From: **Arati Vaidya** < <u>arati_vaidya@scmhrd.edu</u>>

Date: Thu, Apr 30, 2020 at 7:14 PM

Subject: FDP - By Dr. Harsh Jha on Qualitative Research

To: faculty_group < faculty_group@scmhrd.edu>

Cc: Director Office <director@scmhrd.edu>, Deputy. Director

< deputy_director@scmhrd.edu>, Col. Kiran Kanade < ao@scmhrd.edu>, Harsh Jha

< Harsh.Jha@newcastle.ac.uk >

Dear Sir/Madam,

Greetings!

This is to inform all that we have scheduled FDP for all faculty members on Qualitative Research by Dr. Harsh Jha .

As directed by Director mam request all to please attend.

Details are as below:

Day & Date:Tuesday, 5th May & Wednesday 6th May 2020 Time: 2 pm to 6 pm On Google meet

5th May 2020 link: meet.google.com/wux-pxrk-uqz

6th May 2020 link: meet.google.com/zhg-errr-rvk

PFA the material for FDP.

Thanks & Regards,

Arati Vaidya Information Officer

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Attendance sheet Qualitative Research by Dr. Harsh Jha Sr. No **Faculty Name** 05-May-20 06-May-20 Pratima Sheorey 2 Netra Neelam 3 Vasundhara Sen Manoj Hudnurkar 4 5 Manish Sinha 6 Aradhana Gandhi Sonali Bhattacharya 8 Vaishali Mahajan 9 Pankaj Sharma 10 K.Rajagopal 11 Vinita Sinha Gauri Joshi Rahul Hiremath 13 Pooja Sharma 14 Dipasha Sharma 15

Sanjay Bhattacharya

Suhas Ambekar

Monica Kunte

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Organizational Research Methods

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

Dennis A. Gioia, Kevin G. Corley and Aimee L. Hamilton

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What is This?

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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

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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. 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. 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

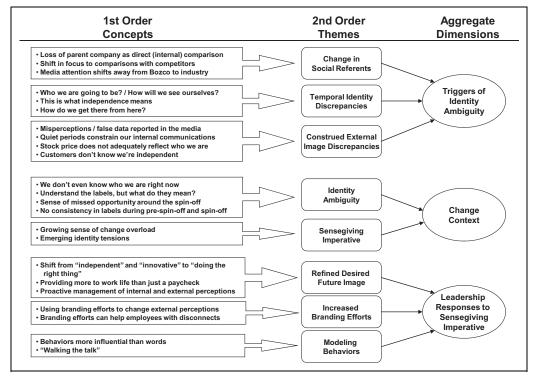


Figure 1. Data structure.
Reproduced from Corley and Gioia (2004).

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).

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

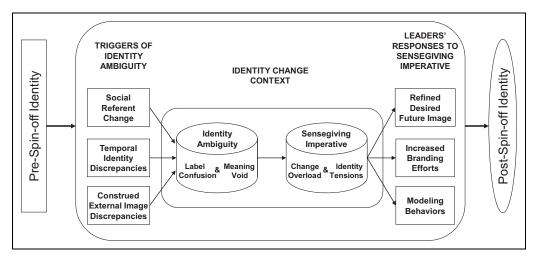


Figure 2. Organizational identity change process. Reproduced from Corley and Gioia (2004).

(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. 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 AFeatures 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 Ist-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 | • Formulate dynamic relationships among the 2nd-order concepts in data structure | |
| Articulation | Transform static data structure into dynamic grounded theory model | |
| | Conduct additional consultations with the literature to refine articulation of emergent concepts and relationships | |

^aThe 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 BStudies 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 |

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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).
- 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.

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Mechanisms of theorization of a new practice in a professional field: The case of design-thinking in business management

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Mechanisms of theorization of a new practice in a professional field: The case of design-thinking in business management

ABSTRACT

Legitimation of new practices in an established fields is a challenging task as it has to be made understandable and meaningful to prospective recipients. Garnering such legitimacy for the new practice is critical for successful diffusion across the target field. Extant research has shown that the process of theorization - rendering of ideas into understandable and compelling formats - is central to legitimacy construction. However, we still have limited understanding of specific mechanisms through which theorization operates. To address this gap, in this paper we explore how the new consulting practice of design-thinking was theorized in the professional field of business management. We undertook mixed methods approach to analyse the data, including grounded theory based qualitative analysis of archival data and quantitative analysis of temporal shifts. Our qualitative analysis revealed three key mechanisms of theorization – appropriation (focussed on presenting design-thinking as a solution to management problems), assimilation (focussed on integrating design-thinking with current vocabularies and existing practices within management field) and adaptation (focussed on redefining design-thinking in order to resolve contradictions with existing practices within management field. Further, our quantitative analysis the usage of appropriation decreased over time, while the usage of assimilation and adaptation increased over time, with being the most dominant mechanism. This study contributes directly to current literature on legitimation and diffusion, by showing how theorization of a new practice goes beyond simple problem-solution coupling and predominantly includes contextualization of the meanings associated with the new practice.

KEY WORDS

- (1) Theorization;
- (2) Legitimation;
- (3) New Practice;
- (4) Diffusion:
- (5) Profession;
- (6) Consultancy

INTRODUCTION

"Whenever I see a business magazine glow about design thinking, as *BusinessWeek* has done recently with this special report, and which *Harvard Business Review* did last year it gets my dander up. Not because I don't see the value of design (I started a company dedicated to experience design), but because the discussion in such articles is inevitably so fetishistic, and sadly limited."

(Peter Merholz, HBR Blog, 2009)

Introduction and diffusion of new practices, organizational forms and identities in an established field faces substantial challenges. As the quote above suggests, new practices, even seemingly familiar ones, may face scepticism and derision from other field actors, including prospective recipients, especially with respect to the meaning and the application of the new practice. Hence, garnering legitimacy for a new practice is a critical task for those promoting them and how new practices achieve legitimacy and diffuse within and across fields is one of the key areas of research in organizational theory (see Harrington, 2015; Noordegraaf, 2015; Adler & Kwoon, 2013; Kennedy & Fiss, 2009; Guler, Guillen & Macpherson, 2002).

Prior research has shown that for new practices to achieve legitimacy and become widely adopted, that is, for successful diffusion, they have to be appropriately "theorized" (Strang & Meyer, 1993). Appropriate theorization confers legitimacy to a new practice by "rendering of ideas into understandable and compelling format" (Greenwood, Suddaby & Hinings, 2002: 75); elaborating various cause and effect relationships (Tolbert & Zucker, 1996; Strang & Meyer, 1993); and making various problems salient, while specifying how the new practice can provide solutions to those problems (David, Sine and

Haveman, 2013). The process of theorization is critical because legitimating new practices is a difficult and resource intensive process, wherein legitimation is not given. How promoters theorize the new concepts, identities or organizational forms they are championing, that is, which problems they identify and what solution they claim to provide, is central to the theorization process (David et al., 2013).

However, even though the importance of the process of theorization in legitimating new practices, identities and policies has been well established (see David, Sine and Haveman, 2013; Nigam & Ocasio, 2010; Maguire, Hardy & Lawrence, 2004; Greenwood et al., 2002), our current understanding of the theorization process itself, especially various mechanisms (or micro-processes) through which theorization is undertaken is limited and more empirical work in varied empirical contexts is required to explicate these mechanisms (David et al., 2013; Greenwood et al., 2002). Exploring how theorization occurs in different contexts, focusing upon the language used, by whom, and how and with what effect is important for identifying various micro processes underlying theorization (Greenwood et al., 2002). While research has shown that theorization primarily includes making ideas understandable by contextualizing the new practice and presenting it as a solution to known problems, the various mechanisms through which these aim are achieved is not clear. Prior work has focussed more on what theorization is, and not enough attention has been paid to how theorization is undertaken (see David et al., 2013 and Maguire et al., 2004 for exceptions).

To address this gap in our understanding of the key mechanisms through which theorization is undertaken, in this paper we examine how the new practice of designthinking was theorized in the field of business management. Theorizing a new practice in

an established field is particularly challenging due to the highly structured setting, presence of multiple audiences, hard occupational boundaries, especially in case of professional settings. Further, members in an established field may be more oriented to field specific norms, values and beliefs than to external cultural schemas and may be sceptical of claims based on such schemas (David et al., 2013). In contrast, institutional entrepreneurs in emerging fields do not have to face such resistance from entrenched value systems, as the field in not developed yet.

However, examining theorization of the new practice of design-thinking in the established field of business management may provide an appropriate empirical context for examining mechanisms within theorization process. As such a professional setting includes multiple audiences, specializations and occupations, this context may provide an extreme case, wherein promoters of design-thinking have had to undertake extensive theorization in order to garner legitimacy for this new practice. Hence, we can expected various underlying mechanisms within theorization process may be expressed more evidently in this context.

To various mechanisms of theorization, we undertook a mixed methods analysis of 21 articles about design-thinking published in three major practitioner centric management journals – *Harvard Business Review, California Management Review* and *MIT Sloan Review*. We undertook mixed methods approach to analyse the data, including grounded theory based qualitative analysis of text corpus and quantitative analysis of temporal shifts. Our qualitative analysis revealed three key mechanisms of theorization – appropriation (focussed on presenting design-thinking as a solution to management problems), assimilation (focussed on integrating design-thinking with current

vocabularies and existing practices within management field) and adaptation (focussed on redefining design-thinking in order to resolve contradictions with existing practices within management field. Further, our quantitative analysis showed that (1) usage of appropriation decreased over time; (2) usage of assimilation and adaptation increased over time; and (3) assimilation emerged as the most dominant mechanism.

THEORETCIAL BACKGROUND

Examining the process of diffusion of new practices in a field, especially how they are legitimated, is an important aspect of understanding field level institutionalization (Zilber, 2008). Diffusion of new practices in a field may have profound impacts and may permanently change the field (Kennedy & Fiss, 2009; Greenwood et al., 2002). Early literature on diffusion, especially that of technology innovations and practices, tended to give primacy to either the purported economic benefits of adopting new practices or legitimacy benefits drawn from adopting readily available templates legitimized by the other powerful actors external to the field (Boxenbaum & Jonsson, 2008). However, this suggests a very unproblematized model of institutionalization – a universal, deterministic process, with clearly defined steps (Zilber, 2008; Sahlin-Anderson, 1996).

Instead, most recent research shows that diffusion of new practices is not a straight forward process of adoption of available templates. Instead, practices change and vary during the diffusion process itself (Fiss, Kennedy & Davis, 2012). For instance, Kennedy & Fiss (2009), using data on diffusion of total quality management (TQM) in US hospitals, found that motivation to appear legitimate coexisted with presumed economic benefits of TQM adoption for both early and late adopters. However, the

relationship depends on the extent of practice adoption. Further, Fiss, Kennedy & Davis (2012) found that practices not just diffuse, but are also modified as they spread among adopters. In their study of "golden parachute" contracts across corporations in 1980s, they found that firms differed significantly in terms of the extent to which they adopted this practice, making substantial changes in the contract type. Similarly, Whitson, Weber, Hirsch & Bermiss (2013) suggest that diffusion of a concept across fields brings features of the context in which a term originated into another context and through path dependency lead to a focus on certain areas, while neglecting others. This understanding is consistent with the notion of translation, that is, concepts are rendered meaningful through the construction of stories that embed ideas in the context of a narrative plot, where a plot is a means through which events are put into a meaningful whole (Czarniawska-Joerges, 1997).

Consistent with such concerns about an unproblematic mimicry or economic efficiency driven diffusion approach, Strang & Meyer (1993) presented "theorization" as a critical component of diffusion. They argued that social practices are accompanied by "theorized accounts" (p. 492), which play a central role in the very process of diffusion. Theorized accounts chart abstract categories and outline the relationships between them (e.g. cause and effect), which are produced as part of the efforts to make sense of the word. Accordingly, more complex and rich the theorization of a practice, diffusion will be more rapid and less dependent on social relations (Strang & Meyer, 1993; Greenwood et al., 2002). Theorization is particularly important because most organizations don't have direct experience with the structures and practices to be implemented, what they actually imitate are "rationalizations" – stories constructed by actors in the "exemplary"

organizations and their own translations of such stories (Maguire et al., 2004; Sahlin-Anderson, 1996).

Theorization refers to the process of development and specification of abstract categories and the elaboration of cause and effect relationships, which simplify and distil the properties of new practices and explain the outcomes they may produce (Strang and Meyer, 1996). Operationally, theorization involves two major tasks: specification of a general "organizational failing" for which the proposed new practice or innovation is "a solution". Such linking of the new practice to the field through an existing, ideally abstract, field level problem allows for both moral and pragmatic legitimacy building (Tolbert & Zucker, 1996; Suchman, 1995). Overall, theorization is about rendering of ideas into understandable and compelling format - how issues are interpreted, represented, translated, and normatively developed – especially by linking them to prevailing problems of the target field (Greenwood et al., 2002).

Recent empirical research focusing on the process of theorization has variously looked at new practices in both established (see Greenwood et al., 2002) and emerging (see Maguire et al., 2004) fields; new organizational forms (see David et al., 2013); policy reform proposals (see Nigam & Ocasio, 2010); professional services models (see Harrington, 2015); limited institutionalization of a professional practice (see Nicklich & Fortwengel, 2017) and professional expertise (see Brady, 2018).

For instance, Greenwood et al. (2002) identify theorization as a key stage in the institutional change process, wherein the new professional model of multidisciplinary practices was presented as a solution to two field level problems – need for change and need for responding to clients or client service. David et al. (2013) further elaborated on

this aspect of theorization to show how management consulting pioneers theorized the new organizational form by making salient contradictions between status quo and professed societal values (e.g. between structures and practices in client firms and the progressive values of efficiency and rational organization). Hence, theorization may involve highlighting inconsistencies with abstract societal values, and not just refer to generalized problems from within a field. Further, they also show theorize the new practice as not just a solution to the current problem, but rather by linking it to another established category of expertise external to the field (e.g. psychology or natural science methods).

Maguire et al. (2004) further elaborated the process of theorization by showing how institutional entrepreneurs in the emerging field of HIV/AIDS treatment developed an array of arguments that translated the interests of diverse stakeholders (and). Referring to this more dynamic multi-actor aspect of theorization, Nigam & Ocasio (2010) show how the theorization of managed care logic evolved over time, as different actors theorized individual dimensions of the logic, based on their relationship with hospitals. In a recent study Niklich & Fortwnegel (2017) highlight another aspect of theorization - how partial theorization, especially failure to link the professional practice with identifiers of formal training and occupational status, especially through alignment with the institutional configuration of the home country, that is, Germany, led to insufficient institutionalization of the apprenticeship program in Germany's private security services.

Overall, current literature on theorization has clearly established the centrality of theorization process in diffusion and institutionalization of new practices, especially through legitimation, and identified problem-solution coupling as a key aspect of

theorization. However, despite substantial empirical research on how theorization leads to legitimation, diffusion and institutionalization of new practices, there has been comparatively less focus on specific mechanisms through which theorization is undertaken (except research on problem-solution coupling). Identifying the specific mechanisms through which theorization is achieved is important in order to understand both the dynamics of the theorization process itself and how promoters use theorization to legitimize the new practices they champion. In this paper we attempt to uncover the black-box of theorization further by exploring specific mechanisms through which theorization of a new practice in an established field is undertaken. Specifically, we examine these mechanisms of theorization by analysing how the new practice of design-thinking was theorized by its promoters in the field of business management.

RESEARCH CONTEXT

Design-thinking has been variously defined as "a process for creative problem solving, with a human centred core, encouraging organizations to focus on the people they are creating for" (IDEO) or "an approach to problem solving that uses tools traditionally utilized by designers of commercial products, processes, and environments" (Elsbach & Stigliani, 2018). The origins of design-thinking can be traced back to 1960s, rooted in the works of scholars drawing distinction between natural science and science of design (e.g. Gregory, 1966; Simon, 1969). The Conference on Design Methods held in London in 1962 is generally regarded as the critical event which marked the launch of design methodology as a subject and field of inquiry (Cross, 2001). These scholars portrayed design-thinking as a method "aimed at creating new forms, new artefacts or more generally, new knowledge" (Elsbach & Stigliani, 2018: 2276). In contrast to

previous understanding of design associated with creating and beautifying physical objects, these scholars decoupled design and designer's work from physicality and postulated the science of design as concerned with all activities aimed at creating those artefacts or "the transformation of existing conditions into preferred ones" (Simon, 1969: 4). As noted by Gregory (1966), "the process of a design is the same whether it deals with a design of new oil refinery, the construction of a cathedral of the writing of Dante's Divine Comedy".

However, in subsequent decades the overtly positivist underpinnings of the design science approach was challenged by a more constructivist stance of design as practice. In particular, Rittel & Weber (1973) and Schon (1983) criticized the design as science approach as being too focused on solving well-formed problems. Rittel & Weber (1973) identified the problems in design as 'wicked problems', wherein designers often face challenging, ill-formulated problems that do not have a linear pre-determined plan for a solution In the same vein, Schon (1983) stressed that, in contrast to design as science approach, designers face much more messy and problematic situations and emphasized the reflective aspect of designer's practice, which is predominantly an artistic and intuitive process used to understand and solve problems in situations of uncertainty, ambiguity and instability.

Building on such constructivist theorizing, scholars attempted to unpack specific aspects of design method, especially the 'wicked' nature of design problems (e.g. Buchanan, 1992), design process as open ended and highly ambiguous, with multiple plausible solutions (e.g. Goldschmidt, 1997) and designer's attitude towards solving such problems (e.g. Boland & Collopy, 2004). More recently, designer's key task has been

identified as that of "organizing complexity" and "finding clarity in chaos" (Kolko, 2010: 15), in order to achieve appropriate solution through an abductive thinking process aimed at collecting, organizing, pruning and filtering data regarding aesthetic, cultural and technological trends and consumer and business needs.

During this period, probably due to somewhat foundational links between designthinking and organizing, interest in how designers work and think progressively moved from the field of design and architecture to the field of management, with specific focus on using design tools to solve management problems (Elsbach & Stigliani, 2018). The early champions of the use of design-thinking approach in the field of management focused on how design thinking can influence innovation and help companies gain competitive advantage (e.g. Brown, 2008). In last couple of decades, design-thinking has attracted substantial interest from both academic and practitioner community in business and management. Tim Brown and his design consulting firm – IDEO - became a business media sensation, with a dedicated Business Week special report, a special issue in Harvard Business Review and publication of best-selling book, Change by Design. In parallel, management researchers have explored the influence of design-thinking on various firm level outcomes, including innovation, decision making, growth and profitability, stock market prices and social innovation. For a recent full review of academic research on design thinking in the field of management, please see Elsbach & Stigliani (2018).

Alongside increasing academic attention, design-thinking also became structurally embedded within management field through development and diffusion of design thinking consultancy or specialized practices across management consultancy industry.

One of the first design consultancies – Frog - was founded in 1969. However, the emergence of design thinking as a fully developed specialist consultancy practice can be marked by the merger of three design firms leading to the foundation of iconic design-thinking consultancy IDEO in 1991. More recently, design-thinking consultancy practice has been established by most major management consultancies, either through acquisition (e.g. FJORD by Accenture) or in-house development of specialist practice unit (e.g. by Mckinsey, Deloitte and IBM).

METHODOLOGY

As the aim of this paper is to explore a not so well understood phenomenon — mechanisms underlying theorization of a new practice - we primarily used qualitative research method, specifically qualitative analysis of archival data (Mohr & Ventresca, 2002), supported by exploratory quantitative analysis. Qualitative approach is appropriate because it increases the researcher's ability to describe a complex social system due to its emphasis on interpretation (Marshall and Rossman, 1989) and allows for revelatory exploration (Lincoln & Guba, 1985). As archival sources related to design-thinking are not located in any particular repository, we used purposive theoretical sampling approach (Glaser & Strauss, 1967) to collect relevant representative data. Further, as we are interested in exploring how promoters theorized the *de novo* practice of design-thinking in the field of business management, we purposefully collected data from sources can appropriately capture attempts by promoters of design-thinking to legitimate this new practice, specifically theorization, to management practitioners.

To do so, we focused on articles about design-thinking published in three top business management practitioner focused journals – *Harvard business Review, Sloan*

Management Review and California Management review. After the appropriate sources were identified, we searched for relevant articles with the term design thinking or design method, either in the title or in the key words in these journals. Through this process we identified 19 articles which were explicitly about design-thinking. Next, we undertook a wider search for articles about design thinking from other sources catering to management practitioners. This approach yielded two more articles, one from Academy of Management Learning & Education and the other published by the Business Process Management Institute. These 21 articles, including 228 printed pages of text in total, form the data corpus we qualitatively examined.

While it is possible for us supplement this data with other media resources (e.g. interviews with promoters championing design-thinking), we have avoided doing so in order to maintain the integrity of our data. The articles published in chosen journals represent structured texts specifically targeting management practitioners, in contrast to interviews published in general media. As institutions are "social constructions constituted through discourse", such structured collection of texts that exist in a particular field, produces the social categories and norms that shape the understanding and behaviour of other actors (Philips, Lawrence & Hardy, 2004: 638). Hence, this collection of texts, produced by those pioneering design-thinking practice, should be an appropriate source for exploring theorization mechanisms used by them, as legitimacy seeking is inherent to production of such text (Zilber, 2008; Philips & Hardy, 2002).

To analyze our data corpus, we used a multistep analytical strategy. First, we developed the historical sequence of key events, presented in the context section, as 'a sequence of individual and collective events, actions and activities unfolding over time in

context' (Pettigrew, 1997: 338) and developed a clear case narrative showing how design thinking concept developed and evolved over time. Second, using grounded theory driven inductive coding approach (see Charmaz, 2006; Gioia, Corley & Hamilton, 2012; Langley, 1999), we identified key themes present in our data. Our coding was particularly driven by how design-thinking or design method was discussed in the data. Grounded theory approach is relevant to this study because it is well suited for studying complex phenomena and allows us to derive themes from the examination of and immersion in the data and capture substantive aspects of the research situation (Locke, 2001; Gioia et al., 2012). Initially, we used open coding approach (Strauss & Corbin, 1998) to identify all the interesting and relevant segments of data, typically one to three sentences long, and coded them based on in-situ or within quote vocabulary – identifying 342 relevant data segments during this process. Next, we started seeking "similarities and differences" (Gioia et al., 2012: 20) amongst our many open codes and through a process of integrating, renaming and deleting various codes we identified 26 first order codes. Next, we looked for second order themes, that is, deeper structures or patterns of potential aggregation or relationships across our first order codes, asking "whether the emerging themes suggests concepts that might help us describe and explain the phenomena we are observing" (Gioia et al., 2012: 20). Through this process we aggregated 26 first order codes into seven higher level second order themes, each theme containing 3-5 first order codes. Finally, we further aggregated the seven second order themes into three theoretically driven aggregate dimensions, which represented the three mechanisms through which theorization of design-thinking was undertaken. All qualitative coding and analysis of the data was undertaken using NVIVO.

In the third step, we undertook exploratory quantitative analysis to examine any temporal patterns in the usage of the three pre-identified mechanisms of theorization. We divided the time period for our study into two periods: period 1 (1999-2014) and period 2 (2015-2018). Year 2015 was used as a cut-off due to the substantial increase in number of articles published 2015 onwards. Off the 342 data segments coded, 143 were from period 1 and 199 from period 2. Next, we created a dataset containing the proportion of data segments coded for the three mechanisms (off the total number of coded data segments coded) for each article included in our data corpus. This step allowed us to compare the occurrence of various mechanisms across articles, irrespective of the article length. Finally, we undertook a series of t-tests to explore the mean prevalence of the three theorization mechanisms, both within and across time periods. All quantitative analysis was run using SATA 15.

FINDINGS

Mechanisms of theorization

Our inductive data analysis identified three key mechanisms by which promoters theorized the new practice of design-thinking within management field: appropriation, assimilation and adaptation. First, these promoters 'appropriated' the new practice of design-thinking from an external field, architecture and design, and juxtaposed it as a solution for various limitations of existing dominant practices in the management field. Second, they 'assimilated' design-thinking tools within the management field by integrating it with key managerial practices, while acknowledging challenges inherent in its application. Third, finally, they also 'adapted' design-thinking through reinterpretation with respect to challenges arising from the application of design-thinking

and inconsistencies and contradictions therein. Please see figure 1 for a thematic representation of the full data structure and table 1 for illustrative evidence for each first order order code. Following we describe the three mechanisms of theorization in details.

[Figure 1 about here]

Appropriation

The first mechanism of theorization of design-thinking in management field entails appropriating a new paradigm from the external field of design and architecture. By appropriation we refer to the processes by which promoters identify limitations of existing methods and practices in management field and formulate the potential superiority of an alternative paradigm (design-thinking in this case) for addressing key managerial problems. This aggregate dimension includes two second order themes. First, critique of traditional strategy formulation, which includes codes about limitations and shortcomings of the current strategy formulation paradigms in management. Second, positioning of design-thinking as a solution, which includes codes about inserting design vocabulary in managerial vocabulary, especially need for focus on users, experimentation and organizational structure.

For instance, they portray the premise of traditional methods in strategy as not being 'fit for purposes', which stems from the fact that the competitive landscape has changed significantly in the past two decades. Reliance on the 'deductive' logic – continuous re-use by managers of traditional metrics and objectives to focus solely on 'cost reduction' and 'profit maximization' – is argued to disadvantage strategy-making (e.g. Dunne and Martin, 2006). This is primarily due to managers being less inclined to attend to structural market changes and the new user-centric approach, which would

otherwise be treated as the 'enemy' of traditional strategy-making. Within organizations, adhering to the traditional reasoning implies lack of support for managers to think about innovative user-centric solutions (e.g. Liedtka, 2000). As the result, managers are said to be less capable of predicting or even to responding meaningfully to competitive pressures in the market (e.g. Liedtka, 2000).

On the other hand, the use of design-thinking in strategy formulation, to the tune of 'managing as designing' and 'managers-as-designers', entails revision of both the strategic targets and means of achieving them by organizations. Thus, proponents of the design-thinking argue for a more prominent embeddedness of the human-centric focus into strategy, enabling managers to formulate more 'real' and 'realizable' strategies with the ultimate end-user in mind (Liedtka, 2000). Contrary to the traditional methods in management, design-thinking is argued to position user experience as the ultimate purpose of strategy and not as the vehicle for helping the business to attain performance objectives. In effect, this can be a 'win-win' situation for both the user and the company (Dunne and Martin, 2006).

The new lens, however, is also theorized to require revision of organizational processes that reinforce strategy-formulation. Here, design-thinking challenges the traditional stasis inside organizations in favour of embracing change as a necessity. To achieve that, proponents of design-thinking advocate creation of the intra-organizational "virtual world in which experiments (mental rather than physical) can be conducted" to foster a 'trial-and-error' culture to the tune of time and cost savings (Liedtka, 2000:14). A more fundamental change proposed by the proponents of design-thinking and which would affect strategy implementation relates to re-thinking organizational structure

(Dunne and Martin, 2006). While functional division is the existing source of organizational competitiveness in the market, means of fostering the 'sense of overall purpose' (Liedtka, 2000) is the area in which design-thinking is said to offer unique benefits. To counter the methodological individualism of existing methods, design-thinking offers a more integrative view of strategy formulation, where each functional task is a piece of a larger (and more inter-connected) set of business activities. As such, adoption of design-thinking affords established (and larger) companies the benefits of the start-up - agile and integrated – strategy-making. Taken together, theorizing by institutional entrepreneurs includes appropriating a new paradigm from an external theoretical and practice field (that is, design) and outlining to stakeholders in focal field its benefits compared to the traditional methods of strategy formulation.

Assimilation

The second mechanisms of theorization entails assimilation of the design-thinking into management field. By assimilation we refer to processes by which promoters incorporate principles of the new practice into business education and training, as well as link it with current managerial practices. This aggregate dimension includes three second order themes. First, integrating design-thinking in management education and training, which includes codes about incorporating design-thinking in management education to help develop integrative thinkers who use abductive logic of decision making, and can solve wicked problems. Second theme is about integrating design-thinking in strategy making within firms, which includes codes about flexibility and market responsiveness, prototyping, restructuring firms based on projects, not resource centers. The third theme is about challenges in applying design-thinking, which includes codes about unproven

and unclear benefits of design-thinking, difficulties organizations face in integrating design-thinking and under-estimation of organization wide change required.

Primarily, the reasoning by promoters revolves around pollination of the business education with ideas from design education. For Dunne and Martin (2006), Harvard MBA model is an archetypical educational model that underpins the traditional strategy-making. This model, accordingly, is said to revolve around the 'discounted cash flows', 'ROIs' – in other words, the traditional measures of business performance – and prizes development of skills, including the analysis of 'airtight' business cases, individual (as opposed to collaborative) work and self-advancement at the expense of developing listening skills. The proponents of design-thinking, on the other hand, argue for necessity of abductive logic to be planted at the core of business education, or a logic of 'what might be' in order to equip business students to come up with creative resolutions to deductive ('what should be') and inductive ('what is') business challenges (Dunne and Martin, 2006). Moreover, business education is to benefit from design's emphasis on collaborative forms of work and the multi-stakeholder vision of performance outcomes (Liedtka, 2000).

Fundamentally, proponents of the design-thinking do not see these principles as being absent in MBA courses altogether. Instead, the distinction is made in a degree to which collaboration takes place among inter-disciplinary, as opposed to homogenous student perspectives (a 'broader' vs a 'narrower' form of collaboration) and extent to which interests of multiple stakeholders – consumers or the society at large – are integrated into the business decision (Dunne and Martin, 2006). Incorporation of design-thinking principles is therefore argued to rectify at least two fundamental problems in

MBA programs – producing business graduates who are integrative thinkers when it comes to solving the 'wicked' – fundamental environmental, social and societal – problems and amplifying a sense of social responsibility in the business education (Ghoshal, 2005). Therefore, design-thinking in business education is not concerned with training more designers but the managers with more inclusive (design) mindset and skills (Dunne and Martin, 2006).

Next, greater incorporation of design-thinking into managerial practice revolves around organizational planning. Promoters articulate how strategic planning needs to depart away from its 'inappropriately applied' standardized techniques that drive for efficiency at the expense of reducing variation and responsiveness to market changes and customer needs (Liedtka, 2000). With that, creativity does not only concern aesthetic considerations for core product and service offering in their strictest form, but entails foreseeing market opportunities or responding to them creatively. A further contribution of the design-thinking to managerial practice revises the view of organization as pursuing 'ongoing activities' that require constant and large deployments of people, resources and time (Dunne and Martin, 2006). Instead, business organizations are defined as 'bundles of projects', which have defined terms, timeline and objectives. As part of the design-driven view, issues of stasis, lack of innovation or issues with the speed of communication can be addressed by management within even the larger organizations (Liedtka, 2000).

While claiming "the people who rise to the top of these companies are designers more often than not" (Dunne and Martin, 2006:516), promoters highlight that differences between design companies and businesses are rapidly fading. First, managers must place

design-thinking much closer to the strategic center of the enterprise (Kolko, 2015). For example, Mauro Porcini joined PepsiCo in 2012 as its first-ever chief design officer (Ignatius, 2015). Design-thinking, thus, can be directly integrated with and carrying influence over organizational culture and strategy. Second, popularity of the 'open innovation' strategy (Chesbrough, 2006) means that companies can obtain novel concepts from customers, external designers and scientists with relative ease (Verganti, 2016). This potential ability to tap into contribution from insiders as well as outsiders recreates permeability of organizational boundaries commonly attributed to the 'design shops' (Dunne and Martin, 2006:514).

However, the challenges for promoters to incorporate principles of designthinking into management field continued. At the outset, there was an uncertainty
regarding the definition and the utility of the new paradigm in business education. In
MBA education, the perceived lack of focus on statistical, quantitative-based and selforiented learning objectives draws criticism from both the students (themselves business
managers) and business schools, who are concerned with performance metrics and
competitive rankings (Dunne and Martin, 2006). From another perspective, promoters
under-perform when it comes to communicate benefits of and the complementarity
between design-thinking and traditional methods in consulting to justify deeper
incorporation of design-thinking into management education. As the result, MBA
programs are broadly reluctant to incorporate design-thinking deeper into their curricula
(Dunne and Martin, 2006).

Similarly, design-thinking faces the kick-back from managers as promoters are seeking to incorporate it into managerial practice. The hallmark of design paradigm –

simultaneous ability to consider 'here and now' and the 'distant futures' – raises difficulties for organizations to be ambidextrous (Raisch and Birkinshaw, 2008) and pursue such diverging objectives concurrently and meaningfully (Liedtka, 2000). Accordingly, design-thinking does not spell out those tools that enable managers to capture and to implement the most promising (future) possibilities (Dunne and Martin, 2006). Relatedly, design-thinking is problematic (if not all 'not right') in established companies that have optimized and perfected the key organizational functions, such as R&D, production and after-sale customer care (Kolko, 2015:71). In such companies, incorporation of design-thinking represents a disruption of the business model more generally and those key organizational functions in particular and faces stiff resistance from within all ranks (Ignatius, 2015).

Design-thinking is creative and to that extent is chaotic, which make its integration into business practice extremely uncertain. In fact, it declares the need for 'accepting more ambiguity' and 'embracing risk' by organizations (Kolko, 2015). By employing the 'traditional talk', promoters acknowledge that managers may face difficulties in calculating the 'return on investment in creativity' or the 'value' that better customer experience will deliver to the company (Kolko, 2015). Benefits of design-thinking will not be realized if not aligned with organizational culture, that is, not reflected in hiring, promotion or in setting strategic objectives (Kupp, Anderson and Reckhenrich, 2017; Kolko, 2015) with performance objectives still being uncertain. Alternatively, design-thinking is risking being put 'on a shelf' and never pursued consistently or pursued superficially as a temporal management fad (Brown and Martin, 2015).

Overall, promoters theorize the need for adopting the design-thinking within management field by incorporating its principles into business education and training, as well as managerial practice. Proponents of design-thinking recognize its elevated role within organizations but also highlight limitations of its application within established, larger organizations and dangers of treating design as a fad and not as a true paradigmatic shift in management field.

Adaptation

The third mechanism of theorization entails adaptation of design-thinking within management field. By adaptation we refer to processes by which promoters re-interpret and weigh design-thinking methods and techniques and gauge the potential need and possibility for their change or extension, specifically with reference to the challenges arising from within the management field with respect to application of design-thinking. This aggregate dimension includes two second order themes. First, theme about redefining design-thinking, which includes codes about balancing various organizational priorities, drawing on the contribution of other stakeholders, and acknowledging many contextual factors. The second theme is articulation of design-thinking tools in business terms, which includes codes about how design-thinking can be integrated in all types of organizations, how design-thinking must span organizational boundaries and relevance of prototyping for developing an agile organizational value chain.

To a great extent, prototyping is the most important front-end stage of design-thinking process. Prototyping constitutes 'virtual spaces' for organizations to engage with ideas and designs by introducing input from various (external and internal) key stakeholders as early in the design process as possible (Liedtka, 2000). At the same time,

prototyping is geared to working with physical artefacts (e.g. models, sketches, charts) as well intangible concepts, which fundamentally differ from designing or maintaining human processes. Design-thinking is said to require developing a distinct behavioral element (Kolko, 2015; Dunne and Martin, 2006) as a reflection of organizational inertia, rigidity/flexibility of organizational structure, internal power dynamics, as well as multiple and conflicting performance objectives among individuals or organizational units. Additionally, prototyping stage is explicitly geared towards explorative invention of products/services (Liedtka, 2000), rather than later organizational stage that are perhaps even more important to the organizational performance (e.g. time-to-market, intime logistics or after sales customer service). An extension of design-thinking in management field would therefore model prototyping onto all key stages of organizational value chain.

Furthermore, design-thinking emphasizes resolution of 'wicked' – societal, social and environmental – problems (Liedtka, 2000) and promotes involvement of key external stakeholders in this process. Implicitly, the new paradigm underestimates the inherent 'for-profit' nature of business organizations and overlooks interests of shareholders. While organizational researchers recognize necessity of involving customers and key stakeholders into organizational decision-making (Stewart, 2008), design-thinking in management must attend to interests of shareholders since their interests are, while varying, are 'inexorably linked' (Dunne and Martin, 2006). Relatedly, the outward focus and heightened permeability of organizational boundaries as part of design-thinking may lead to de-valuation of internal human resources (Verganti, 2016). From the resource-based view, holding internal knowledge-based (including, human)

resources as the key organizational asset, the contribution of employees is important for companies to remain competitive in the market. As stipulated by Kolko (2015), the utility of design-thinking should indeed be to product/service aesthetics; importantly, it should be extended to improving processes of 'how people work' and how they contribute to improving 'customer experiences' (Kolko, 2015:68). That said, an extension of design-thinking in the management field is warranted in order to attend equally to 'internal' and 'external' bases of superior customer experience and organizational efficiency and competitiveness.

As a reflection of a 'value chain' thinking in management field, organizational activities are said to be vertically integrated across multiple and independent companies. This tacit or even explicit coordination among companies places a requirement for design-thinking to be diffused not only within one organization but also, across multiple organizations that are frequently globally dispersed, in order to benefit focal organizations. Within the original design thinking school, however, there is lesser focus on coordination across organizations in developing design capabilities. Inherently, the lack of hierarchical control over external organizational processes may restrict the scope for innovation and creativity. Its application in the management field therefore requires 'pushing design into supply chain' (Ignatius, 2015) and warrants spread of a networked design-thinking in management field.

Evidently, adaptation is underpinned by bilateral, as opposed to unidimensional processes. In the course of theorizing, design-thinking extend traditional methods in business consulting, leading to emergence of unique – a more synthetic – set of management concepts and practices in response to business realities.

[Table 1 about here]

Temporality in use of theorization mechanisms

After qualitatively inducing the three key mechanisms of theorization — appropriation, assimilation and adaptation — through grounded theory based coding of our data corpus, we examine the usage of the three mechanisms both within and across time periods 1 and 2. In figures 2 and 3 we graphically present the proportion of data segments coded as appropriation, assimilation and adaptation (off the total number of coded data segments for that period). Overall, our quantitative analysis shows that (1) assimilation was the most dominant mechanism used during both time periods; (2) the use of appropriation decreased over time, whereas the use of assimilation and adaptation increased; and (3) the dominance of assimilation further increased over time.

[Figure 2 about here]

[Figure 3 about here]

Figure 2 shows that the assimilation mechanism was the most dominant mechanism in both the time periods, accounting for 50 percent or higher proportion of the data segments coded. Further, we also find that the dominance of assimilation usage increased over time, with the proportion of assimilation being significantly more than the usage of appropriation and adaptation in period 2. In figure 3 we find that the proportional usage of appropriation mechanism decreased substantially over time, from 0.28 in period 1 to 0.16 in period 2 (approximately 43 percent decrease). In contrast, the usage of assimilation and adaptation mechanisms increased over time. The use of assimilation mechanisms increased by 12 percent (from 0.50 to 0.56) and the use of adaptation mechanisms by approximately 28 percent (from 0.22 to 0.28).

CONTRIBUTIONS & DISCUSSION

Our mixed methods analysis of how the practice of design-thinking was theorized in the management field identified three key mechanisms of theorization – appropriation, assimilation and adaptation. Further, we also found that the usage of appropriation decreased over time, while that of assimilation and adaptation increased, with assimilation being the most dominant mechanism. This study makes two main contributions. First, our primary contribution is to the diffusion studies literature. As theorization is central to garnering legitimacy for a new practice, our study identifies exact mechanisms (or micro-processes) through which theorization occurs. Second, this study also contributes to some of the recent literature on management consulting by showing how meanings associated with a new consulting practice evolve over time, as pioneers embed and contextualize the practice within the focal field.

The field is one of the central constructs in organizational theory (Wooten & Hoffman, 2008), has been considered as the basic structural building block of modern political and organizational life (Fligstein & McAdam, 2012) and "vitally connected to the agenda of understanding institutional processes" Scott (2014: 219). One of the key issues in the study of fields is how new practices, identities and organizational forms are legitimated and diffusion occurs – both integral to institutionalization. While earlier work on diffusion tended to assume economic rationality driven diffusion, with overemphasis on mimetic isomorphism (Boxenbaum & Jonsson, 2008; Mizruchi & Fein, 1999), a parallel, and now burgeoning, set of literature, emphasized the constructivist aspect of legitimation process, focussing on how meanings associated with a new practice are constructed, translated and edited over time (Czarinawska and Joerges, 1996; Sahlins-

Anderson, 1996). Within this tradition, theorization has emerged as key process for legitimizing new practices (see Niklich & Fortwengel, 2017; Harrington, 2015; David et al., 2013; Maguire et al., 2004; Greenwood et al., 2002). These studies have clearly shown how theorization is central to legitimacy construction. We contribute to this body of literature by showing the specific mechanisms through which theorization is achieved, moving beyond focussing on the problem-solution coupling.

We show that while the articulation of an abstract problem or failing of the focal field and how the new practice of design-thinking can provide a solution, that is, appropriation) is indeed one of the key mechanisms of theorization, it is neither the only one, nor the most dominant one. Our analysis shows that assimilation, which includes integrating the new practice within the language and practices of the focal field and acknowledging various challenges to the application of new practice within the field, is the most dominant mechanism of theorization. Similarly, the third mechanism, adaptation, includes explicit redefinition of the new practice and rearticulating it in terms of the focal field. Our findings show that in an established multi-actor, self-referential field problem-solution coupling oriented theorization (appropriation) may not be enough. As the inconsistencies across the new practice and existing practices of the field and the contradictions between the normative guiding principles of key stakeholders (e.g. profit maximization) and the expected outcome of the new practice (e.g. option generation) become apparent, promoters increase theorization focussed on alleviating these inconsistencies and contradictions. Hence, theorization here is not just about what the new practice and which problem it will solve, but also about how the new practice will fit the existing set of practice and redefinition of the practice itself in those terms.

Our findings suggest that theorization of a new practice may be highly contextual, cognizant of dominant actors and practices within the focal field (see Niklich & Fortwengel, 2017; Maguire et al., 2004). Hence, while appropriation of a new practice from an external field and presenting it as a solution to problems in the target field is one of the theorization mechanisms, theorization also, even predominantly, takes into account how the new practice can be fruitfully embedded within the focal field (through assimilation and adaptation). The fact that we found that assimilation and adaptation mechanisms dominate theorization of design-thinking in management field, a field well known for fads and fashions (Kennedy & Fiss, 2009; Abrahamsan, 1996 & 1991), that is, ripe for using appropriation mechanism, suggests how important it is to consider various mechanisms of theorization.

However, this study just provides evidence of theorization mechanisms and their usage from one professional field. Future research may extend and build on our study in several ways. First, as the field of business management presents a specific type of context, neither highly established (e.g. the professional field of accounting) nor an emerging field (e.g. Artificial Intelligence), future research may explore use of theorization mechanisms in other extreme cases, both highly established and emergent. Second, future research may also consider a more detailed quantitative approach and explore the shifts in usage of theorization mechanisms with respect to critical events (Lampel & Meyer, 2008), which may signify episodes of acceptance or deligtimation of the new practice. Such an analysis will help develop a more nuanced theory of the relationship between theorization and legitimation.

This study also makes a secondary contribution to the literature on management practices, especially on management consultancy industry. Such research has drawn attention to the tension between innovation and standardisation while diffusing new practices (Wright, Sturdy & Wylie, 2012); the dynamic relationship between consultants and clients (Alvesson, Kaareman, Sturdy, Handley, 2009), role of power in diffusion of management ideas (O'Mahoney & Sturdy, 2016) and practice translation as an outcome of the relationship dynamics between consultants and clients (Gill et al., 2019). Overall, this literature shows how the context, that is, idea recipients, power relationships and existing level of field structuration, matters with respect to evolution of meanings associated with a practice or idea.

By showing how dominant mechanisms of theorization of a new practice by its promoters – assimilation and adaptation – are essentially reflections of the ways in which a practice is translated and edited over time, we contribute to this literature. Future research may explicitly examine the influence of power differential between idea promoters and recipients on usage of theorization mechanisms. For instance, we may speculate that a highly prestigious consulting firm promoting design-thinking practice to a low status firm may use appropriation mechanism a lot more than when promoting it to a high status Fortune 100 firm, wherein they may undertake lot more assimilation and adaptation.

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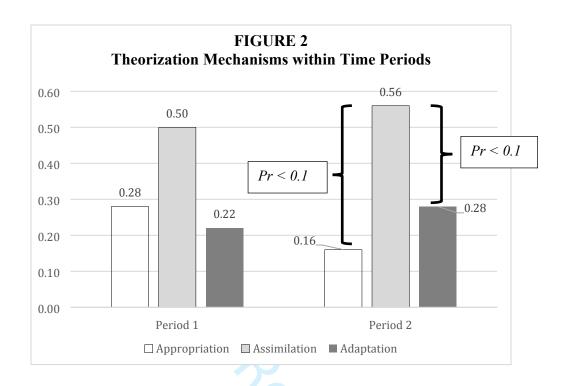
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FIGURE 1: DATA STRUCTURE 2nd Order Themes 1st Order Concepts **Aggregate Dimensions** Critique of Dominance of deductive logic traditional Business focus on cost reduction and profit maximization strategy Lack of user and society centric approaches formulation **Appropriation** Defining strategy making as design process and managers as designers Positioning Highlighting the need for integrating user-centric design thinking as a solution Highlighting the need for 'experimentation' led strategy Benefits of redefining organization structures in start-up Championing the 'abductive' logic of decision making in management education Integrating Drawing greater attention to solving 'wicked' design thinking (environmental and social) through business education in management Producing managers who are integrative thinkers and not education and narrowly specialized. training Redefining strategy formulation in current business training Promoting flexibility and market responsiveness over standardization in strategic planning 'Prototyping' driven strategy making Integrating Structuring firms as 'bundles of projects' and not design thinking Assimilation in strategy 'bundles of resources' making and Placing design focused employees closer to strategy practices making Wider employment of 'open innovation' paradigm in strategy making Unproven and unclear benefits of design thinking to firm performance Organizational difficulties in integrating currently existing strategy making approaches with design Challenges in thinking orientation applying design Underestimating the extent to which existing strategy thinking making needs to be altered to demonstrate outcomes of design thinking application Difficulties in incorporating design thinking in large established firms Balancing organizational priorities equally between shareholder and other stakeholder interests Drawing on contribution of others (e.g. customers and Redefining employees) in strategy formulation design thinking Incorporating behavioural dimensions (e.g. power, inertia, flexibility and rigidity) in design thinking Adaptation Defining prototyping as incorporating experimentation in strategy formulation to develop agile organizational Articulation of value chains design thinking Design thinking as a tool for maintaining strategic and tools in business cultural flexibility at all stages of organizational maturity terms Boundary spanning as applying design thinking across value chain



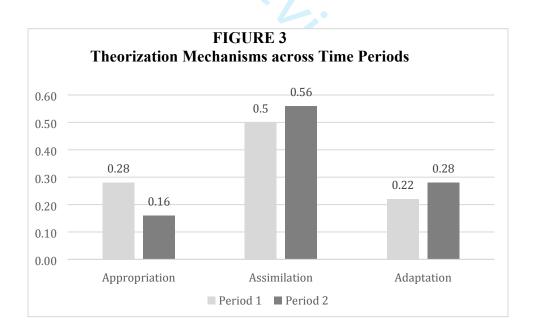


Table 1: Representative evidence for data structure

| Table 1. Representative evidence for data structure | | |
|--|---|--|
| 1st Order Codes | Representative Quote | |
| Dominance of deductive logic | A traditional manager would take the options that have been presented and analyze them based on deductive reasoning. You typically get those options on the basis of what you have seen before | |
| Business focus on cost reduction and profit maximization | Focus on cost reduction and profit maximization is the primary goal of business and that remains the same despite the new human centric approach"; | |
| Lack of user and society centric approaches | Writers in the field of business strategy have argued recently that many issues in strategy formulation are 'wicked' as well, and that traditional approaches to dealing with them are similarly incapable of producing intelligent solutions"; | |
| Defining managing as design process and managers as designers | Several authors from the fields of design and management comment on the parallels between the two domains and explore the intellectual foundations for approaching managing as designingIn exploring the transition of the design metaphor to business in a more complete way, the opportunity is to see all managers as designers (and builders as well | |
| Highlighting the need for integrating user-centric approach | We need new metaphors that better capture the challenges of making strategies both real and realizable, metaphors that bring life to the human dimension of creating new futures for institutions, to move beyond the sterility traditional approaches to strategic planning in large organizations | |
| Highlighting the need for 'experimentation' led strategy | Design's value lies in creating a "virtual" world in which experiments (mental rather than physical) can be conducted on a less costly basis. This offers a very different perspective from which to think about the creation of business strategies | |
| Benefits of redefining organization structures in start-up terms | Design's value lies in creating a "virtual" world in which experiments (mental rather than physical) can be conducted on a less costly basis. This offers a very different perspective from which to think about the creation of business strategies | |
| Championing the 'abductive' logic of decision making in management education | Business education has to be made more like design education". It means, first, getting MBAs to think in terms of projects where you solve wicked problems using abductive reasoning""MBAs have to learn collaborative skills. They have to learn to listen to other people and understand their reasoning process. Not spend their time saying, "Their reasoning process is different than mine; therefore, it is wrong; therefore, I must stomp it out." That would be the traditional MBA approach"; | |
| Drawing greater attention to solving 'wicked' (environmental and social) through business education | There are big questions that could be addressed by business education, like integrative thinking, like integrating corporate social responsibility into the business world"; | |

Producing managers who are integrative thinkers and not narrowly specialized.

For our part, we have to teach students integrative thinking, the broader notion of what is salient, what the important relationships are, to look at things as a whole, not piece parts that you put together

Redefining strategy formulation in current business training

Taken together, these characteristics borrowed from the field of design – synthetic, adductive, dialectical, hypothesis-driven, opportunistic, inquiring, and value-driven – describe strategic thinking

Promoting flexibility and market responsiveness over standardization in strategic planning The design field sets the bar far higher: designers are expected to find creative higher-level solutions that honor both the current reality and some different future. Perhaps we should expect the same of business strategists

'Prototyping' driven strategy making Design thinking advocates user-centered design by examining the context of the end user, creating empathy for end user needs and promoting a culture of generative research, rough and rapid iterative prototyping and end user feedback throughout the process lifecycle

Structuring firms as 'bundles of projects' and not 'bundles of resources'

Design shops work on projects that have defined terms; whereas a traditional firm sees itself as engaged in an ongoing task. The traditional firm treats its activities as an ongoing assignment even though it is really a bundle of projects. As a result, it ends up with big budgets and large staff; whereas, for a design firm, it's all about solving "wicked" problem

Placing design focused employees closer to strategy making The design field sets the bar far higher: designers are expected to find creative higher-level solutions that honor both the current reality and some different future. Perhaps we should expect the same of business strategists";

Wider employment of 'open innovation' paradigm in strategy making

Thanks to powerful ideation approaches such as design thinking and crowdsourcing, it has become incredibly easy and relatively inexpensive for companies to obtain a vast number of novel concepts, from both insiders and outsiders such as customers, designers, and scientists

Unproven and unclear benefits of design thinking to firm performance Nevertheless, the idea of applying design approaches to management is new and, as yet, largely undeveloped"....Design thinking isn't new. But many companies still aren't sure how it can improve their business"

Organizational difficulties in integrating currently existing strategy making approaches with design thinking orientation

Traditional ideation methods, such as...design thinking, result in an overabundance of ideas for new offerings and business models. But managers lack a method for capturing the most promising possibilities

Underestimating the extent to which existing strategy making needs to be altered to demonstrate outcomes of design thinking application The problem is not one of designing better programs or simply replacing or upgrading learning platforms. Rather, there is something more fundamental going on — a need to totally rethink corporate R&D, to shift the focus to design thinking and the employee experience

| - | Difficulties in incorporating design thinking in large established firms | They describe how complex innovations often encounter stiff resistance from intended beneficiaries and those delivering the new product or service, because they jarringly disrupt existing behaviors and business models |
|---|--|--|
| | Balancing organizational priorities equally between shareholder and other stakeholder interests | Design is not about either/or but about integrative thinking. So, there is no reason why it has to be either about customers or about shareholders[T]hose two things are inexorably linked |
| | Drawing on contribution of others (e.g. customers and employees) in strategy formulation | This social process accommodated a less top-down view of the design process and relied less on experts to provide the solutions, instead engaging a broader range of players |
| | Incorporating behavioural dimensions (e.g. power, inertia, flexibility and rigidity) in design thinking | Design thinking, first used to make physical objects, is increasingly being applied to complex, intangible issues, such as how a customer experiences a serviceThe nature of design work is shifting from physical to non-physicalWe're forcing the design thinking way back in the supply chain |
| | Defining prototyping as incorporating experimentation in strategy formulation to develop agile organizational value chains | Prototyping (hands-on approach) is an important part of design thinking methodologyThe basics of design thinking, a hands-on approach that focuses on developing empathy for others, generating ideas quickly, and testing rough "prototypes" that, although always incomplete or often impractical, fuel rapid learning for teams and organizations |
| | Design thinking as a tool for maintaining strategic and cultural flexibility at all stages of organizational | Design offers a different approach and would suggest processes that are more widely participative, more dialogue-based, issue-driven rather than calendar-driven, conflict-using rather than conflict- |

Boundary spanning as applying design thinking

across value chain

maturity

avoiding, all aimed at invention and learning, rather than control

Now our teams are pushing design through the entire system, from

Now our teams are pushing design through the entire system, from product creation, to packaging and labelling, to how a product looks on the shelf, to how consumers interact with it

