The Role of Imagination in Entrepreneurship, Organizations and Organization and Management Theory (OMT)

By Joep Cornelissen, VU University Amsterdam and University of Leeds

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In recent years, it has become a bit of a fashion to lament the declining influence of organization theory (OT) in business and management research, and the social sciences more widely. This is often attributed to institutional forces and dynamics that foster a focus on micro-psychological or economics models of management in business schools (Khurana, 2007) as well as to the 'failure' of OT scholars in not being sufficiently imaginative in reviving the field and developing new and influential theories that become used and sourced by others in the academy. For example, the point has been made that many of the classic theoretical canons such as population ecology, agency theory, transaction cost economics and institutional theory emerged in the 1970s, but with little real innovation since (e.g., Davis, 2010; Suddaby et al., 2011).

At the same time, I think it is fair to say that OT is alive and kicking: OMT is the biggest division at the Academy, EGOS grows every year, and theories such as institutional theory have a strong presence across bodies of scholarship including areas of strategy and international business. Hence, it may not be such dire straits. In my talk, I am therefore not going to take up a particular position on the state of OT and its possible future. Instead, I will focus on the role of imagination in OT and what it may bring to the discipline. I will do this in a roundabout way by first discussing imagination in the context of entrepreneurship and organizations. I will try and sketch some important constituent processes of imagination as well as psychological and social conditions surrounding imagination. In the context of entrepreneurship and organizations, I will point to processes of analogical, metaphorical and counter-factual reasoning as the basis for imagination, and I illustrate how these processes are often both verbal and visual, cognitive and embodied (in a kinesthetic sense)[1].

Then once I have detailed these processes I will turn to OT and describe what lessons there are for organizational researchers and theorists wanting to be entrepreneurial in imagining new theories, as well as ones that (based on the

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[1] As an aside, I will also briefly touch upon the difficulties of getting research based on visual data (e.g., videos or pictures of bodily gestures) published in management and organizational journals.

contours of the analogue) are more likely to be mainstreamed and used by other scholars within OT, business and management research and across the social sciences.

Theory development in OMT: A synopsis

Within management and organization theory (OMT), there is an extensive literature on the use of traditional forms of scientific logic (deduction, induction, abduction) (e.g., Mantere & Keotikivi, in press). Across this literature, these forms of logic have been characterized as forms of practical reasoning; that is, as a process of argumentation by which we, in our scientific texts, proceed from various grounds to various claims to convince a scholarly audience (e.g., Locke & Golden-Biddle, 1997). As it is generally accepted that there are no universally accepted and absolute principles to govern such reasoning and the persuasiveness of the resulting arguments (Ketokivi & mantere, 2010; Mantere & Ketokivi, in press), scholars have instead highlighted the importance of pragmatic virtues of a deductive, inductive or abductive argument in context, such as its simplicity (Weick, 1989), coherence (Shepherd & Sutcliffe, 2011), contrast (Boxenbaum & Rouleau, 2011), interestingness (Alvesson & Sandberg, 2011) or usefulness (Corley & Gioia, 2011).

Whilst prior work in OMT has primarily emphasized the pragmatic reasoning and justification of arguments in context, in stark contrast the body of literature on science in action lends credence to the idea that the basic units for scientists in working with theories are most often not axiomatic systems or formal logic, but conceptual models and representations that they construct, manipulate, adapt and evaluate (e.g., Darden, 1991; Hesse, 1963; Nersessian2008; Morgan & Morrison, 1999). Histories of the sciences also show that in building a theory or in developing an alternative version of it, modeling often comes first, with further abstraction to formal expression in logic and axioms of theories following (Hesse, 1960: Kuhn, 1993). A model can be defined loosely as a representation of a system with interactive parts and with representations of those interactions. A constructed model is largely conceptual in nature in the sense that it is an imaginary system designed to be a structural, functional or behavioral analogue of a target phenomenon that scientists seek to explain (Nersessian, 2008: 10).

Embracing the notion that science in action involves reasoning and thought processes around conceptual models and representations of target phenomena challenges the focus on the traditional canons of formal logic. In one sense, it asks for a fundamental rethinking of the deeply ingrained notion in OMT and elsewhere that equates reasoning with logic in science (Nersessian, 2008). Disconnecting the two is, however, necessary. For example, although it may well be possible to re-derive the outcomes of the reasoning associated with creative thought and theoretical innovation by means of logic, that move can often only take place after the creative work has been done, and so leaves the discovery and creativity process a mystery. The notions of reasoning with which philosophy has been preoccupied are also too narrowly constrained and have led to the mistaken view that discoveries and theoretical innovations cannot derive from reasoned processes outside of formal logic (Nersessian, 2008; Thagard, 2012). It is thus helpful to distinguish between conceptual and pragmatic forms of reasoning, where the first refers to our cognitive processes and inferential work in action, whereas the latter concerns strictly speaking rhetorical forms of logic and justification in the context of scientific texts (see Boxenbaum & Rouleau, 2010; Ketokivi & Mantere, 2010, for similar distinctions).

Conceptual Change and the Foundations of OMT

The conjecture that conceptual change happens through combining or contrasting conceptual models and representations is consistent with recent work in the cognitive science of science (e.g., Thagard, 2012), but the evidence for it within OMT has been restricted to a few examples (e.g., Boxenbaum & Rouleau, 2011). In this section we therefore aim to provide a more thorough evaluation of the conjecture by seeing whether it applies to well documented cases of conceptual change in management and organization theory. The premise for doing so is that any generalizations about the mechanisms behind conceptual change need a more systematic look at a larger number of episodes. Accordingly, we conducted an analysis of the cases describes in the edited volume on *Great Minds in Management* (Smith & Hitt, 2005). The editors of the volume are reputable researchers who selected 24 of the most original and impactful theories in our field. They asked leading scholars who were either the initiators of these theories or have been intimately involved in their development, and the chapters in the volume detail reflections of these scholars on the processes of theory development that they went through (Smith & Hitt, 2005: pages 2-3). For our purposes here, there is no need to

defend the claim that these are exactly the greatest or most original theories in our community, but only that they are undeniably a large collection of very significant theories and theoretical advances, from institutional and resource dependence theories to theory on psychological contracts and on fairness and trust. Most crucial for a serious assessment of the basis of conceptual change, the examples were not chosen by us and so were not biased by a motivation to confirm rather than refute our typology.

In the talk, I will highlight that the primary result of our analysis of these 24 theories is support for a typology concerning analogical and counter-factual conceptual reasoning (see Table 1 below). No counter-examples were found. But the study of each of these theories and their inception is interesting in other ways and provides a much more fine-grained picture of the nature and variety of conceptual reasoning behind theory change. It served for example to clarify the differences between generating new propositions and causal explanations and generating new concepts, with only the former occurring in all cases. In looking at the list of theories, we also note that the theoretical landscape forms an important basis for triggering and enabling a particular form of reasoning. For example, strongly held but limited default assumptions form a key target for a form of constitutive counter-factual reasoning that not only inserts a new set of assumptions but also elaborates a new set of explanatory mechanisms. On the other hand, if the apparent questions in the community are not at the level of underlying assumptions but the direction of causality or the nature of explanatory mechanisms, conceptual change tends to consist of counter-factual reasoning in the form of causal modeling as illustrated with the example of referent cognitions theory.

Another interesting observation is the way in which incipient empirical observations (e.g., about escalating commitment, executive decision-making at the top of an organization) led in a number of cases to an analogical transfer of assumptions, concepts and explanatory principles from other fields that in essence formed a basis or stepping stone to flesh out a new theory. Furthermore, besides the triggering role of empirical observations, it is also striking how many theoretical innovations come about from personal interests in a broad range of topics and literatures. As such, it highlights the crucial role of personal biography and of systematic forms of reading and reasoning across theories and literatures, often in a quite intentional and

purposive way rather than what is sometimes assumed to be the result of a random variation or serendipity (Weick, 1989).

We also found a significant analogical component in all of these cases. Dunbar (1995) distinguished between 'local' and 'distant analogies' in scientific reasoning with local ones operating within a single domain of knowledge and understanding and long-distance analogies operating across domains. Okhuysen and Bonardi (2011) make a similar point in their recent discussion of theoretical innovation through the analogical combination of theories from within (local) and across (distant) fields of social science. The three examples of conceptual integration in the list are for example near analogies that involve the alignment of theories and constructs from within the same domain of knowledge, such as organizational behavior and organizational economics, whereas other cases in the list indicate relatively more distant analogies that borrow ideas from psychology, cybernetics, and law. At the same time, it is fair to say that even these source domains are not miles apart from the home turf of OMT. One explanation for this may be that the pragmatic conventions around reasoning in our community favor changes and presentations that clearly build on, but then mark, the difference from prior theory (e.g., Boxenbaum & Rouleau, 2011; Locke & Golden-Biddle, 1997; Mantere & Ketokivi, in press), which may constrain and compress the range and variety of theoretical innovations that are deemed to be pragmatically possible.

The cases of conceptual change in *Great Minds in Management* also recognizes distinct ways in which analogies can be used, as theory building tools, and with such uses varying in terms of the scope and aims of the analogy. It points to the extent to which an analogy is simply used as a heuristic device – as a mirror image to reflect on current assumptions or as a prod towards the development of new constructs and hypotheses – or is imported and integrated as a causal template into the very fabric of management and organizational theory as in the case of theory on psychological contracts. The heuristic type, as for example illustrated by the theory of sensemaking or upper echelons theory, is focused at least initially on importing new assumptions into OMT and does this by largely promoting (on the back of an analogical argument) novel theoretical perspectives and novel constructs. The analogy that sparked the original insight is not always mentioned as part of this promotion and often quickly disappears from view. Heuristic analogies typically involve an extension of concepts and theories from another domain into OMT, where

OMT may provide a more applied context for fundamental theories of, for example, cognition, decision-making or behavioral enactment (Argawal & Hoetker, 2007). The key challenge towards building new theory is for this application to generate additional and emergent constructs and explanations that lead it to become an increasingly independent and distinctly managerial or organizational theory.

A final important observation is the absence in the list of spotlight counter-factuals, which is even more remarkable given the promotion within OMT of this type of reasoning for creating new theory (e.g., Alvesson & Sandberg, 2011; Oswick et al., 2011: Weick, 1989). The reason for this may be straightforward: with spotlight-counterfactuals there is generally speaking little concern with clearly specifying antecedents, consequents, and principles of causal connection, with demonstrating consistency with basic observations or established theoretical principles, or even with figuring out and elaborating a coherent set of probable theoretical explanations (Turner, 1996). In fact, a researcher may ignore any emerging candidate inferences that are inconsequential for its basic heuristic function of suggesting novel theoretical assumptions that present an interesting turn away from any previously held assumptions (see, for example, Alvesson & Sandberg, 2011; Oswick et al., 2011; Weick, 1989). The key point is that spotlight counter-factuals suggest a change in theoretical assumptions and offer a prod in a certain direction, but as Cornelissen and Durand (2012: 153) remark; "by themselves, spotlight counterfactuals are merely a potential starting point for reconsidering theory and research in a particular domain, and the question of whether an interesting thought or reflection translates into progressive theory with explanatory value is far from certain". What may be required therefore for significant conceptual change is a conjoint focus on elaborating alternative causal dynamics and candidate explanations that contrast with default theory. In fact, the significance of this assertion is drawn out by the significant use of constitutive counter-factuals in theory building that pairs alternative assumptions with an elaboration of concepts and causal or propositional models. Coase, for example, did not stop at questioning the absence of firms in coordinating production, and equally Freeman set out to elaborate the implications of shifting assumptions from stockholders to stakeholders in managerial decision-making.

Table 1: Types of Analogies and Counter-Factuals as Part of Theory-Building

Theorizing tool (type of reasoning)	Definition	Typical application	Illustrative references in OMT
Analogies			
Heuristic analogy	Extension of ideas and assumptions from other contexts into OMT with the purpose of suggesting new and alternative assumptions	Developing new constructs in relation to a target phenomenon	Weick (1989), Bacharach (1989), Shepherd & Sutcliffe (2011)
Causal analogy	Extension of causal models from other contexts into OMT with the purpose of suggesting new hypotheses and explanations	Developing and refining explanations of a target phenomenon	Hannan et al. (2007), Okhuysen & Bonardi (2011)
Constitutive analogy	Alignment and integration of OMT concepts with concepts from other contexts with the purpose of providing an integrated conceptual model with coherence in its base assumptions, default logic and hypotheses	Inserting a new theoretical perspective and vocabulary for advancing our understanding of a target phenomenon	Tsoukas (1991), Cornelissen (2005), Morgan (1980)
Counter-factuals			
Spotlight counterfactual	The challenging of default assumptions through contrastive questioning	Rewriting default assumptions around a target phenomenon in alternative terms	Alvesson & Sandberg (2011), Oswick et al., (2011)
Lab-rat counterfactual	The identification of important causal factors and causal patterns through contrastive questioning	Establishing causality and reducing the causal field of factors around a target phenomenon to a more parsimonious set	Tsang & Elsaesser (2011), Durand & Vaara (2009)
Constitutive counterfactual	The alignment and integration of a default theory with an imagined counter-alternative model with attendant assumptions and a causal logic	Inserting a radically new theoretical perspective and vocabulary for advancing our understanding of a target phenomenon	n/a