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Approaching the Conceptual Leap in Qualitative Research

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This paper reviews the literature on an important but mysterious phenomenon in qualitative research methodology: the conceptual leap that generates abstract theoretical ideas from empirical data. Drawing on epistemological, prescriptive and reflexive writings, conceptual leaps are described as constituted by both 'seeing' and 'articulating', as grounded in abductive reasoning, and as part of an ongoing dialectical process. Methods for approaching conceptual leaps and the conditions for their realization are discussed in the context of four dialectic tensions: between deliberation and serendipity, between engagement and detachment, between knowing and not knowing, and between self-expression and social connection. The literature review suggests that conceptual leaping is best portrayed as a form of bricolage, drawing resources from the different poles of the four dialectics. Moreover, written and verbal communication play important roles in enabling synthesis. The paper concludes by calling for greater openness and legitimacy for reflexive accounts, as well as further research into the process of discovery in qualitative research.

Introduction

The fact that we cannot explain the magic in qualitative method does not mean we ought not to think about it, to discuss it, and to argue about it. (May 1994)

Typical presentations of method in qualitative studies follow the norms of academic prose, tending to emphasize the 'disciplined pursuit and analysis of data' (Golden-Biddle and Locke 1993, p. 604). References to 'magic' (see above) would hardly be seen as legitimate. Yet, as recognized by many qualitative researchers (Carlsen and Dutton 2011; Glaser and Strauss 1967; Langley 1999; Locke *et al.* 2008), there is almost always an element of difficult-to-codify insight in developing theoretical contributions

The authors would like to thank three anonymous reviewers for their constructive comments on an earlier version of this paper. The authors are also grateful to the Social Sciences and Humanities Research Council of Canada for its financial support. from qualitative research: a shady area of methodology to which no failsafe recipe can guarantee access. It is precisely our capacity to penetrate that gray zone that will make or break any qualitative study. Our rich data and carefully executed analysis will be as naught if we cannot somehow make it speak, i.e. find a way to achieve those all-important 'conceptual leaps' that can enrich understanding.

In this paper, we aim to elucidate the notion of the conceptual leap in 'discovery-oriented' qualitative research (Locke 2011) where conceptual insight of some kind is expected to 'emerge' from data. Our position is that, although no one has managed to develop a method of deterministically producing a conceptual leap, there are many ways of attempting to stimulate it or approach it, and that there is value in reviewing these, integrating them and making them as explicit as possible.

Three types of literature were used to develop this review. First, we drew on epistemological and conceptual contributions discussing the nature of conceptual leaps in qualitative research. Second, we reviewed prescriptive methodological texts offering advice on theory building from qualitative data. Third, we examined a range of reflexive accounts or 'confessional tales' (Van Maanen 1988) from both inside and outside the social sciences. Like any other form of academic prose, including formal methods sections, these accounts no doubt reflect elements of impression management, the epistemological preferences of their authors, and the norms of the publications in which they appear. Yet they have distinctive value for their window on the 'creative and open-ended dimensions' of qualitative research that are largely missing from organizational research methods discourse (Locke 2011, p. 630). Themes uncovered across the three bodies of literature were combined to develop the portrait presented here.

We begin by defining what we mean by the 'conceptual leap' and explaining its epistemological and conceptual foundations. Drawing on the sources described above, we then propose a dialectical framework for considering the process of 'conceptual leaping' and use this to explore the methods and conditions that are believed to contribute to it. We conclude with suggestions for integrating dialectic tensions and suggestions for further research.

Conceptualizing the conceptual leap

At the time I had completed two observations, my method had enabled me to 'find' the basic elements of my theory, but I did not see them. In my initial attempt to make conceptual sense of my observations, I was earnest and enthusiastic, but not very successful. (Gersick 1992, p. 54)

We define a 'conceptual leap' in the context of qualitative research as a consciously realized and abstract theoretical idea in an empirical study that may or may not make its way to a theoretical contribution in its final form. Making a conceptual leap involves bridging the gap between empirical data and theory: moving from the mass of words and other data (the world of the field), through and beyond the mechanics of analysis to an abstract and explicit set of concepts, relations and explanations that have meaning and relevance beyond the specific context of their development (the world of ideas). A conceptual leap involves both 'seeing' and 'articulating' and, as we shall see, these elements are often inextricably intertwined (Richardson 1994; Van Maanen 1988). 'Seeing' implies uncovering new ways of making sense of some aspect of existing social worlds.

'Articulating' implies representing this new understanding, either privately to oneself through writing or visualization, or publicly as one attempts effectively to communicate new insights in discussions, publications or presentations.

Indeed, different qualitative methodologies may imply the creation of articulated conceptual products at a range of levels of generality and abstraction. At one extreme, Glaser (2007), one of the originators of grounded theory (Glaser and Strauss 1967), has insisted that a 'formal grounded theory' requires the generation of concepts that are 'abstract of time, place and people' and that have 'enduring grab'. More commonly, qualitative researchers aim to generate 'substantive theories' that apply to particular activity domains (Eisenhardt 1989; Glaser and Strauss 1967). Others have set forth more modest theoretical ambitions in accordance with interpretive assumptions. For example, describing the potential of organizational ethnography, Bate (1997) refers to the importance of what he calls the 'point' or the 'punch line:'

A good punch line in ethnography is like a good tune, one that you can't stop humming once you've heard it. [...] The punch line gives the research a point, but it also synthesizes, synopsizes, or simplifies [...] The best punch lines [...] enable people to realize something that was previously unrealized, and comprehend something that was previously not comprehended. (Bate 1997, p. 1169)

Similarly, in discussing 'small-N' studies, Tsoukas (2009) insists that their value is profoundly embedded in the ability to capture situated specificity – to answer the question 'What is going on here?' And yet, this first question is in constant 'dialogical tension' with another more abstract but important question, 'What is this a case of?' that requires researchers to connect situated particularities with conceptual understandings 'extending the radius of application of the concepts at hand, thus helping to make new distinctions' (Tsoukas 2009, p. 298).

In summary, whether the conceptual product of the research is a punch line (Bate 1997), a 'plot' (Czarniawska 1999), the creation of novel conceptual distinctions (Tsoukas 2009), a 'distilled essence' or 'shazzam' (Gioia 2004), a substantive theory (Eisenhardt 1989; Glaser and Strauss 1967), or a fully fledged formal grounded theory (Glaser 2007), qualitative research is expected to deliver some kind of conceptual insight beyond the data themselves.

Achieving that something requires one, and very likely more, 'conceptual leaps'.

Before delving into the literature on methods for developing conceptual leaps, it seems important to situate this notion epistemologically and theoretically. How can the phenomenon of 'discovery', 'insight' or 'generativity' implicit in the notion of the conceptual leap be framed? The literature suggests that the conceptual leap is grounded in abductive reasoning, that it should be seen as part of an ongoing process, and that this process has important dialectical qualities. We explain these points below.

The conceptual leap as grounded in abductive reasoning

Abduction is . . . a cerebral process, an intellectual act, a mental leap, that brings together things which had never associated with one another: A cognitive logic of discovery. (Reichertz 2007, p. 220)

In reaction to the hypothetico-deductive theory testing model, early renderings of the logic of discovery in qualitative research described it as 'inductive' – implying the production of generalizations through extrapolation from the observation of particularities (Eisenhardt 1989; Glaser and Strauss 1967). Recently, scholars have tended to see this label as problematic, as it suggests a form of naïve empiricism that ignores the inevitable contribution of pre-existing theoretical ideas (however amorphous) to emerging insights as well as underplaying the role of imagination. Increasingly, scholars have drawn on Peirce's (1958) notion of 'abduction' as inherent to discovery-oriented research, including grounded theory and ethnography (Agar 2010; Locke et al. 2008; Van Maanen et al. 2007).

Abduction implies a reasoning process in which ongoing observations lead to some kind of surprise or 'genuine doubt' (Alvesson and Karreman 2007; Locke *et al.* 2008; Reichertz 2007), generating a search for alternative explanations and the production of conjectures about how the puzzling observations might be explained. The best-fitting ideas can then be elaborated. An abductive discovery-oriented research process thus combines inductive and deductive steps. Moreover, it is inherently iterative and recursive (Agar 2010). At its heart lies the conceptual leap. However, conceptual leaps are not disconnected conjectures. They are embedded in observations and informed by ambient ideas.

From the conceptual leap to conceptual leaping

The notion that conceptual leaps emerge over time through connections between data and ideas suggests broadening the focus beyond the conceptual leap as a singular magical event to consider conceptual leaping as a process. In fact, several researchers have noted that the path towards integrated insight is often punctuated by multiple such events, large and small:

It is rarely *the* insight that makes for an interesting theory. That usually comes from the weaving together of many insights, many creative leaps, most small and perhaps a few big. It's all in the weaving. (Mintzberg 2005, p. 370)

Similarly, Fine and Deegan note:

Qualitative researchers are explorers making 'first contact' with alien civilizations, courting experience through observing diverse times and places, later reanalyzing and rewriting, hoping for heightened awareness to ignite insight. But this insight is not a treasure at the end of the road for the Princes of Serendip; it is one that unfolds with every twist and turn in the road. (Fine and Deegan 1996, p. 6)

Thus, the process seems to unfold over time and may be filled with uncertainty and ambiguity. There may be 'aha' moments but some insights may simply emerge gradually over time. For example, Lempert (2007, p. 262) speaks of 'progressively more abstract levels of theorizing'. Glaser (1978, p. 22) remarks, 'Creativity is cyclical and multi-leveled and [. . .] it feeds back in and upon itself in order for the generation of ideas from data to occur'. Moreover, as Weick suggests, there may be periods of setback and renewal:

[In the study of] wild-land firefighting, that project seemed to be running out of gas when there was little I could think of that would move beyond my initial reframing [...]. But a trip to the smoke-jumper base in Missoula, Montana, conversations with fire-fighters, free association, free writing, and mental stimulation drove me deeper into themes such as 'drop your tool' [...], and 'never hand over a fire in the heat of the day' [...]. It was as if the complete pattern in my initial fascination had been restored and the human condition was once more visible in people trying to outrun an exploding fire. (Weick 2004, p. 189)

Leaping, as seen in these examples, appears to be a cumulative, albeit potentially discontinuous and

meandering journey during which one cannot foresee how or when the next leap will come. Each leap, whether or not it is ultimately kept or discarded, could be important in the journey toward a theoretical contribution. But what kind of process is this? More critically, for the researcher wading knee-deep in qualitative data, how can it be stimulated or encouraged?

Conceptual leaping as a dialectical process

The notion of abduction in itself implies the synthesis of apparent opposites: induction and deduction. As we reviewed the literature on conceptual leaps, we were struck by the frequency of elements of opposition or contradiction. Sometimes this is explicit. For example, Weick (1989) speaks of theory-building as 'disciplined imagination'. Similarly, Locke (2007) refers to the need for 'dual-thinking modes', which she labels 'rational control' and 'irrational free play' in the development of grounded theory. Sometimes however, contradictions are implicit and appear across authors rather than within contributions. For example, while some authors propose deliberate 'methods of discovery' (e.g. Abbott 2004), others insist on the role of chance and serendipity (e.g. Fine and Deegan 1996). While some urge closeness to data (Glaser 1978), others note the need for incubation (Mellor 2007). While some emphasize the role of experience and prior knowledge (e.g. Morse 1994), others highlight the value of freshness and naïveté (Nifadkar and Tsui 2007). And while some emphasize the deeply personal nature of theorizing from qualitative data (Kisfalvi 2006), others focus on the need for social connectedness (Smith 2002). To the extent that conceptual leaping can be understood at all, we came to see these tensions and their interplay as characteristic of the phenomenon itself. The image of four dialectic tensions implicit in the process of generating conceptual leaps therefore structures our more detailed presentation of the literature in the sections that follow, and is illustrated in Figure 1. The four areas of tension that we identified are between deliberation and serendipity, between engagement and detachment, between knowing and not knowing, and between self-expression and social connection.

Deliberation vs serendipity

As Weick (1989, p. 522) has noted, 'In general a theorizing process characterized by a greater number

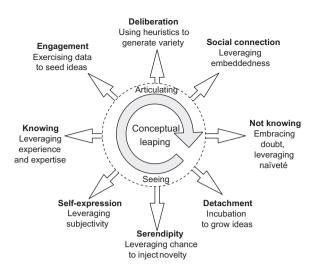


Figure 1. Dialectic tensions encircling the conceptual leap

of diverse conjectures produces better theory than a process characterized by a smaller number of homogeneous conjectures'. In attempting to develop theory, it makes sense then to find ways of stimulating novel formulations. Several authors have put forward deliberate ways of achieving this – labeled 'heuristics'. However, curiously, most reflexive accounts tend to emphasize the role of deliberation only for the more convergent aspects of research, with insight more frequently attributed to serendipity or chance. We explore this tension here, examining its two poles in more detail.

Deliberation: using heuristics to stimulate variety

Sociologist Abbott (2004) and psychologists Wicker (1985) and McGuire (1997) proposed a rich variety of heuristics for stimulating creativity in the social sciences. Examples include the use of metatheoretical category checklists, metaphor, argument heuristics and spatial/temporal shifts. These ideas are all abstract thinking tools useful for theory building, though not necessarily inspired by formal empirical data.

Meta-theoretical category checklists are sets of broad theoretical alternatives into which theorists can dip in order to nurture emerging ideas. In his article on theory-building, Weick (1989) insisted on the need to draw ideas from a heterogeneous set of theoretical categories to avoid grooved thinking. He referred to Astley and Van de Ven's (1983) two-by-two typology of organizational theories classified as system-structural, strategic choice, natural selection

and collective action as a set of categories that was sufficiently diverse to generate the needed variety. While Weick's (1989) example is specific to organization studies, Abbott (2004) identifies several more generic category schemes. For example, he suggests that Aristotle's classification of causes (material cause, formal or structural cause, effective cause and final cause) offers four different ways of conceptualizing any phenomenon that can be used to stimulate new thinking. Giving the example of pollution laws, he notes:

When we say that the reason for pollution laws is the need for clean air, we speak of final cause. Note that a lobbying group is likely to be the effective cause of those laws, even as a configuration of larger political interests and oppositions is likely to be their structural cause. And the numbers and distribution of those interests are the laws' material cause. (Abbott 2004, p. 96)

Typologies such as Morgan's (1997) seven 'images of organization', Burrell and Morgan's (1979) set of four paradigms based on distinct epistemological and ontological perspectives or Van de Ven and Poole's (1995) set of four generic mechanisms underlying theories of development and change (life-cycle theories, teleological theories, dialectical theories and evolutionary theories) can also loosen up thinking.

In the grounded theory lexicon, 'coding paradigms' or 'theoretical codes' (Glaser 1978) are generic patterns of possible relations between concepts that can play a similar role. For example, Glaser (1978) identifies 18 'families' of theoretical codes that express potential relational forms applicable to data. One of these is the 'six "Cs" '(causes, contexts, contingencies, consequences, co-variances and conditions), which expresses nomothetic relationships between variables similar to Whetten's (1989) generic formulation of components of theory. Similarly, Strauss and Corbin (1990) propose a paradigm for the exploration of any category that involves identifying causal conditions, context, intervening conditions, action/interaction strategies and consequences. Although these formulations have similarities, it is around their use that Glaser and Strauss, the two founders of grounded theory parted company, with Glaser (1992) accusing Strauss of undermining the open-ended generative vision behind the grounded theory method by appearing to advocate the force-fitting of a single predetermined framework. Glaser's (1978) 18 'theoretical codes' are indeed more eclectic, ranging across different elements of sociological theory, and appearing as a more loosely structured palette of options.

Metaphors and/or analogies that transfer concepts from one domain to another offer another wellknown heuristic device for stimulating theoretical creativity (Boxenbaum and Rouleau 2011; Cornelissen 2006; Strauss and Corbin 1990; Weick 1989; Wicker 1985). Famous examples of metaphors that have led to new theoretical streams include the organizational ecology perspective based on biological evolution (Hannan and Freeman 1977) and the 'garbage can theory' of organizational choice (Cohen et al. 1972). Metaphors provide a shorthand that can synthesize a variety of dimensions within a single appealing image, facilitating cognitive processing, while at the same time stimulating potentially generative interrogation about differences and similarities between source and target domains (Tsoukas 1993).

Argument heuristics are another form elaborated on by Abbott (2004), Wicker (1985) and McGuire (1997). They recall Davis's (1971) classic article on interesting theory because they propose emphasizing the unexpected: what was previously thought to be true is argued to be untrue. For example, one of Abbott's (2004) heuristics involves 'problematizing the obvious'. As Alvesson and Sandberg (2011) argued, researchers can make stronger contributions by problematizing taken-for-granted assumptions than by 'gap-spotting' within existing literature. Another heuristic suggested by Abbott (2004) is 'making a reversal' or turning an accepted argument on its head (see also McGuire 1997; Wicker 1985): for example, suggesting that something that has always been seen as a cause is actually an effect (e.g. strategic planning might be seen not as a cause of financial performance, but as an effect of having enough financial resources to hire strategic planners).

Finally, *spatial/temporal shifting* implies changing the context or temporality of one's thinking. Changing the context may even involve shifting the relationship between figure and ground. For example, Abbott (2004) offers Hochschild's (1983) study of emotional work among flight attendants as an example of how an element usually seen as part of the organizational context (emotions in the workplace) was brought into the foreground as part of the work itself. Temporal shifting might involve moving from a static to a dynamic view by 'putting things in motion', (Abbott 2004) or turning nouns into verbs (Weick 1989; Wicker 1985), enabling novel insight

by accounting for phenomena such as emergence, recursion and oscillation.

Serendipity: leveraging chance to inject novelty

The juxtaposition of personal accounts of discovery with the deliberation inherent in the techniques reviewed above exposes what seems, at first glance, to be stark contrast. Experiences with conceptual leaps uncovered both within and outside the organizational domain, seem to reveal a significant role for serendipity defined as 'as the unique and contingent mix of insight coupled with chance' (Fine and Deegan 1996). For example, in a reflection on his career, Barley (2004) offers the following account of his work on Barley and Kunda's (1992) study:

For reasons I can't explain, one day I noticed that the estimated timings of the upswings and downswings of long waves seemed to coincide roughly with the eras when we believed significant shifts in managerial discourse had occurred. Thus, the germ of our theoretical account for oscillations between rational and normative ideologies of control emerged serendipitously. (Barley 2004, p. 74)

Note that the 'long wave' is a metaphor derived from economics, and something Barley learned about from reading outside his field (Barley 2004). Inspired by the prescriptive literature, we mentioned metaphor above as a 'heuristic' that could be used to stimulate creativity. We see here that metaphor is indeed useful, but its deployment may be idiosyncratic and accidental. Similarly, in her study of transitions in teams, Gersick (1992) notes how independent readings in areas unrelated to her study helped her to understand her study data:

I think it was not until I had studied and presented feedback to four teams that I realized all of them had 'turned a corner' in the middle of their projects. Even then, I am sure it took one more stimulus to bring the midpoint transition into focus. Dan Levinson's work on adult development (which I had been following avidly for years, for entirely nonacademic reasons) both helped me appreciate important patterns in my own data and showed me ways to understand them. (Gersick 1992, pp. 54–55)

Moving beyond the boundaries of organizational research, the power of serendipitous insight in scientific discovery has been frequently reported and not simply in the legends of Newton's apple and Archimedes' bath. For example, Holyoak and

Thagard (1995, pp. 186–188) tell the story of Kekulé, a chemist, who proposed a new theory of the molecular structure of benzene in 1865. 'According to Kekulé, he was led to the hypothesis that the carbon atoms in benzene are arranged in a ring by a reverie in which he saw a snake biting its own tail'.

There are many other examples of serendipity in conceptual leaps. However, reflexive excerpts and secondary historical accounts also support Pasteur's thesis that 'Chance only favors the prepared mind' (translation from a Lecture, University of Lille, 7 December 1854). These 'serendipitous' discoveries seem to occur in a context of preparedness, after scholars had spent much time deeply engaged in their research projects and, perhaps, having integrated one or more of the devices explained above. In their discussion on serendipity in anthropological and sociological studies, Fine and Deegan (1996) posit that 'theory never develops out of thin air, but is responsive to those intellectual currents that are in circulation and to which the researcher has been exposed'. This implies that important serendipitous stimuli first have to be noticed and then somehow linked with one's research in order to be construed as findings and that these two steps may not occur without a pre-existing internal radar.

Overall, the discussion in this section suggests that the heuristics described above (the injection of variety through multiple theoretical lenses, metaphors, novel arguments and spatial/temporal shifting) can provide valuable resources for insight. However, curiously, their deliberate mobilization rarely features in reflexive accounts of discovery. Rather, it seems as if these intellectual materials are laid down in a much more ad hoc way to become resources only when an occasion serendipitously brings them to the researcher's attention. If this is the case, constituting a 'prepared mind' for conceptual leaping needs to be thought of in a much broader and longer-term way than simply learning the theories and techniques of one's field: the potential for insight can be increased by reading widely in disparate areas (Barley 2004), cultivating social networks inside and outside academia (Fine and Deegan 1996) and accepting eclecticism (what Barley calls 'puddlejumping') as a career strategy instead of the more usual pattern of progressive deepening within one specific study area.

So far, the qualitative data themselves, although central to this review, have played a rather secondary role in our discussion. They are the explicit focus of the second dialectic.

Engagement vs detachment

In her description of dual-thinking modes in grounded theory, Locke (2007) speaks of the 'rational control' and 'irrational free play' dimensions of discovery. By 'rational control', she refers in part to deliberation, but also to the deep engagement with data that is an essential part of the formalized method. By 'irrational free play', she refers to the unexpected connections that may arise when the mind is allowed to wander and explore meanings more creatively. In both of her thinking modes, however, the data seem never far away. Yet several reflexive accounts suggest that more active detachment or 'incubation' may sometimes be helpful. As we discuss below, these seemingly contradictory processes appear to contribute in complementary ways to the ability to make conceptual leaps.

Engagement: exercising data to seed ideas

The 'aha' moment of elation in which the key driver [in my conceptual model] became clear is difficult to describe. I think that insight developed from staying close to the data and constantly thinking about what explanation fit. I felt a bit like the prince in Cinderella trying on a shoe for fit and hoping to find the princess. (Smith 2002, p. 399)

All forms of data analysis and coding are intended to move researchers towards understanding and insight. Locke (2007, p. 577) notes about the data coding process: 'Systematically and deliberately fracturing and naming gets our data inside us and primes the irrational playful modes with the textually materialized details of the lives of those we study'. And yet, as she implies, there is a clear sense that analysis is not quite enough: analysis breaks down the data, but cannot on its own offer holistic understanding. Unusually for a textbook on qualitative research, Richards (2005) devotes a whole chapter to 'Seeing a whole' and notes, 'The crucial stage of a project, the step where you most need ways of seeing, may have no recognized procedure to follow'. Echoing Locke, she continues:

At this stage, it often helps to be playful. Rather than follow the rulebook, try playing with different ways of looking. Often the best advice is, 'Why don't you try this?' rather than, 'This is how it is done'. (Richards 2005, p. 363)

With this advice as a backdrop, we now take a look at some of the procedures researchers 'might try' according to the methodological literature in order to remain close to their data and build on them to seed insight. We refer to these procedures as ways of 'exercising data', because they imply attempts to imaginatively interrogate them in various ways.

For grounded theorists, 'constant comparison' is one of the fundamental elements of method identified for its generative potential (Glaser and Strauss 1967; Strauss and Corbin 1990). The comparing of incidents (Glaser 1978), cases (Eisenhardt 1989), time periods (Langley 1999) or emerging concepts with known situations in search of similarities and differences provides the grist for raising the level of abstraction and approaching theorization. Beyond this basic tool, Strauss and Corbin (1990, p. 75) devote a chapter to 'Techniques for Enhancing Theoretical Sensitivity', suggesting among other things the use of the basic list of questions 'Who? When? Where? What? How? How much? Why?' to explore emerging categories, focusing on specific data words to explore the variety in their meanings, or thinking about what elements might make one's descriptive observations unlikely. Locke (2007, p. 573) prefers Glaser's (1978, 1992) generative questions: 'What is the central problem faced by the person in this situation? What is happening in this excerpt?' Using a small data extract, she offers a rare example of how detailed coding and more free-wheeling imaginative thinking can contribute jointly to making sense of particular situations.

Other methodologists outside the grounded theory school also offer suggestions. For example, Miles and Huberman (1994) propose heuristics such as clustering and subdividing elements and variables, counting, splitting and generalizing from particularities. Richards (2005, p. 170) discusses ways of 'goading data' by running with a theme, trying on theories from other areas and, again, exploiting comparisons.

Another way of stimulating different kinds of theoretical ideas may be to play with different methodological or analytical templates. For example, Langley (1999) identified seven approaches to sensemaking from qualitative process data that are likely to generate different kinds of theoretical products. These include composing case narratives, quantification of incidents, using alternative theoretical templates, grounded theorizing, visual mapping, temporal decomposition and case comparisons (Langley 1999). These strategies can serve as a set of

generative data exercising tools precisely because of their capacity to produce a variety of different kinds of theoretical outputs. Similarly, Feldman (1995) described four strategies for analyzing ethnographic data (ethnomethodology, semiotic analysis, dramaturgical analysis and deconstruction) that she has used in combination as a way of digging beneath a mass of data to see it in novel ways. She finds that the four techniques complement each other, allowing the researcher 'to go behind the surface understandings' (Feldman 1995, p. 65).

Detachment: incubation to grow ideas

We get interesting theory when we let go of all this scientific correctness, or to use a famous phrase, suspend our beliefs, and allow our minds to roam freely and creatively – to muse like mad, albeit immersed in an interesting, revealing context. (Mintzberg 2005, p. 361)

While methodological texts emphasize immersion in data, many of the reflexive accounts we found situate conceptual leaping in a context of physical and cognitive detachment from them. Wallas's (1926) foundational model of creative thought includes 'incubation' as an important stage of creative processes during which the unconscious mind takes over while taking a break from the problem at hand. In his discussion of the messiness of field research, Mellor (2007) refers to multiple periods of incubation, during which he disengaged from the data and went, for example, for a walk in the park. This often led to new ideas. Outside the organization sciences, Dasgupta (2004) reports in his story of Watt's discovery of the steam engine:

The moment of 'illumination' in the course of a Sunday walk in the park was when Watt arrived at the idea of a separate vessel connected to the steam engine cylinder for condensing the steam without affecting the temperature inside the cylinder. (Dasgupta 2004, p. 407)

Kisfalvi (2006) discusses how staying close to the data actually prevented her from seeing the story her data was telling:

After I had coded data ad nauseum for months and felt that I had reached the point of diminishing returns, I literally could not write a sentence for three full weeks. In allowing me to submerge (...) my emotions about my subject in a sea of codes and

categories, the data coding has, ironically, cut me off from [my thesis topic] and from access to the story my data could tell, the meaning that it held. (Kisfalvi 2006, p. 122)

Both Mintzberg (2005) and Smith (2002) refer to sleeping or the moment of waking from sleep as pivotal moments during which leaping takes place:

The best of creativity so often happens at the interface, just as we wake up, when our more visually inclined right hemisphere, where dreaming activity occurs, connects with our more analytically-inclined left, where speech takes place. (Mintzberg 2005, p. 368)

Many times I would work on (...) a visual map for several days: looking at the sketch in the binder, making a preliminary drawing on the flip chart paper, adding more events, returning to binder materials, and trying to add arrows and linkages to sharpen connections between events. Sometimes, I would crumple up the drawing when I did not feel it was capturing the essence of what managers had described. Other times, the picture would come to me all of a sudden, sometimes during a nap! (Smith 2002, p. 391)

It therefore appears that, whereas the subconscious may be primed to receive and to see because the data is 'inside us' as Locke (2007) put it, the moments at which the leaping takes place may occur during periods when one is not consciously analyzing them.

In summary, our analysis suggests that Locke's (2007) dual thinking modes of rational control and irrational free play may operate at both conscious and sub-conscious levels in conceptual leaping. Conceptual leaps must be primed through the close engagement with data associated with the first pole of the duality. But this is clearly insufficient to complete the abductive process. Peirce (1958) himself identified absent-minded musing as a contributor to abduction (Reichertz 2007), along with surprise and doubt or the uncomfortable state of 'not knowing', which leads us to our third dialectic.

Knowing vs not knowing

A generative moment in research, when a researcher comes to understand something new, is an act of learning. It's particularly difficult for researchers to learn because they are experts in the topics they study and learning requires admitting

that one does not know ... between knowing and not knowing lies intellectual humility, a putting aside of egotistical concerns to focus on what might be learned. (Martin 2011, p. 206)

The very expression 'Chance favors the prepared mind' points to the benefits of deliberation and engagement with data in order to reap the fruits of serendipity and detachment in conceptual leaping. It also suggests the importance more generally of knowledge and experience. And yet, other considerations imply that experience might also be a liability, making it more difficult to step outside the grooves laid down by previous cognitive wiring and to engage in abductive reasoning. This apparent contradiction is explored in this section.

Knowing: leveraging experience and expertise

There are two ways in which experience and expertise may nurture what Glaser (1978) and Strauss and Corbin (1990) label 'theoretical sensitivity' or the capacity to generate conceptual leaps. The first of these is associated with substantive and theoretical knowledge. The experience of the researcher – including life events, background reading and unique training and work trajectories – may offer resources for insight.

Yet, there remains disagreement among methodologists about how much researchers should 'know' before they enter the field and start analysis. Some, including Berg (2004) and Strauss and Corbin (1990, pp. 48-56) explicitly value the prior literature as a source of theoretical sensitivity. Others such as Lincoln and Guba (1985) and Glaser (1978) advocate setting aside the existing literature to avoid contaminating a study with a priori constructs. Moreover, Glaser (1978) suggests that reading should actually begin outside the substantive area of study. Curiously, as pointed out by Kelle (2007), despite his strong inductive stance, Glaser himself was clearly inspired by a deep familiarity with microsociological theory. Covan (2007) offers a revealing personal account of learning grounded theory with Glaser in the 1970s:

Glaser was adding to the comparisons by inserting data that were in his head from personal history, knowledge of other studies and the like. [...] We had been told not to 'review the literature' before beginning to analyze our data, and thus we typically had much less relevant information in our heads than did Glaser. Many were impressed with Glaser's

apparent genius for discovering the basic social processes from which we could frame our dissertations. (Covan 2007, p. 68)

She goes on to conclude:

Now that I have more than 30 years of research experience [...] I am much better at 'doing grounded theory' than I could ever have been as a student. That is because I now have a great deal of experiential data in my own head on theory and research methods. [...] Grounded theory perhaps [...] is best performed by mature theorists who possess the wisdom of experience. (Covan 2007, p. 69)

This brings us to the second way in which knowledge and expertise may contribute: the very practice of conceptual leaping may demand and embed a form of expertise that can only be acquired through experience. This is implicit in Richards' (2005, p. 363) advice: 'If you are able to work with experienced researchers, encourage them to talk about the times that data "fell into place" or "made sense", and to reminisce about why this might have happened. Then try creating such a situation in your own project.'

Paradoxically, some of the authors who most insist on the importance of allowing theory to 'emerge' (as if without human intervention) are also those who also insist on the qualities of the expert practitioner as the source of all theoretical sensitivity (May 1994; Stern 1994, 2007). This practical expertise is described as a form of tacit knowledge that can never be communicated formally. For example, May (1994) notes:

I would argue that an attribute of expert practice in qualitative research is an exquisitely tuned capacity for pattern acquisition and recognition. Pattern acquisition is the ability to know where to look; in this area, the expert analyst may be informed substantially by intuition and creative reasoning. Pattern recognition is the ability to know similarities and differences, based on previous experience. Again these processes cannot be observed or understood directly. (May 1994, p. 18)

Stern (1994) adds:

Students often find it hard to believe, as they begin the research process, that they will ever develop a credible conceptual framework. [...] The neophyte must watch the act and be able to relate it to her or his data. Having transcended the creative process, the neophyte becomes sufficiently proficient to conduct studies independently and to teach other neophytes. (Stern 1994, p. 218)

Given the tacit nature of the knowledge that conceptual leaping appears to demand, these authors see apprenticeship as the best (if not the only) route to acquiring it. If true, this may undermine the potential of the heuristic solutions suggested above, as well as the hope that exercising data by the book will work any magic without experience under the tutelage of a master.

Not knowing: embracing doubt, leveraging naïveté

Despite the insistence by some scholars on the importance of prior knowledge and experience in achieving conceptual leaps, other evidence suggests that too much knowledge and experience, both in the substantive and practice realms, may be a recipe for banality rather than creativity. For example, drawing on Peirce's (1958) notion of abduction, Locke et al. (2008) explore the importance of doubt – not knowing – as a generative element in the process of discovery. As they note (see also Reichertz 2007), Peirce believed that 'genuine' or 'living doubt' was a necessary condition for abduction to occur. This recalls Weick's (1995a) description of sense-making as particularly salient in situations of crisis or surprise when something happens to disrupt the normal course of events (see also, Alvesson and Karreman 2007). The sensation of 'living doubt' is accompanied by an intense need to find an answer, even a 'fear' that one might not be found. One might wonder whether management academics really care enough about the topics of their studies to experience the intense unease that genuine doubt engenders. Yet, as Locke et al. (2008) note:

An experience that can rapidly induce doubt and which many researchers share is the dreaded 'so what' question or the request to know 'what is new here.' These simple questions coming from a dissertation advisor, from an audience at a presentation, from journal reviewers, or even from oneself or coauthors are often capable of producing at least a momentary crisis of confidence, a feeling of having the rug pulled out from under. What was obvious becomes problematic. (Locke *et al.* 2008, p. 911)

Locke et al. (2008, p. 912) suggest three principles for making doubt generative: arguing first for the need to actually 'turn toward/embrace' doubt as a

constructive force rather than to deny it; to follow hunches or guesses that might offer solutions; and to 'disrupt order' by questioning existing beliefs – indeed, they note how heuristics such as those indicated above could contribute to such disruption.

The intensely painful though ultimately generative experience of doubt is often implicit in reflexive accounts. For example, as he describes coping with uncertainties in his study, Mellor (2007) subtitles sections of his story: 'The nightmare begins', 'The horror returns . . .', 'But with one bound, he was free'. Or, as described by Irvine and Gaffikin (2006, p. 136): 'Nobody ever explained how much hard work and anxiety went into the process of data collection, study and analysis before "things suddenly became clear" or "a pattern began to emerge"'.

While many of Glaser's followers invoke the need for apprenticeship and the value of experience in developing insight from data, Glaser (2009) himself has questioned this assumption, arguing on the contrary that novice researchers have an advantage because they are more open to novelty, unformed by prior professional commitments, and more tolerant of the doubt, insecurity and even 'depression' that seems to appear mid-stream (Glaser 1978). He deplores supervisors' temptations to 'rescue' novice researchers from this state, suggesting that in so doing, they tend to impose their own preformed frameworks rather than allowing the creative juices to flow. Supporting this thesis, Nifadkar and Tsui (2007) draw the following conclusion after reviewing Smith and Hitt's (2005) collection of reflections on theory-building:

Clearly evident in the reflections of these 'great minds' is that many of the ideas were formed during the early years of these contributors' scholarly life. [...] What does this imply? For us, this means that idealism and naïveté in young age may be an important feeder of creativity. (Nifadkar and Tsui 2007, p. 301)

In summary, there are countervailing arguments for and against knowing (expertise and experience) and not knowing (doubt and naïveté) as contributive to creative insight. Once again, both poles seem important. Creative thinking can benefit from both diverse knowledge resources and openness to surprise, doubt and uncertainty. Productive mixtures might mean building diverse intellectual resources through continual movement across new work and research contexts, or what Huff (2004, p. 164) described as continuing to 'be an apprentice'. Other strategies

might imply collaboration between senior and junior colleagues. As Gioia (2004, p. 106) notes in describing his experience of qualitative theory-building research: 'I consider Ph.D. students the life force of the theory/research enterprise. Truth is, I depend on them to rescue me from my intellectual fogs and to energize me.'

Self-expression vs social connection

We now come to the fourth dialectic in conceptual leaping: self-expression vs social connection. Weick (1995a) notes that sense-making is both 'grounded in identity construction' and 'social'. To the degree that theory-building is a form of sense-making, this suggests that the sense that researchers make of qualitative data is inevitably intertwined with who they see themselves to be. At the same time, it is necessarily grounded in ongoing conversations with others. We explore this tension next.

Self-expression: leveraging subjectivity

The results that emerged from my research were clearly constructed by me, however carefully I documented the process and however much I checked the original data and the different abstraction levels with members and respondents. There was no doubt in my mind that the constructed truth was idiosyncratic and that any other researcher going on the same journey was bound to discover another truth. (Fendt and Sachs 2008, p. 441)

The idea that the subject may play an important role in the production of insight might be a source of discomfort for some. Does this place qualitative research more in the domain of art than science? And yet, this phenomenon is an obvious corollary of what we have seen so far concerning the importance of the idiosyncratic experience.

Indeed, researchers generally choose topics and methods that resonate with their interests and histories (e.g. Samra-Fredericks 2010). Moreover, the data themselves have often been created through the researcher's agency (as 'instrument') and will be interpreted first and foremost through their eyes. Finally, as Morgan (1983) points out, that which a researcher observes and 'sees' in his or her data is highly dependent on his or her unique frames of reference and on the interaction between that researcher and the research setting. As Locke (2007,

p. 566) put it, 'Theorizing takes place within the confines and reach of an embodied researcher'. For this reason, at least in the social sciences, qualitative data are multi-vocal – there are many senses that might be made of them (Langley 1999).

In accounts of their own experiences with qualitative methods, scholars have argued that it is precisely the highly personal, active and often emotional engagement with research objects that enables important interpretive insight. For example, Glynn (2011) notes on her study of Martha Stewart that 'generativity involves not only methodological engagement but also self-engagement. To understand Martha, I (almost) had to "be" Martha . . . ' (p. 65). Similarly, drawing on the work of Devereux (1967), Kisfalvi (2006) describes an ethnographic study of an entrepreneurial firm and its leader, and provides several illustrations of how her relationship with the firm and its CEO enabled her to see things that others might not: 'It was precisely because of who I was, with its consequences for the relationship that formed with Ben – what he represented for me, and I for him – that I was able to access certain types of data about my subject' (Kisfalvi 2006, p. 123).

Several scholars reflect on the important role of one's emotions in fuelling insight while intensely engaged in a research setting. In the following excerpt, we see how allowing subjectivity and emotionality to penetrate was, for Kisfalvi, a major breakthrough in enabling insight after a lengthy period of isolation amid 'a sea of codes and categories'.

Mainly, I felt a deep sadness for this man whose life experiences had made him into the complex difficult individual he had become, a person with whom I (like his managers) had found it hard to establish a caring relationship, and I began to cry. I believe that in that moment, in which I had once again gained access to the emotions that the fieldwork and Ben had aroused in me and in which rather than suppressing them, I allowed these emotions to become conscious feelings, I began to truly mourn all that could have been, both in Ben's life and in the personal and professional relationship that I had developed with him during the research project. The next day I began to write, and once I started there was no stopping it. I wrote 200 pages of what largely amounted to gibberish . . . but a text that nonetheless contained the germ of my thesis. (Kisfalvi 2006, p. 122)

Carlsen (2011) even calls upon on researchers to pay attention to the body's visceral reactions, which may alert them to important insights that might otherwise be overlooked: 'A quickened pulse or a screaming sensation can be tips of icebergs in interpretation, windows that open to broader vistas of insight' (Carlsen 2011, p. 34).

If conceptual leaping is so intensely personal, some might wonder whether we can take it seriously as a path to the development of knowledge that might have value to others. This draws attention to the opposite pole of the dialectic: social connection.

Social connection: leveraging embeddedness

Some results of this analysis surprise me. In particular, I am struck by how many people contributed to the 'jolts' article, and by how crucial certain contributions were in shaping the final product. (Meyer 1992: p. 97; reflecting on an analysis of documentation surrounding the production of an article on environmental jolts)

While individual identity and personal engagement may be important in generating insights, these insights are unlikely to spread or develop unless they resonate with others. This may mean that their distinctive individuality will need to be adapted to fit into a broader context. Weick (2005, p. 409) suggests that researchers should 'moderate your demands that people agree with your definitions so that they register more nuances in the phenomenon being conceptualized'. Huff (1999) used the metaphor of 'conversation' to describe the disparate arenas within which individual scholars choose to participate. Meyer (1992) refers to an 'invisible college'. Social embeddedness can provide both more resources for generating and developing ideas, but also more conduits for expanding and communicating them.

Social connections that contribute to the process and/or outcomes of conceptual leaping may occur at multiple stages and in varying degrees. For a doctoral researcher completing a thesis, the path requires a relatively isolated process of data collection and analysis in which the greater social world may have input through informal exchanges, formal presentations or peer review. In a detailed reflection on the development and publication of the ideas emerging from her doctoral study, Smith (2002) describes the process of developing insight as a 'give-and-take movement between personal sensemaking and outsider sensegiving':

The disparate voices were directive and, to me, demanded to be heard. These babbling voices pro-

vided their interpretation of what they saw as important in [my data]. I found it difficult to separate meaningful insights from the noise: What were the voices trying to tell me? Which voices were offtrack? Why so many different viewpoints [...]? I was unable to respond quickly when advice was received. Early on, I think that I was searching for the one right interpretation among the advice – the holy grail of outsider insight. Instead, when I look back, what these interpretations provided were new ways of looking at the data. (Smith 2002, p. 401)

She goes on to identify the interactions that were most helpful in developing her ideas: a brainstorming session with her thesis supervisor, a conversation with a fellow academic on a mountain hike, or a constructive exchange with a journal editor.

At a much deeper level of social connectedness in research, collaborative ethnographers may find that different selves intersect in the juxtaposition of individualized interpretations of a research setting, exposing multiple realities (May and Patillo-McCoy 2000). Some argue that multiple perspectives and the comparative conversations that 'confront one another's reality' serve to deepen interpretation, develop fuller portraits of phenomena and facilitate conceptual leaping (May and Patillo-McCoy 2000; Le and Jarzabkowski 2011). Collaborative research in general also allows for motivational contagion as researchers spur each other along (Dutton 2011) or 'feed off each other's excitement' (Le and Jarzabkowski 2011), as was certainly the case for the co-authors of this paper.

Finally, as inspiring and generative as social connectedness may be during the process of conceptual leaping, it must also be noted that, in some cases, formal or informal dialogue with others may act as a constraint rather than an enabler (Nifadkar and Tsui 2007): the reflexive accounts of well-known theorists (e.g. Smith and Hitt 2005) often include stories of early rejection and disappointment, which in some cases may result in the abandonment of ideas. There is a clear tension between giving free rein to imaginative individualism (self-expression) and the testing that may come from exposing one's ideas to others (social connection).

Bridging the dialectics: towards abductive synthesis

In the previous sections and in Figure 1, we described how conceptual leaping in qualitative

research involves navigating among and around a series of dialectic tensions: between deliberation and serendipity; between engagement and detachment; between knowing and not knowing; and between social connection and self-expression. We suggest that the abductive process of conceptual leaping entails bridging across these tensions over time, reaching towards synthesis by building on both poles, but ensuring that neither dominates for too long.

The observant reader of this paper will have noticed that there is a dual pattern underlying our four dialectics, somewhat reflecting Weick's notion of 'disciplined imagination' and Locke's (2007) conception of dual-thinking modes mentioned earlier. Specifically, one of the poles of each dialectic seems to have a structuring or disciplining character (Weick 1989), ensuring that emerging ideas are grounded, whether in logic, in data, in experience or in shared understandings. Yet overemphasis on the disciplining poles may result in becoming 'bogged down' in contrived frameworks (deliberation), obsessive coding (engagement), cognitive inertia (knowing) or collective orthodoxy (social connection). The other pole of each dialectic has a potentially liberating influence, offering openness to chance, to imagination, to surprise and to individuality – elements that are clearly crucial to abduction (Peirce 1958). However, overemphasizing this pole can also be unproductive as researchers wait for lightning to strike (serendipity), forget the richness and nuances of their data (detachment), reinvent the wheel (not knowing) or drift off into groundless personal reflection (self-expression). If there is one central message to this paper, it is that the abductive process is constructed through the synthesis of opposites that we suggest will be manifested over time in a form of 'bricolage'.

Conceptual leaping as bricolage

Indeed, this literature review of conceptual leaping leads us to a view of the creative scholar as a 'bricoleur' (Lévi-Strauss 1962), a term that is gaining more widespread use in social sciences theory and methods discourse (e.g. Baker and Nelson 2005; Kincheloe 2001; Stock 2010). Conceptual leaping is a 'do-it-yourself' process of 'cobbling together' that one undertakes with the tools at hand. There is, and must be, plenty of trial and error, tinkering, playing and testing, during which the scholar draws upon his or her unique toolbox (Stock 2010). The bricoleur is able to engage in multiple, diverse tasks and does not

limit each to the tools available for the project at hand. Instead, he or she accesses a broader toolbox that contains many items collected over time (e.g. ideas, theories, methods, life experiences, skills, social connections), sometimes acquired with a view to their potential usefulness, but often accumulated in a more undirected way.

During the conceptual leaping process, the bricoleur can embrace both 'magic' and 'science' (or imagination and discipline) as two parallel and important paths to acquiring knowledge, remaining wary of acontextual, standardized approaches to the 'craft' (Lévi-Strauss 1962; Mintzberg 2005; Stock 2010). Deliberate use of available heuristics may help researchers to prepare mentally for the possibility of serendipitous findings. Engaging deeply with data and then detaching from it from time to time once it is 'inside us' seems to help ideas coalesce to generate insight. There are some who believe that scholars should work as apprentices with experts of the 'craft'. However, there is also general agreement that, no matter how much experience one has, one can continue to benefit from openness to doubt, surprise and anomaly that can lead to insight. Conceptual leaping is necessarily a process bound to identity, history and context embedded in each individual's own unique toolbox. At the same time, it relies on the scholarly community as a source of stimulation, resonance or sanction for emerging ideas.

We must also add here that verbal and written communication are key tools for the scholarbricoleur, helping him or her navigate across and around the dialectic tensions described above, and contributing to synthesis as next explained.

Communication: the bricoleur's tool

Although we usually think about writing as a mode of 'telling' about the social world, writing is not just a mopping-up activity at the end of a research project. Writing is also a way of 'knowing' – a method of discovery and analysis. [...] I write because I want to find something out. I write in order to learn something I didn't know before I wrote it. (Richardson 1994, pp. 516–517)

Richardson's statement above expresses a common experience in qualitative research: that it is often in the very act of writing that productive conceptual ideas develop and crystallize. Although analysis and writing are often treated in research methods

manuals as distinct steps in the research process, they are in fact closely related (Van Maanen 1988). In discussing the generative power of writing, Huff (1999) reformulates Weick's (1995a) dictum about the retrospective nature of sense-making: 'How can I know what I think until I see what I write?'

We argue here that not only writing, but various forms of verbal communication with self and others at all stages of research play a pivotal role in the abductive process of bridging the dialectic tensions associated with conceptual leaping. For example, while communication is ostensibly deliberate, it is also a place where serendipitous insights must somehow be made explicit if they are to have any life beyond the moment of their generation. Writing or communicating detaches researchers from engagement with data, but at the same time requires them to draw on the results of this engagement while raising questions that are likely to focus further episodes of engagement. Communicating also bridges knowing and not knowing by building on existing knowledge while simultaneously revealing what is not known. And of course, almost by definition, communication bridges self-expression and social connection.

One form of intermediary writing, the 'memo' (Charmaz 2006; Glaser and Strauss 1967), actually holds pride of place in qualitative research, consecrating writing as both a process and product of theorizing. Lempert (2007) illustrates how repeated memo-writing can become the means of tracking the researcher's conceptual train of thought as partially formed conjectures gel, shift and reform:

Memos are the analytical locations where researchers [...] find their own voices, and where they give themselves permission to formulate ideas, to play with them, to reconfigure them, to expand them, to explore them, and ultimately to distill them for publication and participation in conversations with others. (Lempert 2007, p. 247)

In addition to writing, other forms of representation such as drawings and diagrams may contribute in distinctive ways to conceptual thinking (Langley 1999; Lempert 2007) and to its representation. Sutton and Staw's (1995) paper on 'What theory is not?' listed a variety of elements including diagrams as 'not theory'. Weick's (1995b) published response to that paper points out that each of the elements and, in particular, diagrams, though not theory in themselves, can be resituated as important components of 'interim struggles' on the path to developing theory.

Mintzberg sums this up as follows, 'My work is loaded with diagrams, seeking to express every which way the ideas I am trying to make come together. Aristotle said that, "The soul . . . never thinks without a picture [. . .]." I try to help my soul think' (Mintzberg 2005, p. 363).

This discussion of communication underlines the reciprocal relationship between 'seeing' and 'articulating' that we introduced at the beginning of this paper, as shown at the centre of Figure 1. Communicating (if only with oneself) is a powerful stimulant for seeing what there is to say, as well as of enabling and stimulating synthesis across dialectic tensions.

Conclusion

It seems that reflexive excerpts describing the detailed mechanics of conceptual leaps remain as elusive in management research as they do in the world of art, as illustrated in excerpts by Smith (2002) on her management research and Dasgupta (2004) in an account of Picasso's work:

Even today, I have great difficulty explaining exactly how the final process model emerged from the classroom analysis other than it was the outcome of intense discussions, trial-and-error drawings, and what, in the end, felt right and true to the data. I suspect that this was the time during our data analysis that exemplifies 'an uncodifiable step that relies on the insight and imagination of the researcher'. (Smith 2002, p. 395)

'How can a viewer live a picture as the painter himself has lived it?' Pablo Picasso once asked. 'A picture comes to me from far off, who knows how far I divined it, I saw it, I made it, and yet next day, I myself don't see what I have done. How can one penetrate my dreams, my instincts, my desires, my thoughts . . . and . . . seize in them what I have brought about, perhaps against my will?' (Dasgupta 2004, p. 409, citing Zervos)

In the final analysis, we believe that conceptual leaps may be as varied as the individuals that engage in conceptual leaping and the circumstances in which they leap at particular moments in time. Nevertheless, we hope that this review and integration of the literature can assist researchers in approaching their own conceptual leaps.

Building on a mix of literatures ranging from epistemological arguments to pragmatic methodological texts to reflexive reports from qualitative researchers themselves, this review paper offers ideas about the nature of conceptual leaping, articulates four dialectic tensions that need to be bridged, and identifies some mechanisms of synthesis that can contribute to this bridging. Figure 1 encapsulates the findings from this review. The abductive process of conceptual leaping appears at the center of the four dialectics, as the synthesizing bridge across the four dialectic tensions, each with a disciplining and liberating pole. Conceptual leaping involves both seeing (that is finding new ways of understanding the world) and articulating (that is finding new ways to privately and publicly represent that world).

As a final note, after conducting this review, we see that the reflexive turn in qualitative organizational research has yet to make its way into mainstream methods discourse. Star (2007, pp. 75, 76) openly states that much of what scientists do in their research remains inaccessible to the world: that scientists are discouraged from writing about the emotions and identity construction that is so embedded not only in their research processes, but in all aspects of human life, and that 'popular notions of science support this quiet suppression of passion'. Yet, in the same way that personal stories of any experience allow readers to gain 'close-up', albeit idiosyncratic views of phenomena that would otherwise be inaccessible (Watson 2011), narratives by scholars sharing their journeys and struggles toward theory can play an important role in making these relatively opaque, mysterious and creative steps of transforming data into theory more visible (Locke 2011). We suggest that it is time for the community of management scholars to: (1) legitimize honest and frank narratives of the paths toward theory, as has long been the case in the ethnographic methods literature (e.g. Fine 1993; Van Maanen 2006); (2) recognize more fully this mysterious dimension of qualitative methodology; and (3) encourage further studies on the topic through longitudinal observations. We hope that this will, in turn, pave the way for more creative yet grounded insight, bravely undertaken by a greater number of organizational scholars.

References

- Abbott, A. (2004). *Methods of Discovery: Heuristics for the Social Sciences*. New York, NY: W.W. Norton.
- Agar, M. (2010). On the ethnographic part of the mix: a multi-genre tale of the field. *Organizational Research Methods*, **13**, pp. 286–303.

- Alvesson, M. and Karreman, D. (2007). Constructing mystery: empirical matters in theory development. *Academy of Management Review*, **32**, pp. 1265–1281.
- Alvesson, M. and Sandberg, J. (2011). Generating research questions through problematization. *Academy of Manage*ment Review, 36, pp. 247–271.
- Astley, W.G. and Van de Ven, A.H. (1983). Central perspectives and debates in organization theory. *Administrative Science Quarterly*, 28, pp. 245–273.
- Baker, T. and Nelson, R.E. (2005). Creating something from nothing: resource construction through entrepreneurial bricolage. Administrative Science Quarterly, 50, pp. 329– 366.
- Barley, S.R. (2004). Puddle jumping as a career strategy. In Stablein, R.E. and Frost, P.J. (eds), *Renewing Research Practice*. Stanford, CA: Stanford University Press, pp. 67–82.
- Barley, S.R. and Kunda, G. (1992). Design and devotion: surges of rational and normative ideologies of control in managerial discourse. *Administrative Science Quarterly*, 37, pp. 363–399.
- Bate, S.P. (1997). Whatever happened to organizational ethnography? A review of the field of organizational ethnography and anthropological studies. *Human Relations*, 50, pp. 1147–1175.
- Berg, B.L. (2004). *Qualitative Research Methods for the Social Sciences*. Boston, MA: Pearson Education.
- Boxenbaum, E. and Rouleau, L. (2011). New knowledge products as bricolage: metaphors and scripts in organizational theory. *Academy of Management Review*, **36**, pp. 272–296.
- Burrell, G. and Morgan, G. (1979). *Sociological Paradigms* and *Organisational Analysis*. Aldershot: Gower.
- Carlsen, A. (2011). Doubting thomas: seeds of wonder. In Carlsen, A. and Dutton, J.E. (eds), *Research Alive: Exploring Generative Moments in Doing Qualitative Research*. Frederiksberg: Copenhagen Business School Press, pp. 34–36.
- Carlsen, A. and Dutton, J.E. (2011). Research Alive: Exploring Generative Moments in Doing Qualitative Research. Frederiksberg: Copenhagen Business School Press.
- Charmaz, K. (2006). Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis. London: Sage Publications.
- Cohen, M.D., March, J.G. and Olsen, J.P. (1972). A garbage can model of organizational choice. *Administrative Science Quarterly*, **17**, pp. 1–25.
- Cornelissen, J.P. (2006). Making sense of theory construction: metaphor and disciplined imagination. *Organization Studies*, 27, pp. 1579–1597.
- Covan, E.K. (2007). The discovery of grounded theory in practice: the legacy of multiple mentors. In Bryant, A. and Charmaz, K. (eds), *The Sage Handbook of Grounded Theory*. London: Sage Publications, pp. 58–74.

- Czarniawska, B. (1999). Writing Management: Organization Theory As a Literary Genre. New York, NY: Oxford University Press.
- Dasgupta, S. (2004). Is creativity a Darwinian process? Creativity Research Journal, 16, pp. 403–413.
- Davis, M.S. (1971). That's interesting! Towards a phenomenology of sociology and a sociology of phenomenology. *Philosophy of Social Sciences*, **1**, pp. 309–344.
- Devereux, G. (1967). From Anxiety to Method in the Behavioral Sciences. The Hague: Mouton.
- Dutton, J.E. (2011). Movement as a means of overcoming dread and despair. In Carlsen, A. and Dutton, J.E. (eds), Research Alive: Exploring Generative Moments in Doing Qualitative Research. Frederiksberg: Copenhagen Business School Press, pp. 106–108.
- Eisenhardt, K.M. (1989). Building theories from case study research. Academy of Management Review, 14, pp. 532– 550.
- Feldman, M.S. (1995). Strategies for Interpreting Qualitative Data. Thousand Oaks, CA: Sage Publications.
- Fendt, J. and Sachs, W. (2008). Grounded theory method in management research: users' perspectives. *Organiza*tional Research Methods, 11, pp. 430–455.
- Fine, G.A. (1993). Ten lies of ethnography: moral dilemmas in field research. *Journal of Contemporary Ethnography*, 22, pp. 267–294.
- Fine, G.A. and Deegan, J.G. (1996). Three principles of serendip: insight, chance, and discovery in qualitative research. *Qualitative Studies in Education*, **9**, pp. 434–447.
- Gersick, C. (1992). Time and transition in my work on teams. In Frost, P. and Stablein, R. (eds), *Doing Exemplary Research*. Thousand Oaks, CA: Sage Publications, pp. 52–64.
- Gioia, D. (2004). A renaissance self: prompting personal and professional revitalization. In Stablein, R.E. and Frost, P.J. (eds), *Renewing Research Practice*. Stanford, CA: Stanford University Press, pp. 97–114.
- Glaser, B.G. (1978). Theoretical Sensitivity. Mill Valley, CA: Sociological Press.
- Glaser, B.G. (1992). Basics of Grounded Theory Analysis: Emergence Versus Forcing. Mill Valley, CA: Sociological Press.
- Glaser, B.G. (2007). Doing formal theory. In Bryant, A. and Charmaz, K. (eds), *The Sage Handbook of Grounded Theory*. London: Sage Publications, pp. 97–113.
- Glaser, B.G. (2009). The novice GT researcher. *Grounded Theory Review*, **8**, pp. 1–21.
- Glaser, B.G. and Strauss, A.L. (1967). The Discovery of Grounded Theory: Strategies for Qualitative Research. New York, NY: Aldine de Gruyter.
- Glynn, M.A. (2011). The 'Martha' moment: wading into others' worlds. In Carlsen, A. and Dutton, J.E. (eds), Research Alive: Exploring Generative Moments in Doing Qualitative Research. Frederiksberg: Copenhagen Business School Press, pp. 63–65.

- Golden-Biddle, K. and Locke, K. (1993). Appealing work: an investigation of how ethnographic texts convince. *Organization Science*, **4**, pp. 595–616.
- Hannan, M.T. and Freeman, J. (1977). The population ecology of organizations. *American Sociological Review*, 82, pp. 929–964.
- Hochschild, A.R. (1983). The Managed Heart: The Commercialization of Human Feeling. Berkeley, CA: University of California Press.
- Holyoak, K.J. and Thagard, P.R. (1995). *Mental Leaps*. Cambridge, MA: MIT Press.
- Huff, A.S. (1999). Writing for Scholarly Publication. Thousand Oaks, CA: Sage Publications.
- Huff, A.S. (2004). Transitions revisited. In Stablein, R.E. and Frost, P.J. (eds), *Renewing Research Practice*. Stanford, CA: Stanford University Press, pp. 155–170.
- Irvine, H. and Gaffikin, M. (2006). Getting in, getting on and getting out: reflections on a qualitative research project. *Accounting, Auditing & Accountability Journal*, 19, pp. 115–145.
- Kelle, U. (2007). The development of categories: different approaches in grounded theory. In Bryant, A. and Charmaz, K. (eds), *The Sage Handbook of Grounded Theory*. London: Sage Publications, pp. 191–213.
- Kincheloe, J.L. (2001). Describing the bricolage: conceptualizing a new rigor in qualitative research. *Qualitative Inquiry*, **7**, pp. 679–692.
- Kisfalvi, V. (2006). Subjectivity and emotions as sources of insight in an ethnographic case study: a tale of the field. *M@n@gement*, **9**, pp. 109–127.
- Langley, A. (1999). Strategies for theorizing from process data. Academy of Management Review, 24, pp. 691–710.
- Le, J. and Jarzabkowski, P. (2011). Touching data: revelation through energetic collaboration. In Carlsen, A. and Dutton, J.E. (eds), *Research Alive: Exploring Generative Moments in Doing Qualitative Research*. Frederiksberg: Copenhagen Business School Press, pp. 130–132.
- Lempert, L.B. (2007). Asking questions of the data: memo writing in the grounded theory tradition. In Bryant, A. and Charmaz, K. (eds), *The Sage Handbook of Grounded Theory*. London: Sage Publications, pp. 245–264.
- Lévi-Strauss, C. (1962). The science of the concrete. In *The Savage Mind* (trans. from French *La Pensée Savage*). Chicago, IL: University of Chicago Press, Chap. 1.
- Lincoln, S.Y. and Guba, E.G. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage Publications.
- Locke, K. (2007). Rational control and irrational free play: dual-thinking modes as necessary tension in grounded theorizing. In Bryant, A. and Charmaz, K. (eds), *The Sage Handbook of Grounded Theory*. London: Sage Publications, pp. 565–579.
- Locke, K. (2011). Field research practice in management and organization studies: reclaiming its tradition of discovery. Academy of Management Annals, 5, pp. 613–652.
- Locke, K.D., Golden-Biddle, K. and Feldman, M. (2008).Making doubt generative: rethinking the role of doubt

- in the research process. *Organization Science*, **19**, pp. 907–918.
- Martin, J. (2011). When experts learn: intellectual humility as a key to research generativity. In Carlsen, A. and Dutton, J.E. (eds), *Research Alive: Exploring Generative Moments in Doing Qualitative Research*. Frederiksberg: Copenhagen Business School Press, pp. 206–212.
- May, K.A. (1994). Abstract knowing: the case for magic in method. In Morse, J.M. (ed.), *Critical Issues in Qualita*tive Research. Thousand Oaks, CA: Sage Publications, pp. 10–21.
- May, R.A. and Patillo-McCoy, M. (2000). Do you see what I see? Examining a collaborative ethnography. *Qualitative Inquiry*, **6**, pp. 65–87.
- McGuire, W.J. (1997). Creative hypothesis generating in psychology: some useful heuristics. *Annual Review of Psychology*, **48**, pp. 1–30.
- Mellor, N. (2007). Messy method: the unfolding story. *Educational Action Research*, **9**, pp. 465–484.
- Meyer, A. (1992). From loose coupling to environmental jolts. In Frost, P. and Stablein, R. (eds), *Doing Exemplary Research*. Thousand Oaks, CA: Sage Publications, pp. 79–98.
- Miles, M.B. and Huberman, A.M. (1994). *Qualitative Data Analysis*, 2nd edn. Thousand Oaks, CA: Sage Publications.
- Mintzberg, H. (2005). Developing theory about the development of theory. In Smith, K.G. and Hitt, M.A. (eds), *Great Minds in Management*. Oxford: Oxford University Press, pp. 335–372.
- Morgan, G. (1983). Research as engagement. In Morgan, G. (ed.), *Beyond Method*. Beverly Hills, CA: Sage Publications, pp. 11–18.
- Morgan, G. (1997). *Images of Organization*. Thousand Oaks, CA: Sage.
- Morse, J.M. (1994). 'Emerging from the data:' The cognitive process of analysis in qualitative inquiry. In Morse, J.M. (ed.), *Critical Issues in Qualitative Research*. Thousand Oaks, CA: Sage Publications, pp. 23–43.
- Nifadkar, S.S. and Tsui, A.S. (2007). Book review. *Academy of Management Review*, **32**, pp. 298–312.
- Peirce, C.S. (1958). *The Collected Papers of Charles Sanders Peirce*. Cambridge, MA: Harvard University Press.
- Reichertz, J. (2007). Abduction: the logic of discovery of grounded theory. In Bryant, A. and Charmaz, K. (eds), *The Sage Handbook of Grounded Theory*. London: Sage Publications, pp. 214–228.
- Richards, L. (2005). *Handling Qualitative Data: A Practical Guide*. London: Sage Publications.
- Richardson, L. (1994). Writing: a method of inquiry. In Denzin, N.K. and Lincoln, Y.S. (eds), *Handbook of Qualitative Research*. Thousand Oaks, CA: Sage Publications, pp. 516–529.
- Samra-Fredericks, D. (2010). Where is the 'I'? One silence in strategy research. *The Globalization of Strategy*

- Research: Advances in Strategic Management, 27, pp. 411–444.
- Smith, A.D. (2002). From process data to publication: a personal sensemaking. *Journal of Management Inquiry*, 11, pp. 383–406.
- Smith, K.G. and Hitt, M. (eds) (2005). Great Minds in Management: The Process of Theory Development. Oxford: Oxford University Press.
- Star, S.L. (2007). Living grounded theory: cognitive and emotional forms of pragmatism. In Bryant, A. and Charmaz, K. (eds), *The Sage Handbook of Grounded Theory*. London: Sage Publications, pp. 75–93.
- Stern, P.N. (1994). Eroding grounded theory. In Morse, J.M. (ed.), Critical Issues in Qualitative Research. Thousand Oaks, CA: Sage Publications, pp. 212–223.
- Stern, P.N. (2007). On solid ground: essential properties for growing. In Bryant, A. and Charmaz, K. (eds), *The Sage Handbook of Grounded Theory*. London: Sage Publications, pp. 114–126.
- Stock, P.V. (2010). Sociology and the mix tape: a metaphor of creativity. *The American Sociologist*, 41, pp. 277– 291.
- Strauss, A. and Corbin, J. (1990). Basics of Qualitative Research: Grounded Theory Procedures and Techniques. Newbury Park, CA: Sage Publications.
- Sutton, R.I. and Staw, B.M. (1995). What theory is not. *Administrative Science Quarterly*, **40**, pp. 371–384.
- Tsoukas, H. (1993). Analogical reasoning and knowledge generation in organization theory. *Organization Studies*, **14**, pp. 323–346.
- Tsoukas, H. (2009). Craving for generality and small-N studies: a Wittgensteinian approach towards the epistemology of the particular in organization and management studies. In Buchana, D. and Bryman, A. (eds), *Sage Handbook of Organizational Research*. London: Sage Publications, pp. 285–301.
- Van de Ven, A.H. and Poole, M.S. (1995). Explaining development and change in organizations. Academy of Management Review, 20, pp. 510–540.
- Van Maanen, J. (1988). Tales of the Field: On Writing Ethnography. Chicago, IL: University of Chicago Press.
- Van Maanen, J. (2006). Ethnography then and now. *Qualitative Research in Organizations and Management: An International Journal*, 1, pp. 13–21.
- Van Maanen, J., Sorensen, J.B. and Mitchell, T.R. (2007).
 The interplay between theory and method. *Academy of Management Review*, 32, pp. 1145–1154.
- Wallas, G. (1926). *The Art of Thought*. New York, NY: Harcourt Brace.
- Watson, T. (2011). Ethnography, reality, and truth: the vital need for studies of 'how things work' in organizations and management. *Journal of Management Studies*, **48**, pp. 202–217.
- Weick, K. (1989). Theory construction as disciplined imagination. Academy of Management Review, 14, pp. 516–531.

- Weick, K. (1995a). Sensemaking in Organizations. Thousand Oaks, CA: Sage Publications.
- Weick, K. (1995b). What theory is not, theorizing Is. *Administrative Science Quarterly*, **40**, pp. 385–390.
- Weick, K. (2004). How projects lose meaning. In Stablein, R.E. and Frost, P.J. (eds), *Renewing Research Practice*. Stanford, CA: Stanford University Press, pp. 183–208.
- Weick, K. (2005). The experience of theorizing: sensemaking as topic and resource. In Smith, K.G. and Hitt, M.
- (eds), *Great Minds in Management: The Process of Theory Development.* Oxford: Oxford University Press, pp. 394–413.
- Whetten, D.A. (1989). What constitutes a theoretical contribution? *Academy of Management Review*, **14**, pp. 490–495.
- Wicker, A.W. (1985). Getting out of our conceptual ruts: strategies for expanding conceptual frameworks. *American Psychologist*, **40**, pp. 1094–1103.