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THEORY BUILDING: A REVIEW AND INTEGRATION

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ABSTRACT

Building theories is important for advancing knowledge of management. But it is also a highly challenging task. Although there is a burgeoning literature that offers many theorizing tools, we lack a coherent understanding of how these tools fit together—when to use a particular tool and which combination of tools can be used in the theorizing process. In this paper we organize a systematic review of the literature on theory building in management around the five key elements of a good story: conflict, character, setting, sequence, plot and arc. In doing so we hope to provide a richer understanding of how specific theorizing tools facilitate aspects of the theorizing process and offer a clearer big picture of the process of building important theories. We also offer pragmatic empirical theorizing as an approach that uses quantitative empirical findings to stimulate theorizing.

Keywords: creativity, grounded theory, philosophy of science, entrepreneurship theory
THEORY BUILDING: A REVIEW AND INTEGRATION

Management scholars have been highly attentive to the role of theory. A prerequisite for publication in elite management journals is that papers make a contribution to theory (Colquitt & Zapata-Phelan, 2007; Hambrick, 2007; Rynes, 2005; Sutton & Staw, 1995). While some scholars question the extent of this preeminence of theory (Hambrick, 2007; Pfeffer, 2014), there is little argument about the importance of building theories for advancing knowledge of management (Suddaby, 2014a). For example, business scholars have called for new theories of organization (Suddaby, Hardy & Huy, 2011), entrepreneurship (Shepherd, 2015), management (Barkema, Chen, George, Luo, & Tsui, 2015), work (Okhuysen et al., 2013), compassion (Rynes, Bartunek, Dutton, & Margolis, 2012), and so on. Despite the widespread recognition of the importance of building theory, doing so is a highly challenging task (Weick, 1995). As a result, there is a growing literature in management on the process of theorizing—that is, how to build theories. This burgeoning literature offers many tools and approaches to theorizing, for example, engaged scholarship (Van de Ven & Johnson, 2006), metaphor (Cornelissen, 2005), and finding the balance between novelty and continuity (Locke & Golden-Biddle, 1997). These papers have made important contributions by offering different insights into select aspects of the theorizing process—that is, different ways to stimulate the creation of a new theory, different ways to build new explanations of management phenomena, and different notions of what represents a theoretical contribution, respectively.

But where does this leave budding theorists? It seems to leave them with an array of potential tools for theorizing without a coherent understanding of how these “theorizing tools” fit together; there is little information about when to use a particular theorizing tool vis-à-vis a different theorizing tool (i.e., substitutes) and which combination of tools can be used in the theorizing process (i.e., complements). Therefore, while these approaches address discrete and often isolated questions about
“how” to construct specific aspects of theory, they fail to offer a coherent explanation for how and when to engage the various tools that facilitate theorizing. Thus, our intent is to integrate the various threads of how to build theory. We then extend that integration to a specific theorizing approach—pragmatic empirical theorizing.

Our systematic review of the literature on theory building in management integrates the various individual components of theory building into a coherent whole. Our reading of this growing literature reveals the distinct importance of narrative or storytelling in theorizing (Pollock & Bono, 2013; Van Maanen, 1995)—that is, compelling theories are at their core compelling stories. Compelling stories are built around main characters who engage in a struggle with a powerful entity (narrative conflict) within a narrative setting. The story is held together by the sequence of events and made comprehensible by the plot. The narrative arc concludes with a resolution of the problem of the story and/or the problem faced by the main character(s) of the story. Accordingly, we organize our review of theory building around the five key elements that inform every great story: conflict, character, setting, sequence, plot and arc.

By reviewing and organizing the literature on theory building, we hope to make three primary contributions. First, organizing the literature on theory building provides the opportunity to integrate “like tools” to provide a richer understanding of how these like tools facilitate a specific aspect of the theorizing process. Second, organizing the literature provides the opportunity to connect different aspects of the theorizing process. With a deeper understanding within and across theorizing aspects, we gain a clearer “big picture” of the process of building interesting theories. Finally, we offer a theorizing tool—pragmatic empirical theorizing—that we believe has potential for advancing theories of management. In short, pragmatic empirical theorizing uses quantitative empirical findings to stimulate theorizing as part of an abductive process of inquiry.
METHOD

To select the articles for review, we used keyword searches in general management journals (consistent with other recent review articles [Surdu & Mellahi, in press; Shepherd, Williams, & Patzelt 2015; Wang & Rajagopalan, 2015]) publishing work on theory building. These journals include the *Academy of Management Journal, Academy of Management Review, Academy of Management Annals, Administrative Science Quarterly, Journal of Management, Journal of Management Studies, Organization Science, Management Science*, and *Strategic Management Journal*. We choose these journals because, according to the web of knowledge, they are the highest impact general management journals in the category of “Management” that are not journals focused on psychology, operations management, research methods, or international business (Thomson Reuters), with the exception of *Management Science* which has the reputation as a top journal (despite a lower impact factor). To provide an initial list of papers on theory building, we searched for papers that included in their title the word(s) “theory” or “theorizing” or “theories.” Not surprisingly, this generated a large number of papers—973 papers. We further refined this list by reading the abstract of each of these papers (and when necessary the full paper) to determine their appropriateness given the purpose of the review. Specifically, we excluded papers that did not have theory building at their core (788 papers) and excluded papers that were commentaries, research notes, and book reviews (127 papers). Furthermore, in the process, we necessarily considered some contributions in books. The remaining 58 papers were categorized into theory-building topics arranged based on the key elements that inform every great story: conflict, character, setting, plot and arc.\(^1\)

**1. THEORIZING TRIGGER—THE NARRATIVE CONFLICT**

Perhaps the most challenging aspect of theorizing is identifying an anomaly or tension to motivate and guide the process. Doing so is a creative process that requires both considerable

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\(^1\) We marked with an asterisks in the reference section those papers included in the review.
imagination (Mills, 1959) and acute powers of observation, skills that, according to March (1970), can be best learned by attending to the observational habits of outstanding storytellers.

In stories, narrative conflict represents the struggle between two powerful entities—human versus human, human versus nature, or human versus god. In theory, narrative conflict reflects a struggle between two realms of knowing—the empirical world of phenomena, on one hand, and the scholarly world of theoretical literature that attempts to describe the empirical world, on the other. Conflict can arise from within either of these worlds and, perhaps more typically, can arise from gaps that occur between them. We examine each in turn to identify the various techniques used by management scholars to “trigger” the theorization process. In Table 1 we detail each form of narrative conflict, its function, the key cites, and an example.

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Insert Table 1 about here
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**Conflict in the Literature**

Immersion in the literature can reveal paradoxes, problems, challenges, and puzzles. A paradox involves “contradictory yet interrelated elements that exist simultaneously and persist over time” (Smith & Lewis, 2011: 382). Recognizing the underlying tension between two sets of relationships that appear to make sense when considered independently but contradictory when considered simultaneously can trigger theorizing as an attempt to resolve the paradox. Paradoxes arise from changes in system(s), differences in individual and collective identity, competing organizing modes/designs, and different stakeholder goals (Smith & Lewis, 2011). Paradoxes also exist across the categories of learning, belonging, organizing, and performing and represent (or create) a tension that can stimulate theorizing that is more encompassing as an attempt to reconcile the apparent paradox (Poole & Van de Ven, 1989).
Problematization is another way to engage the literature to stimulate theorizing. To problematize means to “challenge the value of a theory and to explore its weaknesses and problems in relation to the phenomena it is supposed to explicate” (Alvesson & Karreman, 2007: 1265-1266). This problematization highlights the need for rethinking existing theory and perhaps the need to head in a new direction. To problematize requires an understanding of the literature. However, it also requires an open-minded approach to that literature. Theorists can approach the literature with an open mind to allow the literature (as data consistent with a grounded theory approach) to “speak to them” to reveal (in a bottom-up way) problems in or across literatures (Shepherd & Sutcliffe, 2011). Problematizing also involves considerable rhetorical skill in constructing the “gap” between the literature and the real-world or describing a logical flaw in existing theory (Locke & Golden-Biddle, 1997) because it is likely (hopefully) not a simple case of incremental gap-spotting but a substantial gap that challenges important assumptions (Sandberg & Alleveson, 2011). Contrastive questions can help problematize a situation or explanation by referring to different aspects of the event (i.e., an allomorph) or highlighting the fact to be explained and contrasting it with an alternative(s) (i.e., fact and foil) (Tsang & Ellsaesser, 2011). The notion underlying contrastive explanation is that by asking better questions the theorist can begin the process towards offering better explanations (Tsang & Ellsaesser, 2011). Indeed, Abbot (2004) proposes a number of heuristics that can facilitate discovery by changing the way the budding theorist conceptualizes a problem or solution. For example, problematization can be stimulated through reversing a well-known proposition, switching figure and ground, using emotional language, and as we elaborate on below, “putting things in motion” (Abbot, 2004).

Conflict Revealed through Empirical Phenomena and Practice

Although the data stimulating theorizing can come from the literature (as detailed above), it can also come from the phenomena of interest; knowledge discovery starting with “observation by the
senses” (Locke, 2007: 888). Again, however, the theorist needs to approach the phenomena and the associated data with a somewhat open mind; otherwise, the data and/or its interpretation will simply be forced to fit existing theories. With an open mind (i.e., withholding as best one can prior expectations), collecting and analyzing data can reveal interesting research problems—namely, “the high potential for an empirical response and a novel insight that adds significantly to—or against—previous understandings” (Alveson & Karreman, 2007: 1268) and, in the case of grounded theory, can “elicit fresh understandings about patterned relationships” and social interactions (Shah & Corley, 2006; see also Glaser & Strauss, 1967; Turner, 1983).

One important source of empirical material for stimulating theorizing on management phenomena can come from an orientation toward practice—how organizational activities are constituted and enacted by actors (Sandberg & Tsoukas, 2011: 339). Because, recurrent actions represent the building blocks of a social understanding for those in or affected by organizations (Feldman & Orlikowski, 2011), theorizing triggered by practice helps reveal paradoxes and problems of practical value to managers. To do so might require the theorist to zoom in on the specific activities in context or zoom out to attend to the relationships across practices to gain a deeper understanding of the connections and possibilities of activities, tools and interactions (Bechky, 2011; Nicolini, 2009; Sandberg & Tsoukas, 2011). Indeed, in performing organizational activities, managers and/or employees are often one with the task (Dreyfus, 1995) but it is when they experience a temporary breakdown in the effectiveness of the activity—a momentary disconnection of the individual from others and/or things—that they detach from the task and engage in deliberate reflection (Sandberg & Tsoukas, 2011). These temporary breakdowns reveal problems for the manager and by extension an opportunity to theorize to gain a deeper, richer, and practically useful understanding of the situation and/or task. Such theorizing
helps to “explore new terrain and develop novel ideas, thus potentially overcoming the inherent conservatism in well-established frameworks” (Alvesson & Karreman, 2007: 1267).

Indeed, Weick (1974) suggests a theorist focus on everyday events, everyday places, everyday questions, micro-organizations, and absurd organizations. By searching, observing, and/or questioning everyday events in everyday places, theorizing itself can become more commonplace rather than tied to Fortune 500 companies or the “armchair.” It starts by observing a pattern and building more and more robust explanations for the pattern of the focal task (and organizing tasks more generally). Similarly, a focus on micro-organizations reduces the emphasis on the centrality of the thing—the organization—and more on the process—the organizing. Studying the absurd organizations—almost by definition (of absurd)—challenges the theorist’s fundamental assumptions, which is an important step toward theorizing to open up new terrain (Weick, 1974) and generate contributions to knowledge.

Using engaged scholarship can also stimulate new theorizing. Engaged scholarship is “a collaborative form of inquiry in which academics and practitioners leverage their different perspectives and competences to co-produce knowledge about a complex problem or phenomenon that exists under conditions found in the world” (Van de Ven & Johnson, 2006: 803). Engaged scholarship is likely to be most useful when the associated projects are designed to address complex real-world problems, to be a collaborative learning environment, to operate for an extended duration, and to employ multiple frames of reference (Van de Ven & Johnson, 2006). This problem-driven research requires the researcher to be at least somewhat engaged with the practitioner performing his or her activities, to be open to new (vis-à-vis existing theories) experiences, and to be self-reflective of his or her engaged scholarship role (Van de Ven & Johnson, 2006). In doing so, the researcher is taking a step toward addressing what has been argued as a large gap between theory and practice (Anderson, Herriot, & Hodgkinson 2001; Rynes, Bartunek, & Daft 2001). By collaborating with practitioners throughout the process, the theorist is able
to formulate a problem grounded in the experiences of those engaged in the task (Van de Ven, 2007); a real world problem, whose solution can make a contribution to academic and practitioner knowledge.\(^2\)

**Conflict between Literature and Phenomena**

We have described how a trigger for theorizing arises when the researcher encounters an unexplained puzzle resulting from an unexplained phenomenon that defies extant knowledge. Considerable effort has been devoted in management theory to debating the relative importance of phenomenal gaps over gaps in the literature. Advocates of the former tend to grant primacy to empirical facts (Pfeffer, 2014; Hambrick, 2007). They are supported by intellectual giants in social theory, such as Durkheim ([1895] 1964:15), who argues that researchers should move from “things to ideas” not from ideas to things. However, the pragmatic consensus—supported by a long procession of writers beginning with Peirce (1934), extending to Merton (1967), and advancing today with Weick (2014)—is that effective theorizing is a process in which the researcher moves *iteratively* between the gaps observed in the phenomenal world and those observed in the extant literature. Indeed, it is often the tension created by a gap between the literature and the phenomenal world that ultimately triggers the need for new theory.

Having triggered the theorizing process by discovering or generating a conflict—a paradox, problem, or challenge—the theorist *conceives* of a research idea, perhaps first as a simple construct or guess, that is then *constructed* into a theory.

**2. CONCEIVING AND CONSTRUCTING THEORIES—BUILDING STORIES**

We use a narrative framework to organize research on conceiving and constructing theories because it reinforces the notion that powerful theorizing involves skilfully weaving together prior knowledge (i.e., existing literature) and emerging knowledge (i.e., new empirical observations). As

\(^2\) For a detailed guide in conducting engaged scholarship see Van de Ven (2007).
illustrated in Table 2 and detailed below, building stories is facilitated by storytelling that involves main characters, a narrative setting, an event sequence, and a plot/theme.

Identifying Core Constructs: The Main Characters

Effective stories are built around main characters (Pentland, 1999)—actors whose behavior best captures the narrative of interest. In storytelling, a character is an actor—a person, animal, or entity—whose experience is the focal point of the story. Just as stories are built around main actors, so too are theories built around core constructs (Pentland, 1999). The act of naming a core construct early in the process of theorizing is a critically important step because even though the theoretical narrative is not yet clear and the construct itself is still somewhat fuzzy, the act of putting a formal name to the phenomenon of interest is an essential step in conceptually separating one’s phenomenon from the mass “noise” of our everyday empirical experience and/or separating one’s core construct from the mass “noise” of prior research.

Theorists have adopted a range of different strategies for naming constructs. The most common strategy, perhaps, is to simply use a common everyday word that most closely captures the phenomenon of interest. So, for example, the somewhat generic word “performance” has been used to describe the range of activities by which we evaluate organizations. Noted sociologist Max Weber (2001: 63) endorsed this approach, advocating the use of “the nearest and most descriptive words” from common language to name constructs. However, there are clear risks to using dictionary definitions. Foremost is the risk that adopting a term in common everyday use will burden the construct with too much “surplus meaning” (Cronbach & Meehl, 1955). Thus, the use of the term performance invites theorists to infer, consciously or otherwise, a range of meanings of performance drawn from individuals, machines, sports
teams, and a range of other entities and activities, which substantially reduces the analytic precision of the construct.

A related strategy is to borrow a construct from a related discipline. Thus, in organizational theory, population ecologists borrowed words like “niche” and “species” from the adjacent field of evolutionary biology (Freeman & Hunnan, 1989; Hannan & Freeman, 1977). While a term from a related scientific discipline partially addresses the issue of a lack of definitional precision associated with using everyday language, it does not completely resolve the problem of surplus meaning. Population ecology, thus, has been soundly criticized for using terms like species, which has a much more precise meaning when applied to living organisms (i.e., capable of interbreeding and producing a viable offspring) than it does when applied to organizations. As Whetten, Fellin, and King (2009) observe, borrowing terms from other disciplines often introduces more confusion (in levels of analysis, boundary conditions, etc.) in understanding a phenomenon than clarity. An alternative approach is to create a completely new term to describe the phenomenon of interest. A useful example of this in management theory is Weick’s use of the term “sensemaking,” which is a portmanteau of pre-existing common terms but, as a result of Weick’s theorizing, has acquired a unique and highly specific meaning.

Regardless of the technique used, identifying and naming constructs is an essential part of theorizing because constructs are a source of agency or causality. That is, greater clarity in describing constructs and their relationship to the phenomenon of interest, helps to clarify the motivations or causal relationships in the theoretical argument (Suddaby, 2010; for other aspects of rigor on theory building see Donaldson, Qiu and Luo [2013]). Clearly defined constructs in theory require precise definitions and specific boundary conditions or contexts in which they do or do not apply. Constructs help the reader understand a theoretical argument because if they are accurately captured, the reader can quickly grasp their history, their motivation, and the implications of their role in the causal relationships that the
theorist is presenting. We note, however, that there are limits to construct clarity. As Kaplan (1964: 65) observes, the process of enhancing definitional clarity inevitably produces even finer-grained distinctions that fall outside our understanding. The “more discriminations we make, the more opportunities we create for classification errors between borderlines” (Kaplan, 1964: 65).

Choosing a Perspective for Theorizing: Determining the Narrative Setting

All stories occur in a narrative setting—namely, a time and place within which events occur. In a way, the setting becomes as important in explaining causality as the broad conflict that defines the story and the motivations of the central characters. Skilled storytellers understand that context is not merely a backdrop but can also play a determinative role in their argument; it is essential both to the credibility of the theoretical argument and to the reader’s appreciation of the causal logic of the theory and by shifting the context the theorist may open up new conceptual terrain. In this section, we review a range of strategies used by theorists to adopt new perspectives by adjusting the philosophical setting within which the theory is presented, namely, shifting ontology, shifting the position on the ladder of theory complexity, shifting back and forth between data and theory, and shifting level of analysis.

First, shifting ontology can provide a new perspective. Scholars often adopt a specific theoretical lens such that one philosophical perspective dominates a particular research topic, or the research topic is bifurcated by streams of research that progress in parallel based on their different philosophical underpinnings (e.g., research anchored in either a structural realist or a social constructivist perspective [Hassard, 1993]). Importantly, rather than a theorist choosing one philosophical approach to use consistently, he or she can use an ontological shift to generate creative insights for the development of mid-range theories. An ontological shift refers to “changes in the ontological emphasis that maintain epistemic-ontological alignment” (Thompson, 2011: 755), with ontology referring to the nature of phenomena and epistemology referring to the nature of knowledge about the phenomena (Gioia & Pitre,
It is important when engaging an ontological shift to also change the epistemology; otherwise, it can lead to ontological drift, in which the construct is compromised (Thompson, 2011).

One example of shifting ontology for theorizing is shifting from an entity-based ontology to a process-based ontology (or vice versa). Theories in management have focused more on entities (e.g., organizations, entrepreneurs, and institutions) than processes (e.g., organizing). For example, take the notions of entrepreneur and institution (i.e., entities) and start to think about them in terms of processes, such as entrepreneuring and institutionalizing, respectively. Such a theorizing approach does not replace the entity construct but involves a complexification of the established construct and can lead to different research logics of action that are reflective of different assumptions and orientations, which tackle different research questions (Kilduff, Mehra, & Dunn, 2011; Morgan, 1980).

Second, conceiving and constructing theory can also be facilitated by moving up and/or down the ladder of theory complexity. Ofori-Dankwa and Julian (2001) emphasize two dimensions in establishing the level of theory complexity: (1) relative endurance, which captures the extent to which the core concepts of the (proposed) theory are represented as relatively stable (high endurance) or unstable (low endurance), and (2) relative exclusivity, which captures the extent to which a single core concept (high exclusivity) or several core concepts (low exclusivity) form the model. As a $2 \times 2$ matrix, this sets up four levels of theoretical complexity: Level 1 (simple complexity) involves high endurance and high exclusivity to offer theories of contingency, Level 2 (medium complexity) involves low endurance and high exclusivity to offer theories of cycles, Level 3 (high complexity) involves high endurance and low exclusivity to offer theories of competing values, and Level 4 (very high complexity) involves low endurance and low exclusivity to offer theories of chaos.

Indeed, abstracting one’s theorizing (by moving up the ladder of theory complexity) can provide the basis for a meta-paradigm perspective that allows disparate approaches to theory building to be
considered together as a way to bridge across paradigm boundaries (Gioia & Pitre, 1990; for an epistemological approach (evolutionary naturalist) to unify diverse perspectives see Azevedo, 2002). As Kaplan (1964) observes, theorists move from observable indicators (i.e. the “individual”) to higher levels of abstraction that involve unobservable categories or concepts (i.e. “social classes” or “society”).

The process of building theories, as Stinchcombe (1968) notes, requires skillful abstraction, or selectively moving up or down the ladder of abstraction to create propositions (generated at higher levels of abstraction) or operationalize hypotheses (generated at observable levels of abstraction).

The abstraction is needed for the theorist to broaden his or her view (from one anchored in the assumptions of one paradigm) to juxtapose, and perhaps link, previously different views to provide a broader perspective of organizational phenomena (Gioia & Pitre, 1990; Lewis & Grimes, 1999).

Theorizing across paradigms may appear difficult given that each paradigm has a different set of assumptions, but the boundaries between these paradigms are often blurred (Bochner, 1985; Geertz, 1980) and can be usefully conceived as “transition zones” (Gioia & Pitre, 1990). Through abstraction, the theorist can generate second-order concepts (Van Maanen, 1979). Second-order concepts describe scientific understanding as opposed to first-order concepts, which describe how people experience the phenomena. Second-order concepts, as an abstraction of first-order concepts, facilitate the recognition of related or analogous concepts as the basis for a bridge across the transition zones of two or more paradigms (Gioia & Pitre, 1990; Lewis & Grimes, 1999). A meta-paradigm perspective moves beyond the “agree to disagree” approach of disparate paradigms to gain an understanding of why disagreement exists and to theorize on similarities and inter-relationships to understand management phenomena, which broadens the “conception of theory and the theory-building process itself” (Gioia & Pitre, 1990: 600; Lewis & Grimes, 1999). For example, Pfeffer and Fong (2005) argue for theorizing that uncovers core, fundamental constructs and linking them to build a broad understanding that explains a range of
behaviors. Therefore, both abstraction and complexification can serve as a basis for new theories (Thompson, 2011).

Third, moving back and forth between the empirical evidence and the literature helps to build a theoretical story. Eisenhardt (1989) suggests that a theoretical narrative is best constructed through comparisons between multiple case studies. The theorist enters the field with a clear research question (possibly one drawn from the literature or focused on elaborating specific constructs), carefully selects cases that build tension or contrast around the focal research question (“theoretical sampling”) and identifies key patterns that match data with theory to build “bridges from rich qualitative evidence to mainstream deductive research” (Eisenhardt & Graebner, 2007: 25; See also Eisenhardt, 1989; Hallier & Forbes, 2004). An alternative approach, suggested by Dyer and Wilkins (1991) places even greater emphasis on the narrative elements of a single case study in which the researcher constructs theory by moving between the thick description of data and the extant literature. In both approaches, however, the theoretical narrative emerges as the result of abductive iteration between theory and literature in an effort to address an “unmet expectation”. As Van Maanen, Sorenson and Mitchell (2007: 1149) observe, an unmet expectation is a mystery or a clue that, “like the dog that did not bark in the fictional world of Sherlock Holmes”, motivates theorizing by requiring the research to construct a robust explanatory narrative by giving “primacy to the empirical world, but in the service of theorizing”.

Finally, building a story can be facilitated by changing assumptions through crossing levels of analysis. Klein, Dansereau, and Hall (1994) highlight three key assumptions underlying multi-level theorizing that should be made explicit—namely, (1) homogeneity, which refers to group members’ being sufficiently similar on the focal construct such that they can be categorized as a whole (i.e., the “group as a whole”); (2) independence, which refers to group members’ being independent of the group’s influence and others in the group (between individual variance); and (3) heterogeneity, which
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refers to individuals’ being nested within the group such that the “group context is not only informative but necessary to interpret an individual’s placement or standing in the group” (Klein et al., 1994: 202). Indeed, by theorizing across levels of analysis, we can gain a deeper understanding of the mechanisms at levels of analysis different from those used in the initial theories or topics that explain the “why” of existing relationships (and theories) (see also Shepherd & Sutcliffe, 2015).

In particular, Morgeson and Hofmann (1999: 251) highlight the multi-level nature of constructs in a collective context where collective refers to “any interdependent and goal directed combination of individuals, groups, departments, organizations, or institutions”. Under such collective contexts, constructs can exist at both the individual and group level and can be explored in terms of their function—the causal output of the system (or component of the system)—and/or in terms of their structure—the system of interaction among members of the collective. Exploring the function and structure of collective constructs can facilitate theorizing on the emergence of, stability of, and changes in collective constructs. Emergence, stability, and change involve notions of time to which we now turn.

Set Time to Establish Boundary Conditions: The Story’s Event Sequence

The event sequence is the order in which events occur and brings together the different components of the story. Although time is implicitly or explicitly a boundary condition of most theories, theorizing can involve shifting the perspective on time to change the ontological nature of constructs and the relationships between constructs (George & Jones, 2000; Zaheer, Albert & Zaheer, 1999). Indeed, in Whetten’s (1989; see also Dubin, 1978) description of the criteria of theory—“what”, “how”, “why”, “who,” “where,” and “when”—the “when” is a direct reflection of the importance of time in theory. Specifically, George and Jones (2000) highlight how time can be used in theorizing by considering (1) how the past and future can impact the present and how time can be experienced differently (i.e., subjective time) within or across individuals; (2) how time is aggregated into chunks, such as with
defined episodes (for different time scales see Zaheer, et al. [1999]); (3) how the duration of periods can be categorized as periods of stability and of change, (4) how the nature of change can be considered in terms of its rate (over time), its magnitude (e.g., incremental or discontinuous), and its pattern (e.g., frequency, rhythm, and cycles); and (5) how the interplay between constructs over time can be reflected in mutual causation (e.g., positive or negative spirals) and change intensity (Dansereau, Yammarion & Kohles, 1999; Mitchell & James, 2001). For example, Corley and Gioia (2011) suggest theorists direct attention to future problems in order to anticipate problems and thereby inform future thought and action, generate vibrancy, and ensure usefulness in a rapidly changing external environment. Such theorizing (labelled prescient theorizing) is informed by either projective futurism—a sound theoretical basis for arguing and predicting—or prospection—the use of informed projections into the future to anticipate issues, act as if those issues are manifest, and then infer domains requiring attention or invention (Corley & Gioia, 2011: 25).

For theorists who consider time to develop process theories (as opposed to theories of variance [Mohr, 1982]), Langley (1999) offers different theory construction strategies, that is, by (1) constructing a detailed story anchored through time [narrative strategy], (2) coding qualitative incidents into predetermined categories for statistical analysis [quantification strategy], (3) proposing and assessing alternate theoretical templates of the same events using different theoretical premises [alternate templates strategy], (4) constantly comparing sets of data to gradually build a system of categories that can be linked to explain the process [grounded theory strategy]; (5) graphically or otherwise visually displaying multiple representations of “precedence, parallel processes, and the passage of time” (700) [visual mapping strategy]; (6) bracketing and labeling periods of an event and detailing the continuities within that period and the discontinuities at or outside its borders [temporal bracketing strategy]; and (7) constructing global measures of a process as a whole to compare different processes [synthetic strategy].
Disciplined Imagination: Plot and Theme

The plot is what holds a story together (Jameson, 2001), makes it comprehensible (Garud & Giuliani, 2013) and, along with the main character, provides coherence (Ibarra & Barbulescu, 2010); the plot provides the discipline for the imaginative aspects of the story. In a similar way, theorizing to create something new—a new explanation, new insights, and a new story—not only requires imagination, but it also requires discipline. Theorizing as disciplined imagination can involve thought experiments—abstract hypothetical scenarios (Folger & Turilo, 1999) or simulations—“a method for using computer software to model the operation of real world processes, systems, or events” (Davis, Eisenhardt & Bingham, 2007:481)—as part of a process of artificial selection (Weick, 1989). These processes of disciplined imagination begin with the creation of a research question in the form of problem statements. Problem statements specify a need that requires a solution and are formulated and posed by the theorist. The theorist specifies a problem to be solved (explained), details assumptions that can be confirmed and disconfirmed, offers a set of concepts that can be connected differently, implies a plot that may be implausible, and asks a question that has not been asked yet (Weick, 1989: 521; see also Davis et al., 2007). After constructing problem statements, the theorist engages in thought trials—that is, trialing (competing) conjectures of a solution to the problem statements (see also Kaplan, 1964; Stinchcombe, 1968). Theorizing is enhanced by thought trials that are more numerous and more diverse (heterogeneous thought trials will provide more information to inform the theorizing process) that facilitate progress in refining the conjectures. Finally, the theorist must choose and use selection criteria for the thought trials. Theorizing is more promising when the selection process consistently applies a set of criteria (Weick, 1989), when it activates access to tacit knowledge through embodied or vicarious participation (Folger & Turillo, 1999), and invokes the related properties of a system’s inter-related links.

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3 Weick (1989) notes that when theorists build theory through imaginary experiments their activities resemble an evolutionary model of variation, (artificial) selection, and retention.
THEORY BUILDING

(Folger & Turillo, 1999). Although thought trials can be conducted in the theorist’s head (or through simulation software), knowledge production typically has a social component such that conjectures are tested when they are communicated to others (i.e., via stories) and receive feedback (Jacques, 1992; Weick, Sutcliffe, & Obstfeld, 2005).

The discipline of theorizing can come from metaphors including the specific case of anthropomorphizing, from other forms of blending, from the knowledge resources at hand, and from patterns in the form of typologies, to which we now turn.

Theorizing through an interaction *metaphor* (Cornelissen, 2005, 2006) starts with the development of a generic structure that connects a source and a target domain such that the theorist can begin to map the correspondences and transfer “instance-specific” information about concepts between these domains. This provides the opportunity to elaborate on the emerging story by blending the concepts of the source and the target, which provides for new insights not only about the target but also about the source domain (Cornelissen, 2005, 2006) (more on blending in the sections that follow).

Specifically, metaphors can help theorizing by (1) providing a vocabulary to “express, map, and understand” the complexity of a particularly phenomenon, which provides a more concrete basis for understanding (and discussing) underlying constructs (Cornelissen, 2005: 753; Lakoff & Johnson, 1980; Tsoukas, 1991); (2) encouraging an open-minded approach with “multiple ways of seeing, conceptualizing, and understanding” the phenomena of interest (Cornelissen, 2005: 753); and (3) allowing for new insights that may have previously been inconceivable (Morgan, 1980, 1983, 1996; Oswick, Keenoy, & Grant, 2002).

Anthropomorphizing represents a special case of theorizing through metaphor. Anthropomorphizing refers to “imbuing the imagined or real behavior of non-human agents with humanlike characteristics, motivations, intentions and/or emotions” (Epley, Waytz, & Cacioppo, 2007:
Shepherd and Sutcliffe (2015) highlight how anthropomorphizing has been critical to the creation and development of many important management theories, including those of organizational knowledge and organizational identity. Anthropomorphizing can be an effective theorizing tool when the theorist uses his or her rich understanding of him- or herself and other people to (1) take a leap of faith to make a guess at an explanation of an anomaly, (2) provide insights into the mechanisms underlying the “how” and the “why” of key relationships and insights into organizing, and (3) facilitate sensemaking as well as tap into the audiences’ knowledge of themselves and others as a communication strategy for sensegiving to tell robust stories. Anthropomorphizing, as a tool for theorizing, provides the potential for theorists to generate, build, and communicate creative theories of organizations and organizing as well as other non-human management entities or processes (and perhaps theories of themselves). Moreover, it gives junior scholars the confidence to theorize.

Metaphor, at least in the interaction model of metaphor, involves blending but not all blending involves metaphor. Oswick and colleagues (2011) offer four types of blending: (1) orthodox domestic theory (i.e., narrow focus in terms of theoretical contribution and consumed largely with the domain of production) provides incremental extensions to a focal sub-area of management; (2) innovative domestic theory (i.e., broad focus in terms of theoretical contribution and consumed largely within the domains of production) “challenges existing knowledge and ways of thinking but does so from an insider’s perspective” (323); (3) novel traveling theory (i.e., narrow focus in terms of theoretical contribution and consumed across domains) offers “quirky insights into non-management disciplines yet largely reinforces, builds upon, or resonates with prior knowledge (324); and (4) radical traveling theory (i.e., broad focus in terms of theoretical contribution and consumed across domains) represents a “significant challenge to and departure from the contemporary and conventional pre-existing insights in a particular discipline” (322) but requires considerable “repackaging, refining, and repositioning” (323) in order for
it to be taken up by management scholars. It is important when using blending to theorize about how the generated insights impact the source discipline (over and above the impact on the target discipline), potentially including how existing source theories need to be refined and boundary conditions need to be reconsidered (see also Zahra & Newey, 2009).

While blending provides a basis for transforming constructs and relationships in both the target and source literatures (i.e., bidirectional flow of information), bricolage largely combines sub-elements from a source discipline to application in management to create a unique combination (i.e., unidirectional flow of information). Bricolage is an important theorizing tool. Indeed, knowledge production can be conceptualized in terms of evolution, differentiation, and bricolage. Although evolution (i.e., knowledge accumulation through “trial and error toward an increasingly robust view of the world”) and differentiation (i.e., attempts to “generate knowledge that is discontinuous with existing knowledge”) predominate in management (Boxenbaum & Rouleau, 2011: 279-280), bricolage has considerable potential to be a source of novel theories. In theorizing, bricolage refers to “the assembly of different knowledge elements that are readily available to the researcher” into fluid knowledge constructs (Boxenbaum & Rouleau, 2011: 281). This approach requires the theorist to be “flexible and responsive . . . to deploy whatever research strategies, methods, or empirical materials, at hand, to get the job done” (Denzin & Lincoln, 1994: 2). Indeed, perhaps bricolage’s role in theorizing is more common than it seems because while scholars might use bricolage to theorize, they communicate the outcome of the process in terms of an evolution or differentiation approach.

Boxenbaum and Rouleau (2011) propose that theorists engage bricolage by (1) focusing on combining various elements (e.g., ideas, concepts, experiences) they have at hand rather than engaging in endless search of the literature or creating a theory from “scratch”; (2) choosing elements that are local (to the theorist) and sufficiently diverse such that their combination can provide novel (and
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hopefully useful) insights; (3) using common sense in selecting the items and combining them such that further theorizing can generate a coherent, broad, and useful explanation of management phenomena; (4) remaining flexible and responsive to new combinations by approaching the elements (to be combined) as fluid concepts and their combinations as potentially transformative (in terms of new insights); and (5) reflecting on how one is using (and/or has used) bricolage to theorize.4

Finally, typologies are another way of combining constructs; typologies offer a way to theorize by representing complex explanations of causal relationships involving contextual, structural, and strategic factors for explaining a focal outcome (Doty & Glick, 1994; Fiss, 2011). These explanations are not classification schemes—“systems that categorize phenomena into mutually exclusive and exhaustive sets with a series of discrete decision rules” (Doty & Glick, 1994: 232; see also McKelvey, 1982; Pinder & Moore, 1979) for describing phenomena—but are complex theories (Doty & Glick, 1994). Theorizing through typologies requires the theorist to make explicit his or her grand theoretical assertions (Doty & Glick, 1994: 235), define each ideal type, describe each ideal type using the same set of dimensions, and make explicit the assumptions underlying the weighting of the dimensions (e.g., core and peripheral elements [Fiss, 2011]) that describe the ideal types (Doty & Glick, 1994). Typologies can provide important insights for knowledge accumulation because they enable the theorist to move beyond the linear to explore multiple patterns (Miles, Snow, Meyer, & Coleman, 1978), emphasize the importance of how multiple factors fit together to offer a more holistic story (Fry & Smith, 1987; McKelvey, 1982), allow for equi-finality (i.e., organizations can reach the same outcome [e.g., high

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4 These approaches for building a story (i.e., using metaphor, anthropomorphizing, blending, and bricolage) are distinct from the notion of borrowing which does little to facilitate effective theorizing. Borrowing refers to importing largely fully formed theories from other scholarly domains to explain management phenomena. This might be useful but does not likely provide a theoretical contribution. Indeed, it has been argued that management scholars over-rely on theory borrowing (Oswick, Fleming, & Hanlon, 2011; Whetten, Felin, & King, 2009). Common forms of borrowing include using concepts from studies in other social contexts—horizontal borrowing—or using concepts developed at a different level of analysis—vertical borrowing (Whetten et al., 2009). The problem (over and above the challenge of generating a theoretical contribution) is that these forms of borrowing could (likely do) ignore differences across contexts and/or across levels important in knowledge production.

3. EVALUATING A THEORY: THE NARRATIVE ARC

Narrative arcs typically conclude with a resolution of the problem of the story and/or the problem faced by the main actor of the story. Despite the importance of developing theories and making a theoretical contribution, the resolution of the story (i.e., what constitutes a theory) varies widely as does the interpretation of what represents a good story (i.e., a theoretical contribution). The range of understandings of what constitutes theory is, as Suddaby (2014b) observes, a reflection of the wide variety of understandings of what theory should be used for. Some (most perhaps) see theory as a means of accumulating knowledge. Others, however, see theory as useful for legitimating some forms of knowledge over others. A third group sees a powerful normative value in theory, less important in summarizing existing knowledge than in directing the attention of a research community to explore issues of importance for the future. In each case, however, some theories seem to be preferred over others because of their narrative attributes (Van Maanen, 1995). Our interest in this section is in reviewing the rhetorical attributes of successful theories and, more particularly, identifying the narrative elements of what constitutes a contribution to theory. These attributes—in terms of story completion, compelling story, and the next story—are illustrated in Table 3.

A theory can be conceptualized as a statement of concepts and their relationships that specifies who, how, and/or why a phenomena occurs within a set of boundary assumptions conditions (see Bacharach, 1989; Gioia & Pitre, 1990). The general purpose of a theory is to organize (parsimoniously)
and communicate (clearly) (Bacharach, 1989), and it does this by offering a coherent explanation of a phenomenon, making assumptions and building on those assumptions to logically derive predictions, offering conjectures that allow for refutation or falsification, and testing (Shapira, 2015).

Although these attributes of the notion of theory are useful, it is not necessarily clear whether the outcome of a specific piece of a scholar’s work is a theory. Sutton and Staw (1995) acknowledge the difficulty in specifying an outcome as a theory and approach the issue by specifying what theory is not: theory is not references to prior work, is not data capturing the phenomenon, is not a list of variables or constructs, is not a diagram with boxes and arrows, and is not a set of hypotheses. Indeed, Bacharach (1989) also attempts to explain what is not a theory by detailing how theory is not a description or the what of a relationship absent the how, why, and when.

Weick (1995) largely agrees with Sutton and Staw (1995), and for that matter Bacharach (1989), about what theory is not. However, he recognizes that it is rare to offer a full-blown theory and that what scholars can often hope to do is contribute to knowledge by offering their work as an interim struggle (Runkel & Runkel, 1984) for which the outcome can be evaluated in terms of a continuum rather than a dichotomy (a theory or not). There is considerable comfort in thinking about theory as a continuum because it sets more realistic expectations about what is (or should be considered) a theoretical contribution. Therefore, while the Sutton and Staw (1995) list of what is not theory is appropriate given the notion of theory as a dichotomy, theorizing outcomes can be important as part of an emerging story and/or as an input to further theorizing. That is, to the extent that theorizing as interim struggles informs subsequent work, it is useful and salutary and perhaps a contribution worthy of publication (despite not yet having reached the status of full-blown theory).

The question then becomes what represents a theoretical contribution. A theorizing outcome can be considered to make a contribution to the extent that it bridges a gap between two theories as a basis
for explaining something between two domains (Bacharach, 1989) and generates new insights that lead
to a re-evaluation of existing theories (Bacharach, 1989) that are useful (Corley & Gioia, 2011; Kilduff,
2006; Whetten, 1989). Therefore, to be a contribution, the theorizing outcome needs to be original and
useful. In terms of being original, the theorizing outcome should reveal something that we previously
did not know (Corley & Gioia, 2011), surprise us by making us reconsider something we thought we
knew (Mintzberg, 2005; Rynes, 2002), and be sufficiently novel and/or counter-intuitive (Corley &
Gioia, 2011; Davis, 1971). The theorizing outcome is useful to the extent that it offers scientific utility—
facilitates advances in conceptual rigor and specificity and/or enables operationalization and testing—or
practical utility—can be applied to the problems facing practitioners (Corley & Gioia, 2011) (i.e.,
problems that matter [Pfeffer, 1993]). Therefore, while the theory must be different from received
wisdom to warrant a second look, it must be similar enough to what is known to be comprehensible
(McKinley, Mone, & Moon, 1999). By linking a theory with what is already known, the theorist imbues
novelty with meaning and thus sets up a dynamic tension and interplay between novelty and continuity
(McKinley et al., 1999: 638).

Building on the importance of coherence to a theory contribution (Azevedo, 2002), Shepherd and
Sutcliffe (2011) offer the following principles for assessing the theoretical contribution of theorizing
outcomes: (1) A broader theory is a better theory. A broader theory is one that explains more facts and,
in doing so, provides a more coherent explanation than one that explains fewer facts. The breadth of a
theory is the range of phenomena encompassed by the theory (Bacharach, 1989: 509). (2) A simple
theory is a better theory. A simpler theory is one that requires the fewest assumptions (Read & Marcus-
Newhall, 1993) and is more parsimonious. A theory is less parsimonious when factors can be deleted
because they add little additional value to our understanding (Dubin, 1978; Whetten, 1989). A good
theory finds a balance between being overly exhaustive and overly exclusive (Feldman, 2004: 566). (3)
A theory with explicit mechanisms is a better theory. Mechanisms offer an explicit explanation for proposed relationships (Davis & Marquis, 2005). Anderson and colleagues (2006: 102) define social mechanisms as “theoretical cogs and wheels that explain how and why one thing leads to another.” In describing a good theory, Whetten (1989) suggests the theory must offer an explanation of why. (4) A theory with fewer acceptable alternative explanations is a better theory. The evaluation of a theory is partly comparative in that a judge is partially influenced by the availability of alternate explanations and how good they are (Read & Marcus-Newhall, 1993; Thagard, 1989). A better theory is one that loosens “the normal science straightjacket” (Daft & Lewin, 1990) to offer something new (Feldman, 2004; Mone & McKinley, 1993) that challenges and extends existing knowledge (Davis, 1971; Whetten, 1989).

However, a theory (or other form of theorizing outcome) itself may stimulate additional theorizing. For example, theorists can be reflexive, that is, to reflect and take account of the research process by recognizing the situated nature of knowledge and knowledge creation underlying the theorizing outcome. Alvesson, Hardy, and Harley (2008) suggest that reflexivity can be stimulated by practices that (1) use different perspectives to establish a different frame of reference from that used in the original theorizing in order to see things differently and thus recognize that these different perspectives represent a source of new knowledge; (2) use a different voice to that used in the original theorizing outcome to understand how voice influences perspective (see also Pentland, 1999); (3) use different positionings to understand how time and context influence the choice of perspective (see also Pentland, 1999); and (4) destabilize a perspective through questioning the conditions and consequences of theory construction and thus problematizing the process and outcome of the original theorizing. Reflexivity as a trigger for new theorizing may also depend on how researchers exit from their field work. Interestingly, Michailova and colleagues (2014) propose that paradoxical thinking and revelatory
theoretical outcomes can come from a field work exit in which the relationship between the researcher and the subjects (or informants) is terminated and not easily re-engaged for research purposes; the argument is that the disruption in the relationship enables the theorist to disconnect (physically, mentally, and emotionally) from the field enabling the abstraction necessary for theorizing, provides the irritant necessary for abductive research, and takes the researcher out of his or her comfort zone provides a basis for a eureka moment.

**PRAGMATIC EMPIRICAL THEORIZING**

The foregoing discussion has reviewed existing understandings of how to effectively identity an anomaly and then conceive, construct, and evaluate a theory as expressed by our leading theorists. A recurring issue in this literature, however, is an ongoing tension between the emphasis that should be given to prior and emerging knowledge or between the existing theoretical literature and empirical observation. A growing concern, expressed most ably by Hambrick (2007), is that management scholarship’s obsession with theory often impedes the publication of research that identifies a new but under-theorized phenomenon. Hambrick (2007: 1346) concludes that management scholarship has a “theory fetish [that] prevents the reporting of rich detail about interesting phenomenon for which no theory yet exists. And it bans the reporting of facts—no matter how important or how competently generated—that lack explanation, but that once reported, might stimulate the search for explanation.”

Indeed, Harris, Johnson and Souder (2013: 451) suggest that “many of the interesting gaps to be filled by empirical research may be in phenomenological understanding rather than in questions about theoretical axioms”.

Hambrick is joined by a long list of eminent scholars who also argue that theory is increasingly becoming a restrictive rather than a generative tool for creating new knowledge in management. Miller, Greenwood and Prakash (2009: 278), for example, describe the current approach by top-tier
management journals as narrowing the notion of a contribution to theory (i.e., applying a straightjacket) to topics that fit neatly within contemporary popular theories and allow the development and tweaking of those theories. Miller is supported in his notion of theory as a straightjacket by Sutton and Staw (1995: 381), who note that “the problem with theory building may also be structural” in that data can only be interpreted through the lens of existing theory, and as a result, “the craft of manuscript writing becomes the art of fitting concepts and arguments around what has been reassured and discovered.”

Here, as Suddaby (2014a, b) observes, Hambrick is expressing the long-standing frustration and tension between rationalism and empiricism. Rationalists see knowledge as most valuable when it is abstracted into general principles and relationships—namely, theory. New empirical knowledge can only be understood when viewed through the lens of theory, and rationalists would scoff at the assumption that a new phenomenon can be understood in the absence of theory. What makes the phenomenon new, they would argue, can only be assessed with an understanding of the extant literature. Rationalists construct new knowledge largely through deduction from prior knowledge. It is this conforming influence of prior theory that management scholars see as a confining straightjacket requiring a contribution to theory that, in turn, limits access to elite management journals.

The alternative to rationalism is empiricism, which advocates a focus on direct empirical observation without the confining influence of theory. Knowledge is accumulated by induction (i.e., building observation on observation, fact on fact), and purist empiricists will argue that prior theory clouds observation and impedes the construction of knowledge through brute facts. This view—evident in Hambrick (2007) and others’ (e.g., Pfeffer, 2014) impassioned pleas for less theory—is perhaps best illustrated in Kerr’s (1998, in Bern, 1987: 173) observation that “There are two possible articles you can write: (1) the articles you planned to write when you designed your study, or (2) the article that makes
the most sense now that you have seen the results. They are rarely the same and the correct answer is 

(2). . . the best journal articles are informed by the actual empirical finding from the opening sentence.”

How should one make sense of these two diametrically opposed views of theory? We conclude 
our review with a proposed alternative that offers a middle ground between these two extreme positions. 
We term this alternative view pragmatic empirical theorizing, which draws largely from the renowned 
abductive reasoning as a practical compromise of induction and deduction and more realistically 
captures the authentic process by which theorizing occurs.

Through pragmatic empirical theorizing scholars can discover and engage interesting findings as 
a transparent step within the hypothetico-deductive process (but not the completion of all steps in the 
process). Interesting facts, such as anomalies that are not easily explained by our current theories, are 
important because they trigger inquiry. Indeed, these anomalies trigger abduction, which is central to the 
logic of discovery (at least to the tradition of pragmatism [Hanson, 1958; see also Locke, Golden-
Biddle, & Feldman, 2008; Swedberg, 2014; Van de Ven, 2007]). Therefore, theorizing can be triggered 
by interesting facts. Rather than simply offering the interesting facts upon which others can theorize, 
scholars who discover these interesting facts can make a more substantial contribution by taking a first 
attempt at an explanation—the opportunity to offer a story that explains the why of the found 
relationships.

In contrast to presenting post hoc hypotheses as a priori (PPHA; also known as Hypothesizing 
After Results are Known [HARKing]), a pragmatic theorizing approach to understanding entrepreneurial 
phenomena presents post hoc propositions as post hoc—transparently theorizing from results. This 
overcomes many of the criticisms of PPHA as mentioned above (Kerr, 1998; Bedeian, Taylor & Miller, 
2010) because many of these criticisms can be attributed to the lack of transparency (or deception) about
the process. The problems arise from deceptively disguising theorizing from findings as a priori hypotheses. Apparently, the disguise is needed because of journals’ theory fetish, but through pragmatic empirical theorizing, scholars can satisfy both the potential of the discovery of anomalies and the need for theory by more accurately reflecting the process. We are not so naïve to believe that this does not require a shift in the research mindset of authors, reviewers, and editors, but the recognition of the need for new discoveries, the emphasis on theory, and the perhaps widespread practice of PPHA suggests that the community of scholars might be open to a pragmatic empirical theorizing approach; an approach which uses empirical inspiration from interesting findings about management phenomena to inform and motivate an initial conjecture and refinements to the conjecture all while critical steps in this process are documented and reported.

With pragmatic empirical theorizing, facts can play an important role in triggering (i.e., informing and motivating) theorizing to offer a tentative (and perhaps highly speculative) explanation for the data. This theorizing can be bundled with the facts to represent a theoretical contribution—that is, theorizing need not be expelled from the current paper to be the exclusive challenge of future research. We propose that as the discoverer or creator of the anomaly, the scholar has the opportunity to offer a first explanation. A problem and one step toward its resolution is a more solid foundation for a contribution to our understanding than the recognition of a problem alone. Admittedly, taking a guess at a possible explanation makes one vulnerable to being challenged and having one’s work replaced by a better explanation of the phenomenon—but only if we are lucky. As the story progresses across subsequent papers, so too does the original contribution (or at least it should).

Therefore, we agree with Hambrick’s (2007) point that facts can trigger theorizing. Rather than interesting findings having to be explored across papers, we hope scholars begin to recognize that interesting findings can lead to theorizing within a single paper (and that recognition needs to include
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reviewers and editors). That is, data does not have to follow theory. Indeed, to the extent that data highlights an unmet expectation (i.e., of an explanation for an empirical phenomenon), an abductive process can be triggered that “works backward to invent a … theory that would make the surprise meaningful. . . . [Abduction] assigns primacy to the empirical world, but in the service of theorizing” (Van Maanen et al., 2007; see also Swedberg, 2014). While descriptive accounts can provide interesting questions, theorizing is needed to offer novel insights. Indeed, the notion of contribution has rested on the insight offered by a paper (insight that is original and useful [Corley & Giola, 2011]). Future contributions will likely come from scholars’ transparently offering interesting findings and then theorizing on possible explanations for them (rather than presenting them as theory testing or presenting only interesting findings). Papers presenting the outcomes of pragmatic empirical theorizing are likely to have sections like the following (in order): Introduction, Research Method, Multiple Tests, Multiple Results, Initial Theoretic Model and Propositions, Discussion, and Conclusion.

CONCLUSION

Our intent in this paper was to review and integrate the rapidly growing literature on theorizing in management scholarship. Our hope was that by focusing on what leading management theorists have to say about the process, we would be able to accumulate knowledge on the tools for producing exemplary theory. In doing so, our objective is to reinforce the notion that creative theory building is not the exclusive domain of elite or experienced management scholars but rather is a technical craft that can be learned and applied. We believe that we have accomplished those objectives in this review article.

We identified and elaborated a number of activities that produce effective theories. The first activity we present, which we term the theorizing trigger, requires the aspiring theorist to identify a tension that will motivate the rest of the theorizing process. Management theories are typically triggered by tensions that exist between what we know and what we observe. We then identified a range of
tensions that have historically generated sound theory. The next set of activities presented that facilitate the conceiving and constructing of theories involves developing the main characters (or constructs), constructing the context or setting, and actively engaging the audience’s imagination through the introduction of plots and themes. Finally, we explored how the theorist needs to select the story elements that build the narrative arc of a theory, i.e., justify and evaluate the theory.

After reviewing the literature on theorizing, we offered an approach to theorizing which we believe has great potential to generate new theories of management. Pragmatic empirical theorizing builds on the recognition that interesting findings may be an important source of new theories and overcomes the lack of transparency offered by PPHA—presenting post hoc hypotheses as a priori. We are interested in others’ responses to pragmatic empirical theorizing and we hopefully see its use and eventual acceptance as a legitimate tool for theorists.

Each of the tools offered in this paper requires exceptional skill and insight, likely involving a degree of detail that extends far beyond the scope or space of this paper. Our intent is to initiate the conversation necessary to make theorizing a point of ongoing reflection in our scholarly community. It is but a preliminary step that offers a common language and a proposed causal process that requires elaboration by a community of like-minded scholars. The project of building better theory, like all research, is a communal effort, and we hope that this brief sketch sets the stage for an ongoing and focused conversation.
REFERENCES (* means that the paper is included as part of the formal review)


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Theories of Theory Building


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### Table 1
Narrative Conflict as a Trigger for Theorizing

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<thead>
<tr>
<th>Narrative Conflict</th>
<th>Function</th>
<th>Key Cites</th>
<th>Example</th>
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<tbody>
<tr>
<td>Paradox</td>
<td>Recognizing the tension between two sets of statements that on their own make sense but together are contradictory triggers theorizing to resolve the paradox</td>
<td>Poole &amp; Van de Ven, 1989; Smith &amp; Lewis, 2011</td>
<td>“… ‘on the one hand, conflict improves decision quality; on the other, it may weaken the ability of the group to work together’ (1986: 67). … How can top management teams use conflict to enhance the quality of their decisions, without sacrificing consensus and affective acceptance among their members?’ (Amason, 1996: 123)</td>
</tr>
<tr>
<td>Problematization</td>
<td>Challenging the value of a theory and/or focusing on its weaknesses highlights the need for new thinking on the topic.</td>
<td>Alvesson &amp; Karreman, 2007; Shepherd &amp; Sutcliffe, 2011; Locke &amp; Golden-Biddle, 1997</td>
<td>“An idea from an ethic of care perspective that is important to the construction of people’s struggles is the problematization of the division between public and private spheres (Held, 2005; Tronto, 1993). An ethic of care draws attention to the ways in which ostensibly private problems and issues are the result of public, political processes …” (Lawrence &amp; Maitlis, 2012: 646).</td>
</tr>
<tr>
<td>Empirical Surprise</td>
<td>Observing through the senses can reveal data and findings that would not otherwise be expected, which requires theorizing for an explanation.</td>
<td>Locke, 2007; Shah &amp; Corley, 2006; Turner, 1983</td>
<td>“This study of the complete life-spans of eight naturally-occurring teams began with the unexpected finding that several project groups, studied for another purpose, did not accomplish their work by progressing gradually through a universal series of stages, as traditional group development models would predict. Instead, teams progressed in a pat-tern of</td>
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### Theory Building

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Reference</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Practice Logic</td>
<td>Following an actor’s activities can reveal relationships across practices, the connections between people and tools, and events that disconnect individuals from their activities; all of which may highlight paradoxes and problems of practical importance.</td>
<td>Feldman &amp; Orlikowski, 2011; Sandberg &amp; Tsoukas, 2011</td>
<td>A nine-year ethnography is used to show how two investment banks’ controls, including socialization, targeted bankers’ bodies, how the bankers’ relations to their bodies evolved, and what the organizational consequences were. The banks’ espoused and therefore visible values emphasized autonomy and work-life balance; their less visible embodied controls caused habitual overwork that bankers experienced as self-chosen. This paradoxical control caused conflict between bankers and their bodies, which bankers treated as unproblematic objects.</td>
</tr>
<tr>
<td>Everyday or Absurd Occurrences</td>
<td>Searching, observing, and questioning everyday events provides abundant opportunities to theorize and searching, observing, and questioning absurd events challenges conventional wisdom.</td>
<td>Weick, 1974</td>
<td>“… if one watches people ride on escalators, he will observe that there are times when they walk on the escalator in order to speed up their ride. Now the question is, is there any regularity to this pattern of walking? Informal observation suggests that … the closer they are to where they want to get, the stronger is their tendency to approach it (Weick, 1974: 488).</td>
</tr>
<tr>
<td>Engaged Scholarship</td>
<td>Collaborating with practitioners provides the academic access to a different perspective as a basis for identifying complex real-world problems</td>
<td>Van de Ven &amp; Johnson, 2006</td>
<td>“To explore change and managerial sensemaking, we conducted action research at the Danish Lego Company. … Through collaborative intervention and reflection, we sought to help managers make sense of issues surfaced by a major restructuring. Results … a process for working through paradox and explicating</td>
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three organizational change aspects—paradoxes of performing, belonging, and organizing” (Luscher & Lewis, 2008: 221; Note Luscher is a practitioner).
Table 2

Building Stories through Conceiving and Constructing Theories

<table>
<thead>
<tr>
<th>Main Characters</th>
<th>Function</th>
<th>Key Cites</th>
<th>Example</th>
</tr>
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<tbody>
<tr>
<td>Labeling Constructs</td>
<td>Identifying and naming a core construct(s) helps to separate the phenomenon of interest from the mass noise of everyday experience and prior research.</td>
<td>Donaldson et al., 2013; Pentland, 1999; Whetten et al., 2009</td>
<td>Compassion organizing refers to “when individuals in organizations notice, feel, and respond to human pain in a coordinated way” (Dutton et al., 2006: 59).</td>
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<tr>
<td>Narrative Setting</td>
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<tr>
<td>Ontology</td>
<td>Shifting the way a theorist conceptualizes the nature of phenomena (ontology) can provide a new perspective from which to theorize but also requires a corresponding shift in epistemology.</td>
<td>Kilduff, Mehra &amp; Dunn, 2011; Thompson, 2011</td>
<td>“To label these five as “not theory” makes sense if the problem is laziness and incompetence. But ruling out those same five may slow inquiry if the problem is theoretical development still in its early stages. Sutton and Staw know this. But it gets lost in their concern with theory as a product rather than as a process. To add complication and nuance to their message, I want to focus on the process of theorizing” (Weick, 1995: 385).</td>
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<td>Abstraction/Complexification</td>
<td>Moving up the ladder of complexity can provide abstraction necessary for a meta-paradigm perspective whereas moving down the ladder of complexity provides a more concrete perspective of the phenomenon.</td>
<td>Gioia &amp; Pitre, 1990; Lewis &amp; Grimes, 1999; Ofori-Dankwa &amp; Julian, 2001</td>
<td>“… by adopting a multi-paradigm approach that integrates insights from the OB and OT literatures to study multiteam systems. … we suggest that IFD and vertical coordinated action are intertwined in a complex manner, with vertical coordinated action determining whether IFD’s advantages (increased horizontal coordination) or disadvantages (decreased aspirational behavior) will prevail” (de Vries et al., In press).</td>
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</table>
## Back and Forth between Data and Literature

Entering the field with a research question and perhaps focal constructs, selecting cases that are extreme or highly revelatory, and pattern matching data and theory enables the theorist build a story that bridges rich qualitative evidence with deductive research. 

In commenting on the finding of the use of semi-structures, Brown and Eisenhardt (1997: 15) engaged the literature to note: “Another reason may be that these limited structures help people to make sense of a fast-changing environment. In such environments, it is easy to become confused, make mistakes, and fall behind. Previous research indicates that structure helps people to make sense of change. For example, Weick’s (1993) …”

## Choice of Levels

Making explicit the mechanisms by which constructs and relationships are influenced by lower and/or upper level constructs can provide new insights at the focal level or cross levels and a basis for theorizing on the emergence of, stability in, and changes to collective constructs.

This study focuses on emotional contagion, ‘a process in which a person or group influences the emotions or behavior of another person or group through the conscious or unconscious induction of emotion states and behavioral attitudes’ (Schoenewolf, 1990: 50), in particular, the contagion of every-day moods in work groups. … [which] will lead to greater cooperativeness on both an individual and group level” (Barsade, 2002: 646, 651).

## Narrative’s Event Sequence

Considering time from different perspectives—e.g., how time is experienced, bracketed, categorized as periods of stability and change, considered in terms of rate, magnitude, and pattern, and the inter-relationship between the past, present and future—can allow theorizing to extend the boundary

“This team temporal leadership” orients teams toward managing the time-related aspects of their work. We examine how perceived time pressure affects team processes and subsequent performance under weak versus strong team temporal leadership” (Maruping et al., 2015: 1313).
<table>
<thead>
<tr>
<th>Theory Building</th>
<th>Conditions of Existing Theories</th>
<th>Zaheer, et al., 1999</th>
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<tbody>
<tr>
<td>Plot and Theme</td>
<td>Posing problem statements, making conjectures on solutions to the problem, trialing conjectures, and selecting and retaining those that show promise enable the theorist move through disciplined imagination to build a theory.</td>
<td>Davis, et al., 2007; Folger &amp; Turillo, 1999; Weick, 1989</td>
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<td>Thought Experiments</td>
<td>“One could imagine a thought experiment in which there are two groups and the average individual attributes conducive to creativity (creative personality, experience in creative work, etc.) of one team is greater than the other; another, similar sort of question might concern whether groups starting out with a more creative initial “working idea” require even more adherence to these coordinative interactions. We think these differences would matter in our model, but perhaps in a counterintuitive way” (Harrison &amp; Rouse, 2014: 1278)</td>
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<td>Metaphor &amp; Anthropomorphizing</td>
<td>Analogically connecting concepts from target and source domains at a structural level, transferring concept information between domains, and blending the concepts provides for an emergent understanding of both domains. For anthropomorphizing the source is human and the target is non-human.</td>
<td>Cornelissen, 2005; Morgan, 1996; Shepherd &amp; Sutcliffe, 2015</td>
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<td>Metaphor</td>
<td>“The meaning … is that the act of managing is framed as involving improvisation and as offering considerable degrees of freedom to managers within organizations in interpreting, expressing, responding, and performing in a given situation …. This image is stretched even further by writers … who suggest that managers in fact ‘author’ their own script; they become the writers and play-wrights of their own actions and are fully accountable for them. …. This image of organizational life that is evoked through the ‘organization as theatre’ metaphor underlines …” (Cornelissen, 2004: 716).</td>
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<td>Blending</td>
<td>… provides a basis for transforming constructs and relationships in both the target and source to generate new insights for both literatures.</td>
<td>Oswick, et al., 2011; Zahra &amp; Newey, 2009</td>
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<td>Blending</td>
<td>“That modern work organizations either “have” or might “be like” a culture similar to other human groups requires us to draw connections that mirror the clan and workgroup. … The modern workgroup and the clan then yield the richer idea of</td>
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<tr>
<td>THEORY BUILDING</td>
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<td>organizational culture, which can then be tested in relation to other referents (motivation, morale, performance, etc.)” (Oswick et al., 2011: 331).</td>
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<tr>
<td>Bricolage</td>
<td>Flexibly and responsively deploying whatever research strategies, methods, or empirical materials at hand and assembling these knowledge elements in unique combinations to generate fluid constructs for theorizing.</td>
<td>Boxenbaum &amp; Rouleau, 2011; Denzin &amp; Lincoln, 1994</td>
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<tr>
<td>“The building blocks for organizations come to be littered around the societal landscape; it takes only a little entrepreneurial energy to assemble them into a structure. And because these building blocks are considered proper, adequate, rational, and necessary, organizations must incorporate them to avoid illegitimacy. Thus, the myths built into rationalized institutional elements create the necessity, the opportunity, and the impulse to organize rationally, over and above pressures in this direction created by the need to manage proximate relational networks” (Meyer &amp; Rowan, 1977: 345).</td>
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<td>Typologies</td>
<td>Combining contextual, structural, and strategic factors to offer ideal types based on the same set of dimensions and making explicit the weighting of those dimensions enables theorists to explore multiple patterns.</td>
<td>Doty &amp; Glick, 1994; Fiss, 2011; Payne, 2006</td>
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<td>“On the basis of an interdisciplinary literature review, Part I introduces four basic types of process theories that explain how and why change unfolds in social or biological entities: life-cycle, teleological, dialectical, and evolutionary theories. … we will call them motors-to explain how and why changes unfold. Part II arranges these four ideal-type process theories into a typology by distinguishing the level and mode of change to which each theory applies. Part III considers how the typology is useful for understanding a variety of specific theories of change processes in organizations” (Van de Ven &amp; Poole, 1995: 511).</td>
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### Table 3: Narrative Arc to Achieve a Theorizing Outcome

<table>
<thead>
<tr>
<th>Story Completion</th>
<th>Function</th>
<th>Main Cites</th>
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<tbody>
<tr>
<td>Theory as Outcome</td>
<td>Although a theory represents a statement of concepts and relationships</td>
<td>Bacharach, 1989; Gioia &amp; Pitre, 1990; Sutton &amp; Staw, 1995; Whetten, 1989</td>
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<td>that specifies who, how, and/or why a phenomena occurs within a set of</td>
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<td>boundary conditions (where and when) and while there are some indications of what a theory is not, there remains debate about the threshold upon which a work becomes a theory.</td>
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<td>Theorizing</td>
<td>By focusing on theorizing, rather than theory, research is considered on a continuum of “theory” that acknowledges the emerging nature of the story and the interim struggles on the way to advancing knowledge.</td>
<td>Langley, 1999; Shepherd &amp; Sutcliffe, 2015; Weick, 1989</td>
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<td>Compelling Story</td>
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<tr>
<td>Original and Useful</td>
<td>To be a contribution, the theorizing outcome needs to reveal something that we previously did not know, surprise us by making us reconsider something we thought we knew, and/or counter-intuitive but also advances conceptual rigor and addresses problems facing practitioners.</td>
<td>Corley &amp; Gioia, 2011; Davis, 1971; Pfeffer, 1993</td>
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<td>Coherent</td>
<td>A theoretical contribution is greater for those that offer a broader and simpler theory that is explicit about the underlying mechanisms and has fewer alternate explanations.</td>
<td>Shepherd &amp; Sutcliffe, 2011; Thagard, 1989</td>
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<tr>
<td>Comprehensible</td>
<td>While a theory must be sufficiently novel to capture attention, it must be similar enough to what is known to be comprehensible and theorists can do this by imbuing novelty with meaning to provide both novelty and continuity.</td>
<td>Locke &amp; Golden-Biddle, 1997; McKinley, et al., 1999</td>
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<tr>
<td>The Next Story</td>
<td></td>
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<tr>
<td>Reflexivity</td>
<td>To reflect, to take account of the research process, and to recognize the situated nature of knowledge and knowledge creation, theorists can use a different perspective, voice, positioning, and problematize the process and the outcome to stimulate subsequent theorizing.</td>
<td>Alvesson, et al., 2008; Michailova et al., 2014; Pentland, 1999</td>
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</tbody>
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