



# Developing theoretical insights in entrepreneurship research

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## Abstract

**Research Summary:** As the study of entrepreneurship advances, our appreciation for the role of theory in the development of the field has grown. In this paper, we build on our collective experiences to offer a peek into the inner workings of entrepreneurship theorizing, using specific examples to highlight ways of developing theoretical insights for advancing entrepreneurship research. Our journeys suggest an iterative process centered on asking an important and interesting question, challenging prevailing assumptions, understanding context and phenomenon, and developing conceptual models and analyses. We focus on the uniqueness of entrepreneurial phenomena, contexts, and actors as well as the interdisciplinary nature of the field.

**Managerial Summary:** Entrepreneurship as a scholarly field has reached a stage of maturity where we need to think more carefully about our contribution to theory. Theory enriches managerial practice. We offer helpful and actionable suggestions to develop and share rich theoretical insights that inform scholarship and practice.

## KEYWORDS

assumptions, entrepreneurship, immersion, theoretical contribution, theorizing at the intersection, theory building

## 1 | INTRODUCTION

Theory development has long been central to entrepreneurship research (Amit et al., 1993; Bygrave, 1993).<sup>1</sup> Foundational contributors to the field such as Joseph Schumpeter (Schumpeter, 1934, 1942), Frank Knight (1921), and Israel Kirzner (1973, 1997) were primarily theorists and, despite a surge of empirical work over the last several decades, entrepreneurship research continues to devote significant attention to theory. Theoretical insight in entrepreneurship has emerged from importing, applying, and extending theories from foundational disciplines such as economics, sociology, psychology, and the natural sciences, and from adjacent business fields such as strategic management, finance, and organizational behavior (Zahra, 2007; Zahra & Newey, 2009). Other work has developed theoretical insights indigenous to entrepreneurship such as effectuation (Sarasvathy, 2001) and opportunity creation (Alvarez & Barney, 2007).

The broader management literature offers many reflections on the nature of theory (Feldman, 2004; Feldman & Orlikowski, 2011; Gioia & Pitre, 1990), what constitutes a theoretical contribution (Barney, 2018), and how to build theory (Bygrave, 1993; Eisenhardt & Graebner, 2007; Mintzberg, 2005; Sætre & Van de Ven, 2022; Shepherd & Suddaby, 2017; Weick, 1989). Entrepreneurship scholars have provided additional perspectives, such as how to develop theoretical insights by considering the evolution of entrepreneurial phenomena (Dushnitsky & Matusik, 2019). Yet many entrepreneurship scholars, particularly those early in their careers, may seek additional, practical ideas for how to generate theoretical insights. Can the process of theorizing be systematized, codified, and taught, or does theory building rely mainly on tacit knowledge gained through apprenticeship and experience? The authors of this article, all senior scholars in the entrepreneurship field, believe that this knowledge is at least partly teachable. While theorizing takes different forms in different contexts, we can learn from careful examination of best practices from established scholars who have been successful (and unsuccessful) at developing and propagating new theoretical insights. This article aims at presenting examples, illustrations, and stories from the development of theoretical insights in entrepreneurship to help lay out these general lessons.

## 2 | UNIQUENESS OF ENTREPRENEURSHIP FOR THEORIZING

We construct theories to explain and predict phenomena (Whetten, 1989) and, ultimately, solve problems of importance. Despite some debates (e.g., Cucina et al., 2014; Hambrick, 2007), and a growing emphasis on atheoretical or “theory-light” empirical work in fields such as applied microeconomics (Angrist & Pischke, 2010; Hamermesh, 2013; Klein, 2014), it is generally believed that theory is indispensable for scientific advancement (Ashkanasy, 2016) and for practice and policy (Aguinis & Cronin, 2022). Theory guides which research questions to ask, elucidates logical relationships, and gives meaning to empirical results (Mises, 1957; Popper, 1944; Van de Ven, 2007). Developing and using theory is also an important way to accumulate knowledge and stay engaged in the evolution of ideas in the field, allowing us to evaluate our collective progress and identify research opportunities. Theories allow us to recognize milestones that indicate key transitions in the field, making it possible to understand and appreciate the history of ideas that shape our scholarship.

Entrepreneurship researchers have frequently imported theories from psychology, sociology, economics, and other disciplines to study entrepreneurial phenomena. While this has helped to enhance the quality and rigor of entrepreneurship research, it is increasingly clear that entrepreneurs and their new ventures, models, and projects differ from other contexts in ways that existing theories may not adequately explain. For example, entrepreneurial phenomena are dynamic and even ephemeral, requiring distinct resources and capabilities to manage or commercially exploit entrepreneurial opportunities. The startup process itself tends to be complex and dynamic rather than simple and linear (Eisenhardt & Brown, 1998). The founders and founding teams which play a pivotal role in the growth of new ventures (Lazar et al., 2020) are often low-powered, low-resourced actors. Still, many of them can challenge existing conditions and institutions, mobilize resources, build their companies and grow them despite the limitations of their positions (Clough et al., 2019). Moreover, in the study of early-stage ventures, the individual and



firm levels of analysis often collapse, cutting against the usual micro–macro distinction in management studies. Finally, unlike established firms with proven resources, customers, and track records, entrepreneurial ventures usually have both the problem and the solution largely unknown (Blank, 2013). While such uncertainty is often manifested in risky returns and entrepreneurial failures (McGrath, 1999), it is also an essential condition for the existence of entrepreneurial opportunities and a defining characteristic of entrepreneurial decision-making (Kerr et al., 2014; Knight, 1921; Packard et al., 2017). These features suggest that entrepreneurship is a rich area in which to develop novel theoretical insights, yet the process by which such insights emerge remains opaque.

### 3 | DEVELOPING THEORETICAL INSIGHTS: BIG T AND SMALL t THEORIZING

Broadly speaking, new theoretical insights are needed when we look for an answer to a novel question (e.g., when new and useful concepts or mechanisms need to be identified) or a better answer to an existing question (e.g., when the accuracy of existing predictions needs to be improved). Theoretical reasoning is also important for investigating the internal validity of existing theories, constructs, and mechanisms. Whether a theoretical insight pertains to a novel or existing question, it helps to differentiate between “big T” and “small t” theorizing in entrepreneurship research. The distinction has its roots in Kuhn's (1962) distinction between “extraordinary science” (the establishment of a new scientific paradigm) and “normal science” (incremental knowledge gains in an existing paradigm). While entrepreneurship research has not experienced the type of “paradigm shifts” identified by Kuhn in the natural sciences (e.g., the Copernican model of the solar system), we nevertheless believe it is useful to draw distinctions between broader (Big T) and narrower (little t) theoretical contributions within the entrepreneurship domain.

Big T contributions can be broad frameworks or specific theories. A big T framework articulates new constructs and definitions along with a set of rules or practices about what phenomena or questions are in or out, and what kinds of mechanisms are reasonable. A big T theory introduces new logic and mechanisms, challenging and even replacing prevailing assumptions, premises, and logic of received theory.<sup>2</sup> Conversely, small t theorizing offers refinements and extensions to existing theories and frameworks, often accepting the assumptions, premises, concepts/constructs, definitions, and basic logic of existing theories and frameworks (Barney, 2018). These two types of theoretical insights play useful and complementary roles in entrepreneurship research.

Big T theoretical insights often arise through the articulation of broad frameworks or perspectives, such as Kirzner's (1973) conceptualization of entrepreneurship as alert entrepreneurs discovering profit opportunities, Schumpeter's idea of entrepreneurs as agents of innovation or “carrying out of new combinations” (Schumpeter, 1934, p. 74; Schumpeter, 1942), and the Knightian view of entrepreneurship as judgmental decision-making under uncertainty (Knight, 1921). These broad frameworks help shape the scope of entrepreneurship research by suggesting appropriate research questions for entrepreneurship scholars, defining core constructs such as alertness or judgment, and distinguishing entrepreneurship studies from complementary research in economics, finance, strategy, information systems, and so on. Since the classic literature of Kirzner, Knight, Schumpeter and others, entrepreneurship scholars have engaged in big T theorizing—Alvarez and Barney's (2007) notion of opportunity creation, Sarasvathy's (2001) effectuation perspective, and Foss and Klein's (2012) perspectives are recent examples.

Sarasvathy's (2001, 2009) work on the effectuation perspective can be regarded as a meaningful exercise to offer big T theorizing. Effectuation emerged within the broader theoretical perspective of behavioral social science, building on Simon's insights on cognition and decision. This perspective has cast doubts on traditional planning models and altered our views of how entrepreneurs make decisions. Earlier literature suggested that entrepreneurs start with a vision (clearly specified in pitches and goals) of the ventures they wish to create. To bring this vision to life, they follow several steps to test their ideas, raise money, assemble the right team, develop and commercialize products to target markets, etc. In contrast, effectuation (Sarasvathy, 2001) argues that entrepreneurs begin with

their means rather than preset goals or a vision, and work with self-selected stakeholders to shape and co-create their markets, without planning or prediction.

Big T theorizing challenges long-held beliefs and assumptions. Consequently, scholars may find big T theories and frameworks intellectually difficult to develop. Moreover, the “switching costs” associated with big T ideas are high. Resistance to big T ideas may even pose career risks to the individuals who champion them. As the aphorism attributed to Max Planck goes, science progresses one funeral at a time.

Small t theorizing, however, is more familiar. It offers important refinements and extensions to existing big T theories or frameworks, clarifies assumptions, elucidates concepts/constructs, explicates mechanisms, and establishes boundary conditions. Much of our theorization in entrepreneurship, as in many other fields, follows this pattern.

For example, real options theory is a big T, challenging the traditional net present value model for investment decisions (Dixit & Pindyck, 1994) and questioning the assumption in many economic and organizational theories that uncertainty is undesirable and should be avoided or minimized (for a given expected return), as in the cases of portfolio theory (Markowitz, 1959), transaction cost economics (Williamson, 1985), and the behavioral theory of the firm (Cyert & March, 1963). The real options approach theorizes and formalizes the idea that entrepreneurial and managerial flexibility is valuable under conditions of uncertainty (and irreversibility) (Dixit & Pindyck, 1994; Li et al., 2007; Trigeorgis, 1996; Trigeorgis & Reuer, 2017). Scholars have since made small t contributions by elucidating the key concepts of uncertainty and irreversibility (e.g., Folta et al., 2006; Kogut & Kulatilaka, 2001; Pindyck, 1993), examining the boundary conditions of the theory (e.g., Bowman & Moskowitz, 2001), and extending the basic tenets from analysis of stand-alone options to portfolios of options in strategy and entrepreneurship (e.g., Bowman & Hurry, 1993; Li & Chi, 2013; Vassolo et al., 2004).

In many cases, big T theories are first articulated at a more general level from cognate fields and then refined and extended to address key entrepreneurship questions. This process is often accomplished through contextualization of big T theories and incorporation of what is unique about entrepreneurs or the entrepreneurship context in theorizing (Zahra, 2007; Zhao & Li, 2019). Such is the case with real options theory (originated from financial economics) and the resource-based view (from strategy). For example, scholars have contextualized real options theory to offer fresh insights into entrepreneurship phenomena such as entrepreneurial failure (McGrath, 1999), hybrid entrepreneurship (Folta et al., 2010), venture capital funding, staging and withdrawal (e.g., Li, 2008), and corporate venture capital (CVC; e.g., Hurry et al., 1992; Tong & Li, 2011). In research on venture capital, the predominant agency and information economics views highlight that venture capital, as a key source of funding for high-growth ventures, creates value by mitigating information asymmetry between investors and entrepreneurs (Amit et al., 1998; Brander et al., 2002; Gompers, 1995; Kaplan & Stromberg, 2001). Scholars have proposed and examined another distinct mechanism for venture capital to create value, which emphasizes acting flexibly under uncertainty (e.g., through staging and portfolio investment) to avoid premature commitment and capture the upside potential of entrepreneurial opportunities and projects (e.g., Li & Chi, 2013; Li & Mahoney, 2011; Tong & Li, 2011).

The resource-based view has also been contextualized to offer insights in entrepreneurship. The theory challenged assumptions underlying the competitive-positioning view regarding the source of a firm's competitive advantage, highlighting resource heterogeneity among organizations as the key contributor to performance differences (Barney, 1986, 1991; Penrose, 1959; Peteraf, 1993; Wernerfelt, 1984). These views later altered what we know about how startups use their resources to create and sustain their competitive advantage, providing insights into how these companies differ in their resource bases as well as their resource management processes (e.g., assembly, orchestration, and deployment) from other populations (Zahra, 2021). Applications of transaction cost theory (Foss et al., 2007; Michael, 2007; Verbeke & Kano, 2012) and incomplete-contracting theory (Godley, 2013) to entrepreneurship problems have also yielded new insights on how entrepreneurs organize their ventures and relations with suppliers, customers, and other partners.

As these examples show, the relationship between big T and small t theories—like the relationship between basic science, applied science, and technological development (Kline & Rosenberg, 1986)—can be messy and nonlinear. And it is important to note that incremental small t contributions characterize most research. Small t theoretical

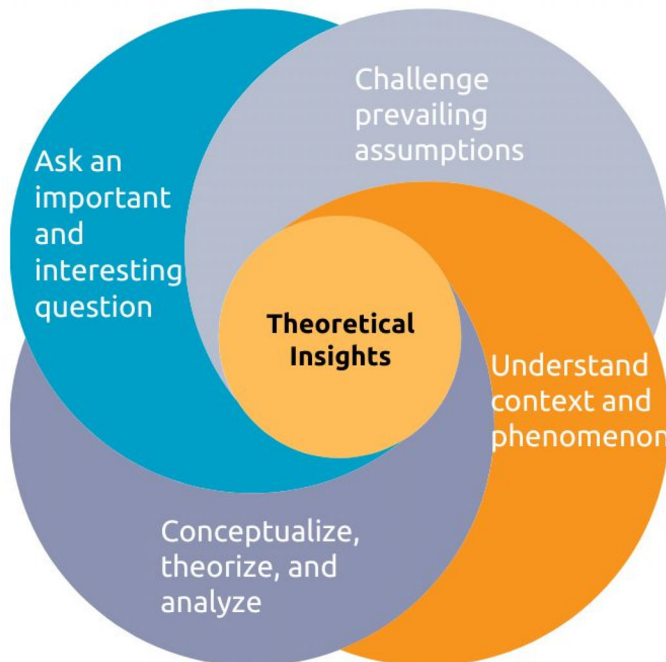


insights are useful in accumulating the knowledge essential to the development of a field. Over time, the accumulated multiple incremental innovations (e.g., extensions) and findings derived from applying these theories can enrich our collective knowledge or even revise the fundamental notions embodied in the original big T theories.

No matter whether the theoretical insight is a big T or a small t, it is important to create original ideas and generate fresh insights that extend or alter our understanding of a theory, entrepreneurs, or entrepreneurship phenomena. It is insufficient to claim a unique theoretical insight or contribution if a researcher simply uses entrepreneurship as an empirical context to test a theory established in another field without extending the theory, or if the research merely demonstrates a statistically significant relationship between two variables without being clear about the underlying mechanism (Makadok et al., 2018).<sup>3</sup>

#### 4 | UNDERSTANDING THE PROCESS OF DEVELOPING THEORETICAL INSIGHTS

Our research and theory building efforts usually reflect our ontological, epistemological, theoretical, and methodological views (Crotty, 1998; Tsang, 2016). Despite potential differences on these dimensions, our experiences in developing theoretical ideas in entrepreneurship suggest that theorizing, be it big T or small t, shares several similarities across disciplines and approaches. Figure 1 describes four aspects of developing theoretical insights: asking an important and interesting research question, challenging prevailing assumptions, understanding the context and phenomenon, and conceptualizing, theorizing and analyzing data. The process is iterative and nonlinear with the researcher engaging some or all of these aspects once or multiple times as the theoretical insight emerges, and any of these aspects can be the starting point for a research project. The subsections below describe each aspect in more detail.



**FIGURE 1** Iterative process of developing theoretical insights.

## 4.1 | Asking an important and interesting question

Developing theoretical insights usually starts with asking a research question. It could be a question about a novel entrepreneurial phenomenon. For example, “Are crowdfunding platforms substitutes or complements to conventional forms of new venture finance?” or “How will artificial intelligence affect entrepreneurship theory and practice?” Alternately, the research question could be one that has been addressed differently elsewhere (e.g., “Where does startups' heterogeneity come from?”) but has not been answered well, or a question that has been answered in a way that does not incorporate what is unique about entrepreneurship.

Asking *the right* question is key to developing influential and interesting theories. “Far better an approximate answer to the right question, which is often vague, than an exact answer to the wrong question, which can always be made precise” (Tukey, 1962, pp. 13–14). In our view, the “right” question is one that is not only interesting, but also important. For example, the resource-based view of the firm builds on the premise that resources and capabilities are unevenly distributed among firms and strategy research has focused on examining the implications of this heterogeneity for organizational performance differences. But where does this heterogeneity come from? This is an important question that is not well understood or studied in the strategy literature. We know that entrepreneurs and startups usually start with a minimal set of resources and capabilities, but they develop unique resources and capabilities over time. To answer this question, therefore, one may look into what entrepreneurs actually do. Alvarez and Barney (2007) went through this thought process to develop the idea of opportunity creation that stands in contrast with the prevailing view of opportunity discovery.

Alvarez and Barney's work also illustrates that, in order to make a unique theoretical contribution to entrepreneurship, we cannot simply take ideas established elsewhere and apply them in the field of entrepreneurship without carefully considering the specific context of entrepreneurial problems and phenomena. Both the question and the answer need to incorporate what is unique about entrepreneurship. That does not in any way preclude us from applying theories from other business areas or foundational disciplines; rather, it means that we have to search deeply into what makes our answers and questions entrepreneurial. Alternatively, we can cross-pollinate by applying entrepreneurship theories to other areas and vice versa. For example, Foss and Klein (2005) show how entrepreneurship theories shed light on “classic” issues in the theory of the firm (existence, boundaries, and internal organization) while theories of the firm also inform key entrepreneurship questions (how should entrepreneurs organize their ventures, when should they make or buy, etc.).

There are key benefits to asking an interesting question (Bartunek et al., 2006; Davis, 1971). Davis noted that “a theorist is considered great, not because his/her theories are true, but because they are interesting...The capacity to stimulate interest is a necessary characteristic of greatness” (1971: 309). Interestingness is often associated with the following: “Challenges established theory; is counterintuitive; goes against folk wisdom or consultant wisdom, etc.; creates an ‘aha’ moment” (Bartunek et al., 2006, p. 13). At the same time, important research questions may not always fulfill these criteria. Clarifying assumptions, elucidating mechanisms, identifying magnitudes, and influencing policy or practice are important research tasks, even if the problem or finding is not clever, surprising, or click-worthy (Tihanyi, 2020; Tsang, 2022).

## 4.2 | Questioning prevailing assumptions

One way to generate an important and interesting research question is to spot gaps in the literature and “criticize it for being deficient in some way (e.g., for being incomplete, inadequate, inconclusive, or underdeveloped)” (Alvesson & Sandberg, 2011, p. 249). This approach tends to focus on adding to or extending extant research, potentially making small contributions. For example, researchers have argued for and against the discovery and creation perspectives on entrepreneurial opportunities. Zahra (2008) recognized a gap in existing conceptualizations, which led him to suggest a virtuous cycle where discovery can lead to creation and vice versa.

Another way is to challenge the key assumptions and premises of existing literature (Alvesson & Sandberg, 2011; Bartunek et al., 2006; Vermeulen, 2005). The “problematization” approach (Alvesson & Sandberg, 2011) requires identifying widely held assumptions, understanding their logic, and appreciating their relevance. This process sets the stage for



questioning and challenging assumptions, leading to big T or small t theoretical insights. For example, the opportunity discovery view suggests that alert entrepreneurs discover objective opportunities formed by exogenous shocks in an existing market. Alvarez and Barney (2007) challenged the assumption of exogenously existing opportunities by taking a social constructivist perspective and proposing a big T idea that entrepreneurial opportunities are endogenously enacted by the actions of entrepreneurs themselves and do not have an existence independent of those human actions (see also Wood & McKinley, 2010). They also acknowledged that entrepreneurs may or may not differ from non-entrepreneurs *ex ante* and that such differences may emerge *ex post*. Moreover, the process of opportunity creation itself unfolds under conditions of uncertainty (Alvarez & Barney, 2007). In a creation context, strategy is emergent; decision-making is iterative, inductive, and incremental. Consequently, entrepreneurs are prone to biases and make use of heuristics or simple rules. This is clearly a different world from what was envisioned by opportunity discovery scholars for decades.

The judgment-based approach (Foss & Klein, 2012) also emerged from questioning the logic and core assumptions of the opportunity-discovery view and its linear model of opportunity recognition, evaluation, and exploitation (Shane, 2003; Shane & Venkataraman, 2000). It asks: If entrepreneurship is best understood as alertness, or the discovery of “hitherto unknown profit opportunities” (Kirzner, 1997, p. 72), then how can entrepreneurs earn losses? The worst that can happen to an entrepreneur is to fail to notice a profit opportunity she could have exploited; in that case, she breaks even. Loss is only possible if entrepreneurship involves investment and uncertainty—that is, if entrepreneurship is a creative act, not simply the discovery of market conditions that already exist (McMullen & Shepherd, 2006). This act of “judging” the uncertain future, manifest in the assembly, combination, and deployment of productive resources in pursuit of profit (while avoiding loss), represents an alternative conception of the entrepreneurial function from that of the alert discoverer (Foss & Klein, 2017). Building on Knightian uncertainty, the judgment-based approach therefore sees entrepreneurship instead as a process of experimentation, rather than arbitrage as suggested by Kirzner (1973).

#### 4.3 | Understanding context and phenomena

Theory is constructed to solve problems and move research (and society) forward. Hence, besides asking important and interesting questions and challenging existing assumptions, it is often useful to understand the context for the problem of interest, explore the relevant phenomena and data in that context, discern any underlying “big-picture” problems, and imagine broader implications of getting the theory right. Newly emerging phenomena such as digital transformation including blockchain, machine learning, and artificial intelligence, as well as systemic disruptions such as the Covid-19 pandemic, can also motivate the search for new theoretical insights (Dushnitsky et al., 2020). These developments offer opportunities to examine novel entrepreneurial issues and capture dynamics only previously hypothesized about (see Dushnitsky & Matusik, 2019). Unanticipated changes also present opportunities to question and test the key assumptions and boundary conditions of existing theories. In addition, large volumes of data, sometimes at a granular level, and their increasing availability, allow entrepreneurship researchers to examine a broader range of questions, test theoretical perspectives and their corresponding mechanisms, conduct exploratory research, and develop fresh theoretical insights (Obschonka & Audretsch, 2020).

Many big T theories start with addressing a fundamental question that can be linked to a practical problem or a phenomenon. For example, the economic theory of the firm (Coase, 1937) asks several key questions: Why do firms exist? What is the boundary of the firm? How are firms organized internally? These questions emerged from Coase's experience touring US manufacturing plants and his recognition that conventional production theories shed little light on how these firms operated (Coase, 1988). Williamson (1985) further developed the theory with his observations about transaction costs as a determinant of vertical integration—an insight that partly resulted from Williamson's work as a US government antitrust analyst (Mahoney & Nickerson, 2022). Similarly, the resource-based view (Penrose, 1959) asks why and how firms grow, and what limits that growth. Penrose drew on practical insights from interviews, field studies, company visits, as well as secondary data, arguing that scarcity of firm-specific managerial talent is a key constraint to growth (Drnevich et al., 2020).



In another example, while working on a research project about CVC investments in startups (Dushnitsky & Shaver, 2009), Dushnitsky read the literature on innovation races between incumbents and entrants. What he observed, however, was different from what the literature implied. Incumbents and entrants were collaborating, not competing, to foster innovation. For example, Microsoft engaged and financed startups because it acknowledged that it had no lock on innovative ideas. As he started to conceptualize collaboration between incumbents and startups, Dushnitsky spoke with entrepreneurs and heard, “Yes, these big firms want to innovate and want to engage with us, but you know what? We are very concerned about opening up to them.” One founder even said that Microsoft was the one large company in the world that they really feared. This reality led Dushnitsky to refine his theory to reflect that high-quality startups may prefer funding from independent venture capital firms that pose less of a threat of appropriating the startups’ intellectual property.

While some researchers begin with a theoretical point of view before immersing themselves in a phenomenon, other researchers take a more inductive approach, focusing on the phenomenon first. This approach can lead in unanticipated theoretical directions. For example, Graebner was intrigued by the real-world phenomenon of large technology firms acquiring small start-ups. After reviewing the literature on mergers and acquisitions, she realized that the role of the leaders of the selling (target) firm had been overlooked. Economic theory had predicted that the leaders of target firms were likely to be incompetent (a market for corporate control argument) and resistant to acquisition (an agency theory argument). Yet pilot interviews with entrepreneurs suggested this was a simplistic and inaccurate view. Given the lack of prior theory or research on the seller’s role and perspective in acquisitions, Graebner conducted a multiple-case, theory-building study.

The result was three journal articles that made theoretical contributions in three distinct domains. Graebner and Eisenhardt (2004) explored the timing of and motivations for entrepreneurs’ decisions to sell their firms. They identified “courtship” as a metaphor for understanding acquisitions to reflect the fact that entrepreneurs exercised considerable discretion about whether and to whom they sold their ventures, and proposed the “syndicate” as a model of venture governance to reflect collaboration between managers and boards of directors rather than principal-agent dynamics. Graebner (2004) examined the role of acquired leaders in post-acquisition integration, highlighting the importance of maintaining momentum in order to realized expected synergies while also identifying opportunities for unexpected, serendipitous value creation. Graebner (2009) elucidated the role of trust in acquisitions of entrepreneurial ventures, explaining how entrepreneurs could seek out buyers whom they viewed as trustworthy, yet nevertheless end up feeling betrayed by their acquirers.

Notably, Graebner did not begin her study with the intention of contributing to theory on trust. Instead, she began with a broad research topic and attempted to deeply understand the context and phenomenon. It became clear when analyzing the data that entrepreneurs favored buyers with whom they felt a sense of social connection and rapport, but these sentiments were rarely reciprocated by buyers. To understand this pattern, Graebner delved into the literature on the social embeddedness of economic activity (Uzzi, 1997). However, what she was observing did not reflect social embeddedness in the purest sense, that is, reciprocal relationships developed incrementally over an extended period and buttressed by shared third-party ties. She then turned to the literature on organizational (and interorganizational) trust. Although the trust literature had also often assumed symmetry in relationships, a few scholars had acknowledged the need to explore the validity of this assumption. Graebner realized that her study could provide a theoretical contribution to this literature by explicating how trust symmetries emerge and persist.

Taken together, these three articles addressed a distinctive trait of entrepreneurial ventures—their apparent lack of power relative to more established organizations. These studies demonstrate how entrepreneurs attempt to overcome their low-power positions, both before and after an acquisition. Graebner and Eisenhardt (2004) and Graebner (2009) examine how entrepreneurs are active participants in the acquisition process, either encouraging or discouraging potential buyers, while Graebner (2004) illuminates how acquired leaders shape post-deal integration. Yet these articles also offer contributions beyond the context of entrepreneurship. For example, Graebner (2004) was one of the first academic articles to examine serendipity in organizations, helping to launch a vibrant and diverse research stream, and Graebner (2009) contributed to the literature on trust in interorganizational relationships, a topic of interest to strategy, marketing, and operations scholars (Graebner et al., 2020).





#### 4.4 | Iterating among data, literature, and conceptual model

In asking an important and interesting research question, challenging prevailing assumptions, and understanding context and phenomena, one hopes to develop a theory, framework, or model to analyze the problem at hand. The kind of conceptualization and theorization may vary across disciplines, approaches and problems. Regardless, this is seldom a linear process that starts with a research question and ends with conceptual model and analysis. Our individual research journeys suggest that entrepreneurship research is an iterative process of speculation, discovery, judgment, creation, and confirmation. A research project may start with any of the elements in the iterative process. While some of us start with focusing more on the phenomenon and data, as the example of Graebner's journey illustrates, others begin with the existing literature and assumptions of conceptual models. For example, in working towards the opportunity creation idea (Alvarez & Barney, 2007), Alvarez, in preparing her dissertation, talked to entrepreneurs and got an intuitive sense about what entrepreneurial behavior was. Barney, on the other hand, consciously chose assumptions that were not consistent with the strategy research he had done earlier in his career: "Okay. This is what we assume. Do the opposite. What does it do for us? ...We sat next to each other in front of a computer screen and banged out papers in a series of mini arguments, day after day. ...Was it participant observation or empirical? No. It was staring at the computer until it confessed."

New ideas can also emerge from engagement with older and classic literature to look for insights that have been lost or neglected in more recent work. The judgment-based approach (Foss & Klein, 2012), which sees entrepreneurship as residual authority or "ultimate responsibility" (i.e., ownership) over the use of assets under conditions of Knightian uncertainty, combines ideas from Knight (1921) and the "Austrian" theory of capital heterogeneity (Hayek, 1931; Kirzner, 1966; Mises, 1949), ideas previously developed in isolation.<sup>4</sup> Indeed, one of us includes Cantillon's 1730 *Essay on the Nature of Commerce in General* on his entrepreneurship PhD syllabus, confident that this is among the oldest work the students need to read as part of their doctoral training.

Using different methods and studying different phenomena, both Dushnitsky and Shaver (2009) and Graebner (2009) went through similar iterative processes when developing their ideas. Iteration persists as the researcher shares her ideas or theory with colleagues in informal discussions, working papers, conference presentations, and panel discussions, as well as in the review process, and even after publication. Engaging with diverse audiences in the act of creation often means going back to reflect on our hunches and intuition, a process that improves our arguments and shapes our discoveries. It is this back and forth that ripens ideas and improves their impact. All of us have experienced the challenges, frustrations, and elations of such iterations. It is a process akin to a sculptor chiseling through the stone to carve something of beauty. It demands intellectual curiosity, creativity and imagination, as well as patience and endurance. No doubt, the nonlinearity of the process frustrates many but without it, the process of creation in developing theoretical insights becomes dull and incomplete, if not impotent.

As our experiences also suggest, different scholars may employ different approaches. For example, while Barney is more theory-driven and takes a more deductive approach, Graebner is more phenomenon-driven and takes a more inductive approach. Our examples show, however, that these different approaches can all be effective in developing theoretical insights, demonstrating some degree of equifinality. In fact, no one approach is inherently better than another.

## 5 | SOME IMPORTANT CONSIDERATIONS IN DEVELOPING THEORETICAL INSIGHTS

Having discussed the iterative process in entrepreneurship research, we build on our personal journeys to elaborate on a few elements that shape the process, especially getting immersed in context and literature, using multiple methods and settings, integrating data and literature, and theorizing at the intersection of disciplines and fields. We also briefly discuss one practical issue in the process: staying focused and disciplined in a potentially excruciating but rewarding research process.

## 5.1 | Getting immersed in context and literature

Immersion in the research context and the literature is crucial to developing creative theoretical insights. But how? One common approach is to collect archival data, usually from diverse sources. Fortunately, digitalization has given us large quantities of data which can be matched, merged, and validated. We can access multiple sources to understand how entrepreneurs think (e.g., listening to their speeches, reviewing company reports and documents). “Big data” analytics and machine learning help with causal inference, assessing external validity, and other issues that have long frustrated empirical researchers (Dushnitsky & Matusik, 2019).

Other information about entrepreneurs and entrepreneurial action must be accessed in the laboratory or in the field, either because they are not recorded (e.g., venture capitalist discussions and founding team deliberations) or exist only inside people's heads (e.g., ideas for business models or new organizational forms, subjective and tacit judgments about future outcomes). In developing the theory of opportunity creation (Alvarez & Barney, 2007), Alvarez interviewed multiple entrepreneurs. Later she and Barney reviewed her transcripts repeatedly, contrasting what they observed in these transcripts with what the literature had said about opportunity discovery.

Novel insights may also emerge from informal engagement with practitioners. For Dushnitsky (e.g., Dushnitsky & Shaver, 2009), the original research question was framed from the perspective of the incumbent firms and their effort to set up corporate venturing arms so as to learn from innovative startups. Upon conversation with entrepreneurs, Dushnitsky came to realize that startups are concerned with imitation to the extent that they would rather forgo the backing of CVC. Thus, a new conceptual model came to life, reconciling the perspectives of incumbents and entrepreneurial firms (e.g., Dushnitsky & Shaver, 2009).

Novel theoretical insights also emerge from personal experience. Sarasvathy (2001) had co-founded five ventures before returning to academia. Thinking about her own experiences, she speculated that effectuation may be more common in decision making than causation: entrepreneurs often begin with what they are given and they employ different processes and logic from those described in “causal” research on entrepreneurship (for a discussion, see Sarasvathy, 2001, p. 251; Sarasvathy, 2009). This was the beginning of her perspective on effectuation.

Immersion also requires thorough grounding in and creative reorganization of the literature. For example, a researcher who is interested in writing a paper about the decision to join a startup will end up with a large number of articles. She is likely to find that some of these articles are based on economic rationality assumptions, whereas others are based on behavioral assumptions. Immersion, in this case, may require the researcher to organize these studies according to the phenomena examined, identifying the different theoretical perspectives and corresponding assumptions, and critiquing the findings. This organization promotes deeper understanding of what has been said from which perspective. This is likely to encourage the researcher to begin thinking about where she can contribute beyond what we already know. It also helps the researcher to appreciate the assumptions underlying prior research and where to challenge them vis-à-vis the questions being asked or the phenomenon being explored.

Another approach to immersion is to pause and challenge one's own prior work, having gained a new level of understanding. What are the cumulative findings? Are the assumptions still valid? How do others view these findings—and how can we incorporate these issues to improve our theoretical contribution? We can do the same with prior research in an area or the field.

## 5.2 | Using multiple methods and settings

One source of theorizing is the use of multiple methods and data sources across multiple settings to bring together practice, pedagogy, and policy. Effectuation research, for example, has used not only quantitative empirical analyses and qualitative case studies but also methods ranging from mathematical modeling (Mauer et al., 2018) to novel historical analyses (Harmeling & Sarasvathy, 2013). Research on the effectuation perspective has also benefited from a variety of data relating to R&D managers in large companies (Brettel et al., 2012), social media (Fischer &



Reuber, 2011), product innovation processes (Berends et al., 2014), the Toquaht nation in Canada (Murphy et al., 2020), and SMEs in Russia (Shirokova et al., 2020). Further, studies looked for effectuation in various aspects of internationalization (e.g., Galkina & Chetty, 2015). Effectuation scholars have also used data from fields outside entrepreneurship and management such as marketing (Coviello & Joseph, 2012), public policy (Yusuf & Sloan, 2015), and ethics (Pompe, 2013).

Diversifying data sources and methods both within and outside entrepreneurship deepens theories and allows nuances across theories to emerge. For example, in an examination of a major natural disaster in Brazil, developed new concepts such as “diseffectuation” and “extended effectuation.”

### 5.3 | Integrating data and literature

By immersing themselves in the phenomenon, existing theory, and literature, researchers can gain great insights into what we know and how well we know it. This sets the stage for developing original ideas by developing or importing a theory, comparing and contrasting different existing theories, or creatively synthesizing and integrating the literature. In particular, integration is about discerning patterns, connecting the dots, and explaining them in ways that spark new meaning and learning (Zahra et al., 2020). Our intellectual curiosity usually spans across industry contexts and levels of analysis, conditioning us to spot patterns within and across settings. Thus, when we begin to look into new data, this often compels us to ask: How are they similar to other data pieces? How are they different? This “pattern recognition” process is an integral part of integration and synthesis when developing theoretical insights. Pattern making and recognition, in turn, allow us to see and establish new connections, recognize hereto hidden or overlooked dimensions and develop new insights.

Integration also requires that we organize what we know, often leading to a reevaluation of existing literature. This could include formal meta-analyses that seek to summarize what we know as well as identify the relationships already examined in prior studies and appreciate how strong they are. Meta-analyses are also useful in highlighting key contingencies that affect these relationships. Even though meta-analyses have their own limitations (for a discussion, see Borenstein et al., 2009), they help identify gaps in the literature.

Regardless of how it is done, integrating the literature can be complicated and cumbersome. Papers may have different theoretical perspectives and assumptions, empirical contexts, and sampling frames. Thinking through these issues can give the researcher a unique perspective on the ongoing debates in that literature. For instance, in their research on the effect of knowledge contexts on entrepreneurship, Agarwal and Shah (2014, p. 1109) identified two dominant theoretical perspectives: Klepper's work on industry evolution and industry entry (e.g., Klepper, 1996; Klepper & Sleeper, 2005) and Teece's (1986) thesis on profiting from innovation. Agarwal and Shah built on these two different perspectives, weaving their arguments into their (new) context. This led them to “develop stylized facts and predictive propositions pertaining to differences in the innovative contributions, roles played in shaping industrial dynamics and evolution, and performance outcomes for startups stemming from the three entrepreneurial origins.” To reach this point, Agarwal and Shah thought carefully about how different sampling frames and empirical contexts may define different sources of knowledge and shape new firm formation. This made it possible to synthesize the literature and advance a set of new propositions.

### 5.4 | Theorizing at the intersection of disciplines and fields

Scholars often tout the interdisciplinary nature of entrepreneurship research. Yet, many miss the opportunity to capitalize on this interdisciplinary intersection to develop creative theoretical insights. To illustrate, we know a great deal about entrepreneurial teams' compositions, processes and their relationship with performance. Prior studies have used the psychology, sociology, and economics lenses, but often in isolation. A researcher may reason from an

economic view that team formation occurs because team members want to maximize their gains or because of resource complementarity. From a social psychology view, however, team formation may occur because members like each other and simply want to work together, even though they do not have complementary capabilities or know what type of venture they may want to create. This situation may be best explained by the “similarity attraction” view, which offers a markedly different view of entrepreneurial team formation from the economic perspective (e.g., Mitteness et al., 2016). Integrating these different perspectives, therefore, may enrich the development of new theoretical insights (see, e.g., Lazar et al., 2020; Lazar et al., 2022). This integration can also drive the researcher to reconsider the assumptions each discipline or perspective holds. This may prompt the researcher to ask: Where are these assumptions in conflict? Where and how do they complement each other? Broadly speaking, integrating insights from foundational disciplines such as economics, sociology, and psychology has the potential to shed new light on entrepreneurs, entrepreneurial ventures and their stakeholders.

Integrating the literature at the (interdisciplinary) intersection can lead us to question the utility of dominant assumptions in our research context, surfacing new questions for further study. Returning to team formation (Lazar et al., 2020; Lazar et al., 2022), we note that founders do not always start from a position of advantage: they often have limited resources, they are not embedded in the best networks, and their creations suffer from liabilities of newness. As a result, they do not always have access to the best and brightest people. This raises the question: How do founders assemble their teams, and how this might change over time? Founders often make their decisions about team membership under severe time and resource constraints, potentially leading to pathologies that can impair group functioning and performance, ultimately affecting the fate of their ventures. How do founders avoid these pathologies? These and similar issues invite creative reflections and the development of additional theoretical insights. In fact, such reflection would suggest that we have not systematically studied these pathologies, where and when they arise, and how they affect team and venture performance.

## 5.5 | Staying focused

Research is a process of ideation. Ideas may emerge from observations, prior knowledge, hallway conversations, or the continuous scoping and sensing for new opportunities. As Agarwal recalls about the thought process leading to the Agarwal and Shah (2014) paper, “Up to this point in time, most of my scholarship had been in industry evolution. Why was I then doing this work on employee entrepreneurship? And now, why am I interested in doing work which is reconciling the knowledge context that includes not just employee innovations but also user and academic innovations? A lot of it was there subconsciously.” It is important to trust our instincts and allow ourselves to go with the flow of our minds and ideas.

Once we have an idea, however, developing theoretical insights requires clarity and focus about the research question. This is one of the most complicated issues a researcher encounters in theory development. The process is creative and iterative, embodying many activities and involving many loops (Corley & Gioia, 2011; Daft, 1985; Hitt & Smith, 2005). As many of us have experienced when writing a paper or developing theoretical ideas, reality is often too complicated: there are many variables to examine and multiple ideas float in our heads. We want to be thorough and comprehensive, but a good research project should also be disciplined and focused. Hence, choosing one issue to examine or one question to address is extremely important.

Frequently, entrepreneurship papers submitted for journal review are full of ideas that may not clearly relate to their primary research question. Some even use fragments of multiple theories to connect these arguments, resulting in inconsistent assumptions, unclear mechanisms, imprecise or problematic logic, and convoluted propositions. Consequently, to communicate their arguments and make their research more impactful, authors need to strip away extraneous material. Editing for impact sharpens a paper's theoretical arguments and the contributions made. This starts with articulating a simple, important question to examine and a theory that can illuminate it. Getting others to review and critique this question (and associated theoretical arguments) can help sharpen our focus. Presenting one's



work to peers is also helpful. In that spirit, Daft (1985, p. 207) notes that “the ripening process is facilitated with hard work and frequent revisions.” Hence, by simplifying, clarifying, and focusing, a paper’s theoretical base and contributions become clearer.

As authors, we have all experienced our initial ideas evolving into something messy and complicated. In the beginning, we think we have a clear motivation and a focused research question. However, as we gain more understanding of the data and the literature, things may not develop as we expect, and we feel muddled in the details, get frustrated with where we are, and even get lost. As we share our ideas with peers, things might get even more complex, since we are likely to receive divergent suggestions. Yet, there comes a point in this process where we have to focus. Thus, we start to look at those kernels that keep coming up. This signals that our “eureka” moment may have arrived! Things begin to crystalize and take shape—finally, we know what the research project is about. From here on, we need to be merciless with ourselves in letting go of tangents that do not necessarily fit into the paper; every good paper is about a single question. What do to do about all the ideas that were stripped away from the focal research project? They may breed new research projects.

## 6 | SUMMARY AND CONCLUSION

Four key points emerge from our collective experiences, and they are worth reiterating. These apply to all the approaches to developing theoretical insights discussed in this paper: deep engagement with existing theories and prior literature, immersion in data or reflection on personal experience, use of inductive, deductive, and abductive methods, and so on.

First, there are different ways to develop theoretical insights. It is part science, part intuition, and part craft. We have described specific approaches we and others have taken to develop theoretical insights for advancing entrepreneurship scholarship. Researchers differ in tastes, skills, and experiences, so there is no one “correct” approach. Recognizing the variety of paths researchers have taken should inspire us to read widely about phenomena (including practitioner and public policy literatures), become familiar with prior theories that are relevant, apply our training and intuition to the problem of interest, conceptualize the relevant phenomenon, recognize puzzles emerging from comparing data and literature, and look for opportunities to fill gaps in understanding. Immersion in the literature prepares us to recognize the unexpected and apply our skills to develop new insights. Being close to the phenomenon and context makes this possible.

Second, a researcher needs to look into the prevailing assumptions in the literature, appreciating their boundary conditions and questioning their validity and relevance to the question at hand. Some researchers may identify prevailing assumptions simply by carefully reading prior work. Others uncover implicit assumptions by comparing the prior literature to their own experiences or field data.

Third, developing theoretical insights is an iterative process. This process demands serious immersion in the literature, context, and data, and iteration among phenomenon, literature, and conceptual model. It also entails a lot of questioning, sensing, and probing. It may require integration of what we read, observe, intuit, analyze, and find. It helps to think and synthesize and then go back and reframe the question anew, and so on. Developing theoretical insights is labor-intensive. It is also an entrepreneurial process that demands creativity and imagination. It is often a “team sport” that requires interacting with multiple actors to learn, theorize, test, and validate what is observed and found.

Fourth, entrepreneurship researchers—especially scholars in their early careers—need not search only for big T contributions, but also devote time to small t contributions. Both types add to our collective knowledge and the development of the field. This requires attention to framing, motivating, and providing context. It also requires a passion about the question and what it means for the field. It demands persistence and endurance. It also demands alertness and attentiveness as surprises pervade the creative process. Flashes of insight are rarely organized; they may occur in unpredictable ways; they also come from the strangest places—an accidental encounter in an academic meeting, a visit to a company, a new database that does not yield the predicted results, a critique from a reviewer,

and a sense of “this does not fit” or simply asking the proverbial “is this really true?” Moreover, sometimes the data speak directly, compelling us to see the phenomenon differently or interpret the results in novel ways. This is likely to prompt researchers to examine their data with fresh eyes, allowing their data to guide them through the rebuilding of their questions, assumptions and interpretations—a process of “creative construction” (Agarwal et al., 2007; Zahra et al., 2020).

Our field has accomplished much, but the most exciting work lies ahead. Entrepreneurship offers a rich context for creative and varied theoretical insights and approaches that can have transformative impact on other disciplines. We need to pursue such possibilities to enrich the field and sister disciplines with intrepid vigor. We should not be obsessed with whether our theories are converging into a paradigm or whether we could develop “the” grand theory of everything in entrepreneurship. Theorizing is a way for us to stay engaged in the history of ideas and appreciate our collective learning and intellectual progress. We, as entrepreneurship scholars, can take on that endeavor as the new frontier for developing novel theoretical insights.

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## ENDNOTES

- <sup>1</sup> Essentially, “[a] theory is a statement of relations among concepts within a set of boundary assumptions and constraints” (Bacharach, 1989, p. 496). In ancient Greek, “theory” (rational abstract thinking) is contrasted with “practice” (doing).
- <sup>2</sup> While a framework “provides a metatheoretical language to enable scholars to discuss any particular theory or to compare theories,” a theory “is used by an analyst to specify which working parts of a framework are considered useful to explain diverse outcomes and how they relate to one another” (Ostrom, 2010, p. 646). The boundaries between frameworks and theories can be fuzzy. For example, transaction cost economics (Williamson, 1985) as a theory offers some specific predictions about vertical integration but it is also a general framework for interpreting phenomena (“all contracting problems can be understood as attempt to minimize transaction costs”) that is not itself testable. In entrepreneurship, Knight’s (1921) framework also has specific theoretical content, for example, with the predictions that entrepreneurs will not be able to buy insurance against firm failure, that idiosyncratic projects will be hard to finance externally, and so on.
- <sup>3</sup> Empirical contributions in terms of testing theoretical arguments or replicating prior empirical analyses can be just as important as theoretical insights (Ethiraj et al., 2016; Kohler & Cortina, 2021; Tsang & Kwan, 1999). Moreover, as the field grows and phenomena change, we may need studies that are truly exploratory in simply articulating novel questions or presenting facts without formally theorizing or hypothesizing.
- <sup>4</sup> One of the first papers in this stream (Foss et al., 2002) resulted from an invitation to contribute to a *Festschrift* for Israel Kirzner; expecting the other contributors to focus on Kirzner’s, 1973 book *Competition and Entrepreneurship*, the authors looked for something different, deciding to write about Kirzner’s relatively unknown *Essay on Capital* (1966).

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