Organizational Research Methods
16(1) 15-31

DOI: 10.1177/1094428112452151
orm.sagepub.com
SAGE

Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology

Dennis A. Gioia[1], Kevin G. Corley[2], and Aimee L. Hamilton[3]

Abstract

For all its richness and potential for discovery, qualitative research has been critiqued as too often lacking in scholarly rigor. The authors summarize a systematic approach to new concept development and grounded theory articulation that is designed to bring "qualitative rigor" to the conduct and presentation of inductive research.

Keywords

qualitative rigor, inductive research, grounded theory, new concept development

What does it take to imbue an inductive study with "qualitative rigor" while still retaining the creative, revelatory potential for generating new concepts and ideas for which such studies are best known? How can inductive researchers apply systematic conceptual and analytical discipline that leads to credible interpretations of data and also helps to convince readers that the conclusions are plausible and defensible? These questions represent perennial concerns among qualitative researchers and were the prime motivators for developing an approach to inductive research designed not only to surface new concepts, but also to generate persuasive new theories (Gioia & Pitre, 1990). Over the past 20+ years, we have elaborated and refined this approach as a way of conducting qualitative, interpretive research and also as a way of guiding our analyses and presentation of that research.

Another impetus for developing the approach was the recognition that in our field we often design and execute theory development work according to the precepts of the traditional scientific method, which often leads us to engage in progressive extensions of existing knowledge as a way of discovering new knowledge. This venerable orientation, however, most often trains our attention on refining the existing ideas we use to navigate the theoretical world. Such an approach is appropriate

[1]Penn State University, University Park, PA, USA
[2]Arizona State University, Tempe, AZ, USA
[3]University of Denver, Denver, CO, USA

Corresponding Author:
Dennis A. Gioia, 452 Business Building, Penn State University, University Park, PA 16802, USA.
Email: dag4@psu.edu

much—and perhaps even most—of the time and, in fact, has dominated the conduct of theory and research in the field for many years. Yet these time-honored precepts, as widely applicable as they might be and as undeniably useful as they often are, do not encourage the kind of originality we would most like to see in our theorizing (Corley & Gioia, 2011). Our concern with this traditional approach is simply this: Advances in knowledge that are too strongly rooted in what we already know delimit what we can know.

In organization study, one of the main consequences of the traditional approach is that we most often focus our attention on construct elaboration. Constructs are abstract theoretical formulations about phenomena of interest (Edwards & Bagozzi, 2000; Morgeson & Hofmann, 1999; Pedhazur & Schmelkin, 1991). A construct, however, usually is formulated so it can be measured; its primary purpose is to delineate a domain of attributes that can be operationalized and preferably quantified as variables. Constructs and variables have the wonderful advantage of allowing parsimony and some semblance of consensuality as we engage in the ambitious and ambiguous work of trying to make sense of organizing, organization, and organizations. Yet our concern with construct development and measurement sometimes blinds us to the arguably more important work of *concept* development in organization study. By ''concept,'' we mean a more general, less well-specified notion capturing qualities that describe or explain a phenomenon of theoretical interest. Put simply, in our way of thinking, *concepts are precursors to constructs* in making sense of organizational worlds—whether as practitioners living in those worlds, researchers trying to investigate them, or theorists working to model them. For organization study to fulfill its potential for description, explanation, and prescription, it is first necessary to discover relevant concepts for the purpose of theory building that can guide the creation and validation of constructs.[1] Ultimately, informed theory building and theory testing are both necessary if organizational study is to fulfill its potential for generating work that has originality, utility, and prescience (Corley & Gioia, 2011).

While recognizing and appreciating that studying organizations via construct elaboration and measurement has served us well in the relatively short history of our field, there remains the sense that something is missing—something that hinders our ability to gain deeper knowledge of organizational dynamics. That something has to do with understanding the essence of the organizational experience, and perhaps especially the *processes* by which organizing and organization unfold (Langley, 1999). An intensive focus on process requires an appreciation of the nature of the social world and how we know (and can know) that world. We would argue that the single most profound recognition in social and organizational study is that much of the world with which we deal is essentially socially constructed (Berger & Luckmann, 1966; Schutz, 1967; Weick, 1969/1979). Studying social construction processes implies that we focus more on the means by which organization members go about constructing and understanding their experience and less on the number or frequency of measureable occurrences. As Einstein so famously put it, ''Not everything that can be counted counts, and not everything that counts can be counted.''

For that reason, we believe that focusing too much on refining our existing constructs too often amounts to sharpening the wrong tools for gaining bona fide understandings. What we really need instead are some new tools. In our work, those new tools are new concepts. How then might we go about discovering and developing the kinds of concepts that might better capture the phenomena of organizing and organization? In our view, doing so requires an approach that captures concepts relevant to the human organizational experience in terms that are adequate at the level of meaning of the people living that experience *and* adequate at the level of scientific theorizing about that experience. To accomplish both aims, we have devised a systematic inductive approach to concept development. The strong social scientific tradition of using qualitative data to inductively develop ''grounded theory'' (Glaser & Strauss, 1967; Lincoln & Guba, 1985; Strauss & Corbin, 1998) provides deep and rich theoretical descriptions of the contexts within which organizational phenomena

occur. Yet many scholars feel that inductive approaches do not meet the high standards usually held for demonstrating scientific advancement (see Bryman, 1988; Campbell, 1975; Campbell & Stanley, 1963; Goldthorpe, 2000; Popper, 1959/2002). How then can the imaginative traditions of qualitative, inductive research in the social sciences be reconciled with the apparently conflicting demands of a scientific tradition of ''rigorous'' theoretical advancement?

In the following, we describe a holistic approach to inductive concept development that we believe balances this (often) conflicting need to develop new concepts inductively while meeting the high standards for rigor demanded by our top journals. The precursor to this approach first appeared in print in Gioia and Chittipeddi (1991) and was followed by two other studies that were elaborations on the methodology used in the original piece: Gioia, Thomas, Clark, and Chittipeddi (1994) and Gioia and Thomas (1996). In subsequent years, the approach has been further refined by Corley and Gioia (2004); Corley (2004); Nag, Corley, and Gioia (2007); Gioia, Price, Hamilton, and Thomas (2010); Clark, Gioia, Ketchen, and Thomas (2010); Harrison and Corley (2011); and Nag and Gioia (2012).

Ground Assumptions

In addition to the basic assumption that the organizational world is socially constructed, we employ another crucial and actionable assumption as well: that the people constructing their orzganizational realities are ''knowledgeable agents,'' namely, that people in organizations know what they are trying to do and can explain their thoughts, intentions, and actions. The consequence of this latter assumption for the conduct of research is profound. For one thing, it foregrounds the informants' interpretations and initially casts us as researchers in the role of ''glorified reporters'' whose main role is to give an adequate account of the informants' experience. We do not presume to impose prior constructs or theories on the informants as some sort of preferred a priori explanation for understanding or explaining their experience. This means that we make extraordinary efforts to give voice to the informants in the early stages of data gathering and analysis and also to represent their voices prominently in the reporting of the research, which creates rich opportunities for discovery of new concepts rather than affirmation of existing concepts. For example, in the Gioia and Thomas (1996) study, which investigated how top managers in an academic institution made sense of their environments, we pointedly avoided using the accepted theoretical categories of ''threats'' and ''opportunities'' (Dutton & Jackson, 1987). We were surprised to find that the informants never actually used those terms in their descriptions. They instead used the categories of ''strategic'' and ''political'' to classify issues that demanded attention and action. If we had designed our interview protocol around existing theory and terminology, we would have missed a key aspect of *their* sensemaking by imposing *our* preordained understandings on their experience.

We also make some fundamental assumptions about ourselves as researchers. We assume, for instance, that we are pretty knowledgeable people too—that we can figure out patterns in the data, enabling us to surface concepts and relationships that might escape the awareness of the informants, and that we can formulate these concepts in theoretically relevant terms. How do we enact these assumptions in a way that enables us to be true to the informants' experiences while also meeting a scientific criterion of presenting evidence systematically? Over the years, we have worked out procedures that not only guide the conduct of the research itself in a way that imposes qualitative rigor, but also encourages the presentation of the research findings in a way that demonstrates the connections among data, the emerging concepts, and the resulting grounded theory.

Forerunners

Qualitative research has a long and venerable history, especially in terms of its ability to be revelatory (Lincoln & Guba, 1985). Qualitative research also has a long history of suffering the (often well-deserved) criticism that it does not adequately justify its assertions, leading to some troubling skepticism about whether qualitative researchers are engaging in creative theorizing on the basis of rather thin evidence. Most reviewers of qualitative research intended for publication in our journals have an overriding concern with getting a satisfactory answer to the question, "How do I know that you know (what you are claiming)?" or more simply, "Where is the evidence for your assertions?" As noted, this recurring question is one that served as an initial impetus for devising a way to demonstrate to readers the evidentiary basis for our findings and conclusions. The origins of this approach date from the attempt to publish the Gioia and Chittipeddi (1991) paper. It is important to understand that the journal to which that paper was sent had not previously published a bona fide grounded theory study and had seldom published qualitative research, so the reviewers were accustomed to seeing deductive thinking, quantitative data displays, rigorous statistical tests, and strong, transparent connections between hypotheses, data presentations, results, and conclusions. The initial submission of what eventually became the Sensemaking/Sensegiving article had none of those attributes. It was interpretive, ethnographic research in the pure sense, with all the attributes of such research of that era: a great storyline, an engaging narrative writing style, and a myriad of insightful observations, but also a pronounced impressionistic overtone. All those features led the editor and reviewers to think we might be onto something informative, but the data presentation was, shall we say, unconvincing (the reviewers initially said, in effect: "Great story! Good writing! Incisive thinking! But how do we know you haven't just made up an interesting interpretation?"). We were challenged in no uncertain terms to demonstrate the basis for our conclusions—and especially the grounds for asserting that a new concept, "sensegiving," wasn't just old wine in a new bottle.

In essence, these reviewers were adopting a classic scientific skepticism toward our assertions. The editor asked (fortunately but ominously) for a revision characterized as "high risk," but was nonetheless giving us a chance to justify ourselves, even if he and reviewers were being hardnosed about it. They were not about to accept a disingenuous "we were there; we are bright people, and these are our insightful impressions" stance that had characterized so much prior qualitative work. That jarring feedback prompted us to think of ways to show that we had executed the data gathering and analysis in a systematic way, namely, that we hadn't just cherry-picked the quotes in the reporting, contrived some clever explanation, and slapped a sexy label on it. We took up the thrown-down gauntlet and worked to create a presentation that not only revealed the care we had taken in the data acquisition, but also in the way we had analyzed those data (and, frankly, there was also a skirmish between the authors, one of whom advocated a purist, stake-in-the-ground ethnographic stance in the grand tradition of anthropology and one who advocated the demonstration of more "qualitative rigor" in showing how the data linked to the insights).

The resolution to the tussle with the reviewers—and the debate between the authors—was the devising of an approach that allowed for a systematic presentation of both a "1st-order" analysis (i.e., an analysis using informant-centric terms and codes) and a "2nd-order" analysis (i.e., one using researcher-centric concepts, themes, and dimensions; for the inspiration for the 1st- and 2nd-order labeling, see Van Maanen, 1979). Taken together, the tandem reporting of both voices—informant and researcher—allowed not only a qualitatively rigorous demonstration of the links between the data and the induction of this new concept, sensegiving, but also allowed for the kind of insight that is the defining hallmark of high-quality qualitative research. Over the years, this systematic approach has continued to prove useful for us and others in conducting research and to help readers see the rigor of our concept development and theory building. Although we certainly do not claim that this approach is necessarily the best way

to demonstrate rigor in qualitative research,[2] we do believe it is worthwhile to share the details of the methodology and discuss its potential to advance the process of concept development within organization study.

Laying the Groundwork

The guiding research question and the interview. Like almost all good research, our approach depends on a well-specified, if rather general, research question (e.g., How do top managers of academic institutions make sense of their environments?). Also, like all good qualitative research, we employ multiple data sources (archives, field observation, media documentation, etc.), but the heart of these studies is the semi-structured interview—to obtain both retrospective and real-time accounts by those people experiencing the phenomenon of theoretical interest. This is genuine "research as engagement" (Morgan, 1983); it also is engaging research—especially for the informants. We have been surprised in the past—to the point where we are no longer surprised—at how willing informants are to reveal what we might have considered to be proprietary information. As one key informant said for the Gioia et al. (1994) study, "I'll tell you anything you want to know, so long as you don't embarrass me." We do not consider it our right to be a bull in a china shop. Informants always have larger agendas they are pursuing, so we work to protect their interests while trying to serve our own. Diplomacy and discretion are always the watchwords. So is transparency (see Bansal & Corley, 2011). We often show informants our evolving analyses, models, and even manuscripts, but also do not grant veto power over anything other than reporting of sensitive data. As a sidebar, we also do not promise "confidentiality," which literally would preclude most reporting; we instead promise "anonymity."

This style of research is also "get in there and get your hands dirty" research—madly making notes on what the informants are telling us, conscientiously trying to use their terms, not ours, to help us understand their lived experience. The fact that we try to stay so close to the informants' experience has its downsides. A major one is the risk of "going native," namely, being *too* close and essentially adopting the informant's view, thus losing the higher-level perspective necessary for informed theorizing. For that reason, we always have one member of the collaborative team adopt an outsider perspective—a devil's advocate, really, whose role it is to critique interpretations that might look a little too gullible. It is a role designed to deal with Van Maanen's (1979) counsel to acknowledge the "fact of fiction" in ethnographic research.

A good example here again stems from the original interpretation of the data from the Gioia and Chittipeddi (1991) study. We had worked very hard to develop an insightful understanding of top academic administrators trying to become "strategic" in an era when being strategic was not a prominent part of the academic vocabulary. After months of work, we proudly presented our initial findings to the top management team. The president read the executive summary and said, "Oh, you guys! You're so naïve. Don't you know that there is a 'Kitchen Cabinet' that makes most of the important decisions? You haven't asked for access to those meetings, so you're missing some of the most important stuff, and your analysis shows your ignorance." Hmmm. An eye-opener. We then wheedled access to the Kitchen Cabinet meetings and thereafter the story—and the theoretical narrative—changed in some significant ways.

We also pay extraordinary attention to the initial interview protocol, to make sure that it is focused on the research question(s), that it is thorough (i.e., tries to anticipate related issues about which we should ask), and doesn't contain leading-the-witness questions (e.g., "Wouldn't you agree that. . . ?"). And then we pay extraordinary attention to the revision of the protocol as the research progresses, following the twists, turns, and roller-coaster rides involved in discovering grounded theory (Glaser & Strauss, 1967), sometimes even to the point of modifying the initial research question.[3] We occasionally have problems with a reviewer who doesn't seem to appreciate the designed-

in flexibility of interpretive research—the recognition that the interview questions *must* change with the progression of the research. We follow wherever the informants lead us in the investigation of our guiding research question. Adhering to some misguided sense that the protocol must be standardized so that there is consistency over the course of the project is one of the reasons why traditional research sometimes is not very good at uncovering new concepts to develop. And part of their development occurs *during* the research that discovers them, so long as researchers are sharp and prepared to adjust on the fly. Little of the description of our research approach to this point is particularly distinctive, however. The features that enhance qualitative rigor actually begin with our approach to analyses, especially in terms of organizing the data into 1st- and 2nd-order categories to facilitate their later assembly into a more structured form.

The analyses. As a number of qualitative/interpretive researchers have noted, it is somewhat artificial to parse the interviewing and the analyses, as they tend to proceed together (Langley, 1999; Lincoln & Guba, 1985; Locke & Golden-Biddle, 1997). A myriad of informant terms, codes, and categories emerge early in the research (a process akin to Strauss and Corbin's [1998] notion of open coding). In this 1st-order analysis, which tries to adhere faithfully to informant terms, we make little attempt to distill categories, so the number of categories tends to explode on the front end of a study. There could easily be 50 to 100 1st-order categories that emerge from the first 10 interviews, and the sheer number of categories initially becomes overwhelming. It is not unusual to look up and conclude, "I'm lost," with no firm idea about how to make sense of all these data that don't seem to hang together. Yet it is important to get lost at this stage—as the first author is fond of saying, "You gotta get lost before you can get found" (Gioia, 2004).

As the research progresses, we start seeking similarities and differences among the many categories (similar to Strauss and Corbin's [1998] notion of axial coding), a process that eventually reduces the germane categories to a more manageable number (e.g., 25 or 30). We then give those categories labels or phrasal descriptors (preferably retaining informant terms) and consider the array before us. Is there some deeper structure in this array? It is at this point that we treat *ourselves* as knowledgeable agents who can (and must) think at multiple levels simultaneously (i.e., at the level of the informant terms and codes *and* at the more abstract, 2nd-order theoretical level of themes, dimensions, and the larger narrative—answering the important question "What's going on here?" theoretically). Developing tentative answers to this question by way of a "gestalt analysis" (Gioia & Chittipeddi, 1991) leads to the formulation of other questions, as subsequent interviews pursue subjects that are increasingly focused on concepts and tentative relationships emerging from the interviews to date (via a process that Glaser and Strauss [1967] termed "theoretical sampling").

In this 2nd-order analysis, we are now firmly in the theoretical realm, asking whether the emerging themes suggest concepts that might help us describe and explain the phenomena we are observing. We focus particular attention on nascent concepts that don't seem to have adequate theoretical referents in the existing literature (e.g., "identity ambiguity" from Corley and Gioia, 2004) or existing concepts that "leap out" because of their relevance to a new domain ("optimal distinctiveness" from Gioia et al., 2010). Once a workable set of themes and concepts is in hand (and the culmination of the theme and concept development process leads to what Glaser and Strauss [1967] termed "theoretical saturation"), we investigate whether it is possible to distill the emergent 2nd-order themes even further into 2nd-order "aggregate dimensions."

When we have the full set of 1st-order terms and 2nd-order themes and aggregate dimensions, then we have the basis for building a *data structure* (see Figure 1)—perhaps the pivotal step in our entire research approach. The data structure not only allows us to configure our data into a sensible visual aid, it also provides a graphic representation of how we progressed from raw data to terms and themes in conducting the analyses—a key component of demonstrating rigor in qualitative research (Pratt, 2008; Tracy, 2010). In this way, the act of constructing a data structure compels us to begin

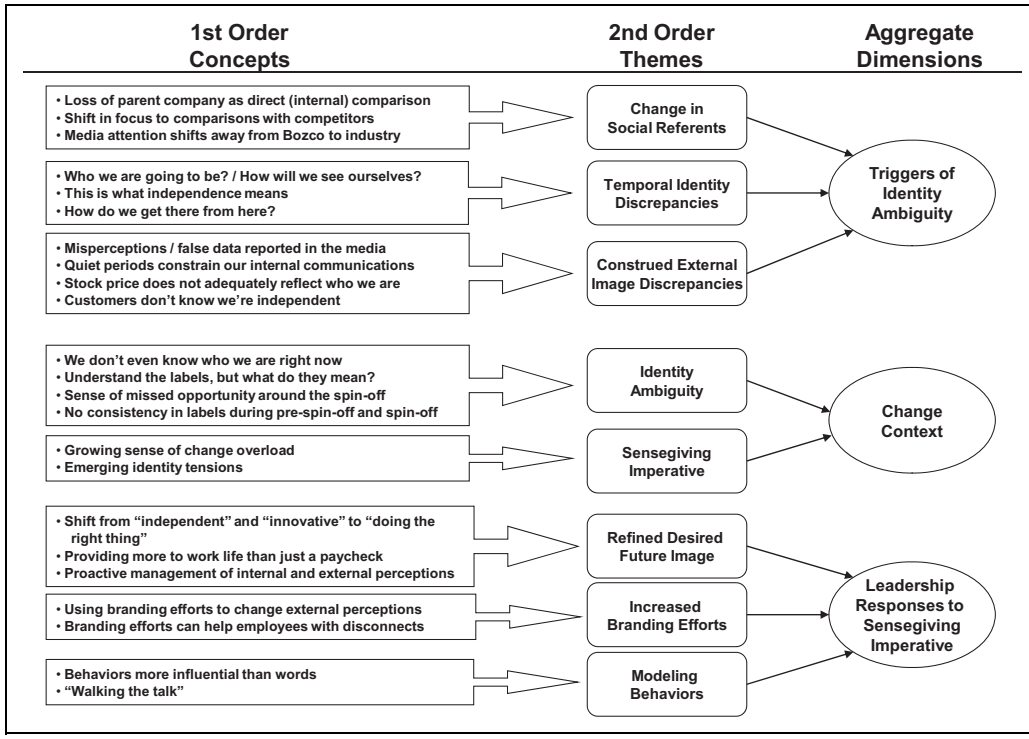

Figure 1. Data structure.
Reproduced from Corley and Gioia (2004).

thinking about the data theoretically, not just methodologically (or as a former doctoral student explained it, ''to see those transcripts and notes as more than just page after page of work''). This does not mean, however, that the data structure should capture relationships among the 2nd-order themes (a step that comes later in the theorizing process). But this forced ''stepping-up'' in abstractness does lay the foundation for balancing the deep embeddedness of the informant's view in living the phenomenon with the necessary ''30,000-ft.'' view often required to draw forth the theoretical insights necessary for journal publication. Hence, our key criterion for assessing the analysis takes the form of a guiding mantra: ''No data structure; know nothing.'' As an example, Figure 1 shows the data structure from Corley and Gioia (2004).[4]

Coincident with the data gathering and after the initial stages of analysis, we also begin cycling between emergent data, themes, concepts, and dimensions and the relevant literature, not only to see whether what we are finding has precedents, but also whether we have discovered new concepts. A small confession here: There is value in semi-ignorance or enforced ignorance of the literature, if you will. Up to this stage in the research, we make a point of not knowing the literature in great detail, because knowing the literature intimately too early puts blinders on and leads to prior hypothesis bias (confirmation bias). Upon consulting the literature, the research process might be viewed as transitioning from ''inductive'' to a form of ''abductive'' research, in that data and existing theory are now considered in tandem (Alvesson & Kärreman, 2007). Of course, we are never completely uninformed about prior work, either, so one might also term this stance as ''willing suspension of belief'' or witting (as opposed to unwitting) ignorance of previous theorizing in the domain of interest. Some combination of knowing and not knowing amounts to another fine balancing act that allows for discovery without reinventing the well-ridden wheels.

Lastly, in trying to finalize the analyses of the data, we invariably must deal with the issue of different authors interpreting some informant terms and passages differently. If agreements about some codings are low, we revisit the data, engage in mutual discussions, and develop understandings for arriving at consensual interpretations. We reconcile differing interpretations by developing consensual decision rules about how various terms or phases are to be coded. On a few occasions, we have engaged independent coders who are unfamiliar with the study to code portions of the data and have computed intercoder agreement percentages. We certainly do not consider such a step to be necessary, however, because the data structuring procedures themselves lend the requisite rigor to the analyses. Reporting intercoder agreements also strikes some dyed-in-the-wool interpretive researchers as some sort of back-door positivism sneaking into an interpretive study, and thus view such calculations as a capitulation to traditional research. In fact, when we do it, we do so simply as another way to bolster our own confidence in our assertions and findings.

From Data Structure to Grounded Theory

As important as the data structure might be, and as much energy as we put into developing it, it is nonetheless a static picture of a dynamic phenomenon, and process research doesn't actually investigate processes unless the static picture—a photograph, if you will—can be made into a motion picture. Therefore, we keep a front-and-center focus on our ultimate goal of building a vibrant inductive model that is grounded in the data (as exemplified by the data structure), one that captures the informants' experience in theoretical terms. The resulting grounded theory model, then, should be one that shows the dynamic relationships among the emergent concepts that describe or explain the phenomenon of interest and one that makes clear all relevant data-to-theory connections (thus allaying the usual concern that qualitative research too often does not show just how data relate to theory).

The key question for us as model builders is how to account for not only all the major emergent concepts, themes, and dimensions, but also for their dynamic interrelationships. Speaking in classic boxes-and-arrows terms, this process amounts to assembling the constellation of boxes with a special focus on the arrows. It is the arrows that "set everything in motion" (Nag et al., 2007). A reader should be able to look at the grounded theory model and see that the essential concepts, themes, and/or dimensions contained in the data structure are well represented in the model, but that the relational dynamics among those concepts are now made transparent. Because of our intimate knowledge of the data, by considering the relationships among the emergent concepts, we enable the possibility of theoretical insights that would not be apparent simply by inspecting the static data structure itself. Of course there is room for a conceptual leap in this process as well. What the first author calls a "Shazzam!" often accompanies our close familiarity with the data in both a gestalt sense and in the sense of deep immersion in the data and the data structure. Figure 2 shows the grounded model generated by the data structure from Corley and Gioia (2004). Appendix A summarizes the key features of the approach as a means of enhancing grounded theory development.

Writing It All Up

It helps to be able to write engagingly when presenting a paper using this approach. With the Introduction you want to "grab readers by the frontal lobes," inviting them along for an interesting ride with the promise of a paper that is going to be informative and insightful. It is here that we quickly identify the problem domain as one that is important and fascinating, the main research question as one that is intriguing to investigate, and the theoretical possibilities as ones that are valuable and

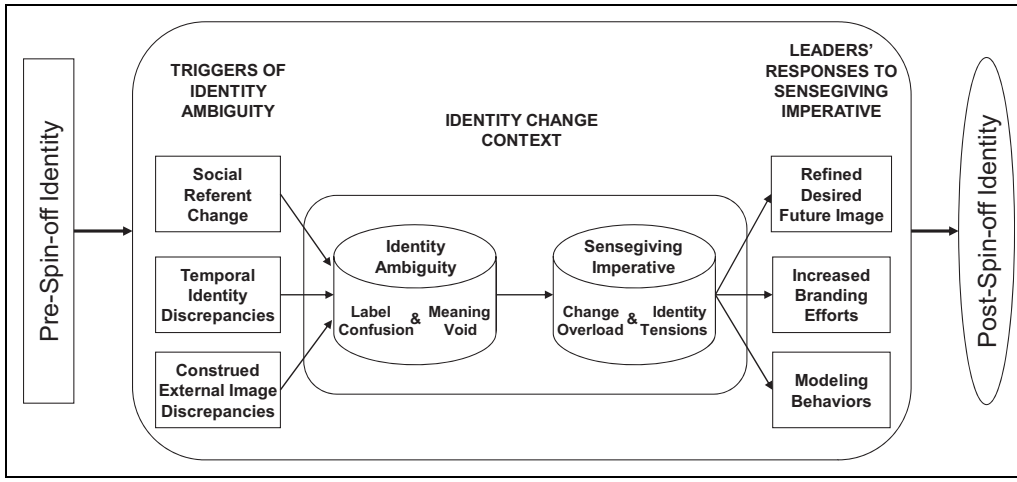

Figure 2. Organizational identity change process.
Reproduced from Corley and Gioia (2004).

(usually) surprising in some way. These first few pages matter immensely. The literature reviews that follow are never extensive or exhaustive (they can't be because, as noted, grounded theory research presumes a level of semi-ignorance or some suspension of belief in the received wisdom of prior work). Such an approach to a literature review confers a welcome license to write more interestingly, as we are freed from the chains of being pedantic and thorough in trying to cover everything that has gone before.

The Methodology section, however, *is* thorough, as we are careful to explain the systematic approach we employ with the data gathering and their analyses. In contrast with many inductive/interpretive methodology sections that say little more than "we got entry into a good research site; we spent a fair amount of time with some important people; we used the relevant principles of qualitative research; here's what we found"—we go to some length to explain exactly what we did in designing and executing the study and the procedures we used to explicate our induction of categories, themes, and dimensions.

Then comes the fun part. We focus on having the Findings narrative tell an intellectually compelling—and sometimes even an emotionally compelling—story on the basis of transparent evidence. Little of the methodological approach matters if you cannot present a convincing, data-driven account that prefigures the developing theory. The intent of the Findings section is to narrate an informative story that is driving toward some new concept development and theoretical discovery with the careful presentation of evidence. This is one reason why the Findings sections of the articles are suffused with informant quotes—quotes that align with the exemplars shown in the data structure figure.[5] The meta-message to the reader is, "This is what the informants told us. We're not making this stuff up." The reader should be able to see the data-to-theory connections in the form of linkages among the quotes in text, the 1st-order codes in the data structure, and their connection to the emergent 2nd-order concepts/themes and dimensions.

In the Findings narrative, we devote space to explaining each emergent theme and/or dimension, but more importantly, we "zoom in" on the key emergent new concepts or themes and hold them up for examination as the core ideas of a given paper. Some examples of these emergent concepts stemming from this approach include "sensegiving" (Gioia & Chittipeddi, 1991), "desired future image" (Gioia & Thomas, 1996), "identity ambiguity" (Corley & Gioia, 2004), and "transitional

identity'' (Clark et al., 2010). The writing strategy here is in some ways analogous to using the ''magnifying glass'' feature in photo-editing programs. If you zero in on some parts of the whole image, you can find the most interesting and incisive parts to work with and emphasize. We focus on highlighting those emergent concepts that are new and/or those existing concepts that have new twists that produce new insights—a presentational tactic that foreshadows the central issues to be addressed later in the Discussion section. The section describing the grounded theory shows the transformation of the static data structure into the dynamic inductive model. To use a biological metaphor: If the data structure is the anatomy of the coming theory, then the grounded model is the physiology of that theory. The writing in the Grounded Theory section articulates and weaves together the workings of this anatomy and physiology to produce a dynamic inductive model that describes or explains the processes and phenomena under investigation. It is in this section that we not only present any ''deep structure'' (Chomsky, 1964) in the concepts, but also the ''deep processes'' (Gioia et al., 2010) in their interrelationships.

The Discussion section is equally important to write convincingly. It is in the Discussion that all the foregoing work in reporting the findings and the development of the grounded model is infused with meaning. Meaning, of course, is itself a relational concept (as is structure). New concepts, insightful ideas, and even grounded theories themselves have meaning only if they can be related to what we already know (existing ideas or theories), and the Discussion is where we draw out those relationships and revelations. Ideally, we also work not only to develop propositions to guide future research, but also to extract and emphasize transferable concepts and principles.

A note about transferability. If our findings were purely idiosyncratic, there would be little benefit to learning that might apply to wider domains. Extracting transferable concepts and principles (Lincoln & Guba, 1985) allows our findings to address a larger audience. Here we part company with pure interpretivists, who tend to maintain a stance that when one is studying the socially constructed structures and processes of others, those structures and processes are necessarily idiosyncratic because they are fashioned and performed by unique individuals acting within unique contexts. We disagree on this point. Many concepts and processes are similar, even structurally equivalent (Morgeson & Hofmann, 1999), across domains. Our stance here is a strong rejoinder to the old argument that it is not possible to generalize from small samples—perhaps especially samples of one, as some believe case studies to be. Is it possible to generalize from a case study? Of course it is—*if* the case generates concepts or principles with obvious relevance to some other domain. It is also important to emphasize that our corollary intent is to generalize to theory (Bansal & Corley, 2011). Our stance here is also similar to the philosophy behind choosing a good case with which to teach. Many instructors seem not to understand that the choice of a great teaching case is first predicated on finding the specific case that exemplifies a general principle that can be taught as a transferable generality—namely, ''principles that are portable'' from one setting to another. A directly analogous notion applies to the transferability of emergent concepts or a good grounded theory.

A note about propositions. Readers will almost always find informal or implicit propositions in the discussion sections of our studies employing this method. When one of the intents of a study is to help guide subsequent nomothetic research, it is also possible to include formal propositions as well. Proposition development for the purpose of guiding more nomothetic research requires, as John Wagner of *Administrative Science Quarterly* put it, ''that you take a look at your work from the point-of-view of a quantitative researcher and ask how the model might generate testable propositions'' (personal communication). Such propositions now appear in the discussion sections of some recent papers (see Clark et al., 2010; Gioia et al., 2010). We certainly do not believe that formal propositions are necessary, however. Nonetheless, although the inclusion of formal propositions

would appear to impose a positivist hallmark on a relentlessly interpretivist approach, we believe that such propositions are not paradigm-bound, but instead provide an opportunity to speculate on where further exploration of the grounded theory might lead. Simply put, propositions—whether implicit or explicit—can strengthen the contributions made by an inductive—and especially a grounded theory—study. The rationale is straightforward. A theory should provide a description or explanation at some more general level of understanding. That is one of the main purposes of theory anyway (Corley & Gioia, 2011). Therefore, even emergent theories grounded in data from specific cases should contain the wherewithal to make them extensible to other domains.

Propositions certainly make our work more accessible and useful to other scholars. First, and most obviously, propositions suggest a roadmap for future qualitative researchers to follow. In one sense, propositions bring the process of concept development full circle by explicitly laying out how a subsequent cycle of grounded theory development might build upon the current one. Propositions, whether formal or informal, help to punctuate the contributions of our grounded theory for wider audiences (and we unabashedly welcome further developments by both qualitative and quantitative researchers). Second, propositions can be useful in bridging the often wide gulf between qualitative and quantitative researchers. We view this role for the propositions as a plus, because our field sometimes appears to adopt Kipling's stance that "East (quantitative research) is east and west (qualitative research) is west and never the twain shall meet." Propositions demonstrate to quantitatively oriented researchers that qualitative findings can offer good guidance in developing emergent concepts into measureable constructs. They thus provide an avenue not only for theory development, but also for bringing together approaches that should not have been treated as strange bedfellows in the first place.

A larger point we want to emphasize, however, is that qualitative research can and should be able to stand on its own. We believe the approach we have developed enhances that ability. Propositions can help augment the transferability of emergent concepts or a grounded theory to other spheres, but they are not mandatory. Overall, our approach mainly allows any reader—whether qualitatively or quantitatively inclined—to more easily discern how we progressed from raw data to emergent theory in a fashion that is credible and defensible.

Assessing Others' Use of the Methodology

Given that a number of other researchers have now adopted some form of this methodology, some fellow scholars have asked us if we have any commentary on the way that others have implemented it. For the most part, these works are quite well done, as is evident by looking at the quality of the journals in which they appear. (See Appendix B for a compendium of studies that have used some form of this approach.) We have only two moderate concerns. Both derive mainly from our role as reviewers and editors in assessing papers being submitted for publication. The first is that the 1st-order/2nd-order conceptualization/terminology is becoming increasingly prevalent. As one of our colleagues put it, "Are we all going to talk mainly in terms of 1st- and 2nd-order findings in our research reporting now? Is that a good thing?" Our answers are "no" and "no." Different methodological approaches will naturally rely on different conceptualizations of data. To force fit data into the 1st-order/2nd-order rubric when not called for not only diminishes the potential value of those data, but also sacrifices the benefits of qualitative research's flexibility in applying different approaches to fit different phenomenological needs (see Bansal & Corley, 2011).

The second related and perhaps more important concern is that organizational researchers seem to be applying the methodology as a template, or as one of our reviewers characterized it, others seem to be treating it as a "formula," essentially reproducing the exact format of the data structure from recently published studies. Even a number of methodology sections now seem to be adopting formats and procedural descriptions that are almost identical to those in the published works. This trend

is something of a concern, because we envision the approach as a "methodology," rather than a "method"—that is, we see it as a flexible orientation toward qualitative, inductive research that is open to innovation, rather than a "cookbook." For instance, each of the published studies over the past 20 years contains some sort of methodological innovation. When the approach is treated as a template or cookbook, it not only constrains its innovative possibilities, but also seems to get in the way of using it to address one of its main intents: rigorously demonstrating connections between data and theory.

Conclusion

Construct development and measurement are of obvious, even unquestionable, importance in the field of organization study. Yet if we are willing to admit that we are still at a relatively young age as a field and at a relatively early stage in conceptualizing organizations and organizational processes, then it is imperative that we remain open to new concept development and new theory development as well. It is clear, though, that we should have approaches or methods that can generate new concepts and grounded theories not only via impressionistic studies, but also via qualitatively rigorous inductive studies. We have tried to articulate one such approach in this article by tracing out some of the features of an evolving methodology designed to enable both creative imagination and systematic rigor in conducting qualitative, grounded theory research.

Appendix A

Features of the Methodology That Enhance Grounded Theory Development.

Step[a]	Key Features
Research Design	• Articulate a well-defined phenomenon of interest and research question(s) (research question[s] framed in "how" terms aimed at surfacing concepts and their inter-relationships) • Initially consult with existing literature, with suspension of judgment about its conclusions to allow discovery of new insights
Data Collection	• Give extraordinary voice to informants, who are treated as knowledgeable agents • Preserve flexibility to adjust interview protocol based on informant responses • "Backtrack" to prior informants to ask questions that arise from subsequent interviews
Data Analysis	• Perform initial data coding, maintaining the integrity of 1st-order (informant-centric) terms • Develop a comprehensive compendium of 1st-order terms • Organize 1st-order codes into 2nd-order (theory-centric) themes • Distill 2nd-order themes into overarching theoretical dimensions (if appropriate) • Assemble terms, themes, and dimensions into a "data structure"
Grounded Theory Articulation	• Formulate dynamic relationships among the 2nd-order concepts in data structure • Transform static data structure into dynamic grounded theory model • Conduct additional consultations with the literature to refine articulation of emergent concepts and relationships

[a]The Research Design and Data Collection steps are moderate variations on traditional grounded theory approaches. The Data Analysis and Grounded Theory Articulation steps constitute the main distinctive features of the approach.

Appendix B

Studies Using the Methodology or Variations on the Approach.

Author(s)	Year	Journal
Anand, Gardner, and Morris	2007	*Academy of Management Journal*
Anand and Jones	2008	*Journal of Management Studies*
Balogun and Johnson	2004	*Academy of Management Journal*
Clark, Gioia, Ketchen, and Thomas	2010	*Administrative Science Quarterly*
Corley	2004	*Human Relations*
Corley and Gioia	2004	*Administrative Science Quarterly*
Dacin, Munir, and Tracey	2010	*Academy of Management Journal*
Gioia, Price, Hamilton, and Thomas	2010	*Administrative Science Quarterly*
Gioia and Thomas	1996	*Administrative Science Quarterly*
Gioia, Thomas, Clark, and Chittipeddi	1994	*Organization Science*
Harrison and Corley	2011	*Organization Science*
Kjærgaard, Morsing, and Ravasi	2011	*Journal of Management Studies*
Labianca, Gray, and Brass	2000	*Organization Science*
Maguire and Phillips	2008	*Journal of Management Studies*
Maitlis	2005	*Academy of Management Journal*
Maitlis and Lawrence	2007	*Academy of Management Journal*
Mantere, Schildt, and Sillince	2012	*Academy of Management Journal*
Nag, Corley, and Gioia	2007	*Academy of Management Journal*
Nag and Gioia	2012	*Academy of Management Journal*
Poonamallee	2011	*Journal of Management Inquiry*
Pratt, Rockmann, and Kaufmann	2006	*Academy of Management Journal*
Ravasi and Phillips	2011	*Strategic Organization*
Rerup and Feldman	2011	*Academy of Management Journal*
Rindova, Dalpiaz, and Ravasi	2011	*Organization Science*
Stigliani and Ravasi	2012	*Academy of Management Journal*
Thomas, Sussman, and Henderson	2001	*Organization Science*

Acknowledgments

We thank Gerry Johnson for organizing a seminar by Denny Gioia on "Qualitative Rigor" at Cranfield University in 1994; Anand Narasimhan of IMD in Lausanne, Switzerland, for organizing the 2010 Academy of Management Professional Development Workshop, "The 'Gioia Methodology' for Conducting Inductive Qualitative Analysis"; and also Ann Langley and Chahrazad Abdallah for their summary of the "Gioia Method" approach (Langley & Abdallah, 2011).

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes

1. We acknowledge that scholars often treat *constructs* and *concepts* as synonymous. We draw a subtle but significant distinction between concepts and constructs to connote that concepts are broader, more tenuous notions that can later be more narrowly specified, operationalized, and measured. We might similarly note that some scholars often treat "ethical" and "moral" behavior as synonymous, whereas others treat the two as subtly different to make a comparative point that ethical behavior can be defined as professional

agreement concerning appropriate behavior, whereas moral behavior can be construed as adhering to some higher standard of right and wrong. We believe that making such distinctions can prompt reflection on how we conceive our conceptualizations.

2. For examples of alternative approaches, see Eisenhardt (1989a, 1989b); Bechky (2003); Elsbach and Kramer (2003); Kreiner, Hollensbe, and Sheep (2006); Orlikowski (2002); Plowman et al. (2007); and Riley (1983).
3. Throughout the research process, we work to adhere to Glaser and Strauss's (1967) guidelines for conducting proper grounded theory research. See O'Reilly, Paper, and Marx (2012) for a good, recent summary in *ORM*.
4. We should note that this kind of data structure is ordered according to hierarchical categories (informant terms → themes → dimensions), which itself represents a theoretical presumption that phenomenological experience can be represented as a categorical structure. We acknowledge that this is an imposed ordering, albeit one aimed at developing a theoretical understanding. An astute reader might also note that the data structure does not account very well for chains of events and interactions among concepts. That accounting, however, is the purpose of the subsequent grounded theory development, for which the data structure serves as a content substrate for the coming process model (see the following).
5. Note that the label here is not "Results," which implies the reporting of the outcome of some sort of tests.

References

Alvesson, M., & Kärreman, D. (2007). Constructing mystery: Empirical matters in theory development. *Academy of Management Review*, *32*, 1265-1281.

Anand, N., Gardner, H. K., & Morris, T. I. M. (2007). Knowledge-based innovation: Emergence and embedding of new practice areas in management consulting firms. *Academy of Management Journal*, *50*, 406-428.

Anand, N., & Jones, B. C. (2008). Tournament rituals, category dynamics, and field configuration: The case of the Booker Prize. *Journal of Management Studies*, *45*, 1036-1060.

Balogun, J., & Johnson, G. (2004). Organizational restructuring and middle manager sensemaking. *The Academy of Management Journal*, *47*, 523-549.

Bansal, P., & Corley, K. (2011). The coming of age for qualitative research: Embracing the diversity of qualitative methods. *Academy of Management Journal*, *54*, 233-237.

Bechky, B. A. (2003). Object lessons: Workplace artifacts as representations of occupational jurisdiction. *American Journal of Sociology*, *109*, 720-752.

Berger, P. L., & Luckmann, T. (1966). *The social construction of reality: A treatise in the sociology of knowledge*. Garden City, NY: Doubleday.

Bryman, A. (1988). *Quantity and quality in social research*. New York, NY: Unwin Hyman.

Campbell, D. T. (1975). "Degrees of freedom" and the case study. *Comparative Political Studies*, *8*, 178-193.

Campbell, D. T., & Stanley, J. C. (1963). *Experimental and quasi-experimental design for research*. Chicago, IL: Rand McNally.

Chomsky, N. (1964). *Syntactic structures*. The Hague, the Netherlands: Mouton.

Clark, S. M., Gioia, D. A., Ketchen, D. Jr., & Thomas, J. B. (2010). Transitional identity as a facilitator of organizational identity change during a merger. *Administrative Science Quarterly*, *55*, 397-438.

Corley, K. G. (2004). Defined by our strategy or our culture? Hierarchical differences in perceptions of organizational identity and change. *Human Relations*, *57*, 1145-1177.

Corley, K. G., & Gioia, D. A. (2004). Identity ambiguity and change in the wake of a corporate spin-off. *Administrative Science Quarterly*, *49*, 173-208.

Corley, K. G., & Gioia, D. A. (2011). Building theory about theory building: What constitutes a theoretical contribution? *Academy of Management Review*, *36*, 12-32.

Dacin, M. T., Munir, K., & Tracey, P. (2010). Formal dining at Cambridge colleges: Linking ritual performance and institutional maintenance. *Academy of Management Journal*, *53*, 1393-1418.

Dutton, J., & Jackson, S. (1987). Categorizing strategic issues: Links to organizational action. *The Academy of Management Review*, *12*, 76-90.

Edwards, J. R., & Bagozzi, R. P. (2000). On the nature and direction of relationships between constructs and measures. *Psychological Methods*, *5*, 155-174.

Eisenhardt, K. M. (1989a). Building theory from case study research. *Academy of Management Review*, *14*, 532-550.

Eisenhardt, K. M. (1989b). Making fast strategic decisions in high-velocity environments. *The Academy of Management Journal*, *32*, 543-576.

Elsbach, K. D., & Kramer, R. M. (2003). Assessing creativity in Hollywood pitch meetings: Evidence for dual-process model of creativity judgments. *Academy of Management Journal*, *46*, 283-301.

Gioia, D. A. (2004). A renaissance self: Prompting personal and professional revitalization. In P. J. Frost & R. E. Stablein (Eds.), *Renewing research practice: Scholars' journeys* (pp. 97-114). Stanford, CA: Stanford University Press.

Gioia, D. A., & Chittipeddi, K. (1991). Sensemaking and sensegiving in strategic change initiation. *Strategic Management Journal*, *12*, 433-448.

Gioia, D. A., & Pitre, E. (1990). Multiparadigm perspectives on theory building. *Academy of Management Review*, *15*, 584-602.

Gioia, D. A., Price, K., Hamilton, A. L., & Thomas, J. B. (2010). Forging an identity: An insider-outsider study of processes involved in the formation of organizational identity. *Administrative Science Quarterly*, *55*, 1-46.

Gioia, D. A., & Thomas, J. B. (1996). Identity, image, and issue interpretation: Sensemaking during strategic change in academia. *Administrative Science Quarterly*, *41*, 370-403.

Gioia, D. A., Thomas, J. B., Clark, S. M., & Chittipeddi, K. (1994). Symbolism and strategic change in academia: The dynamics of sensemaking and influence. *Organization Science*, *5*, 363-383.

Glaser, B. G., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine.

Goldthorpe, J. H. (2000). *On sociology: Numbers, narratives, and the integration of research and theory*. Oxford, UK: Oxford University Press.

Harrison, S. H., & Corley, K. G. (2011). Clean climbing, carabiners, and cultural cultivation: Developing an open-systems perspective of culture. *Organization Science*, *22*, 391-412.

Kjærgaard, A., Morsing, M., & Ravasi, D. (2011). Mediating identity: A study of media influence on organizational identity construction in a celebrity firm. *Journal of Management Studies*, *48*, 514-543.

Kreiner, G. E., Hollensbe, E. C., & Sheep, M. L. (2006). Where is the "me" among the "we"? Identity work and the search for optimal balance. *Academy of Management Journal*, *49*, 1031-1057.

Labianca, G., Gray, B., & Brass, D. J. (2000). A grounded model of organizational schema change during empowerment. *Organization Science*, *11*, 235-257.

Langley, A. (1999). Strategies for theorizing from process data. *Academy of Management Review*, *24*, 691-710.

Langley, A., & Abdallah, C. (2011). Templates and turns in qualitative studies of strategy and management. In D. Bergh & D. Ketchen (Eds.), *Building methodological bridges: Research methodology in strategy and management* (Vol. 6, pp. 201-235). Bingley, UK: Emerald Group.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.

Locke, K., & Golden-Biddle, K. (1997). Constructing opportunities for contribution: Structuring intertextual coherence and "problematizing" in organizational studies. *Academy of Management Journal*, *40*, 1023-1062.

Maguire, S., & Phillips, N. (2008). "Citibankers" at Citigroup: A study of the loss of institutional trust after a merger. *Journal of Management Studies*, *45*, 372-401.

Maitlis, S. (2005). The social processes of organizational sensemaking. *Academy of Management Journal*, *48*, 21-49.

Maitlis, S., & Lawrence, T. B. (2007). Triggers and enablers of sensegiving in organizations. *Academy of Management Journal*, *50*, 57-84.

Mantere, S., Schildt, H. A., & Sillince, J. A. A. (2012). Reversal of strategic change. *Academy of Management Journal*, *55*, 173-196.

Morgan, G. (1983). *Beyond method: strategies for social research*. Beverly Hills, CA: Sage.
Morgeson, F. P., & Hofmann, D. A. (1999). The structure and function of collective constructs: Implications for multilevel research and theory development. *Academy of Management Review*, *24*, 249-265.
Nag, R., Corley, K. G., & Gioia, D. A. (2007). The intersection of organizational identity, knowledge, and practice: Attempting strategic change via knowledge grafting. *Academy of Management Journal*, *50*, 821-847.
Nag, R., & Gioia, D. A. (2012). From common to uncommon knowledge: Foundations of firm-specific use of knowledge as a resource. *Academy of Management Journal*, *55*, 421-457.
O'Reilly, K., Paper, D., & Marx, S. (2012). Demystifying grounded theory for business research. *Organizational Research Methods*, *15*, 247-262.
Orlikowski, W. J. (2002). Knowing in practice: Enacting a collective capability in distributed organizing. *Organization Science*, *13*, 249-273.
Pedhazur, E. J., & Schmelkin, L. P. (1991). *Measurement, design, and analysis: An integrated approach*. Hillsdale, NJ: Lawrence Erlbaum Associates.
Plowman, D. A., Baker, L. T., Beck, T. E., Kulkarni, M., Solansky, S. T., & Travis, D. V. (2007). Radical change accidentally: The emergence and amplification of small change. *Academy of Management Journal*, *50*, 515-543.
Poonamallee, L. (2011). Transforming realities—making the improbable possible: Reclamation of sacredness as a source of generative capacities. *Journal of Management Inquiry*, *20*, 242-262.
Popper, K. (2002). *The logic of scientific discovery*. London: Routledge. (Original work published 1959)
Pratt, M. G. (2008). Fitting oval pegs into round holes: Tensions in evaluating and publishing qualitative research in top-tier North American journals. *Organizational Research Methods*, *11*, 481-509.
Pratt, M. G., Rockmann, K. W., & Kaufmann, J. B. (2006). Constructing professional identity: The role of work and identity learning cycles in the customization of identity among medical residents. *Academy of Management Journal*, *49*, 235-262.
Ravasi, D., & Phillips, N. (2011). Strategies of alignment: Organizational identity management and strategic change at Bang & Olufsen. *Strategic Organization*, *9*, 103-135.
Rerup, C., & Feldman, M. (2011). Routines as a source of change in organizational schemata: The role of trial-and-error learning. *Academy of Management Journal, 54*, 577-610.
Riley, P. (1983). A structurationist account of political culture. *Administrative Science Quarterly*, *28*, 414-437.
Rindova, V., Dalpiaz, E., & Ravasi, D. (2011). A cultural quest: A study of organizational use of new cultural resources in strategy formation. *Organization Science*, *22*, 413-431.
Schutz, A. (1967). *The phenomenology of the social world*. Evanston, IL: Northwestern University Press.
Stigliani, I., & Ravasi, D. (2012). Organizing thoughts and connecting brains: Material practices and the transition from individual to group-level prospective sensemaking. *Academy of Management Journal*, *55*, 1232-1259.
Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage.
Thomas, J. B., Sussman, S. W., & Henderson, J. C. (2001). Understanding "strategic learning": Linking organizational learning, knowledge management, and sensemaking. *Organization Science*, *12*, 331-345.
Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry*, *16*, 837-851.
Van Maanen, J. (1979). The fact of fiction in organizational ethnography. *Administrative Science Quarterly*, *24*, 539-550.
Weick, K. E. (1979). *The social psychology of organizing*. New York, NY: Addison-Wesley. (Original work published 1969)

Author Biographies

Dennis A. (Denny) Gioia is the Robert and Judith Klein Professor of Management and the Chair of the Department of Management and Organization in the Smeal College of Business at the Pennsylvania State University. He holds degrees in both Engineering Science and Management from Florida State University. In former lives,

he worked as an engineer for Boeing Aerospace at Cape Kennedy on the build and launch teams for the Apollo 11, 12, and 13 missions to the moon and for Ford Motor Company as corporate recall coordinator in the '70s. In his academic life, his research and writing interests focus on the ways in which organizational identity, image, learning, and knowledge are involved in sensemaking, sensegiving, and organizational change. His work spans the spectrum from the philosophical, theoretical, and empirical to the methodological, educational, and practical, and has appeared in many of the top journals in management, as well as in numerous book chapters and proceedings.

Kevin G. Corley (PhD, Penn State) is an associate professor of management in the management department at the W. P. Carey School of Business at Arizona State University. His research interests focus on sensemaking and organizing processes, especially as they pertain to organizational change. He has applied this focus to areas of organizational identity, image, identification, culture, and knowledge. His research has recently appeared in the *Academy of Management Journal*, the *Academy of Management Review, Administrative Science Quarterly*, and *Organization Science*. His 2004 *ASQ* article with Gioia received the 2010 *ASQ* Award for Scholarly Contribution. He currently serves as an Associate Editor at the *Academy of Management Journal* focusing on qualitative research.

Aimee L. Hamilton recently received a PhD in Business Administration from the Pennsylvania State University. She is an assistant professor of management in the department of management at the Daniels College of Business at the University of Denver as of fall 2012. Her research interests include organizational identity, image and reputation, and professional identity, as well as fluid organizing and sustained innovation in organizations. Her work has appeared in *Administrative Science Quarterly*, as well as Academy of Management Proceedings and book chapters.