with regard to the usually applicable criteria in interpretive accounting research. However, with regard to the validity criteria applicable in a performative experiment, they will be validated only once the profession actually reassembles around a new identity of audit as insurance. This requires auditors

to renounce the ideal of absolute auditability and give up the dichotomy of the pass/fail opinion, which have made their success for the past eighty years.

Accordingly, the perspective offered by this research in audit is the very revamping of the audit profession. If the auditors manage to relegate what has made their success for the past eighty years, they could reinvent audit as a fully-fledged valuation method in itself. The prototype is almost ready to be tested in real conditions, and as yet it may not be “said” what will happen, or take place, outside of the laboratory.

3. Contribution, limits, and perspectives in accounting research

The third column in table 1 sums up the performative experiment conducted in accounting research.

Addressing concerns with the lack of relevance of accounting research, this thesis has suggested that the theoretically valid results produced in objectivist empirical research may not be relevant to practice if not otherwise mediated.

The analysis of how researchers have tried to achieve practical relevance through their theoretical account of the audit of estimates has indicated that research would become highly relevant if it could answer “how to” projective questions.

This need has been addressed in the development of a projectivist experimental methodology and a concrete experimentation process that aims to perform the reality it studies, based on existing theoretical results.

This work contributes to the practice and theory of accounting research.

To practice, it delivers a step-by-step experimental method that optimizes the use of existing theoretical results in addressing matters that are of concern to both theory and practice. This makes it more likely to reveal whatever relevance these results may have for both theory and practice.

To theory, it proposes an experimental validity that does not replace but usefully complements the currently acknowledged criteria of authenticity, plausibility, reliability and generalizability. Experimental validity can significantly enhance the relevance of research, and thus its sustainability. It also offers a measure for the quality of research that would complement journal rankings.

These preliminary results are promising. However, the experimentation is still on-going, and will only enter the development phase with the reading by the jury of this thesis. Noticeably, even though it fits the work conducted in this thesis and possibly a more generally agreed opinion within accounting research, the assertion that the sustainability of our discipline relies at least partly on an ability to contribute to practice and to address “how to” questions is insufficiently substantiated.

Accordingly, I intend to strengthen the problematization of the third paper, “missing piece”, by addressing the question of the relevance of theoretical results in management research as a whole, thus contributing to existing proposals (e.g. Van de Ven’s engaged practice, Alvesson and Sandberg’s problematization, and Flyvbjerg’s phronetic). The empirics for such an analysis would remain the attempts by audit researchers to contribute to the practice of audit.

4. Contribution, limits, and perspectives in the science studies

The very first column of the table that summarizes this thesis indicates the steps to be followed in conducting a performative experiment.

To address the lack of implementation guidance as to how exactly social scientists should begin or stop a textual description, this thesis has extended Latour’s “abstract projection principle” into a fully-blown projectivist methodology, and designed an experimental process that unlocks these implementation difficulties without infringing on Latour’s core principles.

First, the way the experiment process uses theory does not breach Latour’s principle of flatness forbids the researcher to resort to powerful explanations. Indeed, theoretical results are given no power as such: instead, the coherency of a corpus of knowledge is used to find out a paradox that indicates where to begin with description.

Second, the use of a human laboratory of interlocution does breach Latour’s principle of symmetry, as it implies a distinction between humans and non-humans. However, as any laboratory, it only aims to reproduce real conditions: humans will disappear once the prototype is tested in real-conditions, on which they have no control.

This work contributes to the practice and theory of science studies.

To practice, it offers fresh empirical data that should lead to question the currently prevailing antagonisms in the management sciences. First, from the point of view of a projectivist experimental methodology, both positivism and interpretivism are but objectivist empirical methodologies. Their theoretical results, whatever the criteria of validity, are only useful as far as they can be “made to work” within an experimental setting. Second, in a process that aims to perform the social, critical studies and interventionism cannot exist independently. You need critical unveiling of a doxa to find a paradox which may lead to interventionist prescription.

To theory, the projective experimental methodology indicates a new way to think of the management sciences. The task that lies ahead is to get organized in order to face the world. The aim of the management scientist is not control, but awakened vigilance: keeping an eye open, always ready to clamp a laboratory and engage in the development of a prototype whenever the social is setting itself in motion.

Understood as the science of action, the management sciences have much to bring to pragmatism, which brings together in its very name both human thinking (philosophy) and human action (pragmata). However, this thesis has only discussed the implications for management of a pragmatist reading of Latour’s ANT.

Accordingly, I intend to problematize the second paper, about the development of the performative experiment, as a contribution of the management sciences to the inherent tension in the pragmatist philosophy, as well as in the science studies, between thinking and action. The empirics for such a contribution will be the performative experiments to come.

5. Making a difference as a modest and determined man of craft

A prototype, if it gets validated, will have settled a matter that resisted to both human thinking and action. But even the most experienced researchers and practitioners may not bring thinking and action beyond themselves by applying logics alone. So how is this possible?

Coming towards the end of that thesis, I feel - indeed, feel - that much intuition is needed in order to achieve any valuable result in a laboratory of interlocution. The most important criteria to choose a representative may well be intuition. The researcher must have an intuition of theoretical thinking just as well as the practitioner must have an intuition of practical action. To make it worse, their intuitions should be compatible - on a wholly subjective, completely uncontrollable level.

Now, it could be argued that, over the last one-and-a-half century or so, the social sciences may have mostly been about the relationship between the subjectivity of the researcher and the research he conducts. Projective experimentation could help renew how we address that question, as it may allow to make some interesting parallels with how quantum mechanics have addressed the relationship between measure and instrument.

The Higgs boson is an event, and Truth is a rare achievement. Catching them requires modesty and determination: in a same breath, you'll have to doubt your results and trust your intuition. These competences cannot be acquired in books - nor in data for that matter. They stem from hope, in the everlasting struggle of life. Hope is what pragmatism needs most. Ultimately, this is what performative experiments may bring in the management sciences.

I may not have the philosophical depth of Latour to densify my writing again and again into multiple layers of plausible readings. I may not have Boltanski and Thévenot's scholarly poetry to stage a stunning performance of newly coined concepts. But I don't need to. I am not a philosopher. I am not a sociologist. I am but a proudly modest, and powerlessly determined, management scientist. Truth be told: a man of craft, with an intuition of matter. And that's how I can make a difference.

Truth is transient.

Let it go through.

ANNEX

From Assurance to Insurance

Making Audit relevant again

DRAFT

As at September, 12, 2016

Christian Mouillon and François-René Lherm

⁹² This policy paper has been written to the attention of the Chairman of the IAASB, and a specific version is being written to the attention of the Chairman of the PCAOB. It is co-authored with a representative who played a major role in the experiment conducted in audit.

Executive summary

In a context of overarching concerns about the value of an audit and the relevance of the accounting profession, regulators have recently reported numerous failures in the audit of estimates and interpreted them as a lack of professional skepticism by auditors. The research introduced in this note suggests that this interpretation, though currently vindicated by the auditing standards, is insufficient, and yields insights for the current agenda of the IAASB.

1. There is a paradox in the assurance approach advocated in ISA 540: if auditors could obtain sufficient appropriate evidence to assess the reasonableness of estimates, then those estimates would not be inherently uncertain in the first place. Avoiding or ignoring it would have audit either become useless or drown in litigation or distrust. Yet, withholding their opinion would be detrimental to auditors' credibility. So, how are challenging estimates audited in practice?

2. This question was addressed in a two-year field study. Findings indicate that estimates are challenging not because of estimation uncertainty, but because of audit uncertainty: the lack of benchmarks for evidence appropriateness or sufficiency, together with preparers' superior knowledgeability, make uninfluenced evidentiating of the audit opinion almost impossible. In those circumstances, auditors tend to adopt biased, unskeptical assurance behaviors. They do better when they renounce the assurance ideal of independent judgment and conduct external constructive challenge of the estimate. But how could investors trust an opinion influenced by management, and why should auditors renounce a reassuring pretense of assurance?

3. We propose an insurance system in which auditors would have to sell a hedge against the misstatement risk. In order to sell insurance, auditors have to achieve greater comfort than investors in matters of interest to them, which incentivizes skeptical challenge. They can exclude their areas of discomfort from insurance by writing clear-cut covenants, thus providing relevant but not sensitive information to investors. As it best addresses uncertainty, the insurance approach makes audit relevant again to preparers, investors, and society as a whole. Regulators and standard-setters have a key role to play in this process.

In conclusion, this study sketches a promising renewal of audit as an expertise in skeptical challenge with an aim to achieve or clarify comfort in uncertainty. Shifting from assurance to insurance creates an opportunity for the IAASB to unleash audit's full potential, and dramatically reduce the expectation and information gaps.

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1. The inescapable paradox of estimates in audit as assurance

There is a paradox in auditing estimates through the assurance approach in ISA 540 (1.1). Avoiding or ignoring this paradox would be detrimental to audit (1.2).

1.1 The paradox of estimates in the assurance approach by ISA 540

According to ISA 540, accounting estimates are particularly challenging to audit because their inherent uncertainty makes room for management bias⁹³. Auditors should obtain sufficient appropriate evidence to conclude on estimates' reasonableness or the adequacy of related disclosure⁹⁴. They should use skepticism to identify possible management bias and adapt their audit procedures accordingly⁹⁵.

This stance is consistent with the assurance approach in audit, according to which the audit opinion should be based on sufficient appropriate evidence⁹⁶. It makes professional skepticism an indispensable feature in obtaining evidence in the audit of uncertain estimates, and seems to warrant that regulators interpret the deficiencies they observed as a lack of it.

But on a closer look, ISA 540 does not clarify how exactly auditors are meant to obtain sufficient appropriate evidence even though there is inherent uncertainty in the estimation:

- If sufficient appropriate evidence may be obtained to narrow the estimation range down to below materiality, then how could the estimate be assessed as inherently uncertain?
- And if not, then how could even the most skeptical auditor give assurance as to the reasonableness of the estimate or the related disclosure?

This is the paradox of uncertain estimates in audit as assurance. Assurance should be based on sufficient appropriate evidence. But auditors cannot obtain sufficient

⁹³ See ISA 540.07c and .A1 through .A11

⁹⁴ See ISA 540.06

⁹⁵ See ISA 540.A40

⁹⁶ See ISA 200.05 and ISA 500.04

appropriate evidence as to the reasonableness of estimates with significant accounting uncertainty - for if they could, those estimates would not be uncertain in the first place.

Yet, auditors are implicitly (if not officially) required to give an opinion on uncertain estimates, for qualifying the audit opinion relatively to those most sensitive and significant aspects of the financial statements could discredit the financial communication of the preparer - and qualification is actually forbidden in the case of US listed corporations⁹⁷.

We still lack a coherent theoretical approach to understand and address this challenge.

1.2 Avoidance or ignorance: the elusive ways to escape the paradox of estimates

Current research has failed to address this paradox. Instead, it accentuates either the impossibility to audit cases of high estimation uncertainty (1.2.1), or auditors' ability to obtain sufficient appropriate evidence using professional skepticism (1.2.2). Both stances are unconvincing and may even prove detrimental to audit.

1.2.1 Avoiding the challenge of estimation uncertainty: the danger of irrelevance

A first string of research does acknowledge that audit assurance based on sufficient appropriate evidence may not be possible in the case of estimates with extreme accounting uncertainty. But it avoids that problem instead of addressing it.

Those authors (Christensen, Glover & Wood, 2012; Bell & Griffin, 2012; Glover, Taylor & Wu, 2014; Cannon & Bedard, 2014) propose that the audit opinion on those estimates should be negative (“there is no reason to doubt reasonableness”) rather than positive (“the estimate is reasonable”).

This stance is dangerous for it fails to show how the audit opinion would remain relevant to stakeholders if auditors' liability was significantly decreased in areas which are of most importance to them.

⁹⁷ ISA 540 does mention cases where estimation uncertainty is too high for a reasonable estimate to be made (see paragraph A49) and cases with potentially significant risk (see paragraphs A107 to A115). Those cases are addressed below (see 2.1).

1.2.2 Ignoring the challenge of estimation uncertainty: the danger of excessive liability

A second string of research merely ignores the paradox of estimates in the assurance approach. These studies assume that estimates may be assured by auditors based on sufficient appropriate evidence and suggest that the audit of estimates is deficient because of a tendency to verify management's numbers instead of noticing and processing inconsistencies and/or preparing independent expectations.

Some of those authors recommend that standards-setters and regulators should develop and impose a superior audit method (Griffith, Hammersley & Kadous, 2014), while others claim that changes in staff training could enhance skepticism in the audit of estimates (Griffith, Hammersley, Kadous & Young, 2015; Rasso, 2015).

This stance is dangerous for it maintains auditors' liability while failing to demonstrate that such a "superior" method may be possible, or that staff training could lead to significant improvement in the audit of challenging estimates that are typically already dealt with by highly experienced partners. As a result, auditors are made to bear indefinite liability.

1.2.3 The need for further investigation

Regulation based on avoidance or ignorance of the paradox of estimates in assurance would be detrimental to audit. Limiting auditors' liability on the ground of studies which avoid this paradox could lead to a steep decrease in audit value. Maintaining their liability on the ground of studies which ignore it and fail to offer a plausible alternative could have audit drown in litigation or distrust.

To inform regulation meaningfully, research should bring an understanding of how auditors manage to give an opinion as to the reasonableness of estimates or the related disclosure, even though they are unable to justify their opinion based on sufficient appropriate evidence.

During two years, field research has been conducted to clarify what actually makes estimates so challenging to audit, and how seasoned audit partners address the most challenging ones. Beside a thorough analysis of extant sources, this research encompassed investigation of five challenging cases and a total 42 in-depth interviews with auditors, preparers and investors (Lherm, 2016a).

2. From assurance to skeptical comfort: the challenge of audit uncertainty

The cases observed suggest that estimates are challenging to audit not because of inherent estimation uncertainty, but because of circumstantial audit uncertainty which makes assurance almost impossible (2.1). When auditors strive to fulfill the requirements of assurance nonetheless, they display biased behaviors which hinder skepticism (2.2). However, when they renounce to do so, they conduct a skeptical challenge and may feel comfortable that the most reasonable estimate has been achieved (2.3).

2.1 Audit uncertainty and the inadequacy of assurance in addressing estimates

Estimates are actually challenging only when they cause audit uncertainty (2.1.1), the two main features of which makes the assurance approach inadequate (2.1.2).

2.1.1 From estimation to audit uncertainty: the practical challenge in assuring estimates

The five cases were challenging to audit because the underlying business specificity (e.g. in product, technics or organization) made that there was no acknowledged benchmark to characterize appropriateness or sufficiency of audit evidence as to the reasonableness of the estimate. Such situations create what may be called audit “uncertainty”, which breaks down into audit “subjectivity” and audit “complexity”.

An audit situation is subjective when there is no external benchmark to assess the appropriateness of evidence - such as historical trend, coherency with market or competitors, or expert opinion. The auditor thus has to rely on management’s input to determine what constitutes appropriateness in the circumstances.

For example, how could the auditor justify his opinion as to the reasonableness of the income forecasts used in an impairment test for assets in a new and highly innovative activity with no competitors?

Typically, start-up managers are the best able to tell the future perspectives of their niche business and adequately forecast incomes.

An audit situation is complex when there is no external benchmark to assess the sufficiency of evidence - such as acknowledged trend evolution, active market or

comparable competitors, or a number of concurring expert opinions. The auditor thus has to rely on management's input to determine what constitutes sufficiency in the circumstances.

For example, how could the auditor justify his opinion as to the reasonableness of the resolution time used in the computation of a reserve for contractual compensation that was triggered by delivery delays caused by as yet unclarified technical difficulties?

Typically, even the top engineers of the manufacturer, who are the only experts available for their highly specific product, can only make a rough guess.

This shift of focus from inherent estimation uncertainty to circumstantial audit uncertainty casts a new light on the challenge of estimates in assurance

2.1.2 The inadequacy of the assurance approach to address audit uncertainty

The assurance approach, on which ISA 540 is based, requires that auditors apply independent judgment to achieve complete evidentiating of their audit opinion.

The standards provide that whether sufficient appropriate evidence has been obtained is a matter of professional judgment⁹⁸. Professional judgment should be based on, appropriate in the light of, and consistent with the facts and circumstances known to the auditor⁹⁹.

They further require that the auditor be independent of mind¹⁰⁰, a state of mind which prevents his opinion to be compromised by influences from audit clients¹⁰¹.

Finally, they assume that the reasonableness of judgment and the adequacy of audit decisions to the facts and circumstances unfold from auditors' knowledge, training and experience¹⁰².

In invoking professional judgment and independence of mind, the assurance standards therefore assume that auditors are able to know what constitutes evidence appropriateness and sufficiency in the circumstances, without being influenced by

⁹⁸ See ISA 500.A6

⁹⁹ See ISA 200.A25, .A26 and .A27

¹⁰⁰ See ISA 200.08 and .A14 to .A17

¹⁰¹ See ISA 200.A17 and IESBA's code of ethics for professional accountants, paragraphs 290.04 and 290.06.a

¹⁰² See ISA 200.13.k, .A23 and .A.A24.

management. But the two main features of audit uncertainty makes this assumption untenable.

First, audit uncertainty rests in the absence of external benchmark as to what constitutes evidence appropriateness or sufficiency in the first place. The assumption that auditors are able to know what constitutes evidence appropriateness and sufficiency in the circumstances would thus make auditors liable for deciding themselves on the relevant benchmarks.

ISA 540 does mention that estimation uncertainty may be so high that a reasonable estimate cannot be made, in which case the focus of the audit should be limited to the adequacy of the related disclosure¹⁰³. But this does not resolve audit uncertainty as it merely shifts the question of evidence appropriateness and sufficiency from the demonstration of the reasonableness of the estimate to the demonstration of the adequacy of the related disclosure.

Second, as audit uncertainty rests in the specificity of the underlying business, the auditee is the most knowledgeable in the circumstances. The requirement that auditors' judgment should not be compromised by management influence would imply that auditors should oppose their own estimate¹⁰⁴ to management's even though they lack their intimate business knowledge.

ISA 540 does address two cases where auditors are meant to find support in management input to mitigate significant risk¹⁰⁵. However, in a context where management bias is seen as the primary risk, it is unclear to what extent the consideration of management input may constitute sufficient appropriate evidence as opposed to a compromising influence.

In the absence of any relevant benchmark, and confronted to the superior knowledgeability of the auditee, auditors cannot fulfill the requirements of assurance. Consequently, just as audit theorists avoid or ignore the challenge of estimation

¹⁰³ See paragraph A49

¹⁰⁴ As provided by ISA 540 (see paragraph 13.d)

¹⁰⁵ First, it may not be possible to narrow down the estimation range to below audit materiality (see ISA 540.A94), in which case the auditors should consider whether and how management has assessed how uncertainty may affect the accounting estimate (see ISA 540.A103 to .A105). Second, the estimate may rely on significant assumptions (see ISA 540.A83), in which case the auditor should assess whether support may be found in management's continuing processes of strategic analysis or risk assessment (see ISA 540.A108).

uncertainty in assurance (see 1.2), audit practitioners tend to avoid or ignore audit uncertainty and adopt biased assurance behaviors.

2.2 Biased assurance behaviors: considering the root cause for the lack of skepticism

In biased assurance behaviors, auditors do not aim to address directly the reasonableness of the estimate. Rather, they aim to mitigate their own risk in irrelevant “arrangements” (2.2.1), or to assess the trustworthiness of management’s estimate in risky “compromises” (2.2.2). Those biases have been rightly interpreted as a lack of scepticism, but really illustrate the danger of holding to the assurance approach in uncertain audit situations (2.2.3).

2.2.1 Avoiding the challenge of audit uncertainty: the irrelevance of arrangements

In arrangements the auditor uses his judgment, based on his experience and intimate knowledge of what usually passes as sufficient appropriate evidence, to mitigate his litigation and reputation risks relative to the estimate that causes audit uncertainty.

For example, on the ground that he is unable to make a better estimate than these most knowledgeable actors, the auditor may evidence the reasonableness of income forecasts based on financial analysts’ reports, thus creating circularity in financial information as analysts would then use “audited” figures that were ultimately validated by their own reports.

Such an “arrangement” does arrange both the auditee, who gets positive assurance relative to a highly sensitive estimate, and the auditor, who feels comfortable that he transferred his responsibility to other actors. However, arrangements are irrelevant and even dangerous for statements users, as auditors fail to address the actual risk of misstatement while giving to think that they do.

2.2.2 Ignoring the challenge of audit uncertainty: the riskiness of compromises

In compromises the auditor uses his judgment, based on his experience and intimate knowledge of the audited corporation, in order to assess whether management’s input

can be used as sufficient appropriate evidence relative to the estimate which causes audit uncertainty.

For example, a significant marketing investment in one product may indicate management's honest belief in his assessment of the generation of sizable future cashflows. If the auditor acknowledges the efficiency of the marketing department in achieving sales, he may even go as far as taking this investment almost as a proxy for cashflow generation¹⁰⁶.

The auditor does make a "compromise" as he applies independent judgment not to assess the reasonableness of the estimate, but to assess that the estimate really reflects the best assessment by management, whose judgment cannot be topped in the circumstances.

Compromises are much more relevant than arrangements to statements users, as they ensure at least some sort of reliability to the assessment of the estimate. However, auditors take a huge inspection and litigation risk in case management estimate proves to be significantly wrong, as they may be blamed for not addressing the reasonableness of the estimate.

Those biases have been rightly interpreted as a lack of scepticism. But are the auditors really to be blamed for it?

2.2.3 Lack of skepticism: auditors' professional failure, or counter-productive assurance?

In arrangements, auditors avoid audit uncertainty and make audit irrelevant to stakeholders as they mean to use evidence to disengage their liability instead of critically assessing it.

In compromises, they behave as if they ignored audit uncertainty and take a huge risk as they engage their liability that the estimate is reasonable based on a belief in management honesty.

Those behaviors are in blatant contravention with the standards and have been rightly interpreted as a lack of skepticism¹⁰⁷.

¹⁰⁶ ISA 540 does mention the possibility for the auditor to evaluate management's intent to carry out specific courses of action and its ability to do so (see paragraphs 15.c and A110).

¹⁰⁷ See ISA 200.A20 and ISA 200.A22

However, auditors have developed these biased assurance behaviors to bring together two conflicting institutional demands. On the one side, they are expected by regulators to play by the rules of assurance that require that they apply independent judgment to achieve complete evidentiary support of their audit opinion. But on the other side, they also stand under high pressure by clients and statement users to give an opinion about significant estimates which cause audit uncertainty and make assurance using independent judgment almost impossible.

Releasing the first demand is very risky for auditors who cannot find shelter in conformity anymore. But releasing the second makes audit increasingly irrelevant in proportion to the importance of significant estimates in the financial statements. As a result, it is unclear who or what is to blame for this lack of skepticism: auditors' failing professional awareness, or the current structuring of audit as assurance which proves to be dangerously counter-productive in addressing estimates?

In either case, trust in the audit of estimates is likely to plummet. A way out of this conundrum may be found in auditors' practice of external constructive challenge.

2.3 External constructive challenge: bringing skeptical comfort into uncertainty

Being unable to find shelter in conformity, auditors may challenge the reasonableness of the estimate using not exactly independence but rather externality (2.3.1), nor ideal judgment but rather constructiveness (2.3.2). Though external constructive challenge is the best way to address estimates, making it auditors' default behavior requires to overcome two limits (2.3.3)

2.3.1 Externality instead of ideal independence: challenging through a fresh look

Even though he is no business expert, the auditor may rely on his intimate knowledge of, wide access to, and close interaction with the audited corporation in order to challenge management choices and assumptions from an external point of view.

For example, the auditor may be able to cross-check information from all kind of sources within the audited corporation: from the financial department just as well as from engineers working on a specific project, from the decision center or from

peripheral production centers that matter in the circumstances - in some cases even accessing information that was unknown to central management, or delivering insightful cross-analysis of databases that used to be analyzed independently from each other.

Auditors' externality makes them able to offer a fresh look and apply their expertise in challenge. But it falls short of the assurance ideal of independence of mind, for the auditor has to acknowledge management's superior knowledgeability.

2.3.2 Constructiveness instead of ideal judgment: achieving the most reasonable estimate

Even though sufficient appropriate evidence may not be obtained, the auditor may rely on his experience, knowledge, and training to gain a subjective feeling of comfort that everything has been done to achieve the most reasonable estimate.

For example, if a significant decrease in production costs is forecasted on the ground of synergies expected from a strategic alliance, the auditor may check whether management has considered those potential synergies in great details or used a rule of thumb. Then, on the basis of management's work, he may wish to verify the plausibility of specific synergies. This investigation stops when the auditor feels comfortable that there could be no better estimate in the circumstances.

Constructiveness helps auditors close the phase of challenge and make an opinion they are comfortable with. But it falls short of judgment for it is based on subjective benchmarks for comfort which have no general validity and may not be opposed to third parties.

2.3.3 Bringing comfort into uncertainty: skeptical challenge instead of assurance

On the contrary to arrangements and compromises, settling down from independence and professional judgment to externality and constructiveness enables the auditor to skeptically challenge the reasonableness of management estimates.

As they acknowledge the unavoidable influence of management (vs independence), auditors can focus on offering an external viewpoint to critically assess management estimate (skeptical behavior through externality), instead of making arrangements on the ground that they are unable to make their own estimate independently.

As they do not mean to achieve complete evidentiatioin (vs professional judgment),

auditors are free to construct their opinion using whatever benchmark they feel comfortable with (skeptical behavior through constructiveness), instead of making compromises on the ground that they can obtain evidence only relative to management honesty.

In practice, the acceptable benchmarks for comfort gradually emerge in the interaction between the auditee, who is the most knowledgeable in the circumstances, and the auditor, who is expert in challenging him. Their mutual comfort is the most adequate benchmark to assess reasonableness in the circumstances, for it creates some common sense where there used to be none, thus displacing the boundaries of uncertainty in the financial statements. Consequently, skeptical challenge, based on auditors' externality and constructiveness, is by far the best way to protect the audit stakeholders against the risk of misstatement in estimates.

However, renouncing the assurance requirement of independent judgment to favor external constructive challenge also comes with two shortcomings which have yet to be removed if standard-setters and regulators wish to make skeptical challenge auditors' default behavior.

First, externality falls short of independence because management is acknowledged as a major partner in assessing reasonableness. So how could investors trust that auditors' comfort comes from skeptical challenge, instead of making arrangements or compromises?

Second, constructiveness falls short of judgment because the audit opinion cannot be completely evidenced. So in case of significant misstatement, how could auditors mitigate the risk that their liability be engaged for lack of skepticism though they have done their best?

Shifting the audit system from assurance to insurance (Lherm, 2016b) would make up for those shortcomings and enable auditors to best address the misstatement risk in significant estimates, thus creating value for their clients, investors, and society as a whole.

3. The audit insurance contract: making audit relevant again

After introducing the principles and concrete workings of audit as insurance (3.1), we suggest how standard-setters and regulators may make audit relevant again (3.2).

3.1 The principles and concrete workings of audit as insurance

Issuing a hedging derivative based on the comfort achieved allows to compensate the two shortcomings of external constructive challenge, and fits the purpose of current regulation (3.1.1). We clarify the concrete workings of this insurance system along a simplified decision tree (3.1.2).

3.1.1 The principle of audit as insurance: issuing a hedging derivative

In the insurance system, the audit opinion is expressed in an insurance contract that may be sold to investors as a hedge against the misstatement risk. Auditors' interest therefore is to sell the insurance contract at the highest possible price (incentive), under the constraint of avoiding excessive misstatement risk that could trigger insurance losses (penalty).

This core principle has two important consequences, which address the two shortcomings of external constructive challenge and fit the purpose of current regulation efforts: enhance users' confidence through an increase in skepticism, and deliver relevant information.

First, insurance increases stakeholders' confidence in the audit. Indeed, auditors have a vested interest in conducting a truly skeptical challenge of the auditees to reach the finest grain of understanding and make it possible to:

- Achieve greater comfort than investors in significant matters of interests to them, which they can sell as a hedge against the misstatement risk (= gain incentive);
- Exclude from insurance the areas of the financial statements they are not comfortable with, in order to limit exposure to uncontrolled misstatement risk (= avoid penalty).

Note that, as the auditors aim to reach the highest possible price of the insurance contract for any given degree of comfort, they have no interest in withholding insurance when they feel comfortable, so that they should avoid risk averse behavior.

Second, insurance brings relevant information to stakeholders. Indeed, in order to limit their exposure to areas of discomfort, auditors write covenants to the insurance contract¹⁰⁸. These covenants indicate accurately what areas of the statements are excluded from insurance, but they indicate nothing positive as to the statements' content.

Thus, if the contract were published together with the financial statements in place of today's assurance report, the covenants would provide highly relevant information to stakeholders about which areas auditors are uncomfortable with, without denigrating auditees or revealing sensitive information.

Note that, as the auditors aim to limit their misstatement risk, they have an interest in avoiding "boiler-plate" formulation and instead write covenants that are as clear-cut as possible.

How do these promising principles work in practice?

3.1.2 The concrete workings of audit as insurance

We now clarify the process of audit as insurance along a simplified decision tree (see illustration 1). For each step is mentioned auditors' and auditees' interests and how they balance each other in the process to deliver the best possible estimate in the circumstances.

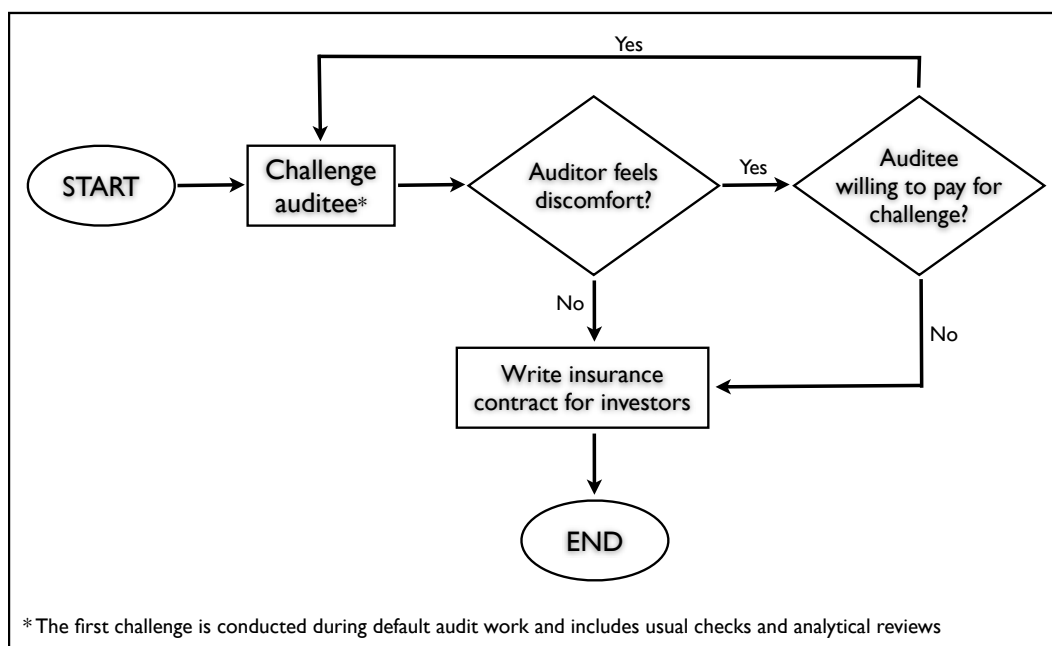


Illustration 1: Decision tree in audit as insurance

¹⁰⁸ see annex 1 below for a simplified example

When starting the audit, auditors make the usual checks, analytical review and automatized analytics as part of their regular work.

However, while the audit *assurer's* goal is to achieve conformity in order to mitigate his inspection and litigation risks, the audit *insurer's* goal is to achieve actual comfort with the statements to issue a valuable hedge. Indeed, the value of the contract for investors, and thus its price, depends on the comfort that the audit insurer may add to investors' comfort.

The first decision in our tree is therefore whether the auditor feels *uncomfortable* with any significant item.

- If not, the auditor simply issues a default insurance contract with no specific clause and therefore insures any loss due to a noted misstatement.

- => Note that if auditors feel uncomfortable with an item they have a vested interest to challenge management, for the only alternative would be to insure the misstatement risk relative to this item.

- If yes, we proceed to the second decision.

As management often is the most, and in some cases the only (see above, 2.1), knowledgeable party in the circumstances, active concurrence of the auditee is mandatory to achieve comfort in difficult estimates. The second decision is therefore whether the auditee agrees to get further challenged with regard to the matter that causes discomfort to the auditor.

- If not, the auditor writes covenants to the contract in order to exclude the area of discomfort from insurance.

- => Note that auditees have a vested interest in cooperating to genuinely increase auditors' comfort, for the only alternative would be disclosure of discomfort in explicit covenants to the insurance contract, which would likely send an adverse signal to investors.

- If yes, the auditor conducts further challenge.

- => Note that auditors have a vested interest to question auditees' self-confidence with any significant matter in order to make challenge appear useful.

This decision tree goes on in further loops until:

- The auditor does not feel any discomfort with a significant item any more, or
- The auditor still feels discomfort, but the auditee does not see an interest in further challenge, as he himself feels comfortable and is confident that the auditor's remaining areas of discomfort expressed in the covenants to the insurance contract will not significantly impact on investors' decisions.

As a result, the inner logics of contractual insurance should balance auditors' and auditees' interests so that any significant caption in the financial statement be either covered by auditors' insurance against misstatement, or publicly signaled as an area of auditors' discomfort. These structural features of insurance are likely to drastically reduce the expectation and information gaps.

A shift from assurance to insurance would likely help the IAASB achieve their goal to bring audit back to relevance.

3.2 How standard-setters and regulators may make audit relevant again

Shifting from assurance to insurance may achieve the IAASB's ambition to unleash audit's full potential (3.2.1). Regulators and standard-setters have a key role to play to make audit relevant again (3.2.2), as they correct rogue behavior and foster continuous improvement (3.2.3)

3.2.1 The high relevance of audit as insurance: creating comfort in areas of uncertainty

Even though the most uncertain estimates may not be fully assured, auditors do create highly valuable comfort in uncertainty as they skeptically challenge preparers. Indeed, in the process of achieving comfort, auditors provide reflectivity to preparers, financial analysis to investors, and a true protection against risk to society as a whole.

First, audit as insurance provides a welcome opportunity for reflectivity to auditees. Really uncertain estimates are not challenging to auditors only: they often indicate important business aspects that are closely watched by investors. Therefore, the preparers interviewed find they benefit from constructive challenge by auditors to put

their own understanding in perspective and make sure they communicate adequately on it.

Second, it bestows to audit a value as financial analysis. Since estimates have to take into account actual business expectations, hedging for misstatement also hedges for part of the investment risk. As a result estimation uncertainty, and with it investors' risk, first begins where auditors' comfort ends. The covenants to the insurance contract, which are published together with the statements, not only limit investors' possibility to sue: they also give them a clear idea of auditors' areas of discomfort even if they don't buy the hedge.

Third, it best protects society as a whole. There is no better way to make sense of highly uncertain situations than to equip the preparers, who are the most knowledgeable in the case-at-hand, with skeptical auditors, who are experts in constructively challenging them. The audit insurance system is designed to make sure that auditors and preparers have a vested interest in achieving the most reasonable estimate even in the most specific circumstances.

Furthermore, audit as insurance fits the purpose of the current objectives of standard-setting: increase skepticism, deliver useful information to financial statements readers without revealing sensitive points, and address estimation uncertainty meaningfully. Standard-setters and regulators therefore have high interest in the development of audit as insurance - and a key role to play.

3.2.2 The organic role of standard-setters and regulators in audit as insurance

For all those advantages, audit as insurance relies on a simple observation: uncertainty in the financial statements may best be alleviated in the interaction between the auditee, who is the most knowledgeable in the circumstances, and the auditor, who has both the expertise and interest to skeptically challenge him.

The three conditions for success therefore are that a highly knowledgeable auditee (1) and a truly skeptical auditor (2) sincerely strive to achieve mutual comfort as to estimates' reasonableness (3). What can standard-setters and regulators do about that?

Whether auditees are highly knowledgeable in the circumstances is beyond their power and likely motivated by the necessity to perform in their business. Likewise, whether

auditors are truly skeptical is motivated by the financial engagement they take in issuing an insurance contract. As a result, well-balanced markets should theoretically provide for the success factors (1) and (2): poorly achieving actors shall simply be selected out.

Sanctioning being left to markets, the organic role of standard-setters and regulators in audit as insurance is to ensure success factor (3), i.e., that the actors sincerely strive to achieve actual comfort. On top of facilitating the structuring of audit as insurance, they should therefore watch over market-disturbing behaviors in the interaction auditor/auditee, and help continuously improve the insurance system as independent facilitators.

The following proposal is intended to help achieve this goal.

3.2.3 Watching over extreme prices: correcting rogue behaviors and fostering improvement

Standard-setters and regulators should structure and apply mechanisms to watch over rogue behaviors. In an insurance market, rogue behavior or a defective auditor/auditee interaction will be indicated by either extremely low or extremely high price of the insurance contracts.

A contract trading at extremely low price may indicate that investors think there is no area of discomfort in the underlying financial statements (which is unproblematic) or that they think there are areas of discomfort but the insurance does not cover them.

This second case may indicate either that auditors are extremely risk-averse and won't insure items in spite of having achieved comfort, in which case they merely lose an opportunity to sell hedging to investors. Alternatively, it may indicate that auditors were not able to achieve comfort.

When the auditor was not able to achieve comfort because the auditee was unwilling to get challenged, regulators could threaten to restrict the auditee's access to the stock exchange. When the auditor could not achieve comfort in spite of the auditee's willingness to be challenged, regulators should investigate on a case-by-case basis.

Conversely, a contract trading at extremely high price may indicate that investors think the areas they are uncomfortable with are well insured and wish to buy that insurance (which is unproblematic), or that speculators think they are overinsured.

This second case indicates either that auditors are complacent and will insure items in

spite of being uncomfortable, in which case they merely take excessive risk and shall be automatically sanctioned as they incur insurance losses. Or it indicates that auditors were not able to achieve discomfort.

When auditors repeatedly fail to achieve discomfort, this likely indicates incompetence and regulators should contemplate barring them from exercising as professionals. When auditors failed to achieve discomfort only sporadically, regulators should investigate on a case-by-case basis.

Watching over extreme prices also offers an opportunity to foster continuous improvement. Indeed, case-by-case investigations aim to tell misbehavior from mishaps. From a systematic analysis of cases may emerge a progressive categorization of mishaps into known errors.

The anonymized results of those investigations could be shared with auditors to make them aware of known errors, enhance overall professional capacity for skeptical challenge, and avoid recurrence.

Such a database would systematize the efforts of standard-setters to provide insights for the conduct of an audit, for example as to how auditors should test management's estimate and the data on which it is based¹⁰⁹, and help make it even more detailed and useful to auditors.

¹⁰⁹ For example, see ISA 540.A13, and .A71 to .A83

Conclusion: unleashing audit value in the best interest of society

At least since the McKesson and Robbins scandal back in 1938, auditors have been summoned to give evidential account for their opinion. This approach has paved the way for the irresistible rise of audit as assurance for half a century.

However, as business models have grown ever more complex, and as the accounting frameworks have tried to keep pace, achieving complete evidentiating of the audit opinion has become increasingly difficult.

The current quandary about auditors' lack of skepticism in the audit of estimates thus merely epitomizes a deeper embattlement of the legitimacy of audit. This report has introduced a 2-year investigation into what makes estimates challenging to audit and how auditors actually address them, which may indicate a way out of this conundrum:

- First, data analysis suggests that yesterday's solution has turned into today's problem: estimates cannot be assured - and yet, they have to be audited. This yields insights into the debate of skepticism in the audit of estimates, and informs a redraft of ISA 540.
- Second, the development of an insurance approach to audit would bring a welcome alternative to the failing assurance approach, as auditors' focus on optimizing the value of their insurance would mechanically reduce the expectation and information¹¹⁰ gaps.

Altogether, the renewed understanding of uncertainty and skepticism introduced in this report sketches a promising renewal of audit as an expertise in skeptical challenge with an aim to bring comfort in areas of uncertainty.

Where auditors achieve comfort based on their skeptical challenge of management, then insurance acts like a swap: the uncertainty of the estimate changes hands, even in the most challenging cases. Where they fail to do so, investors may still benefit from the clear delineation of areas of uncertainty with which they may further engage management.

¹¹⁰ The information gap stands for the difference between the information users believe is needed to make informed decisions, and what is available to them (See the IAASB consultation paper: «Enhancing the Value of Auditor Reporting: Exploring Options for Change», May 2011, p.8)

Audit as insurance therefore creates a structural symbiosis between investors and auditors, and the work of investors really begins where the work of auditors ends. This renewed identity, which would be best structured as insurance, may provide an unprecedented opportunity to unleash audit's full potential and serve the best interests of audit stakeholders as well as society as a whole.

Casting a new light on uncertainty and the use of skepticism in the audit of estimates

The currently prevailing assurance approach to audit is geared towards the evidentiating of the conformity of the financial statements to an applicable accounting framework. The standards assume that auditors have the ability to achieve an evidenced opinion (professional judgment), in an uninfluenced manner (professional independence).

Specifically, ISA 540 provides that auditors should adapt their procedures as a function of estimates' inherent uncertainty, and use professional skepticism to identify conditions for management bias in the computation of an estimate and adapt their procedures accordingly, with a view to achieve adequate independent evidentiating.

However, estimates are challenging to assure because auditors are dependent from management to make sense of highly specific business circumstances, and their opinion cannot be fully evidenced, for lack of adequate external benchmarks.

In practice, experienced auditors do not use skepticism to evidence their audit opinion, but rather as an external constructive challenge to achieve comfort that the estimate is the best possible - so that actual estimation uncertainty begins only where auditors' comfort ends.

As a result, the standards may find advantage in addressing circumstantial audit uncertainty rather than inherent estimation uncertainty. Specifically, in ISA 540, whether an estimate is measured at fair value or not is of limited impact on audit uncertainty. On the contrary, the discussion on how to address significant risks is most relevant and may be underdeveloped. A systematic analysis of challenging audit situations (see 3.2.3) could help foster improvement.

Further, it appears that skepticism has a deeper purpose of allowing the gradual creation of comfort in the challenge of management estimates, in cases when sticking to the ideal of independent professional judgment would merely lead to biased assurance behavior. Rather than a mark of auditors' failing professionalism, the observed lack of skepticism in the audit of estimates may therefore be a consequence of the structural inadequacy of assurance.

In a stark contrast, a shift to insurance would best assist audit in facing the challenges of the expectation and information gaps.

Bridging the expectation and information gaps in the audit of challenging estimates

Because auditors depend on management's input to assess the reasonableness of challenging estimates, their objectivity may be impaired. Moreover, reporting an opinion about estimates which are closely related to business specificities may threaten confidentiality.

To ensure objectivity and confidentiality in the assurance approach, auditors have to resort to artifices, thus widening the expectation and information gaps. On the contrary, the insurance approach structurally addresses this challenge and helps reduce the gaps.

First, to preserve the objectivity of their assurance opinion in spite of being dependent on management input, auditors have to assume management's honesty, in a blatant denial of auditees' interest to manage earnings. This has fueled the expectation gap.

Skepticism was introduced in the standards to meet that concern: though they assume management's integrity, auditors should be alert to fraud and critically assess evidence¹¹¹. But the impact on auditors' liability, and thus on users' confidence, is arguably limited¹¹².

¹¹¹ See ISA 200.A22, .07, and .13.1

¹¹² In spite of regulators' vigilance, a lack of critical assessment may be difficult to demonstrate. Moreover, in practice the legal mean of lack of skepticism can only be actioned by demonstrating a failure in evidentiability, for which auditors are liable as such- thus making the skepticism provision legally useless.

By contrast, the insurance contract is designed to provide comfort, not conformity. Management's honesty is but another criteria which auditors are free to take into account, or not, in assessing whether they are comfortable enough to issue a hedge¹¹³. Moreover, to optimize the value of insurance, auditors have an interest in challenging management and pay close attention to potential fraud. This is likely to enhance confidence and reduce the expectation gap, whether auditors' opinion may be fully objective or not.

Second, to avoid confidentiality issues and exposure to litigation when assuring the reasonableness of matters closely related to business, auditors have to minimize qualitative disclosures in spite of stakeholders' demand. This has fueled the information gap.

To meet that concern, the standards provide that key audit matters be mentioned in the audit report¹¹⁴. However, this forward-looking move may come halfway through relevance as it still restricts disclosure and actually increases the litigation risk¹¹⁵.

By contrast, selling a hedge against the misstatement risk does not require that auditors make their opinion public. Acknowledging that there remains audit uncertainty relative to an estimate communicates a judgment about the audit, not about the estimate.

Moreover, to limit their exposure, auditors have an interest to clearly delineate their areas of discomfort in the covenants, so that investors will know with what matters to engage management. This is likely to reduce the information gap while preserving confidentiality.

Eventually, a shift from assurance to insurance would meaningfully address the challenges faced by the profession, and open whole new perspectives that would make audit highly relevant again. However, the multifold consequences of such a shift have

¹¹³ In the absence of external benchmarks, auditors' insurance (pledge for repayment) is what ultimately makes the reasonableness of a challenging estimate objective.

¹¹⁴ See, e.g., ISA 701. Auditors should list the key audit matters, explain their choice in specific terms without disclosing original information, and give an overview of the procedures used to address the matter.

¹¹⁵ Investors are likely to be already aware of available information pertaining to areas of importance to them, and auditors may not be in a position to give specifics and thus take extended exposure to litigation with regard to the most challenging audit matters. Moreover, mentioning the audit procedures in challenging matters might not have a beneficial effect on perceptions of audit quality as it would make the irrelevance of assurance even more transparent.

yet to be more fully investigated in a feasibility study which would benefit from the IAASB's input.

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Annex 1 - Simplified example of covenants to an audit insurance contract

Example of contractual clauses and their effects for a manufacturing auditee

This example is only intended for illustration of the writing and consequences of covenants to the contract. It trades off complexity and precision for the sake of clarity.

In his basic work during the audit of a manufacturing corporation, the auditor has grown uncomfortable with the value-in-use of production assets because of uncertainties relative to future cashflows (loop 1, decision 1 in the decision tree = "yes", see b above). The auditee agreed to be challenged and pay the corresponding fees (loop 1, decision 2 = "yes").

Future cash-flows in a manufacturing context depend on future expenses and future sales, which themselves depend on the number of units sold and the cost or price per unit. Proceeding to further inquiry, the auditor becomes comfortable with projections of cost and price per unit, as they follow an easily identifiable historical trend and that everything indicates that this pattern may not be changing¹. But there remains discomfort as to the number of units sold (loop 2, decision 1 = "Yes"). As the auditee is now unwilling to face further challenge (loop 2, decision 2 = "No"), this area of discomfort has to be disclosed as covenant to the audit insurance contract.

Assume that management expects to sell 1,5 million units (MU) next year, even though independent expertise forecasts MU 1,3. Note that the auditor may achieve a more intimate understanding of the circumstances than the independent market expert², which enables him to tell whether management is reasonable to believe that MU 1,5 will be sold next year in spite of overall market trends.

To exemplify how the auditor may choose to express his degree of comfort into clauses to the insurance contract, the following cases may be contemplated among many others (everything else remaining equal):

- From his challenging interaction with the auditee, the auditor feels fully comfortable with the reasonableness of the auditee's assumption in spite of the independent expertise and issues unrestricted insurance.

Then, if only 1,1 Million vehicles were actually sold, the auditor would have to take the loss for 100% x total impact on the P/L of a shortfall of 400 000 units in sales (= MU 1,5 - MU 1,1)

- The auditor feels that it is slightly more likely than not that the assumption is too optimistic and insures only 40% of the losses due to misstatement.

Then, if only 1,1 Million vehicles were actually sold, the auditor would have to take the loss for only 40% x total impact on the P/L of a shortfall of 400 000 units in sales (= MU 1,5 - MU 1,1).

- The auditor feels it is very likely that the auditee's assumption of MU 1,5 is too optimistic, but not altogether unrealistic, and that it is very likely that the independent expertise of MU 1,3 is reasonable in the circumstances. He decides to insure only 10% of the losses due to misstatement relative to the auditee's assumption, but feels comfortable enough to take 95% of the losses due to misstatement relative to the independent expert's assumption.

If only 1,1 Million units were actually sold, the auditor would have to take the loss for 95% x total impact on the P/L of a shortfall of 200 000 units (= MU 1,3 - MU 1,1), plus 10% x total impact of a shortfall of 200 000 units (= MU 1,5 - MU 1,3).

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As a partner, Christian oversees the strategy and execution for all of EY's risk-management activities, including independence, ethics and compliance.

Previous experience

Christian joined EY in 1978 and has held a number of leadership roles. He has led EY's Global Financial Services and Global Assurance and Advisory Business Services (AABS) practices in France, where he was previously the Professional Practice Director.

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Christian graduated from ESCP, the European School of Management in Paris. He is a Chartered Accountant registered with the OEC (Institute of Chartered Accountants) in Paris, and a Statutory Auditor registered with the Versailles Court of Appeal.

François-René Lherm

As a PhD student, François-René has developed the *performative experiment*, an experimentation method customized for use in the social sciences. This report is the result of a performative experiment conducted to study the role of scepticism in the audit of estimates.

He is currently conducting a performative experiment to study the recent merging of the French régions with the Research Chair Deloitte and ESCP Europe for public management, in association with ENA.

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