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Entrepreneurship as a Process: Toward Harmonizing Multiple Perspectives

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Are there any common denominators within the diversity of entrepreneurship literature that may serve as foundations for understanding the entrepreneurial process in a systematic and comprehensive way that is useful to both scholars and practitioners? The objective of this paper was to discover about the entrepreneurial process what, if anything, is both generic (*all* processes that are "entrepreneurial" do this) and distinct (*only* entrepreneurial processes do this). Our approach was to evaluate published models of entrepreneurial process to discover what scholars have argued about what entrepreneurs do and how they do it (the processes they use) and to seek out any key commonalities that scholars claim are associated with the phenomenon. Unfortunately for the field, the investigation demonstrates that, as at the time of our investigation, the 32 extant models of entrepreneurial process are highly fragmented in their claims and emphases and are insufficient for establishing an infrastructure upon which to synthesize an understanding of entrepreneurial process that is both generic and distinct. Insights gained in the study lead to suggestions for future research and theory development of which the most urgent is the need to develop a single harmonized model of entrepreneurial process capable of embracing the best of what is on offer and adding new theoretical arguments in areas where practice shows that they are lacking.

Introduction

What is both generic and distinct about entrepreneurship as a process? This is the "double-barreled" question that Hindle (2007, 2010a) believes may hold the key to resolving many contentious issues about the nature of entrepreneurship as a field of both practice and theory. To determine whether entrepreneurship is genuinely different from any other extant and well studied phenomenon (thinking particularly of management) this question penetrates many layers of interest, meaning, and approaches to understanding the nature of entrepreneurship by seeking to determine what *always* happens in every set of activities classifiable as constituting an "entrepreneurial" process that *never* happens in any other type of process. Unless what we call "entrepreneurship" involves a process that has at its core something simultaneously generic and distinct, we are either talking about an eclectic set of activities that have no mutual

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coherence or a coherently connected set of activities that could just as well be classified with a label other than "entrepreneurship."

With this question as its principal driver, the purpose of this article is to examine the set of peer-reviewed, published entrepreneurial process models to discover whether there are any generic core factors and relationships strongly supported by evidence and/or strongly believed by researchers to be first, significant to the entrepreneurial process (this does not require that they be distinct) and second, which, if any of these factors, is distinct to entrepreneurship.

We strive to find common denominators within the extant literature that may serve as foundational to understanding the entrepreneurial process in a systematic and comprehensive way that is useful to scholars *and* practitioners. We focus particularly on studies of entrepreneurial process that are model driven because they are deemed more likely to exhibit the qualities pertaining to good theory (generality, accuracy and simplicity) as well as qualities that are aligned with practical outcomes (functionality, utility, and transferability) both pedagogical and professional (McKelvey, 2004; Weick, 1995). By adopting an overarching epistemology of process for examining the field, we effectively narrow the focus of our study primarily to the "how" of entrepreneurship, supported by the critical factors that impinge upon agents who "do" and their motives for doing. The focus is sharply upon the temporal dynamics of the process and the socio-spatial contexts in which it is performed. Secondary to this task, we seek to identify patterns that may provide insight into several pressing questions associated with the domain of entrepreneurship research. We assess the problem of balance between theory and practice against several of the challenges that currently beleaguer the progression of entrepreneurship as a coherent research field.

Entrepreneurship Research: Harmony, Discord, or Uncomfortable Truces?

Two closely linked and highly provocative questions in the field of entrepreneurship research are: "what exactly do entrepreneurs do that is distinct from managerial functions" and specifically, "how do they do it"? (Busenitz & Barney, 1997; Leibenstein, 1968). A review of the literature conveys a multitude of perspectives that share common roots but have emerged as theories that demonstrate a wide range of variance in the activities they deem critical and the explanations they offer for the way those activities are performed. A third interrelated, but less explored question is whether or not there is a growing disconnect between scholarly theory development and empirical theorizing from the study of the practice of entrepreneurship (Aldrich & Baker, 1997; Davidsson, 2000; Hoy, 1997). It is our assertion that the third question may be used to inform the first two by investigating what scholars believe to be the essence of the phenomenon and which means they use to study it. In his lament for the future of the entrepreneurship paradigm, Bygrave (2006) emphasizes his great concern with trends that show little balance in the use of theory and induction. He goes on to suggest several prescriptions, such as abandoning reductionism, relying more on frameworks deduced from observation, a return to excellence in routine research, cumulative field work and less emphasis on complex statistical models, revolutionary theories or creative methodologies. This perceived impasse between philosophy and method is evidenced by a sizeable corpus of literature that explores the growth and trajectory of entrepreneurship research. Its significance and implications extend across several other areas pertaining to the field that involve issues of legitimacy, purpose, and differentiation (Davidsson; Gartner, 1990, 2001; MacMillan, 1991; Phan, 2004; Schildt, Shaker, & Antti, 2006; Venkataraman, 1997).

For example, there is considerable disagreement between scholars as to the nature of entrepreneurship as an academic discipline: is it better suited as an applied management field where research objectives should accordingly be driven by a problem solving agenda that consists of practice-based theorizing and pedagogy, or should the rules of social (or even natural) science govern research mandates with emphasis on exploratory theory building (Katz, 2003; Phan, 2004; Whitley, 1984)? Should there be a push for greater conceptual convergence (or even a unified theory), or is there strength to be derived from an interdisciplinary, novelty driven approach that incorporates theory from other fields? Is there a need to differentiate entrepreneurship research from other closely related domains in the management sciences, such as strategic management or is there fruitful cross-fertilization that may be achieved (Hitt, Ireland, Camp, & Sexton, 2001; Shane & Venkataraman, 2001; Zahra & Dess, 2001)?

Several authors suggest that the study of process, although not prominently employed by researchers in the field, is at the epicenter of the debate on the nature of entrepreneurship. A process-focused approach offers much unexplored potential for understanding, if not unifying, a highly disparate research domain (Bygrave, 2006; Low & MacMillan, 1988; Ucbasaran, Westhead, & Wright, 2001; Zahra, 2007). We argue that there is both merit and opportunity for balancing pure theory development with practice-based theorizing and adopt an epistemological approach that employs a process-based worldview to examine the phenomenon of entrepreneurship (Whitehead, 1929). In an effort to temper contentious viewpoints among scholars, we also take an admittedly pragmatic stance that is neutral with respect to several opposing philosophical views that often lead to debate which threatens to be endless because the debaters cannot agree on premises for discussion (Rorty, 1979). It is our position that researchers must re-engage in open-minded efforts at laying a foundation upon which extant works in the field of entrepreneurship may be successfully integrated (Steyaert, 2007; Van De Ven, 1993). This position aligns with several other scholars who view theory as a continuum rather than a competitive and dichotomous form of scientific evolution (Runkel & Runkel, 1984; Van Maanen, Sörensen, & Mitchell, 2007). It allows for thorough evaluation, use, and synthesis of what Weick (1995) refers to as the "interim struggles" that are considered as valuable contributions, even if they exist only as approximations of theory (Staw & Ross, 1987).

Our stance concerning the development of agreed models and agendas in the field of entrepreneurship could be seen to be at something of a midpoint in the highly polarized and still current debate in the field of organizational studies characterized by Van Maanen (1995) responding to Pfeffer (1993). In a famous and controversial address, as president of the Academy of Mangement, Pfeffer articulated a preference for the field of organizational studies to become more focused, rigorous, and prescriptive. Van Maanen mounted a vigorous argument against over-specification in almost all areas of organizational studies: especially when it comes to prescribing what is and is not acceptable to the field in terms of subject matter and research methodologies. He railed (Van Maanen, p. 133) against any attempt to impose "A high-consensus paradigm—or better yet, a Pfefferdigm."

Later (Van Maanen, 1995, p. 139) wrote:

> I am appalled at much of organization theory for its technocratic unimaginativeness. Our generalizations often display a mind-numbing banality and an inexplicable readiness to reduce the field to a set of unexamined, turgid, hypothetical thrusts designed to render organizations systematic and organization theory safe for science.

In seeking to critique the large number of extant process models of entrepreneurship, with the possible intent of synthesizing the best aspects into a more comprehensive model of

entrepreneurial process (Hindle, 2010a), we do not adopt what Van Maanen might call a "Pffefer-like" stance of over-rigidity: seeking to pillory diversity and impose an arbitrary perspective of process that all must accept. However, while endorsing the Van Maanen critique of many generalizations in organization theory—as technocratic, unimaginative, and all the rest—we are of the view that something less than open slather for every conceivable model is what the entrepreneurship field needs and needs to agree on when it comes to understanding entrepreneurial process. We agree with Einstein who said that any theory should be made as simple as possible but not more so. We also believe that a generic model of entrepreneurial process should be made as universal as possible and not less so.

Our methodological approach entails a review of authors who view the phenomenon of entrepreneurship through a focus on process: what entrepreneurs actually do and how they do it. The use of process theory to indirectly frame the academic examination of entrepreneurial activities has produced several insightful observations and informs several researched themes and issues prominently related to entrepreneurship, such as the study of planning and design (March & Simon, 1958; Merton, 1968; Weick, 1978), organizational evolution (Aldrich, 1979; Gersick & Hackman, 1990; Nelson & Winter, 1982), life cycle theory (Burgelman & Sayles, 1986; Kimberly, 1980; Schumpeter, 1912/1934), and conflict-based reasoning or dialectics (Blau, 1964; Lindblom, 1965). Therefore, the task at hand in this study is to compile an extant set of conceptually and empirically derived models of entrepreneurial process for the purpose of comparison and contrast.

We then examine the issues raised in the various models of entrepreneurial process by asking the following questions:

1. Is process theory well suited for the exploration of the phenomenon of entrepreneurship?
2. Do the extant models of entrepreneurial process suggest a convergence in identifying what entrepreneurs do and how they do it?
3. Are extant entrepreneurial process models of entrepreneurship conceptually or empirically derived?
4. How do they contribute to both theory and practice, and
5. Do any of the extant models attempt to answer or provide some insight into Hindle's (2007, 2010a) focal question "what is both generic and distinct about the phenomenon of entrepreneurship" in a way that may add clarity and focus to entrepreneurship as a field of both practice and research?

These questions constitute the research problem addressed in this article.

The rationale for our approach starts with the fact that, at least nominally, if not substantively, the allusion to and study of entrepreneurial process is pervasive throughout the literature (Low & MacMillan, 1988; Steyaert, 2007). Often, process models of entrepreneurship appear without explicit reference to their theoretical underpinning (Ucbasaran et al., 2001). Consequently, they are infused with and informed by a multitude of different theoretical or a-theoretical approaches which are often not easy to identify or trace (see Van De Ven and Poole, 1995, for an overview). Meanwhile, parts of the process problem may be examined in the absence of consideration of the whole and many specific concepts or frameworks have appeared and are now accepted by most scholars as fundamental to the entrepreneurial process. These include: the establishment and usage of social networks (Birley, 1985; Jack & Anderson, 2002; Johannisson, Alexanderson, Nowicki, & Senneseth, 1994; Slotte-Kock & Coviello, 2010); the concept of opportunity (Alvarez & Barney, 2007; Davidsson, Low, & Wright, 2001; Eckhardt & Shane, 2003; Shane &

Venkataraman, 2000, 2001; Van de Ven & Engleman, 2004); the cognitive processes and routines of successful entrepreneurs (Baron & Ward, 2004; Mitchell et al., 2004; Sarasvathy, 2006); and the study of environmental or contextual factors (Gartner, 1985; Gnyawali & Fogel, 1994) that constrain or support the facilitation of entrepreneurial agents (Leibenstein, 1968). Of late, several studies have taken a co-evolutionary approach to viewing the entrepreneurial process, in an attempt to combine elements of the above into a more holistic accounting of what entrepreneurs do and how they do it (Jack, Dodd, & Anderson, 2008; Sarason, Tom, & Jesse, 2006).

One uniting theme throughout all of these emerging perspectives—which might otherwise be considered as insulated from one another—is that the authors of these studies all implicitly or explicitly believe that there *is* such a thing as entrepreneurial process. They may only deal with part of it, but through their works it is evident that they believe a whole exists: that it is at least possible to conceive of a (i.e., one, single, generic, encompassing) model of entrepreneurial process.

To get a clearer understanding of the whole of entrepreneurial process, if such a thing does exist, this article is structured as follows. First, we examine reasons why the study of process is directly relevant to entrepreneurship. We suggest that it is well suited for both theoretical examination and for practical application to pedagogy and professionalism. Second, we examine how a perspective stressing entrepreneurial process as the core unit of analysis (rather than, say, the entrepreneur, the entrepreneurial venture, or the environment) has been used to study entrepreneurship and we evaluate several works by authors who have employed this emphasis. We formulate this review into a set of criteria for analyzing extant models of entrepreneurial process. Third, we set up a methodology that defines the parameters for identifying models of entrepreneurial process. A taxonomical framework for primary categorization is also presented. Fourth, a literature search is conducted based upon the guidelines set out in the methodology. We have attempted to be comprehensive in our study by examining as many conceptualized models of entrepreneurial process as fall within our parameters. Those models that appear to offer at least a partial answer to the question: "what is both generic and distinct to the entrepreneurial process?" are then evaluated to determine if any may serve as a theoretical platform with characteristics that make it amenable to focusing and harmonizing a multitude of varying research streams in the entrepreneurship field. Fifth, we discuss our findings and offer our view of potential limitations to the study. The implications that flow from this research are discussed: particularly the need for one or more new conceptualizations of the entrepreneurial process capable of synthesizing the best features of what turns out to be an eclectic and fragmented set of noncomprehensive models. Last, a conclusion is presented and insights gained from the study are enumerated to help guide further research efforts: especially the search for a single, encompassing model of entrepreneurial process.

A Process-Based View of Entrepreneurship

The languages of change, action, and novelty are hallmarks of a process orientation. Events are framed by terms like flow, creation, and "becoming" (Aldrich & Martinez, 2001; Steyaert, 2007; Van de Ven & Poole, 1989). This perspective is argued to comport well with the study of entrepreneurship, which is fundamentally an *action-based* phenomenon that involves a highly interrelated set of creative, strategic, and organizing processes. In this section, we seek (as a predicate to our study and to provide it with a "toolkit") to present a very general (some might say "overly superficial") summary of process theory, review the key questions in the field (the ontological problem), and discuss

its potential for empirically investigating questions central to entrepreneurship research by touching upon some key axiological and epistemological issues relevant to the area. This overview will help us to argue the purpose and articulate the findings of our study clearly and robustly.

Predicate: The Philosophy of Process Theory and How to Apply It

In the simplest of terms, process theory is founded upon a worldview that conceptualizes processes, rather than objects, as the basic building blocks of how we understand the world around us. It is principally in the work of philosophers—pre-eminently, Alfred North Whitehead, Henri Bergson, and Martin Heidegger—that the search for a fundamental understanding of process theory can be found. Whitehead argues that reality is interpreted as a continuous string of changing states of existence categorized into sets of "occasions of experience" that can then be classified into distinct processes (Whitehead, 1929). Individual agents (as well as everything else in the universe) are defined as complex groupings of aggregated experience where *prehension* (the very attempt to understand experience via analysis) leads to reactions that change the nature of the experience. Thus, in Whitehead's conception, there is no mind–body duality, only temporal movement that produces a series of nondeterministic future experiences that are inexorably influenced by prior experiences.

Whitehead's contributions to process theory are thought to flow from Bergson's influential insights into time and space, especially through his concepts of *duration* (existence free of causality) and *multiplicity*. In his book, *Time and Free Will: An Essay on the Immediate Data of Consciousness*, Bergson (1889/2001) defines and provides examples of two types of multiplicity: quantitative and qualitative. Quantitative multiplicity is always homogenous because of the ability to enumerate due to spatial separation (the ability to count sheep), while qualitative multiplicity is temporal, heterogeneous but without juxtaposition (no two moments are identical in a conscious being). The *duration* of a process thus flows both from qualitative multiplicity and the freedom that inexpressible temporal mobility confers. A famous example is Bergson's image of two spools with tape running between them, one winding, and the other unwinding. It symbolizes the simultaneous continuity and heterogeneity of process as we move through time. Our future grows smaller while our past grows larger. This conserves our memory as one moment is added onto the next and, in so doing, implies that there are always differences from one experience to the next, even if we are dealing with a repeated experience.

While Bergson and Whitehead concentrate on the essence of the act of temporal *becoming*, Heidegger (1927/1962) poses several concepts to deal more intimately with *how action is perceived* by making an important distinction between purposeful and nonpurposeful existence in time. First, his concept of *availableness* can be described as a mode of awareness where a sentient being who is active within the world is totally immersed within its environment. This immersion of the individual in a specific context establishes a conditional mode of engagement called *dwelling* that precedes mental representation and deliberate purposeful action, or *building.* In a dwelling mode, we go about our lives using tools around us unobtrusively. Only when this smoothness of practical coping from one moment to the next is broken by a disturbance in our relationship with the world around us does *occurentness* happen. This "failure" or "breakdown" forces an agent immersed within a world to self-consciously reflect and assign meaning to both the agent and the environment; only then will intentionality come into play. Thus it is not success, but failure of daily coping functions that draws our consciousness to reflect on what has come and gone and only then do we engage the world with purpose.

These predicate philosophical perspectives have two principal implications for both theory development and practice-based theorizing on any form of process, particularly regarding methodologies employed to investigate process. To understand the "how" of a particular outcome, researchers of process must focus a great deal of their critical attention on:

1. how change is created (the transformation of inputs to outputs);
2. the ontology of "becoming" that is associated with progressive *individual and social change* that takes place as a result of the transformational process.

Once these investigative priorities are established, the particular processes studied can be as varied as how one becomes an alcoholic, or how to catch a trout, or how to do entrepreneurship.

Approaches to Studying Managerial Processes

Aldrich and Martinez (2001) distinguish between two major perspectives of process theory relevant to management studies: event-based and outcome-based processes (Van de Ven & Engleman, 2004). Outcome driven research presents two problems. First, explanations are built backwards upon the selection of a dependent variable, introducing the potential for research bias. Second, events are only observable at one point in time, regardless of whether the event extends to some or all entities perceived to be involved in the outcome (e.g., see, Schoonhoven, Eisenhardt, & Lyman, 1990). In contrast to outcomes-based explanations, event-driven explanations are built forward and are observed over time yet inexorably linked to historical perspectives (for example, see Gersick, 1994). Several authors have argued for an event-based approach, citing the problems and limitations of the outcomes-based approach (Davidsson & Wiklund, 2001; Shane & Venkataraman, 2000; Van de Ven, 1992). Yet there are several constraints facing researchers looking to empirically test event-based explanations of entrepreneurial phenomena.

Chandler and Lyon (2001) find that 80% of studies published in the entrepreneurship literature reflect empirical outcomes-based research while only 20% are event driven, with even a smaller group of studies using longitudinal methods. These patterns are explained by: (1) a lack of access or support for longitudinal research; (2) fewer management-trained scholars with event-driven methods training; (3) the commitment of time and resources required to conduct in-depth discovery of process events; and (4) little understanding of what constitutes good theory, methods, and practice (Langley, 1999; Van de Ven & Engleman, 2004).

While Aldrich grouped the study of processes by classifying them into events and outcomes, several authors have concentrated upon the methods employed by researchers to establish two divergent streams of process theory that are based upon fundamentally different ontological and epistemological assumptions of change that are incompatible with one another (Bruner, 1991). Mohr (1982) splits the study of process into two divergent theories that operate on radically different procedures for verification: process (narrative)[1] and variance (causal) theories (Abell, 1987). While Mohr's stance on variance and narrative theory is explicitly dichotomous, Langley (1999) holds a more differentiated view of process that suggests *both* narrative and variance perspectives are required to fill

1. It is linguistically if not conceptually unfortunate that Mohr's nomenclature produces, as one of the two identified streams, a "process theory of process." We prefer to name this the "narrative" stream.

gaps and detect blind spots generated by varying epistemological approaches and methods. Because narrative is particularly sensitive to the temporal dimension of human existence, one may pay special attention to the sequence in which actions and events occur, although "sequence" may be "knotted" in recursive and/or highly interrelated and complex movements (Polkinghorne, 1988). McKelvey argues that a drawing together of both approaches can strengthen theory development and create a higher order of meaning that discloses relationships among states of affairs that may be amplified through a deeper understanding of causality (McKelvey, 2004). The next section discusses the implications of variance and narrative-based approaches to the specific study of entrepreneurial process.

Investigating Entrepreneurial Process

To guide the commencing stages of our study, we initially and tentatively adopt William Bygrave's definition of the entrepreneurial process as involving "all the functions, activities, and actions associated with perceiving opportunities and creating organizations to pursue them" (Bygrave, 2004, p. 7). We have inferred from what Bygrave states that much of the variance around explaining success will ultimately reside with the entrepreneurial capacities (Hindle, 2007) of each individual, and of course, a host of other specific factors that limit, constrain, or contextually frame the activity (Bygrave, 2006). But the true inspiration that emerges from Bygrave's words resonate in his argument that through development and practical application of good theory, there is great potential for making individuals/students *better entrepreneurs*. For every entrepreneurial process model we examine, we assess whether or not this mutuality of theory and practice is being sought or achieved.

Studies show that there is a prevailing quantitative methodological bias in all areas of entrepreneurship research (McDonald, Gan, & Anderson, 2004). Indeed, "researchers have thus far mainly sought to explain entrepreneurship not as the creation of artifacts by imaginative actors fashioning purpose and meaning out of contingent endowments and endeavors, but as the inevitable outcome of mindless 'forces,' stochastic processes, or environmental selection" (Sarasvathy, 2001, pp. 261–262). This is despite Bygrave's claim that "entrepreneurship begins with a disjointed, discontinuous, nonlinear (and usually unique) event that cannot be studied with the methods developed for studying smooth, continuous, and linear (and often repeatable) processes" (Bygrave, 1989, p. 7). In an article of significance to entrepreneurship researchers, Gartner (1985) provides a framework for describing new venture creation. It classifies the factors significant to any new venture into four key areas: individual(s), organization, environment, and process. Gartner argues that his framework effectively integrates the field of entrepreneurship research into a necessary set of dimensions that are essential to understanding the full range of activities fundamental (in his view) to the outcome of all entrepreneurship: the creation of new firms. By articulating the complexity of the processes acting through this framework within a kaleidoscope metaphor, it is implied that studying any one of the variables in isolation from the others would potentially weaken a scholarly contribution. The argument continues that to better learn about how new ventures are formed requires in-depth description of the interactions of variables within each of the four dimensions (McKelvey, 1982). Rigorous comparison and contrast of these variables would be necessary to create patterns that could then be tested. Although there may be disagreement with respect to the definition of entrepreneurship used by Gartner (Kirzner, 1997b; Shane & Venkataraman, 2000) there is reasonable consensus that the rigorous study of process in the field of entrepreneurship is vastly under used, not only with respect to how

process interacts with the other dimensions but even as a singular object of study in its own right.

An overarching question looms. Would a general, accurate, and relatively simple model of entrepreneurial process ever be capable of embracing the diversity of activity and guiding research in a complex field? Could it also embrace and build upon extant concepts and theories believed to be significant to the entrepreneurial process, such as intentions (Krueger, Reilly, & Carsrud, 2000), bricolage (Baker & Nelson, 2005), opportunity discovery (Kirzner, 1997a), effectuation (Sarasvathy, 2001), counterfactual thinking (Gaglio, 2004), and innovation (Drucker, 1985). Could any model of entrepreneurial process ever transcend such interrelated and variable-laden domains (Gartner, 1985)? There are scholars who argue the impossibility of building theoretical models of complex social behavior that are also general, simple, and accurate (Thorngate, 1976; Van Maanen, 1995). The challenge of human complexity makes it very difficult for a singular theory to be sufficiently *embracing* and *general* to explain an action-based phenomenon such as entrepreneurship in a highly useful manner across a wide variety of circumstances. However, difficulty is not necessarily synonymous with impossibility.

So, we move to our examination of all extant entrepreneurial process models in the hope that either one or more of them will attain a high degree of general applicability and utility or that a highly comprehensive model might be buildable through combining selected components of the various contenders. The essence of our examination of extant process models of entrepreneurship will be a test aimed at assessing:

- distinctness (i.e., whether the process described in the model applies to entrepreneurship in particular not management in general);
- generality (some variant of this process is observable in every case capable of being labeled "entrepreneurship");
- accuracy (there is an evidential basis for the process claim); and
- simplicity (the totality of the model is not so complex that it borders on impracticality as a guide for practitioners and researchers).

This evaluation of extant models of entrepreneurial process for what they suggest is both generic and distinct about the entrepreneurial process may also turn out to be a point of differentiation that is potentially paradigmatic for the field and foundationally important to its evolution and the balance between theory and practice.

Methodology

Developing a Structure for Examining Models of Entrepreneurial Process

In this section, we utilize literature on theory, model building, and theorizing about process to devise a framework for evaluating models of entrepreneurial process.

After selecting a set of models to determine how researchers in the field conceptualize the phenomenon of entrepreneurship specifically from a process perspective we evaluate this set across several categories: (1) epistemology, (2) method used, (3) purpose, (4) the primary framework of the model, (5) the factors deemed significant to the function of the model, (6) explanatory power, (7) level of analysis, and (8) whether or not the model presents a clear, parsimonious, and accurate depiction of the entrepreneurial process that may be insightful to determining what is both generic and distinct to the phenomenon.

At this point, we will clarify what we mean by the term "model." Models are not automatically synonymous with theory but they can be, especially if they explain a

phenomenon and demonstrate the qualities of generality, accuracy, and simplicity. Second, we draw upon Bacharach (1989, p. 1) for a brief summation of what theory is: "A theory is a statement of relations among concepts within a set of boundary assumptions and constraints. It is no more than a linguistic device used to organize a complex empirical world." To determine if a model is actually a theory, Merton provides (and we adopt) four criteria for evaluating if an alleged theory is actually only an approximation of theory:

1. general orientations in which broad frameworks specify types of variables people should take into account without any specification of relationships among these variables;
2. analysis of concepts in which concepts are specified, clarified, and defined but not interrelated;
3. post-factum interpretation in which *ad hoc* hypotheses are derived from a single observation, with no effort to explore alternative explanations or new observations;
4. empirical generalization in which an isolated proposition summarizes the relationship between two variables but further interrelations are not attempted (Merton, 1967).

We are interested in the theories and concepts that are used to guide the development of the models studied (if they are guided by any theoretical framework), and whether they are using one of several theories relevant to the study of process. Steyaert (2007) presents a comprehensive enumeration of the theories used in process-based studies of entrepreneurship culminating in his observation of eight epistemological approaches: (1) equilibrium-based, (2) order creation, (3) interpretive, (4) phenomenological, (5) social constructionist, (6) pragmatist, (7) relational materialist, and (8) social ontology of becoming. Each of these approaches has implications for theory and practice. They also may have implications for methods used. This may in turn prove problematic for deconstructing what is both generic and distinct about any given model because the introduction of philosophies that are not themselves easily comparable may produce further serious complications into an already complex discussion. Accordingly, we are sure that approaching the study of entrepreneurial process from a pragmatic perspective is necessary not only on grounds of utility but for reasons of clarity.

For example, social constructionist perspectives that focus upon entrepreneurial identity might be guided by methods from the domain of sociological interactionism to build upon and/or generate new concepts to critically delve into the dialogical processes (such as through generational interaction) of the transformational process of how an individual becomes an entrepreneur (Down & Reveley, 2004; Mead, 1967; Strauss, 1993). But the socialized meaning of this transformational process should not be lost. Social constructionist perspectives of entrepreneurship and its processes, depending upon the epistemological roots, may not always focus specifically upon individual or environmental aspects in particular, or even the "firm creation" process in general, but instead, seek to improve our understanding of the interactions between enterprising individuals and relevant stakeholders across several social dimensions (Downing, 2005). These abstract progressions of social relationships may be argued by some to represent "entrepreneurial processes," either in full or in part (Berglund, 2007). To simplify, we limit the range of our classification task. We follow Phan (2004) and Van de Ven (1992) and agree that models of process may be grouped into four general classifications, each with a specific purpose (see Table 1) that may overlap with general methods used. We note without lengthy amplification that they are often associated with certain epistemological or methodological approaches. Primary frameworks are evaluated by assessing the key components, events, or stages while factors deemed significant may be any mediating or moderating variables

Table 1

Taxonomy of Entrepreneurial Process Models

Stage Model: divide into a priori stages major tasks or phases; One major weakness is that they tend to narrow the scope of investigation and that temporal orders of events do not fit the proposed stages and/or often overlap.

Static Framework: characterizes the overall process of venture creation without examining the sequence of activities, consists of a limited set of variables connected by speculative causal links (e.g., Gartner, 1985); process oriented but do not capture sequence of dynamics.

Process Dynamics: employs qualitative methods to examine how and why variations in context and process shape outcomes; often interpretive, temporal, and change oriented.

Quantification Sequences: is a historical sequence based approach of the new venture creation process; this approach does not allow researchers to understand the dynamics of how antecedent conditions shape the present and the emergent future within the process; Carter, Gartner, and Reynolds (1996) identified three broad activity profiles: up and running, still trying and given up.

Other: any models that do not fit within the definitional parameters of the above four models.

that are presented within the model. Enumeration, as well as comparison and contrast of the stages and factors may help to discover patterns across the sample.

Taking into account all these perspectives and issues, we constructed an approach to evaluating models of entrepreneurial process. It is embodied in Table 1.

Unit of Analysis, Explanatory Power, Generality, and Distinctness

The unit of analysis of any entrepreneurial process model may be focused on the individual, a group or team, an organization or firm, the meso-environment, community, region, etc., where the environment and entrepreneur may interact and influence one another or the macro-environment, exogenous to the entrepreneurial process where there is little influence by the entrepreneur on the environment at large. Models that use more than two levels of analysis are categorized as multiple. Models are also rated on whether they are contextually focused on the phenomenon of entrepreneurship: narrowly specific (one event), broadly specific (a certain type of event, theme, research domain, or industry), mixed general (applies to entrepreneurship and *other* management processes), general (*specifically* applied to entrepreneurship but in very broad and potentially ambiguous terms), generic, and distinct (applies specifically to all forms of entrepreneurship and elaborates/informs/implies what is distinct to the entrepreneurial process). The explanatory power of the model is judged by specificity of assumptions regarding processes/events, the relationship to each other, scope, and predictive accuracy (Bacharach, 1989) and is thus ranked in ordinal fashion to reflect these criteria as low (no specific explanation of factors), medium (definition and/or potential significance of factors to process), or high (attempts to specify interrelationships between factors and process).

Study Parameters, Data Collection, and Taxonomic Methods

Our data search examined all peer-reviewed journal publications and scholarly books published in the last 40 years that presented a process model that was specifically defined, conceptualized, or focused upon the phenomenon of entrepreneurship. Educational models from textbooks that did not cite either a conceptual or empirical foundation were omitted. Models that appeared in double-blind conference proceedings (e.g., Hindle, 2007), but had not proceeded to journal article status were excluded. Databases such as Google books, Google scholar, EBSCO host, and ABI/Inform were searched using

multiple paired sets of keywords: (1) entrepreneurship, new venture creation, opportunity; and (2) process, models, sequence, events. The search culminated in over 100 papers or books that were then pared down to 32 works by using simple criteria that eliminated redundancy and employed the use of the following question: "does the model focus specifically on the process of entrepreneurship?" The models were first classified using a taxonomic matrix composed of the headings previously discussed and presented in Table 2. Analytical comparison of the models then produced a simple statistical overview of the canon of academic entrepreneurial process models summarized in Table 3.

Findings

Thirty-two scholarly works focused on entrepreneurial process were discovered, and classified. These works constitute the canon of what we know about entrepreneurial process models and thus stand as a foundational artifact of reference that requires empirical scrutiny. The majority of the models surveyed were of a static framework design (does not capture sequence of dynamics) or stage model design (*a priori* stages define major tasks or phases). Dynamic process models were fewer in number and include only one quantification sequence study. The key category (labeled something like "components," "events," or "stages") demonstrated little uniformity other than patterns forming around typical life cycle stages (such as pre-venture, birth, growth, death), or a focus on stages or events based on the concept of opportunity or cognitive phases that involved decision making. Variables/factors/actions were also highly diverse and at times, overlapped with the key components/events/stages category. Of the 32 models, 20 were conceptual constructs and 12 were based on empirical evidence. Of the empirical studies, three used both qualitative and quantitative methods. The individual unit of analysis—that is, the entrepreneur—was the most focused upon, while organizations were the second most used unit of analysis and 16 models encompassed multiple units of analysis. In a strong confirmation of Bygrave's (2006) contention that entrepreneurship research is becoming more and more aloof from any nexus with practical utility, only seven of the models explicitly stated practical implications for the research conducted. Of the models classified as general (14 studies), only five were found to have a "high" explanatory power. Those that were specific or broadly specific were limited in their findings to either a single case (two studies) or to a specific theme that consisted overwhelmingly of corporate entrepreneurship (seven studies).

Only 4 of the 32 process models, works by Gartner (1985), Bruyat and Julien (2000), Sarasvathy (2006), and Shane (2003) and were considered as converging on conceptualizing the entrepreneurial process by what was simultaneously generic and distinct about the process.[2] These four models are further scrutinized below.

Analysis of Models: The "Generic and Distinct" Nature of Entrepreneurial Process

Model 1: Gartner (1985). Gartner's intention for this conceptual model was to provide a general framework upon which the variance associated with the new venture creation

2. It should be noted that we believe Baker and Nelson's (2005) model of bricolage to be an important work in terms of conceptualizing elements of the entrepreneurial process, but its close association with "challenged" environments restricted it from being classified as "general to all."

Table 2

An Overview of Extant Models of Entrepreneurial Process

Year/author	Model class	Key components/ events/stages/domains	Variables/ factors/actions	Approach/method	Level of generality/ EP	Unit of analysis
2003, Ardichivili, Cardozo, Ray	Static framework†	Perception, discovery, creation; development, evaluation, venture formation	Personality traits (creativity optimism), social networks, prior knowledge (special interest, industry knowledge) entrepreneurial alertness, type of opportunity	Theory: proposes theory of opp'ty ident'n process EMP: conceptual	General: opportunity identif'n EP: Med	IND: GI:
1995, Badguerahanian, Abetti,	Process dynamic†	Prelaunch (acquisition, technological change; loss of competitiveness; Launch and rise (entrepreneur, tech innovation; new market creation); Apogee (strategic fit, divestiture, growth, resource acquisition); Decline and fall (sale, ent departs, closure)	Technology; Market; Social and Industrial Environment; Strategy; Financing; Structure; Role of Entrepreneur	Theory: does not draw on, test or develop theory EMP: Qualitative (longitudinal case study)	Broadly specific: Corporate entrepreneurship EP: med	ORG: (established failing firm)
2005, Baker, Nelson	Stage model (6)†	Environment, Approach to one or more sets of challenges, Counteracts limitations and generates something from nothing; Mutually reinforcing; Enacts limitations; Outcomes	Bricolage, resource seeking, avoiding new challenges, creativity, improvisation, combinative capabilities, tolerance for ambiguity, social skills/ networks, regulatory/institutional/customers; permissive community of practice and identity, routinization, broader, richer, more demanding markets, growth (or no growth)	Theory: open systems theory, exploratory Practice: indirect EMP: qualitative (field study)	General/mixed: resource poor environments EP: high	MULT
2007, Baron	Stage model (3)†	Pre-Launch phase; Launch phase; Post-Launch phase.	(1) Opportunity identification, evaluation; intentions to proceed; resource assembly; (2) choosing structural form; product/service establishment; initial marketing plans; strategy; (3) handling conflict; negotiations; motivating others; attracting employees; management functions; plan exits	Theory: development of measurement techniques EMP: conceptual (lit review)	General: opportunity process EP: High	MULT

Table 2

Continued

Year/author	Model class	Key components/ events/stages/domains	Variables/ factors/actions	Approach/method	Level of generality/ EP	Unit of analysis
1994, Bhave	Stage model (3)†	Opportunity; technology set up/organizing; exchange stage; Separate opportunity process: dual 1) External: decision to start, opp recognized, opp chosen, opp refinement, concept identified, commitment; 2) Internal: need recognized, need fulfilled, bus opp recognized, opp refinement, commitment	Business concept (internal or external), commitment to venture; organization created; production of technology; product; supply and demand boundary, customer; market; operational feedback; strategic feedback	Theory: identifies emerging issues; EMP: Qual (interview techniques)	Broadly specific: Technological entrepreneurship EP: Medium	ORG: Firm IND: Opp
2000, Bruyat, Julien	Process dynamic‡	Individual, new value creation (innovation)	Environment, time	Theory: dialogic; defining the field of Ent Research EMP: conceptual lit review	General and distinct? (new value creation) EP: Low	MULT
1983, Burgelman,	Process dynamic†	Levels of management (group leader, NVD manager, corporate management), Core processes (definition, impetus), Overlaying processes (strategic context, structural context)	Technical and need linking, product championing, strategic forcing, coaching stewardship, strategic building, organizational championing, gatekeeping, authorizing, selecting, rationalizing, negotiating, structuring, questioning	Theory: grounded (no theory tested, but findings extended to context) EMP: Qual (long study of six ongoing ICV projects)	Broadly specific: Corporate entrepreneurship EP: Medium	GI (levels of management) ORG: FIRM
1996, Busenitz, Lau	Static framework†	Social context; Cultural values; Personal variables; Cognitive schema; Cognitive heuristics; Entrepreneurial startup intention; Venture creation decision	Social mobility, network, ecological niche, market conditions; Individualism, uncertainty avoidance, power distance, masculinity, time orientation; Risk taking, locus of control, achievement motivation; Risks, control, startup opportunity, benefits; Availability, representation, overconfidence, anchoring	Theory: Cognition (propositions offered and tested oby use of example) EMP: Conceptual	General: (process does not move past venture creation decision) EP: Med	IND: cognitive
2006, Bygrave	Stage model (4)†	Innovation, Triggering Event, Implementation, Growth	Personal, sociological, environment, organizational	Theory: (based on Moore 1986 model); implications for practice EMP: Conceptual	General: NVC EP: Med	MULT

1996, Carter, Gartner, Reynolds	Quantification sequence†	Up and running, Still trying; Given up	Bought equipment, got financial support, developed prototypes, organized startup team, devoted full time, asked for funding, invested own money, looked for facilities, equipment, applied license/patent, saved money to invest, prepared plan, formed legal entity, hire employees, rented facilities /equipment, had sales, positive cash flow, credit listing, EI, FICA, filed tax	Theory: organizing; contributes to theory on enactment practice: potential diagnostic tool; EMP: Quant and Qual (studied 71 entrepreneurs)	General: nascent ent activities EP: Medium	IND ORG
2005, Corbett	Stage model†	Discovery, formation	Preparation (deliberate, unintended), Incubation, Insight (eureka, problem solved, idea shared), Evaluation (recursive), Elaboration	Theory: exp learning practice: team building EMP: conceptual	General: opportunity EP: Med	IND
1991, Covin, Slevin,	Static framework†	Entrepreneurial posture; External variables; Strategic variables; Internal variables, Firm performance	Technological sophistication, dynamism, hostility, industry life cycle stage, mission strategy, business practices and competitive tactics; top management values, organizational resources and competencies, organizational culture, organizational structure	Theory: Theory of the firm (propositions offered, and findings drawn to extend org theory) EMP: conceptual	Broadly specific: established firms EP: high	ORG
2007, Cuneen, Mankelow	Stage model (4)†	Opportunity recognition; opportunity evaluation; opportunity development; opportunity commercialization	Creative activity, innovative activity, strategic activity; Preliminary evaluation (personal, commercial), detailed situational analysis, formulation of mission and objectives, entry strategy, feasibility analysis, and BP, resources search, operational plans, implementation plans, secure funding	Theory: behavioral view of growth ent; Practice: curriculum development EMP: qualitative (pedagogical experimentation)	General: opportunity process EP: Med	IND: action
2005, Downing	Process dynamic†	storylines, emplotment, and narrative structuring	Social embeddeness, social capital, social networks, business models, entrepreneurial personal theory, vision, and innovation	Theory: social construction EMP: none	General: social processes EP: High	MULT

Table 2

Continued

Year/author	Model class	Key components/ events/stages/domains	Variables/ factors/actions	Approach/method	Level of generality/ EP	Unit of analysis
2007, Fayolle	Stage model (2)†	TRIGGER PHASE Act of NVC not perceived, perceived, considered, desired, COMMITMENT PHASE started, completed, perceived, refused.	Displacements, perceptions of desirability (culture, family peers, colleagues, mentors), perceptions of feasibility (financial support, other support, demonstration effect, models, mentors, partners), commitment; resource acquisition, integrating networks, structuring emerging organizations	Theory: systems theory; theory of commitment Practice: pedagogy EMP: conceptual (literature review)	General: Cognitive process; EP: High	MULT
1985, Gartner	Static framework‡	Individual, Organizational, Environment, Process	Need for achievement, locus of control, risk taking propensity, work experience, entrepreneurial parents, age, education; locates opportunity, accumulates resources, market products, produces product, builds organization, responds to government and society; venture capital availability, presence of exp ents, skilled labor force, suppliers, customers, government influences, universities, land, transportation, culture, supporting services, living conditions; Type of firm, presence of partners, strategic choice variables	Theory: search for key variables; contribution to theory development EMP: conceptual	General and distinct: NVC EP: Medium	MULT
1994, Gersick	Process dynamic†	Time based pacing; temporal milestones	Marketing of first product; strategy for attaining liquidity, consultation with financial analysis; joint venture for third product; marketing strategy	Theory: org theory; development of pacing concept. Emp: qual (grounded theory)	Specific: Med tech—VC relationship EP: High	MULT

Year/author	Model class	Key components/ events/stages	Variables	Empirical or conceptual	Level of generality	Level of analysis
1988, Greenberger, Sexton	Static framework†	Vision, Personality, Control Desired, Salience of events, Self perceptions, Social support, control possessed, decision to initiate	Identify an opportunity, believe they can manage a firm, possess expertise, developed a product or process for which niche can be found, believe other opportunities limited	Theory: Leadership; EMP: Conceptual: un-validated model.	General: (venture creation decision) EP: Med	IND MES
1993, Hornsby, Naffziger, Kuratko, Montagno	Stage model (6)†	Organizational characteristics, Precipitating event, Individual characteristics; Decision to act intrapreneurially, Business planning/ feasibility; Resource availability, Idea implementation, Ability to overcome barriers	Management support, Autonomy/work discretion, Rewards/reinforcement, Time availability, Organizational boundaries	Theory: theoretical framework for intrapreneurship EMP: Conceptual	Broadly specific: intrapreneurship EP: Med	MULT
2003, Ireland, Hitt, Sirmon,	Static framework†	Entrepreneurial mindset, Entrepreneurial culture and leadership; Managing resources strategically, Applying creativity and developing innovation; competitive advantage, Wealth creation	Recognizing ent opps, ent alertness, real options logic, ent, oppty register; Nourish ent capability, protect innovations, sensemaking, question dominant logic, revisit simple questions, link ent to strategic mant; Financial, human and social capital; Structure resource portfolio, building resources, leveraging capabilities; Creativity and bisociation; disruptive and sustaining innovations,	Theory: RBV, social capital, organizational learning, human capital, creative cognition; SE construct EMP: conceptual	Broadly specific: Strategic entrepreneurship EP: Med	IND ORG
2008, Jack, Dodd, Anderson,	Life cycle model†	Path dependency, teleological, evolutionary, and dialectic as non competing (social enactment of environment through creation of network ties)	Identity developed strong ties; co creating broad visions; specific innovation within the network, not cutting ties but handing them off, little conflict, affect, macro environment (not significant)	Theory: process theory Emp: longitudinal ind case studies	Broadly specific: social networking EP: High	MULT
2005, Jones, Coviello	Stage model†	Entrepreneurial event, Internationalisation event, firm performance, Feedback loop (continuous/radical change)	Entrepreneur (level of innovativeness, risk tolerance, managerial competence); Firm (organizational structure); Intl Behavior (fingerprint patterns, profiles); Performance (financial and nonfinancial measures: or learn)	Theory: converge ent and intl bus lit EMP: conceptual	Broadly specific: Intl Ent EP: Med	MULT

Table 2

Continued

Year/author	Model class	Key components/ events/stages	Variables	Empirical or conceptual	Level of generality	Level of analysis
2006, Pech & Cameron	Static framework†	Informal cues, emotive and altitudinal filter, intrinsic motivational filter, opportunity assessment and opportunity diagnosis: decide and act	Opportunity seeking; enthusiasm, audacity, fun, determination, instinct, confidence, EI, creativity; leadership, opp orientation, achievement, challenge, success, excitement, competition; profitability, feasibility, practical details, project size, competitiveness, prior E, risk, time/scope, resources; heuristics, skills, proc K, logic, involvement from external resources, cost benefit analysis, risk assessment	Theory: interdisciplinary entrepreneurship, psychology and cognitive neuroscience	Broadly specific: cognition/info processing EP: high	IND
1999, Russell	Static framework†	Culture map; Structure map	Precipitating event, opp recog, project development, implementation, performance, ent posture, resource allocation, slack resources, champion norms, open mindedness, tolerance for failure, creativity norms, value for innovation, external search	Conceptual: cognitive mapping approach EMP: no testing	Broadly Specific: Corporate Entship EP: Med	MULT
2006, Sarason, Dean, Jesse	Process dynamic†	Recursive process between entrepreneur and social system wherein entrepreneurs as much create opportunities as discover them/co-evolution; continuously evolving cycle of agent/structure inter-dependence	Agents, actions, environment, opportunities: opp's idiosyncratic to individual, idiosyncratic co-evolution of ent ventures, Salient structures: signification, legitimation, domination	Conceptual: Structuration theory	General EP: Med	IND ENV
2006, Sarasvathy	Process dynamic‡	Inputs, effectual strategy: Outputs:	What I know, who I am, whom I know, environment, constraints, expectations Design, Means, Partnership, Affordable loss, Leverage contingencies, Can. Financial performance, Product, firm, or market artifacts created, Increase in social welfare, Change in the process by which things are done	Theory: grounded (theory on ent'l expertise) Practical: development of toolboxes EMP: Qual	General and distinct?: ent's use effectual logic EP: Med	MULT

2003, Shane	Static framework‡	Entrepreneurial opportunities, discovery, exploitation, execution (resource assembly organizational design, strategy)	Individual attributes (psychological factors, demographic factors), Environment (industry, macro environment)	Theory: development of overarching framework EMP: several quant and qual studies	General and distinct?: new means-end framework EP: Med	MULT
2010, Slotte-Kock & Coviello	Stage model†	What develops? How and why does the network develop? What occurs over time.	Organizational development: conceptuion, commercialization, growth, stability; Network development: variation of ties, selection of ties, retention of ties. Goal setting and environmental interaction/ adaption; long run network stability punctuated by purposeful enactment, reflexivity and hybridization	Conceptual: social networks/process theory (life cycle, teleological, dialogic, evolutionary)	Broadly Specific: Social networks EP: Med	MULT
2008, Spinelli, Neck, Timmons	Static framework†	Opportunity, Resources, Entrepreneurial Team	Creativity, Communication, Leadership, Founder, Business plan (fits and gaps)	Theory: economic and psychological theory Practice: applied to family business; EMP: Conceptual	General: high growth ventures EP: Med	MULT
1993, Vander Werf	Static framework†	Product, Industry	Firms in industry, competition, ability to compete, market expansion, financial rewards, technical support, functional capabilities, positive publicity, industry attractiveness, pool of potential entrants	Theory: hyp non fingo, EMP: conceptual	General: product innovation EP: Med	ORG MAC
1976, Webster	Stage model / Process dynamic†	Pre venture; Hard work; Financial jeopardy; Product introduction; Rapacity; Payoff	Ent, search, evaluation, negotiation, networks, inventor (prototyping, R&D, financial stress), manufacturer, distributor, venture organization, power play between subordinates and inventors, vulnerability, critical moment, renegotiation, knothole, success, OR retaliation venture failure.	Theory: life cycle model EMP: conceptual	General: firm EP: Med	IND ORG
2009, Fu-lai	Process dynamic†	Interpretation, Learning, Experimentation, Error elimination	Stock of knowledge, problem solving tools; Adaptive response: incoming (new or repeated) events, success (profit) or: set back (use old method, errors, complete failure or adopt new methods, error elimination, successful transformation; Creative response: action, error of anticipation, experimentation, double loop learning, encounter failure (discard) encounter success (retention: rule of thumb)	Theory: Human agency; Practice: Indirect but useful to pedagogy EMP: conceptual	General: Human agency EP: high	IND MACRO

† Works considered but not found to be convergent upon what is generic and distinct to the entrepreneurial process
‡ Works evaluated as potentially convergent upon what is generic and distinct to the entrepreneurial process
IND, individual; GI, group or team; ORG, organization or firm; MES, meso-environment; MAC, macro environment, MULT, Multiple levels of analysis; FIRM, Firm level of analysis; EP, explanatory power; EMP, Empirical methods used; ICV, Internal Corporate Venturing.

Table 3

Statistical Overview of the Models Reviewed

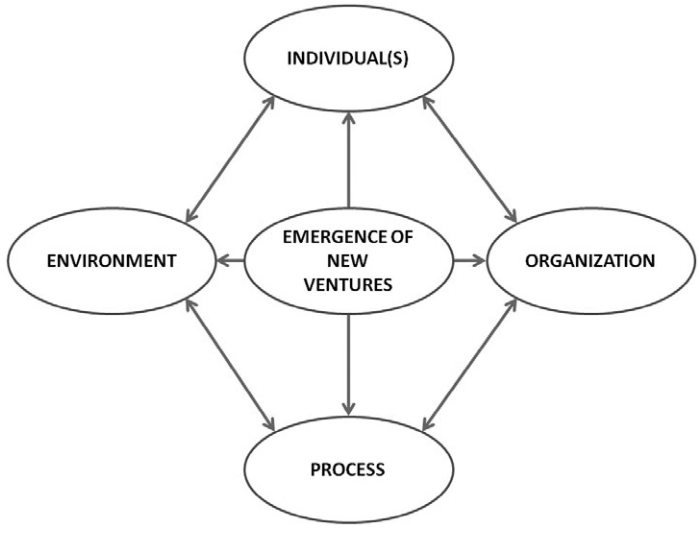
Model class	#	Empirical or conceptual	#	Level of generality		Level of analysis	#
Stage Models	12	Conceptual	21	Specific to context	1	Individual	25
Static Frameworks	11	Empirical	10	Broadly specific	11	Group or team	3
Process Dynamic	8	Qualitative	10	General but mixed:	1	Organization	21
Quantification Sequence	1	Quantitative	3	General:	16	Meso environment	7
Other	0	Both	3	General and distinct	4	Macro environmental	2
Total	31	Practical	7			Multiple	16

process (each process being unique) can be adequately compared and contrasted in order to focus upon the differences between entrepreneurs and the organizations they create, rather than the differences between entrepreneurs and nonentrepreneurs. Although it is explicitly stated that a specific developmental model of new venture creation is not conveyed by the framework, Gartner does present an account of six process components observed by scholars as being commonly shared (or generic to the entrepreneurial process): (1) they locate business opportunities, (2) they accumulate resources, (3) they market products and services, (4) they produce products, (5) they build organizations, and (6) they respond to government and society. Unfortunately, none of these process components can survive the test of describing a behavior that would be considered distinct to the entrepreneurial process. On their own, each of these processes may be carried out by actors engaged in management activities. However, Gartner implicitly points to what he believes is a process distinct to entrepreneurs through the framework developed: the entrepreneur is involved in a multidimensional process of organizational *emergence* that is focused upon the creation of a new venture that is independent, profit oriented, and driven by individual expertise. The *newness* attached to this process is linked to products, processes, markets, or technologies where the firm is considered a new entrant or supplier to a market. Furthermore, the conceptualization does not limit where the new venture may emerge from (such as a corporation spinning out a new venture through an independently structured company, for example), as long as the criteria of independence, profit motive, and individual expertise are met. In other words, if there is no new venture (emergence), there is no entrepreneurship, and only entrepreneurs start new ventures (Figure 1).

This model is at first extremely appealing due to the apparent simplicity, explanatory power, and clarity of the model as presented and defined. Unfortunately, there are several issues that may be seized upon as problematic when evaluating the perspective of emergence in regard to what is both generic and distinct to the entrepreneurial process. First, it is not clear whether or not the intention to start a new venture is inclusive of the distinctness conveyed through this concept. If an individual engages in the process of emergence as outlined above, but for some reason does not complete the process, sells the idea, fails, or succeeds but does not satisfy the principles of profit, independence, or individual "expertise" associated with the new venture creation process, can the process still be considered entrepreneurship? Second, the aspect of profit-oriented goals as a foundational element upon which to conceptualize what is generic to all entrepreneurship is subject to debate. There are currently several

Figure 1

Gartner's Static Framework Model of New Venture Emergence

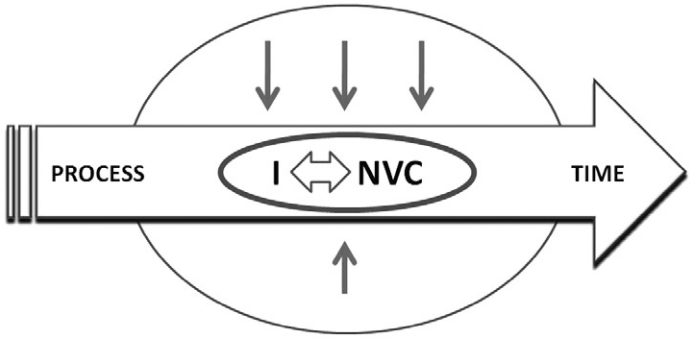


definitions of entrepreneurship that encompass a social perspective that define the entrepreneur as an agent who engages in transformative and value-creating activities that do not involve a focus on personal or stakeholder wealth (Austin, Howard, & Jane, 2006). As well, there is growing agreement among scholars that profit motivation alone cannot explain the behaviors of entrepreneurs (Lazear, 2005). Third, while the issue of newness is raised (with technological expertise being one of the individual drivers), it is handled ambiguously here, especially from the perspective of innovation. As there is common agreement that entrepreneurship and innovation are highly interrelated (Drucker, 1985; Schumpeter, 1912/1934), the concept of emergence would be better served by accounting for innovation within the scope of "what is novel about a new venture." Thus, the process of new venture emergence in Gartner's model may be associated with noninnovative outcomes that may generate profits, but would not be considered by many scholars as creating new "innovative" value, that is generic to all entrepreneurial processes (Parker, 2004; van Praag, 1999). We will continue our evaluation of other models before making a final judgment on the question of this model's addressing of the distinctness issue.

Model 2: Bruyat and Julien (2000). The second model selected for detailed scrutiny resides within a paper by Bruyat and Julien. In this study, the state of entrepreneurship research is examined with an eye to discovering and synthesizing a nondeterministic functional definition that best epitomizes the field of work to the date of their investigation. They review the foundational work of early scholars to emphasize two competing positions: (1) that the entrepreneur is a person differentiated from risk-taking capitalists, who creates a business of any kind through the organization of production factors to create value (a position held by Turgot and Say); and (2) that the entrepreneur is a risk-taking innovator and through this exceptional talent may affect the economy in some way in order to appropriate profits (a synthesis of Cantillon and Schumpeter). They stress the

Figure 2

Bruyat and Julien's Model of the Entrepreneurial Process



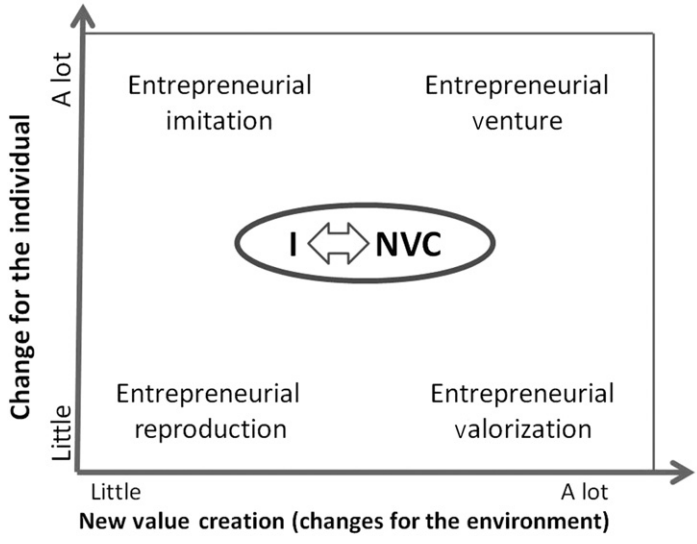
importance of definition as a construct that is only useful as a tool when it (1) may enhance the effectiveness and quality of empirical research, (2) is accepted by a majority of researchers, and (3) facilitates an understanding of the phenomenon of new value creation to ably predict levels of performance (Figure 2).

Adopting a social constructionist approach, their review of the literature points them to the entrepreneurial protagonist's pursuit of new value creation as being what is both general and distinct to the entrepreneurial process and is used as the basis of their model. Unlike Gartner, Bruyat and Julienne do not limit entrepreneurship to the emergence of a new firm, and also consider the issue of temporality (that is a functional characteristic of all process theory). They pose the question: "does intent to start a new business make one an entrepreneur"? Their interpretation is a resounding "no." They suggest that the individual at this stage would be considered a "developing entrepreneur," but not "an entrepreneur," per se. Only when the individual *commits* to the project of creation does the process formally become dialogically engaged. Although the model incorporates Gartner's (1985) four dimensions, the key difference is the dialogic between entrepreneur and event (object) which thus becomes the distinct area of examination that is ultimately important to the domain of entrepreneurship research.

Bruyat and Julienne do note two possible lines of conceptual challenge to their model: (1) new value creation is often originated by several individuals or a team, where leadership is a defining principle of entrepreneurship (where others only play supporting roles) or where the absence of one member of a team could be rationally argued to wipe out the dynamic substance of the individual—new value creation dialogic, and (2) that the notion of new value creation is open to considerable debate from many different perspectives. Therefore they conclude that value must be visible within the aspic of market sector transactions (that include profit, nonprofit, and public sector entities) that are defined by the sale, exchange, or trade of products or services. This conceptualization of new value creation also emphasizes that entrepreneurs may be involved in nonmarket exchanges (direct or indirect spillovers) that enrich the more extensive and visible (accountable/measurable) market exchanges. The rationalization of these two difficulties improves upon Gartner's conceptualization because the profit motivation is subsumed within a broader definition of new value creation, more clearly and logically aligning entrepreneurship with the concept of innovation, while the importance of individual organizing is stressed over that of the organization itself. Therefore, it is the creative organizing

Figure 3

Entrepreneurship as a Heterogeneous Field



individual who should (in their view) be the focus of entrepreneurship research. They regard the innovative organizations that emerge from the process as a secondary, yet highly interrelated and important focus of investigation. Returning to Schumpeter, the scope of new value creation and the heterogeneity of the phenomenon is also considered by these model builders and illustrated by a secondary four-quadrant model that represents varying iterations of the Individual-New Value Creation dialogic: (1) entrepreneurial reproduction (little NVC, usually no innovation, few individual-environmental changes); (2) entrepreneurial imitation (no significant new value creation, but large changes in know-how that present uncertainty and risk); (3) entrepreneurial valorization (innovation and creation of significant new value, engaged through previously formulated structures, relationships, and markets that take shape through a new project); and (4) entrepreneurial ventures (rare case of radical change in environment/individual that is innovative and has significant new value creation, sometimes establishing a new market sector). These dimensional quadrants are reproduced in Figure 3.

Although improvements over Gartner's model are made by incorporating temporal issues that simplify and refocus the entrepreneurial process back to the individual/event duality through the individual-new venture creation dialogic offered, this modeling suffers from a theoretical shortcoming in the explanation of the actual process itself: i.e., "how do entrepreneurs create new value?" Since the objective of Bruyat and Julien's research was limited to defining and hopefully redirecting focus upon "the black box," but not to look into or attempt to explain the black box itself, the model suffers from over simplicity, making the task of determining what is distinct to the entrepreneurial process difficult (Bacharach, 1989; Weick, 1999). Another weakness of the model is that in its attempt to cast the entrepreneurial process as that of an individual new value creation dialogic, it fails to accommodate the observations of early economists that entrepreneurship, by its very nature is both creative and destructive (Schumpeter, 1912/1934). The outcome of any entrepreneurial process may be either positive, zero, or negative sum in terms of value

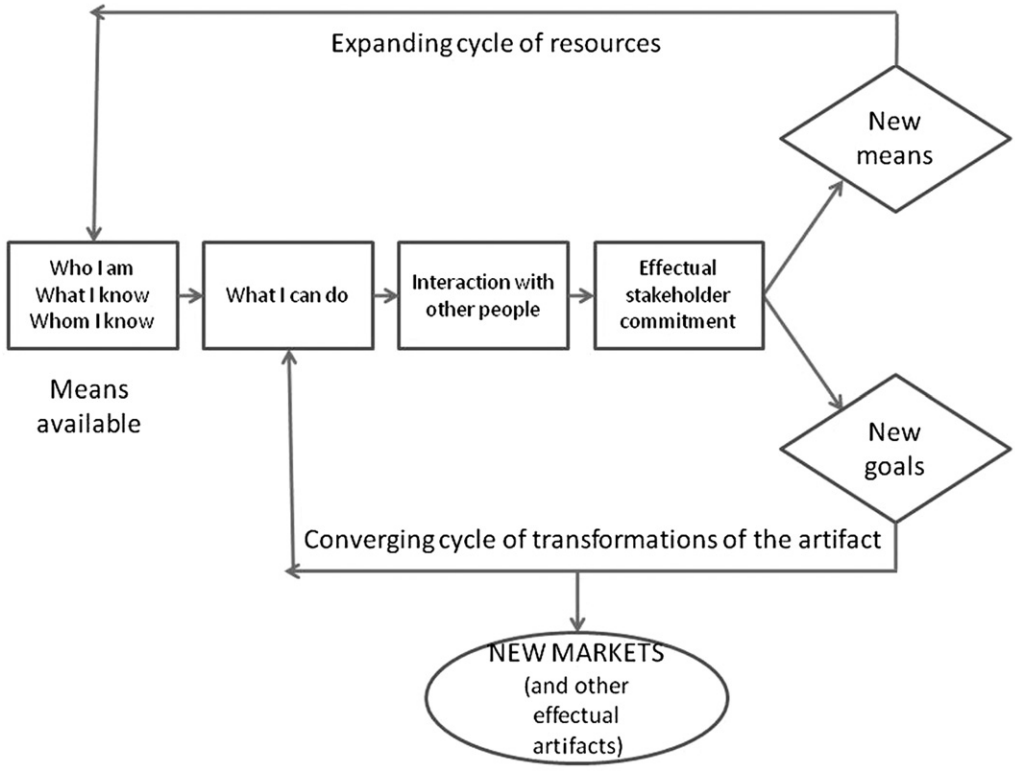
creation (Venkataraman, 1997). They also do not clarify the relationships between those who create and capture the new value. Therefore, an entrepreneur may create new value that is wholly captured by himself/herself (shareholders) in the process of creating a greater amount of negative value for other stakeholders (customers). Thus, determining whether this model represents what is generic to all entrepreneurial processes is very problematic. Finally, while the linkage between innovation and individual/environmental change provides a solid overview of the scope and weighting of processes that may be considered to be "entrepreneurial," it fails to effectively distinguish entrepreneurship as a *distinct* process from other managerial functions. This is evidenced by the entrepreneurial reproduction quadrant where innovation is not a requisite for classifying a process as entrepreneurial. Again, we move onto the next model before offering final judgment on this one.

Model 3: Sarasvathy (2001, 2006). The third model that has potential for offering insight into what is both generic and distinct to the entrepreneurial process is Sarasvathy's conceptualization of what makes entrepreneurs "experts" at what they do by understanding how they do it. Therefore, her work is notably focused through the question: "What are the teachable and learnable elements of entrepreneurial expertise?" The theoretical stance taken by Sarasvathy can be considered as "beyond teleology" or "pragmatist," in comparison with Gartner's interpretive and Bruyat and Julien's social constructionist approaches to understanding the entrepreneurial process (Steyaert, 2007). Attentive to problems associated with various philosophical viewpoints of inductive reasoning, Sarasvathy addresses the temporal issues of the dynamic, change-based nature of entrepreneurship by considering the differences between parts of the entrepreneurial process. Like Gartner, her approach addresses the differences between entrepreneurs. Unlike Gartner, she expands her theorizing to differentiate between types of entrepreneurs and nonentrepreneurs through the development of a concept that she terms as "effectuation." Effectual logic encompasses a noncausal approach to decision making where entrepreneurs assess themselves instead of the opportunity, invest only what they can afford to lose, instead of leveraging resources they cannot afford to lose, engage in networking rather than competitive analysis, expect, and relish surprises rather than fearing and seeking to avoid them, and create new ventures (and markets) through enactment of imagination instead of reaction to environmental information (see Figure 4). She associates a higher use of effectuation with greater entrepreneurial expertise and a higher probability of success, while highlighting the complexity of the concepts of success/failure within the entrepreneurial domain.

Further to her attempt to differentiate between novice entrepreneurs and expert entrepreneurs, Sarasvathy's work also seeks to differentiate expert entrepreneurs from managers through the concept of "effectual logic." The elements involved in this task may be regarded as converging toward an interest in discovering what is *distinct* to the entrepreneurial process. Like Bruyat and Julien, Sarasvathy emphasizes the dualism between firm and entrepreneur (firms fail, entrepreneurs do not), but also moves toward a continuum-based worldview of the entrepreneurial process that accounts for individual change as the process is engaged. Within this continuum, the overlap between entrepreneurial functions and managerial functions is hinted at through the inability of some expert entrepreneurs to bridge the gap between the process of starting up (the pre-firm) and the process of growing and managing a large firm (effectively making them serial entrepreneurs as they leave the growing firm to start another). In this way, she differentiates between the terms "effectual logic" and "predictive logic" and their usage through the entire new venture process. Effectual logic is weighted heavily in the pre-firm and

Figure 4

Sarasvathy's Dynamic Model of Effectuation



nascent stages, while predictive logic becomes more necessary as the firm grows into a large organization, yet (and here lies a small "get out" clause) neither is ever entirely absent from the process. Our interpretation of effectual logic is that it attempts to embrace the major tenets underpinning scholarly thinking on entrepreneurship in that risk, innovation, and opportunity are captured through the transformative processes attached to enactment, creativity, and focus upon changes that can be made in sharp contradistinction to the causal logic approach that emphasizes the importance of trying to predict what cannot be changed. Thus, innovative and risk-bearing opportunities are subjectively brought into existence.

The greatest challenge with any evaluation of effectual logic is Sarasvathy's lack of clarity when she "hedges her bets." There is a largely successful attempt to define effectuation in dichotomous contrast to causal or predictive logic while at the same time there is a largely unsuccessful attempt to convey that effectual and causal logic are cognitive tools that co-exist within the entrepreneur and are used in various proportions in various cases and situations (the "get out" clause does not get us out). Her interpretation of causality is thus contradictory, especially when Aristotelian aspects of cause (material, final, formal, and efficient) are not properly accounted (for greater elaboration, see McKelvey, 2004). The second problem is that there appears to be ontological confusion with respect to the nature of effectual opportunities in that they may be subjectively formed but objectively evaluated against current resources. This viewpoint places the

roots of effectual logic within an equilibrium-based perspective that is not well suited for the exploration of the entrepreneurial process as a mechanism capable of producing profound changes (such as Schumpeterian creative destruction).

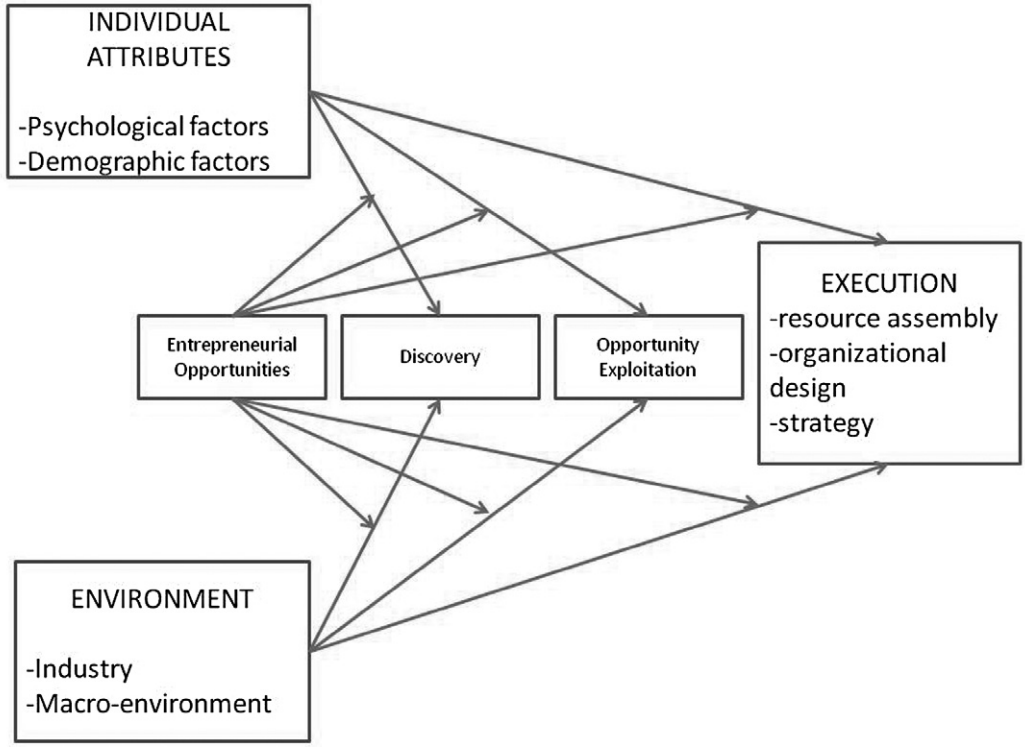
Effectuation seems to us to make too little of the requirement for purposeful human action—in the sense of setting and seeking to achieve goals—in an entrepreneurial process. A necessary and sufficient component of any purposive entrepreneurial process is that of planning, even if the act of planning (a process that includes both imaginative and predictive elements) resides only in a cognitive construct (and not a formally articulated business plan). Effectual logic also stands in contrast to human agency based perspectives of entrepreneurship that presume the co-evolution of causes (Chiles, Gupta, & Bluedorn, 2009). In other words, causal exchange between agent and environment, whether or not the agent actively seeks information or knowledge about the world around her cannot be ignored: imagination is ultimately paired with what is perceived to be conceivable, framed by the knowledge of the world as it is (the agent and perceived capabilities being a part of that world). Due to its complexity, theoretical evolution (retrospectively applied) and contradictory nature, it would appear that effectuation may be more divisive than unifying in theoretical terms. Given our deep concern for the combination of what is generic and distinct about entrepreneurship as a process, we find it hard to assess the value and utility of the effectuation argument until some of the apparent inconsistencies noted above are clarified as they well may be given the rapidly growing volume of scholarship devoted to effectuation.

Model 4: Shane (2003). The last model reviewed is also found to demonstrate properties that converge toward denoting what is both generic and distinct to the entrepreneurial process. This model is Shane's attempt to construct a unifying theoretical framework for studying entrepreneurship based upon the nexus of individual and opportunity. Shane is motivated by what he describes as the lack of a coherent conceptual framework for entrepreneurship due to the tendency of researchers to concentrate on only one part of the entrepreneurial process without formal consideration of the relationships between all parts. His division of the field is narrowed down to two camps: either an individual-centric or environmental-centric viewpoint. As an attempt to mend this division, Shane sets out some necessary conditions for a framework that he believes has potential for unifying the field: (1) the existence of profit based (objective) opportunities that may be exploited through the application of new means end relationships, (2) a variation among people in their willingness and ability to act, (3) a need to embrace uncertainty/risk bearing, (4) a requirement for purposive organizing, and (5) a requirement for some form of innovation. He also states what is not assumed in his model: (1) organizing efforts do not require the creation of a new firm to exploit opportunities, (2) *implementation* (as distinct from origination) does not have to be undertaken by a solo entrepreneur, (3) successful outcomes are not a necessary condition of entrepreneurship, and (4) factors that explain one part of the entrepreneurial process do not have to explain others. The model presented below (Figure 5) thus highlights what Shane believes to be generic to the entrepreneurial process through a series of potentially overlapping and recursive stages: the existence of opportunities, the discovery of opportunities, and the exploitation of opportunities (leading to resource acquisition, strategy, organizing, and eventually performance). The model also strategically incorporates the moderating and mediating effects of the individual and the environment.

Given this comprehensive background we turn to Shane's definition of an entrepreneurial opportunity to apply the test of whether his approach answers the question: "what is both generic and distinct to the entrepreneurial process?" He states that

Figure 5

Shane's Model of the Entrepreneurial Process



entrepreneurship "involves the nexus of entrepreneurial opportunities and enterprising individuals . . . where a situation in which a person can create a new means-ends framework for recombining resources that the entrepreneur believes will yield a profit" (Shane, 2003, p. 18). He goes onto to clarify by contrasting new means-ends frameworks against simply optimizing within an old framework. In this way Shane implicitly aligns his conceptualization of entrepreneurship with innovation. Furthermore, he states that entrepreneurial opportunities are not necessarily profitable and thus should not be equated with economic rents: the perception of the entrepreneur that an opportunity is potentially profitable may not accord with actual outcomes. But can the pursuit of perceived profitable opportunities through new means-ends relationships pass the test of what is distinct only to the entrepreneurial process? The discovery, evaluation, and exploitation of opportunities are not confined only to the entrepreneurial process. Managers, scientists, and even gardeners may engage in this trinity of activities. However, when the pursuit of opportunities that are perceived to be profitable or valuable is coupled with the mandate to create a new means-ends relationship for exploiting them, a much stronger claim for the distinctiveness of entrepreneurial process does emerge.

As in the other models, weaknesses in the Shanian conception are attributable to the difficulties inherent in subjective/objective interpretation of what is considered "new." Depending on how one views the concept of opportunity (Kirzner, 1997a; Schumpeter, 1912/1934), there is either an element of creativity attached (that requires new

information) or the opportunity is limited to discovery (that does not require new information, is more common, and is equilibrating), making the evaluation of novelty much more complex. Shane addresses this through his stance on "existence," and assertion that the objectivity/subjectivity debate is moot.

Considered as a whole, it is very difficult to falsify the distinctness of the opportunity process to entrepreneurship as described by Shane. Yet, when broken down into its component parts: discovery/creation, evaluation, exploitation, it is possible to envision scenarios where an entrepreneur may be involved in the first half of the process (discovering the new means-ends relationship and evaluating whether or not it presents a potential opportunity for making profits) but where it would be feasible for the entrepreneur to pass off (or sell) the opportunity to a manager to successfully exploit it. To clarify, what is distinct to entrepreneurship within the opportunity process involves only the discovery of the opportunity combined with successful evaluation that allows for effective articulation of the inherent value identified within the means-ends relationship. Although all parts of Shane's opportunity process model of entrepreneurship may be carried out by entrepreneurs, it is only the skillful evaluation of a discovered, profitable new means-ends relationship that may be considered distinct. And Shane devotes very little attention and argument to a discussion of any aspect—practical or theoretical—concerning opportunity evaluation. His attention is lavished on existence, discovery, and exploitation.

Summary of the Models. A summary of the four models is provided in Table 4 below.

Although each of these models provides some insight into what may be both generic and distinct about an entrepreneurial process *vis-à-vis* every other kind of process, none of them unequivocally passes the acid test of the double-barreled question fueling our investigation.

While Gartner's model was found to be useful for classifying and generalizing, the utility of the concept of emergence was weakened by an inability to successfully incorporate either innovation or temporality and was further limited by the necessity of outcomes being attached to the creation of a profit oriented new venture. Bruyat and Julien's process model did address issues of temporality, but the model itself was over simplistic, and only partially accommodated the concept of innovation. The concept of effectuation contained several ontological difficulties but was the only one of the models that presented a direct practical focus. Last, as part of an attempted unified theory of entrepreneurship, Shane's model ties the profit orientation to a potential perceived by the entrepreneur and differentiates between what managers and entrepreneurs do through the concept of innovation (new means-ends relationships versus optimizing). So, he at least is deeply concerned with what makes entrepreneurship *distinct* from management or anything else. The remaining sections discuss the contributions of this study, some of the implications that may be derived, the limitations of the approach and methodology, and how the insights gained from this paper may be developed.

The Bad, The Good, and The Ugly

The Bad: Philosophical and Theoretical Inadequacies

The most important result of this research is that no extant model of entrepreneurial process passed the test of being both generic (covering a broad array of entrepreneurial contexts and activities) and distinct (genuinely focused on activities that could be demonstrated to be uniquely the province of entrepreneurship as distinct from any other process). Furthermore, not one of the models by itself was amenable to accommodating

Table 4

Evaluation of Models

	Emergence (Gartner, 1985)	New value creation (Bruyat and Julien, 2000)	Effectuation (Sarasvathy, 2006)	Opportunity driven new means-ends frameworks (Shane, 2003)
New venture created	Yes	Unspecified	Yes	No
Profit oriented	Yes	Market based	Performance	Yes
Individual	Yes	Yes	Yes	Yes
Temporality	No	Yes	Yes	Yes
Opportunity	Yes	Yes	Constructing	Yes
Innovation	No	Partially	Creativity (inferred)	Yes
Risk/uncertainty	Yes	Yes	Yes	Yes
Epistemological approach	Interpretive/Phenomenological	Social Constructionist	Pragmatist	Teleological
Implications for theory	Retrospective framework for generalizing theory	Extant focus on issues important to theory development	Challenges economic theory (endogeneity)	Basis for unifying theory
Implications for practice	Indirect	Indirect	Direct	Indirect
Generic and distinct?	No: Innovation/falsifiable	No: Innovation and function unclear	No: Contradictory, over complex	No: Whole but not parts/falsifiable

multiple perspectives of entrepreneurial theory. Each model demands that its users adhere, *a priori*, to a limited or highly prescribed perspective of what entrepreneurship is all about. For instance, an advocate of the Shanian perspective cannot without massive dissembling claim that this processual view of the world encompasses effectuation and vice versa. In our view, this study thus formally confirms the fragmented nature of academic thought on entrepreneurial process.

The heterogeneity of researchers' notions of the "entrepreneurial process" is so diffuse that, if split into two components, each of the models reviewed could fairly be said to have more about it that was unique to itself than it had in common with any of the other 31 process models. The only thing they really share is their authors' broad belief in the importance of a process-based approach to understanding the phenomenon of entrepreneurship. When it comes to detail, model differences outweigh commonalities. So far, so bad and it gets worse.

In terms of their derivation, only 9 of the 32 process models were based on or compared with empirical studies. The majority of them can be fairly described as artifacts unsupported by systematic evidence. So, the state of our knowledge of the process of entrepreneurship as distinct from our lip service paid to the importance of such knowledge is poor indeed and is made worse by the fact that there is virtually no work, prior to this study, focusing on an attempt to synthesize a more comprehensive entrepreneurial process model from the most well-evidenced and least controversial components of the disparate cluster of extant offerings. Work conducted over the last 40 years in this, a clearly vital area at the heart of the nature of entrepreneurship as a discipline—if it is a discipline—shows scant evidence of cumulative effects. Nearly every entrepreneurial process model is its own, *sui generis* artifact, virtually unrelated to any other "contender" for scholars' attention. For all the superficial use of the phrase "entrepreneurial process" all we really have, to date, is a hodgepodge of different perspectives, using a variety of different multidisciplinary theories that investigate entrepreneurship in narrowly themed contexts.

Thus, there is plenty of bad news. The findings of this study starkly illuminate the many divergences and issues that openly challenge any quest for a harmonizing model of entrepreneurial process. First, the models reviewed demonstrate the emergence of four competing perspectives of the entrepreneurial process: the emergence perspective, the value creation perspective, the creative process perspective, and the opportunity discovery perspective. While the emergence perspective is the product of influence from other fields of management study, such as organizational behavior and strategic management, the central focus moves away from the organization to incorporate other domains important to emergence. Yet it mandates that the outcome of any entrepreneurial function should be aligned with the formation of a "type" of new venture, whether it is optimizing or transformative. The new value creation perspective is guided by economic theory in an attempt to account for the endogenous aspects of the individual-innovation construct but fails to differentiate between the transformative functions of entrepreneurial action and managerial functions. It also is rather vague with respect to the actual "how" of the entrepreneurial process, providing few concrete clues as to what about the process makes it both generic and distinct. The creative process perspective (or effectuation) and the opportunity discovery perspective (causation) are potentially dichotomous in that they represent two different sides of a coin in terms of objectivity/subjectivity, predictive/nonpredictive, and equilibrating/nonequilibrating philosophical viewpoints. Both of these models stand in contrast to the emergence perspective in that creativity is favored over organizing, and the individual opportunity nexus is favored over that of emergence.

The Good: Six Points of Convergence

There is some good news. This study indicates that despite the fragmented nature of the existing set of entrepreneurial process models there are enough points of convergence in what these scholars believe to be the core or essence of entrepreneurship to make the act of critical synthesis of these disparate puzzle pieces worthwhile. The four models reserved for more detailed scrutiny above show that there is agreement on the significance of six important things. First, the relationship between individuals and opportunities is crucial: not every opportunity can be processed by every would-be entrepreneur. Second, the need to critically assess the transformative and disruptive value of knowledge is an explicit or implicit component of every model. Third, there is a shared emphasis (often more implicit than explicit) on entrepreneurial process involving some kind of evaluation of ways to create value for stakeholders through creating new business models (often through the use of novel means) in contrast to optimizing existing business models (nearly always by employing established means). Fourth, fifth, and sixth, are the clearly recognized importance, among entrepreneurial process theorists, of temporality, action (or commitment to action), and context. Time matters: opportunities do not last forever and market receptiveness can differ over time. Action matters: formulating a plan or deciding to apply resources is only part of a process that is not purely cerebral; unless there is action the process is only partial. Finally and crucially, context *really* matters: an entrepreneurial process can never be abstracted from its contextual setting; an overt commitment to understanding context must always be an integral part of appropriate process. The issue of the role of context—particularly community context—in entrepreneurial process is a subject gathering considerable momentum in the field (Hindle, 2010b).

The Ugly

The overwhelming conclusion of this study cannot be disguised or avoided. The field of entrepreneurship needs a new, comprehensive, evidence-based model of entrepreneurial process that is consistent with a strong theoretical and philosophical appreciation of process, embraces both what is generic and distinct about any act capable of being labeled as "entrepreneurship" and allows for the six common ingredients and best features of extant models of entrepreneurship thus far to be harmonized. The last task will be the hardest because, as discussed, the six common ingredients are less prominent than the fragmented array of often mutually contradictory arguments that characterize extant models.

As a key limitation of this work, we must note that of all the works surveyed, only one (Shane, 2003) attempts to portray a model as a "general theory of entrepreneurship," and not one of them helps us to answer the generic and distinct question directly. The four most important results of our analysis thus are that:

1. the "generic and distinct" question has not been adequately addressed within the entrepreneurship field;
2. conceptualization of the entrepreneurial process is beset by more variance than commonality with very few cumulative effects emerging from this body of work;
3. few models of entrepreneurial process are grounded in empirical investigation;
4. only a minority of studies aim at providing practical implications that address the "how" of entrepreneurship. The majority conceptualizes the entrepreneurial process from a theoretical perspective only—and the theoretical perspectives on display are not

cognizant of the most fundamental philosophical ground works at the foundation of understanding the role of process in human affairs (Bergson, 1889/2001; Heidegger, 1927/1962; Whitehead, 1929).

Conclusion

This article demonstrates that there is an urgent need to synthesize what can be taken from the extant body of entrepreneurial process models as one component of a concerted attempt to derive and test what might be called a "harmonizing" model of entrepreneurial process rather than a "unifying" model. Our study does not indicate or argue for an approach such as that of which Van Maanen (1995) accuses Pfeffer (1993) of wanting a "Stalinest purge" of many uncomfortable points of view. On the contrary we are in total agreement with Van Maanen when he writes about our search for meaningful answers to important questions (p. 139):

> The answers—if indeed there are any—must come from the polyphonic voices that comprise our highly diverse field. We must be willing to listen to each other and to listen with respect. The goal is not to control the field, increase our prestige, run a tight ship, or impose a paradigm for self-serving or utilitarian ends. The goal is to learn from one another such that our ink-on-a-page theories and consequent understandings of organizations can be improved. Too often we forget.

We have not forgotten. However, the majority of scholars responsible for the extant models of entrepreneurial process have. Some of these models do claim too much universality in a way that fails to listen to alternative voices with respect. It is especially disappointing to note how rare it is for those who posit entrepreneurial process models to include reference to careful empirical work based on a wide consideration of the vast range of work that entrepreneurs are actually doing. Many of the extant models contain too little generality in a way that makes them not models of entrepreneurial process but models of how to do some very particular thing in a very particular way. A naïve subscriber to Van Maanen's call for wide tolerance of a wide range of perspectives might rest happy with the fact that our field contains a potpourri of over 30 models purporting to describe entrepreneurial process. The authors of this paper cannot be so sanguine. We believe this inquiry shows that the field is badly in need of an instrument that is capable of harmonizing the best notes of "the polyphonic voices that comprise our highly diverse field."

We argue that what is needed is not an artificially unified theoretical approach but a reconciliation of the extant collective effort aimed at refocusing this body of work toward a clearer understanding of what exactly it is that we mean when we talk about, study, and ultimately practice entrepreneurship (Gartner, 1990). Until there is greater clarity and scholarly agreement about the absolutely fundamental *process* issues of entrepreneurship—what goes in, what comes out, and how the transformation takes place—it is a delusion to think that entrepreneurship qualifies as a research field with genuine philosophical integrity. Sometimes, even in a field that values diversity, there can be simply too much polyphony and its discords can contain more noise than wisdom. This fact is equally well worth remembering as the need not to be deaf to different points of view. Accordingly, this inquiry has been followed by another study. One of us has attempted to develop the harmonized model of entrepreneurial process that is so conspicuously absent from and badly needed by our field (Hindle, 2010a). The two papers are in the nature of call and response. We believe that our call for a harmonized model of

entrepreneurial process has been adequately evidenced in this study. Whether the response offered (Hindle) is an adequate answer is a matter for others.

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