

IMAGINING AND RATIONALIZING OPPORTUNITIES: INDUCTIVE REASONING AND THE CREATION AND JUSTIFICATION OF NEW VENTURES

Creating and sustaining novel ventures is a vital yet difficult entrepreneurial process. In this paper, we propose that, at its core, this process consists of inductive analogical or metaphorical reasoning that (a) generates a platform for the creation and commercialization of novel ventures and (b) facilitates the comprehension and justification of a venture, thus enabling a venture to acquire institutional legitimacy and necessary resources for venture growth. We argue that such inductive reasoning is shaped by two determinants – the applicability of prior entrepreneurial experience (prior experience) and the motivation to resolve uncertainty, establish meaning and demonstrate efficacy towards others (effectance motivation) – which interrelate to predict and explain patterns of analogical and metaphorical reasoning by which novice and experienced entrepreneurs construct meaning about novel ventures for themselves and others at different stages of the venture creation process.

The creation of new ventures is a process by which entrepreneurs come to imagine the opportunity for novel ventures, refine their ideas, and after an initial investment, justify their ventures to relevant others to gain much needed support and legitimacy (e.g., Alvarez & Barney, 2007; McMullen & Shepherd, 2006; Shane & Venkataraman, 2000). Yet, how do entrepreneurs come to create and justify new ventures in such a way that they acquire institutional legitimacy and necessary resources for venture growth? Despite increasing attention to conceptualizing and specifying the process of entrepreneurship (e.g., Alvarez & Barney, 2007; Zott & Huy, 2007), past research fails to address this question adequately because most accounts often theoretically or empirically equate the process with antecedent cognitive scripts or characteristics of entrepreneurs (e.g., Baron, 2000; Baron & Ensley, 2006; Busenitz & Barney, 1997; Mitchell et al., 2002; Shane, 2000) or with performance outcomes and the achievement of legitimacy in an industry (Aldrich & Fiol, 1994; Starr & MacMillan, 1990; Zott & Huy, 2007). However, equating entrepreneurship with such antecedents or outcomes over-emphasizes either the individual and his or her present cognitive state or the configuration of the social context and institutional outcomes, at the

expense of a more integrative understanding that bridges the individual and social levels of analysis (McMullen & Shepherd, 2006).

We argue that a sensemaking approach (e.g., Hill & Levenhagen, 1995; Weick, 1995) which emphasizes a direct relationship between the language, cognition and enactment of entrepreneurs, may help develop a combined cognitive and symbolic conception of the process by which the idea for a novel venture is imagined, refined and justified to others. When an entrepreneur makes sense of a novel venture for himself and others, it “is as much a matter of thinking that is acted out conversationally in the world as it is a matter of knowledge and technique applied to the world” (Weick et al., 2005: 412). Adopting this approach, we develop an integrative conceptualization of how individual entrepreneurs use certain forms of speech, specifically analogy and metaphor, to induce an opportunity for a novel venture and whilst speaking to relevant others such as employees and (prospective) investors in order to acquire needed capital to make those ventures work (Alvarez & Barney, 2007; Hill & Levenhagen, 1995).

Specifically, we make a number of contributions. First, we conceptualize processes of inductive analogical and metaphorical reasoning supporting the creation and justification of novel ventures. Despite the recognized importance of induction in entrepreneurship (e.g., Baron & Ward, 2004), very little theory or research in entrepreneurship exists on when, how and why entrepreneurs use inductive reasoning (Ward, 2004) and “move beyond their existing knowledge to produce novel creations” (Baron & Ward, 2004: 566). Second, we develop an interaction model of new venture creation that specifies two determinants – the availability and applicability of prior entrepreneurial experience (prior experience) and the motivation to resolve uncertainty, establish meaning and demonstrate efficacy towards others

(effectance motivation) – which interrelate to predict and explain patterns of inductive reasoning by entrepreneurs at different stages of the venture creation process (i.e., the stages of entrepreneurial exploration, planning, launch and (early) growth). Third, we combine and re-conceptualize the predictions of theory on entrepreneurial cognition (e.g., Mitchell et al., 2002) and institutional legitimacy (e.g., Lounsbury & Glynn, 2001) in the interaction model and offer a pragmatic and conceptual approach to the difficult task of reconciling the related but largely separate cognitive and institutional literatures in entrepreneurship. Fourth, our model provides a methodological contribution: it can be readily connected to the sophisticated techniques developed in linguistics and discourse analysis (e.g., Putnam & Fairhurst, 2001) for analyzing shifts and changes in how entrepreneurs inductively reason about novel ventures - techniques that make it possible to complement the study of entrepreneurial cognition or institutional effects with empirical studies of how new ventures come to be identified and how through interactions and communication with others ventures are enacted and may persist and institutionalize over time.

In the paper, we focus on the development of independent new ventures that are not sheltered by sponsoring organizations (e.g., a spin-off). By definition, such ventures are associated with high levels of uncertainty which forces an entrepreneur to make the enterprise comprehensible and meaningful to key constituencies. Throughout the article, we refer to new ventures as commercial enterprises that are imagined and rationalized by an entrepreneur in relation to specific emerging or established markets and industries. We present our arguments in three sections. First, we provide an overview of past cognitive and institutional research on entrepreneurship, and propose and develop an alternative perspective, grounded in sensemaking, that we believe integrates and extends our

understanding of the creation and legitimization of new ventures. Next, we develop a specific interaction model of new venture creation integrating predictions from entrepreneurial cognition and institutional theory. Finally, we discuss the implications of this model for the study of entrepreneurship and new venture creation and end with specific recommendations for empirical research.

NEW VENTURE CREATION

The study of new venture creation has been primarily addressed in two related yet largely separate literatures. The first, generally referred to as the cognitive perspective, has focused on the cognitive characteristics of individual entrepreneurs and the possession of prior knowledge as the primary basis for identifying and designing new ventures (e.g., Baron, 2000; Baron & Ensley, 2006; Busenitz & Barney, 1997; Mitchell et al., 2002; Shane, 2000). When entrepreneurs make sense of market opportunities and the possibility for a new venture this is seen as largely an individual, cognitive process with scholars subsequently subdividing their attention to different features of that process such as entrepreneurs' perceptual noticing and bracketing of breaks in their experience and the richness and specificity of their cognitive prototypes, scripts or mental models (i.e., cognitive frameworks acquired through experience) (Baron & Ensley, 2006; Korunka et al., 2003; Krueger et al., 2000; Mitchell et al., 2000). For example, when entrepreneurs gain repeated experiences within certain markets or in the development of ventures they build richer and more specific mental models or scripts of their environment (e.g., Baron & Ensley, 2006; Mitchell et al., 2000; Weick et al., 2005). They can then draw upon or cognitively extend such mental models or scripts to new situations and in the process identify the opportunity for a new venture.

A main limitation of this cognitive perspective is that it treats the individual entrepreneur in isolation from his or her social environment, and is unable to capture or explain how entrepreneurs are creative and how through inductive reasoning they imagine or create novel opportunities that surpass their past (cognitively accumulated) experiences (Baron & Ward, 2004). The main reason for this is that cognitive scripts or mental models provide by themselves no rules or guidelines for the interpretation of, and inductive reasoning about, novel circumstances (Edwards, 1997; Weick, 1995). Within the cognitive perspective an entrepreneur's speech is also seen as "revealing" of cognitive interpretations (Donnellon, 1986; Gioia, 1986); when entrepreneurs label and articulate their experiences when communicating to others, they externalize or express "some neutral, definitive and ready-made sense of events produced through a process such as noticing what the world is like and then putting it into words" (Edwards, 1997: 144). Accordingly, the cognitive perspective focuses on individual modes of thought without speech and outside of a social context ("thought without speech" in Figure 1 below), casting aside the formative effect of language, and particularly on-line speech, on thought processes and the construction of meaning (e.g., Fauconnier, 1997; Langacker, 1991).

A second literature, under the broad heading of institutional theory, has located entrepreneurship within a social context and has focused on cultural and symbolic realms of meaning construction around new ventures (e.g., Lounsbury & Glynn, 2001; Martens et al., 2007; Zott & Huy, 2007). Given that most new ventures lack proven track records, obvious asset value, and profitability, entrepreneurs are forced to draw upon discourse to construct accounts that help explain, rationalize and promote a new venture and increase its perceived legitimacy in the eyes of resource providers (Aldrich & Fiol, 1994; Lounsbury & Glynn,

2001). The discourse (e.g., frames, codes) that individual entrepreneurs use in this process is seen to be an outgrowth of social categories and social processes of disseminating and sharing information (Putnam & Fairhurst, 2001; Weber, 2005). Weber et al. (2008) and Zilber (2006) for example show how entrepreneurs in social movements and high-tech ventures enlisted cultural codes and myths to create “cultural resonance” between their specific framing of a venture and broader value orientations of stakeholders. The institutional tradition highlights a sociolinguistic focus (Putnam & Fairhurst, 2001) on how the specific speech of entrepreneurs instantiates or evokes salient cultural codes or frames that encode the criteria for institutional legitimacy by appealing to collective, shared understandings and norms of whether and how novel ventures are sensible, acceptable and legitimate (Aldrich & Fiol, 1994; Rao, 1994; Zott & Huy, 2007).

A main limitation of the institutional tradition is that it fails to sufficiently connect to the material context in which entrepreneurs identify opportunities for novel ventures. In addition, insofar as it treats social structures as relatively stable and assumes fixed socially shared linguistic repertoires (Putnam & Fairhurst, 2001) institutional theory is also unable to explain how individual entrepreneurs pragmatically and creatively *make* sense of the world around them on particular occasions (Weber, 2005; Weber & Glynn, 2006). Within the broader institutional literature, this limitation is reflected in concerns about studies of institutionalization that focus almost exclusively on established conventions, codes and symbols, and how these are being translated, enlisted or instantiated in local contexts (e.g., Phillips et al., 2004). The underlying assumption is that once internalized, the social competence of individuals in speaking a (socially shared) language will subsequently act “as internalized cognitive constraints on sensemaking” (Weber & Glynn, 2006: 1640). In other

words, speech is socially conditioned and constrained and largely reproduced in a rote, habitual manner without conscious thought (“speech without thought” in Figure 1).

INSERT FIGURE 1 ABOUT HERE

The respective foci and limitations of both traditions suggests that they are complementary: the cognitive tradition stresses the internal, self-conscious and cognitive process of entrepreneurs developing an account of what is going on, while the institutional tradition emphasizes the external, strategic process of evoking meaning in line with political interests. It thus appears that much may be gained from moving towards an approach that sees entrepreneurial actions and new venture creation as not exclusively the outcome of either cognitive processes or of processes “in the sphere of symbolic codes” (Bartholomew & Mayer, 1992: 152).

Thinking-for-Speaking and Entrepreneurial Action

To establish such an approach, better linking the individual entrepreneur with the social context, we draw upon the broad perspective of sensemaking (Hill & Levenhagen, 1995; Weick, 1995). Within the context of entrepreneurship, Hill and Levenhagen (1995: 1057) argued that entrepreneurs “operate at the edge of what they do not know” and must seek to make equivocal events non-equivocal by constructing a new vision of the business environment (Alvarez & Barney, 2007) and by speaking about this vision to others in order to gain feedback and their support (Lounsbury & Glynn, 2001). Hill and Levenhagen (1995) proposed that such visions and the opportunities that they imply may be perceptually or unconsciously “felt” (see also Weick et al., 2005), but are only configured into more

elaborate presentations when they are verbally articulated. As such, “context, culture, previous experiences, and language capacity compound an entrepreneur’s problem of proper description of beliefs on which to base action in similar (but new) situations” (Hill & Levenhagen, 1995: 1061-62).

We take as a starting point Hill and Levenhagen’s view that the formative effects of language on thought processes (e.g., Langacker, 1991; Slobin, 1987) need to be incorporated and theorized in the context of entrepreneurial action and new venture creation. Whilst the inner thoughts and imaginations of entrepreneurs matter, they are not spoken or even necessarily speakable – to get to speech, something further takes place, and this is what will be termed “thinking-for-speaking” (Slobin, 1987). Functionally, thinking-for-speaking refers to the point where new (verbal) ideas take form in the stream of the entrepreneur’s experience with external speech reconfiguring ideas to fit the demands of spoken language (see Figure 1 for a positioning of the perspective we are proposing). As Slobin (1996: 71) argues; “whatever else language may do in human thought and action, it surely directs us to attend – while speaking – to the dimensions of experience that are enshrined in grammatical categories”. Hence, consistent with the broad perspective of sensemaking (Hill & Levenhagen, 1995; Weick, 1995), “thinking for speaking” implies that the world does not present itself in a direct or “raw form”, but entrepreneurs actively construct it, using available linguistic frames including pre-fabricated vocabularies (Weber, 2005) that become elaborated in a coherent way, thus shaping thinking while speaking. The concept of “thinking for speaking”, however, offers a stronger linkage than sensemaking to the role of words as triggers to the imagination in entrepreneurial contexts. Whereas sensemaking is conceived as largely retrospective and “targeted at events that have transpired” thinking-for-speaking “is

aimed at creating meaningful opportunities for the future” (Gioia & Mehra, 1996: 1229). Words are not only retrospective signifiers but also “prompts we use to get one another to call up some of what we know and to work on it creatively to arrive at a meaning” (Fauconnier & Turner, 2002: 164). Specifically, entrepreneurs induce and creatively rearrange or blend words, whilst and through speaking, prompting semantic leaps for the purpose of imagining new situations or of making new situations understood (Cornelissen, 2005; Coulson, 2001).

Thinking for, and whilst, speaking is also a dynamic process with the social context of speaking and the interactions with others affecting the construction of meaning about a new venture (Slobin, 1987; see also Alvarez & Barney, 2007; Hill & Levenhagen, 1995). Within this process, thought and language are intimately and dynamically connected at the point where entrepreneurs verbalize their experiences for themselves (sensemaking) and elaborate these in a context of speaking towards others (sensegiving). Baker et al.’s (2003: 264) study of entrepreneurial start-ups provides an example of this process. Their study shows that the design and implementation of new knowledge-based start ups was initially and to a degree “psychological or driven by internal needs” but also significantly “driven by exogenous demands by external resource providers for founders to provide accounts that make their firms appear like legitimate investment opportunities, suppliers or customers”. The result was an improvisational “thinking-for-speaking” process with the design and implementation of these ventures emerging from verbal interactions with resource providers.

Our goal here is to favor neither cognitive accounts that see an entrepreneur’s sensemaking and action in context as derived from and determined by cognitive interpretations nor symbolic accounts that see it as largely conditioned and bounded by the

discursive fields or communities in which entrepreneurs operate. Instead we aim to conceptualize how language and thought interpenetrate in context (Slobin, 1987) and how meaning is not fixed but continually developing as a result of interactions with others. Such an approach does not deny agency or structure but shifts attention to individual acts of sensemaking and sensegiving around new ventures that may be the “feedstock for institutionalization” (Weick, 1995: 35; see also Phillips et al., 2004; Weber & Glynn, 2006).

A central assumption underlying our approach is that individual entrepreneurs are “theorists of a pragmatic sort” (Strang & Meyer, 1993; Tetlock, 2000; Weick, 1995). They self-consciously and through interactions with others develop notions about cause and effect, thus “theorizing” their world and the relationships and opportunities within it (Alvarez & Barney, 2007; Tetlock, 2000). At the individual level, one may view entrepreneurs as intuitive scientists, engaged in a continuous struggle to achieve cognitive mastery of their world (Sarasvathy, 2004), or as intuitive economists who use the resulting cognitive representations to identify courses of action that advance, if not maximize, their interests (McMullen & Shepherd, 2006). At the social level, entrepreneurs may be seen as intuitive politicians (Alvarez & Barney, 2007) or cultural operators (Rao, 1994; Zott & Huy, 2007) who seek to be accountable to different social groups and whose choices and judgments are embedded in, and constrained by, the “broader social and cultural dynamics that embed start-ups” (Lounsbury & Glynn, 2001: 546). These different individual-cognitive and social-cultural images of entrepreneurs are, as mentioned, not conceptually incompatible. In fact, some key works in the cognitive and institutional traditions acknowledge or implicitly assume that the individual and social realms can be bridged (DiMaggio, 1997; March &

Olson, 1989). In the present article, we similarly attempt to bridge the individual and social levels in new venture creation.

INDUCTION AND NEW VENTURES

In this section we combine the insights from past research on entrepreneurial cognition and institutional theory to lay the foundations for an interaction model that captures and explains in an integrated manner how in social contexts of speaking entrepreneurs inductively reason about novel ventures and attempt to convince others to gain much needed support. We first provide an introduction to the key concepts of analogy and metaphor, as primary forms of inductive reasoning. Next, we highlight two determinants (prior experience and the effectance motivation) which interrelate to predict and explain an entrepreneur's analogical or metaphorical speech (and thinking) at different stages of the venture creation process (i.e., the stages of exploration, planning and the launch of a venture and the stage of (early) growth). We use general examples to illustrate our arguments and formalize our discussion in a set of propositions that, together, explicate the role of analogical and metaphorical reasoning in the creation and justification of novel ventures.

Analogical and Metaphorical Reasoning

When entrepreneurs perceptually sense or feel that there may be an opportunity for a venture in a particular industry, they make that opportunity intelligible to themselves and others through inductive reasoning (Hill & Levenhagen, 1995). Because no entrepreneur, however prescient, can see into the future or know with certainty how decisions and actions will pan out, they necessarily rely on inductive reasoning for this purpose. By inducing scenes of how

new ventures are likely to function in an industry and grow, or alternatively of how entrepreneurs want them to function and grow, entrepreneurs as well as relevant others (e.g., investors, employees) achieve some ability to comprehend the opportunity for a venture and what the future consequences of decisions and actions will be like. Specifically, the literature on induction (e.g., Gentner et al., 2001; Holland et al., 1986; Nisbett & Ross, 1980) generally explicates how using analogies or metaphors — that is, how referring to other cases and domains of experience — can guide thinking and can create understanding and social acceptance. It suggests that entrepreneurs may discursively invoke analogical or metaphorical comparisons with other cases and experiences to familiarize themselves and others with a new venture, to reduce uncertainty and to support further inferences (e.g., Sternberg, 2004; Ward, 2004). Entrepreneurs need to “make the unfamiliar familiar by framing the new venture (often through metaphor and analogy) in terms that are understandable and thus legitimate” (Lounsbury & Glynn, 2001: 549). Analogies and metaphors are useful in this context because they “convey relationships to concepts already understood...[and hence] facilitate the construction of meaning by the person or group experiencing them” (Gioia, 1986: 53).

Strictly speaking, analogies and metaphors are drawn similarities with other cases and experiences that are either directly extended to a new venture situation (as the target) or elaborated in interaction with the target as a basis for inferences (e.g., Gentner et al., 2001). The difference between analogies and metaphors rests in the literal versus figurative nature of the comparison (Fauconnier & Turner, 1998, 2000). Analogies, in the context of new ventures, involve literal references to cases and observations associated with entrepreneurship, market or industry contexts, and ventures and businesses in general. An

analogy, in other words, conjoins cases from within the same category of observations (e.g., Gavetti et al., 2005; Terlaak & Gong, 2008). Metaphors, on the other hand, refer to figurative, and hence cross-categorical, comparisons (Cornelissen, 2005; Lakoff, 1993) where the creation of a new venture is likened to cultural domains of experience (e.g., parenting, sports, warfare) outside of a specific entrepreneurial or business context (Cardon et al., 2005; Rindova et al., 2004). As a result, the new venture in its industry is not simply represented *as* or *as like* other ventures or industries (as in the case of analogies) but *as if* it resembles in some form a literally unrelated but culturally familiar domain of experience.

The specific analogies and metaphors that entrepreneurs use can be already familiar and conventional or wholly novel and creative (Cornelissen, 2005). Their use is conditioned by the degree to which an entrepreneur has had previous experiences in, and has learnt about, the same or similar industries in which the new venture will be based (Shane, 2000, 2003) as well as by the activation of social pressures to connect with or accommodate the salient expectations of relevant others (Aldrich & Fiol, 1994; Lounsbury & Glynn, 2001). These two determinants (which we label as prior experience and effectance) both influence the extent to which an entrepreneur uses specific forms of analogical or metaphorical reasoning in relation to a novel venture and industry and whether such reasoning is, in time, corrected, reinforced or overcome as the venture moves from planning to launch and possibly early growth (e.g., Alvarez & Barney, 2007; Greve & Salaff, 2003; Hite & Hesterly, 2001; Schutjens & Stam, 2003). We will briefly discuss each determinant before demonstrating how together they impact the entrepreneurial process of creating, justifying and growing novel ventures.

Prior Experience and Inductive Reasoning

Goodman (1955) gave a well-known account of the basis of inductive reasoning, one that points towards the historic practices and experiences of entrepreneurs and in particular their language use, rather than simply the psychology of an entrepreneur (Sloman & Lagnado, 2005). Ultimately, Goodman (1955: 117) attempted to explain inductive reasoning in terms of our linguistic practices: “the roots of inductive validity are to be found in our use of language”. He argued that induction may consist of a mental habit formed by past observations and experiences, but language is driving whatever past regularities are selected and thus projected onto a novel or future situation. According to Goodman (1955: 117); induction “is a function of our linguistic practices” with “the line between valid and invalid predictions (or inductions or projections) drawn upon the basis of how the world is and has been described and anticipated in words”. Goodman (1955) specifically argued that the entrenchment of language effects inductive reasoning. In short, an entire verbal description or specific words are entrenched when such descriptions or words have a past history of use, where the descriptions and words themselves, and their metaphorical extension, figure in this usage.

Applied to entrepreneurship, this means that through depth of experience in, or learning about, one or multiple industries, entrepreneurs may have entrenched descriptions of the key features driving success or performance in a particular industry (e.g., Baron & Ensley, 2006; Gavetti et al., 2005; Haunschild & Miner, 1997). For example, based on depth of experience in the media industry, an entrepreneur may verbally describe the industry as one where “advertising is key because intrinsic product quality is hard to assess, and therefore customers’ taste is easily shapeable” (Gavetti & Warglien, 2007: 7). Depth of experience refers to the time spent by an entrepreneur operating in, or learning about, a

particular industry (Gavetti et al., 2005). Experienced entrepreneurs may also have breadth of experience in that they have observed or learned about different industries. Through depth and breadth of experience, entrepreneurs have fully developed verbal descriptions that distinguish industries on the basis of significant features such as the size of economies of scale, the size of customer switching costs and the heterogeneity of customer tastes (Farjoun, 2008; Gavetti et al., 2005). The principle of entrenchment suggests that those entrepreneurs with depth of experience in one particular industry will refer to their past description of that industry and will analogically project this onto the novel industry as a working hypothesis. Where entrepreneurs have breadth and depth of experience in multiple industries, they are likely to refer to the description of an industry that is, because of past usage, more entrenched in their speech and is for that reason also likely to be more elaborate and causally specific. In the words of Goodman (1955: 108): “if the antecedent or consequence of one such hypothesis is much better entrenched than the corresponding predicate of a second, and if the remaining predicate of the first hypothesis is no less well entrenched than the corresponding predicate of the second, then the first has the higher initial projectibility index”.

This kind of analogical induction is known as a projection-first model (Gentner et al., 2001) as the analogical reasoning involves a simple extension of an entrenched description of a source domain (e.g., the media industry) onto a new target domain, after which it is corrected and adjusted to the target. Such a projection is assumed to deliver a useful, legitimate base for inferences because the entrepreneur establishes, in his/her reasoning, a high level of similarity in the inter-relation between significant and multiple features across the two industries that highlights the opportunity for a novel venture (Goodman, 1955; see also Farjoun, 2008; Gavetti et al., 2005: 696). There is however a risk that the perceived

close match constrains efforts to what previous experiences and entrenched descriptions suggests – labelled as the liability of the “over-reliance on the old” where descriptions of local, past experiences are exploited as direct bases of reasoning about ventures in other industries (e.g., Cliff et al., 2006; March, 1991; Simon & Houghton, 2002; Ward, 2004).

Proposition 1a: The higher the degree to which verbal descriptions of (experienced or observed) industries have a past history of use in an entrepreneur’s speech, the more likely is their analogical projection to a novel industry.

In instances where an entrepreneur’s past experiences is restricted to entrenched words or references to isolated features of an industry as opposed to a entire description, the entrepreneur may project such features but has to align these with the provisional representation of the target industry before any inferences can be derived (e.g., Baker & Nelson, 2005; Gentner et al., 2001; see also Haunschild & Miner, 1997; Terlaak & Gong, 2008). In this case, analogical inferences arise in the discursive elaboration of comparisons where features of the source and target industries are first aligned before any likely inferences can be drawn from the source to the target (e.g., Fauconnier, 1997, Gentner et al., 2001). This kind of analogical reasoning is known as an alignment-first model as entrepreneurs will discursively project and align isolated features of the source (ventures in known industry) and target (novel venture in novel industry), and then use the results to project and elaborate on additional features of the source, which can lead to inferences when such additional features are discursively blended with the target or make additional features salient (Fauconnier, 1997; Fauconnier & Turner, 1998; Gentner et al., 2001). For example, the CareerBuilder website (www.careerbuilder.com), an internet job site, emerged when the two founding entrepreneurs aligned the possibilities of retail distribution with distribution via the internet. Initially, the business was focused on resume management software. The

alignment with the internet as an alternative distribution channel for this software triggered further elaboration of the role of the internet in the job search and recruitment process in relation to traditional newspaper ads. The inference that followed was that the company could be redeveloped as an interactive internet job site and that Careerbuilder would move from being a traditional software company to a pioneering on-line company. Alignment-first models are creative and may deliver emergent inferences that, when evaluated and verified in relation to the target of a novel industry, may turn out to be legitimate and useful (Cornelissen, 2005; Sternberg, 2004). However, there is also a liability associated with this kind of analogical reasoning as it may lead an entrepreneur down an interpretive route that is only and rather weakly constituted by a superficial similarity between isolated industry features (Dunbar, 2001). This liability of “being too bold” or “taking foolish risk” (Aldrich & Fiol, 1994) involves the development of a new venture on the basis of beguiling superficial similarities rather than deeper and more structural similarities between two industries (Dunbar, 2001; see also Tsoukas, 1991, 1993).

Proposition 1b: The higher the degree to which verbal references to isolated features of (experienced or observed) industries have a past history of use in an entrepreneur’s speech, the more likely is their analogical alignment with a novel industry.

When entrepreneurs do not have any direct analogies to hand, because of a lack of experience in particular industries, they face a clear sensemaking imperative (Robichaud et al., 2004; Sarasvathy, 2001, 2004) and are likely to draw upon entrenched, idiomatic words or expressions that they metaphorically extend to the new venture situation as a way of creating understanding (Goldberg, 1995; Lakoff, 1993). In the absence of directly relevant

experiences and observations, entrepreneurs will induce metaphors “because of [their] proclivity for interpreting the new or less familiar with reference to what is already well established [in their language]; and [because of] the pressure of adapting a limited inventory of conventional units to the unending, ever-varying parade of situations requiring linguistic expression” (Langacker, 1991: 294-295). We predict that in these circumstances entrepreneurs draw upon expressions that are entrenched in their language use and that reflect cultural domains of experience outside of an entrepreneurial or business context. Such expressions are likely to be either idiomatic phrases or argument constructions (Grady, 1997, 1999). Idioms are culturally conventional words or expressions that are metaphorical (e.g., Gibbs, 1994) and that may be entrenched in an entrepreneur’s speech. Richard Branson’s use of the “challenging the fat cats” idiom as a model for his initial Virgin ventures is a good example. Prior research on metaphors and entrepreneurship has also focused on how entrepreneurs may project or extend idiomatic phrases around parenting, theatre or warfare to describe the entrepreneurial process (e.g., Cardon et al, 2005; Dodd, 2000; Nicholson & Anderson, 2005). Argument constructions include constructions with a subject and operative verb that include, for example, an entrepreneur “leveraging” a client base, “building” market awareness, “expanding” market share or “acquiring” market acceptance (Martens et al., 2007: 1118). These constructions (e.g., the English ditransitive, caused-motion, and resultative constructions) are grammatically entrenched in the English language in general, which makes them prime material for metaphorical reasoning, and “encode as their central senses event types that are basic to human experiences” (Goldberg, 1995: 39).

A specific advantage of idioms and argument constructions is that once they are metaphorically extended to or aligned with a target their use simulates an entire scene that

can be dynamically manipulated and generates a wide range of emergent inferences (about events, actions, interests and political biases) (Fauconnier & Turner, 1998, 2002; see also Gaglio, 2004; Sarasvathy, 2004). To illustrate, the Global Reporting Initiative (GRI), a venture around sustainability reporting, was initially set up in 1997 by its founders in the US as a bold vision of an environmental reporting framework that they would, metaphorically speaking, “position” at the “heart” of the sustainability debate. Their intent was to develop a framework and practical guidelines for companies to voluntarily report on their environmental performance, thus revealing their contribution to the sustainability of the economy and society. It metaphorically represented, as they often repeated, “only one piece of what we must do to find our way to a healthy and sustainable future, but it is a necessary piece. Without it, we will never bring all the forms of capital - natural, human, and financial - into healthy alignment”. Initially, the US market was unreceptive to the framework, which led the founders to argue that they needed “to look beyond the borders of the US” and develop a “global” reporting initiative. They meant that the initiative metaphorically had to “cross borders” to gain physical “support” as a voluntary but “generally accepted” framework by multiple stakeholders (including companies) across the world.

The rather creative scenes that are simulated through idioms and argument constructions (e.g., physically manipulate pieces to “bring them into alignment”) are useful to entrepreneurs as an inductive heuristic to estimate the causality of a venture in a novel industry and the probability of success (Gaglio, 2004; Sarasvathy, 2002, 2004). The construction and elaboration of such scenes also makes them appear real (Fauconnier & Turner, 1998, 2002). For this reason, their use is subject to a potential liability of “unfounded belief” in the causality of a particular industry and in the feasibility of a new venture when

such belief is to a greater extent the result of the construction and elaboration of a scene than what objective probability would warrant. For example, the (metaphorical) inference that spreading the GRI, as a voluntary reporting framework, across multiple sites and stakeholders around the world would *add up* to increasing support was not something that could have been assumed at the outset. Furthermore, when individual entrepreneurs induce argument constructions with themselves as instigators of the action, it may, as a consequence, lead to an ego-centric bias (Sarasvathy & Dew, 2008). The standard entrepreneurial expression of “making it happen” (Sarasvathy, 2004), for example, encodes a simple scene with an entrepreneur metaphorically creating, or effectuating, the outcomes of his or her own actions. Because of this bias, the induction of argument constructions may also be associated with a liability labeled as the “illusion of control” (e.g., Simon & Houghton, 2002) which occurs when an entrepreneur overemphasizes the extent to which s/he is personally able to increase performance in situations where chance plays a large role and individual ability is not necessarily the deciding factor.

Proposition 2: The higher the degree to which idioms or argument constructions have a past history of use in an entrepreneur’s speech, the more likely is their metaphorical projection on, or alignment with, a novel industry.

The Effectance Motivation and Inductive Reasoning

Whilst making sense about, and identifying, new opportunities for ventures plays a central role in the process of new venture creation, it is not sufficient to simply envision and identify an opportunity. Rather, for a venture opportunity to succeed entrepreneurs need to publicly convince relevant others (e.g., investors, employees) of the feasibility and legitimacy of the venture (Aldrich & Fiol, 1994; Starr & MacMillan, 1990; Zott & Huy, 2007). Given that

most start-ups or new ventures lack proven track records, entrepreneurs need to construct accounts in their speech that help explain, rationalize and promote a new venture and reduce the uncertainty typically associated with it (Aldrich & Fiol, 1994; Lounsbury & Glynn, 2001). Such accounts ultimately have to demonstrate the feasibility of any new venture and its potential for wealth creation. The need for such accounts stems from the “liability of newness” (Stinchcombe, 1965) associated with novel ventures with resource providers likely to be reluctant to become part of any novel undertaking for which there is no conclusive evidence that their efforts will eventually be rewarded (Brush et al., 2001). This liability is compounded by the information asymmetry (Zott & Huy, 2007) between an entrepreneur and external resource providers in relation to the potential of a novel venture (Shane, 2003). The novelty of the venture and the asymmetry in information leads to high levels of uncertainty about the venture in the eyes of others such as investors and employees. Uncertainty is a driver of an entrepreneur’s need for effectance (White, 1959), defined as the general motivation to “interact effectively with one’s environment” (White, 1959: 297), and consists of activities and verbal accounts that attempt to reduce perceived uncertainty about the venture and about one’s ability as an entrepreneur to make the venture successful. In particular, entrepreneurs must act “*as if* equivocal events are non-equivocal” (Gartner et al., 1992: 18) and “behave *as if* the activity were a reality...[in order to] convince others of the tangible reality of the new activity” (Aldrich & Fiol, 1994: 651). Effectance entails the need for an entrepreneur to reduce the uncertainty of a venture in the eyes of others, at least in part with the goal of attaining common understanding and demonstrating the predictability of a venture. Predictability relates to uncertainty about the probability of the success of the new venture and/or uncertainty stemming from a lack of information about cause-effects

relationships in a particular industry. This uncertainty generally heightens the use of analogies and metaphors in an entrepreneur's speech to others (Lounsbury & Glynn, 2001). In the absence of a performance track record that entrepreneurs can point to, they are primed to use analogies or metaphors to provide an inductive rationale that accounts for the venture's existence, familiarizes others with the new venture and may create common understanding (Lounsbury & Glynn, 2001).

Proposition 3: The higher the degree of uncertainty regarding the predictability of a new venture, the more likely is the use of analogies and metaphors in an entrepreneur's speech to others.

Depending on the prior experiences of an entrepreneur, he or she may then use either specific analogies or metaphors in their communication to provide a structured understanding and to increase predictability. When entrepreneurs can make relevant links to their past experiences with ventures in related industries or to certain competencies acquired in relation to previous ventures, these can be analogically referred to as a way of strengthening trust in a venture in a novel industry and hence increase its predictability. Zott and Huy (2007) and Martens et al. (2007), for example, report how entrepreneurs communicated analogical links between novel ventures and preliminary or interim achievements that their previous ventures had realized, such as partially working products and technologies. Entrepreneurs can also draw analogical links with other organizations and industries to account for a novel venture and to predict its success. For example, the Global Reporting Initiative was early on after its founding presented on the basis of a similarity in scope and principles with the established practice of financial reporting. This strong case of analogical transfer was prominent in the communication strategy about the novel venture and helped in assuring constituencies of the feasibility of the new venture and its predictability. In general, entrepreneurs will use

analogical references to their previous ventures or to other organizations and industries when they themselves or others have already made recognizable commitments (i.e., pledged their support) towards such ventures or industries which sets a precedent for the novel venture.

Proposition 3a: The presence of prior commitments to past ventures, organizations or industries is associated with the use of analogies in an entrepreneur's speech to others.

However, when such commitments are absent and direct parallels cannot be drawn entrepreneurs are likely to use metaphors to familiarize others with the venture and enhance its perceived predictability. In a recent study, Weber et al. (2008) analyzed how entrepreneurs in the social movement for "grass-fed" products created a new market largely through using metaphorical idioms (e.g., "living soil", "heritage breed" cattle) that resonated with broader value orientations of stakeholders. There were no obvious (analogical) parallels to draw on the production side (as opposed to established commitments around local, sustainable and slow food consumption). Entrepreneurs therefore resorted to idiomatic expressions that would resonate with broadly familiar cultural understandings around sustainability and the natural environment thus creating a rationale for the venture. Besides idiomatic expressions, entrepreneurs may also use argument constructions as a basis for entire narratives that "aim to cue plausibility and build confidence that the entire enterprise can succeed" (Lounsbury & Glynn, 2001: 551). Because of the lack of a performance history, narratives for novel ventures are typically metaphorical and built around argument constructions (Goldberg, 1995) that present the novel venture as fictionally going through some kind of development (e.g., the venture is an "up-and-coming player" or "on the brink of commercialization"); a development that is often characterized metaphorically as physically

moving ahead or progressing towards a valued endpoint (see Martens et al., 2007). The linguist Talmy (2000) refers to narratives as fictive motion to make the point that in their use an experience or event is grammatically reconstructed and understood as a fictional movement or scene. The construction of narratives is motivated by the perception of an unprecedented change or breakdown of some sort (Bruner, 1991; Robichaud et al., 2004); for example, when ventures involve new, emerging product or process innovations or emerging markets and industries. In such circumstances, entrepreneurs cannot shift to established commitments in their communication but actively need to construct a narrative account that calls up a limited number of actors whose dispositions and actions cause everything that happens within a delimited time and space (e.g., Robichaud et al., 2004; Tilly, 2006). Narratives carry strong imputations of responsibility and provide a structured understanding of the anticipated trajectory of the venture that allows entrepreneurs to enhance its predictability and “arrive at an interpretation that provides closure” (Robichaud et al., 2004: 631).

Proposition 3b: The absence of prior commitments to past ventures, organizations and industries is associated with the use of metaphorical idioms, argument constructions or narratives in an entrepreneur’s speech to others.

The predictability of a venture also crucially depends on the degree to which the entrepreneur is perceived to be able to control the success of the venture (Lounsbury & Glynn, 2001; Zott & Huy, 2007). Control refers to the entrepreneur’s proven ability to master a venture and carry it through to success, which also aids in establishing predictability about the venture. This need to demonstrate control is particularly salient for novice entrepreneurs (e.g., Martens et al., 2007) and for entrepreneurs operating in dynamic or volatile environments in

which investments are risky (e.g., Brush et al., 2001). In response to such concerns about control, entrepreneurs can refer to certification of their past accomplishments in the form of, for example, industry awards (e.g., Rao, 1994, Zott & Huy, 2007) or academic degrees from prestigious business schools (Zott & Huy, 2007) which are meant to indicate their capability to drive the new venture and make it successful. Such references are based on analogical transfer because it is assumed that the experiences underlying those past accomplishments can successfully be leveraged in relation to the new venture (Thompson et al., 2000).

Alternatively, when entrepreneurs cannot refer to certified or acknowledged past accomplishments, they are likely to metaphorically invoke basic argument constructions to attribute control to themselves. This attributional activity is also likely to increase the entrepreneur's feeling of efficacy in social interaction (Epley & Gilovich, 2006). Martens et al. (2007: 1118), for example, reported how entrepreneurs at the time of the initial public offering (IPO) used argument constructions that evoked images of physically manipulating ventures as objects (e.g., "leverage client base") and as part of their narrative accounts towards (prospective) investors. These metaphors cue an image of an (embodied) operator who physically manipulates a venture and hence can control and direct the likelihood of its success.

Proposition 4: The higher the uncertainty regarding the entrepreneur's ability to control a venture, the more likely is the use of analogical references to certified past accomplishments and/or metaphorical argument constructions in an entrepreneur's speech to others.

Without a known precedent or common, established industry frame of reference, new ventures may also not gain the necessary social acceptance or legitimacy to gain resources to survive. In such cases, in order to acquire acceptance for a new venture, the use of analogies

and metaphors that naturalize a new venture should increase. The absence of rival entrepreneurial ventures with similar innovations or rival firms operating in the same industry, for example, means that there are no direct references that can legitimate a new venture. The use of analogies and metaphors is thus heightened by the incentives associated with gaining social acceptance or cognitive legitimacy (comprehension and taken-for-grantedness) for a new venture (e.g., Aldrich & Fiol, 1994; Zimmerman & Zeitz, 2002). Analogies and metaphors facilitate the comprehension of a novel venture and may also lead to the acceptance of a new venture as they naturalize the new situation in terms that are already well understood and taken-for-granted (Davis et al., 1994; Douglas, 1986; Suchman, 1995). Douglas (1986) argued that the source of legitimacy for new ventures arises from a “naturalizing” analogy or metaphor that sustains the venture by demonstrating its fit with the natural order. When the analogy or metaphor points to strong parallels with relations “found in the physical world, or in the supernatural world, or in eternity, anywhere, so long as it is not seen as a socially contrived arrangement” (Douglas, 1986: 48) it may acquire acceptance and legitimacy for a new venture by virtue of its strong correlation with other common understandings of the way the world works (Davis et al., 1994). When incentives for legitimacy are low, the use of analogies and metaphors should decrease. For example, over time when an industry grows, knowledge about ventures and what is needed to succeed in an industry will spread (Aldrich & Fiol, 1994). When entrepreneurial ventures and activities in an industry become familiar, well-known and taken for granted, there is less incentive to use analogies and metaphors and entrepreneurs will instead refer to information on the industry or point to evidence regarding the performance and reputation of their venture vis-à-vis rival firms (Aldrich & Fiol, 1994; Zott & Huy, 2007).

Proposition 5: The lower the degree of cognitive legitimacy surrounding a novel venture, the more likely is the use of analogies or metaphors in an entrepreneur's speech to others.

AN INTERACTION MODEL OF NEW VENTURE CREATION

We have thus far discussed both determinants largely in isolation but have suggested that they work together and function synergistically in the venture creation process. We have argued that when entrepreneurs create a novel venture, they do not simply imagine or design a venture in isolation but do so in interaction with relevant others whose acceptance, support, and resources are critical to the success of the venture (Hill & Levenhagen, 1995). In the context of new ventures we should therefore not draw too sharp a distinction between entrepreneurial sensemaking for oneself and sensegiving to others (Gioia & Chittipeddi, 1991). When put in a social context which necessitates that entrepreneurs provide intelligible accounts of their actions to others, such instances integrate social pressures for persuasion and justification with linguistic and cognitive processes of sensemaking (Tetlock & Manstead, 1985). Both determinants thus interrelate to predict and explain the activation, correction and possible reinforcement of an entrepreneur's analogical or metaphorical speech (and thinking) and at different stages of the venture creation process (i.e., the stages of entrepreneurial exploration, planning and launch of the venture and the stage of (early) growth). These determinants are also likely to follow different time courses of activation and application. In particular, we argue that the reliance on prior experience in inductive reasoning plays a large role in the early stages of a venture but decays over time as a result of interactions with others and because in time references to past experiences can be corrected or overcome by direct knowledge or information that becomes available about a venture and

its industry (Hill & Levenhagen, 1995). As mentioned earlier, this suggests that analogies and metaphors may serve as a basis for induction but may at a certain point be overcome by deliberate reasoning that is based on more direct and performance-related experiences with a new venture. The motivational process of effectance, in contrast, follows the opposite temporal pattern by increasing in strength over time until uncertainty is satisfied and legitimacy attained, at which point the motivation diminishes. Specifically, we argue that the need for effectance increases during the exploration, planning and launch stages of a venture and up until early growth at which point and because of their initial performance ventures are “likely to have greater legitimacy, reputation, and general resources than emerging firms” (Hite & Hesterley, 2001: 277). In Figure 2, we plot the activation and strength of both determinants (prior experience and the effectance motivation) at different stages of the venture creation process.

INSERT FIGURE 2 ABOUT HERE

In the entrepreneurship and organizational literatures, life cycle models have been used to suggest that entrepreneurial ventures evolve through progressive stages of emergence, launch and (early) growth with the growth stage designating the point at which the venture has intentionally been grown beyond mere survival, viability or sufficiency (Kazanjian & Drazin, 1989; Hite & Hesterley, 2001). While a stage approach, as a conceptual abstraction, has clear limitations, it is useful in framing the emergence and evolution of new ventures over time and particularly during the early stages of the venture. Following earlier research (e.g., Butler & Hansen, 1991; Hite & Hesterley, 2001; Schutjens & Stam, 2003), we highlight four stages: the entrepreneurial exploration, planning and

launch stages and the stage of (early) growth. Each stage represents more than mere changes over time; rather, each represents different resource acquisition challenges to the entrepreneur and increasingly greater pressures for effectance (Figure 2).

Entrepreneurial exploration. When entrepreneurs sense that there may be an opportunity for a venture in a particular industry they will initially explore and discuss their ideas within a small circle of close contacts (e.g., Hite & Hesterley, 2001; Greve & Salaff, 2003) with a majority of these contacts stemming from preexisting social, family or historical relationships (e.g., Hite & Hesterley, 2001; Stam & Elfring, 2008). Entrepreneurs will draw upon their own experiences and beliefs to induce, whilst speaking, the opportunity for a novel venture and will seek to gain initial feedback from these close others without yet committing themselves publicly to a venture or a particular course of action. If they were to expand their contacts, their intentions would become public to a much greater degree, making it hard to withdraw from a potentially losing course of action (Alvarez & Barney, 2007; Hite & Hesterley, 2001).

At this stage, entrepreneurs are likely to articulate basic scenes of both cause and effect but with many essential elements initially undefined (Sarasvathy 2001, 2004). Such scenes are explored and revisited as a result of communication with others (Alvarez & Barney, 2007). The effectance motivation is absent or fairly quickly diminished in the exploration stage because of the tentative commitment to the venture (Greve & Salaff, 2003) and because the entrepreneur's contacts are likely to be composed of strong, embedded ties within a network high in closure and cohesion (Hite & Hesterley, 2001). As a result, an entrepreneur is able to freely explore ideas and to discuss basic scenes for the novel venture without continuously much more effort or further elaboration needed to convince these

contacts. This kind of “coasting” occurs because the entrepreneur and his/her contacts are likely to share the same norms, expectations or background knowledge, which helps speed appraisal and mitigate possible doubts (Zott & Huy, 2007: 94-95). Coasting is also likely to happen because these contacts are easily and quickly persuaded because of their strong ties with the entrepreneur, lowering the overall pressure for effectance (Hite & Hesterley, 2001).

Proposition 6: Because of the low pressures for effectance during the entrepreneurial exploration stage, it is likely that entrepreneurs communicate in their speech basic scenes for a novel venture without much further elaboration.

Planning of the venture. Initial ideas may evolve into a more determinate commitment when entrepreneurs decide to start preparing for the launch of a venture. To do so, they need to acquire information, resources and business relations and will communicate with a larger set of people to procure the necessary resources and knowledge to set up a business. The set of people that they communicate with is likely to be a hybrid that includes individuals from the pre-existing social network of close contacts together with new individuals (e.g., potential employees) and organizations (e.g., banks) with direct business or capital links. The broader range and diversity of people that entrepreneurs speak to is associated with an increase in the pressures for effectance. As a result, entrepreneurs will be motivated to elaborate on the scene for the novel venture in an attempt to explain it to potential employees and business contacts. We term this process “thickening”, because it leads to an increasingly thicker description of the anticipated or imagined scenario for the venture. Thickening is thus a process at the level of a previously articulated basic scene. It occurs when prior, entrenched descriptions serve as an automatic base for the induction of a basic scene but are further extended and elaborated in response to a persistent need for

effectance and until uncertainty and legitimacy in the eyes of potential employees and business contacts are satisfied. For example, novice entrepreneurs are likely to metaphorically draw on argument constructions that highlight their own actions and encode a trajectory for their ventures. Based on perceived pressures for effectance, the construed basic scene of the venture may then be elaborated with further details on their own abilities, relevant others (e.g., employees) and further characteristics of the market (e.g., Lounsbury & Glynn, 2001; Martens et al., 2007). In other words, basic scenes may be thickened into narratives based on the persistence of the effectance motivation. This process of thickening accounts for how entrepreneurial narratives that are relayed to others are elaborations and extensions of basic, initial scenes (e.g., Goldberg, 1995; Robichaud et al., 2004). Baker et al. (2003) illustrate the process of “thickening” empirically in their observation that entrepreneurs elaborated narratives for their ventures as a way of attempting to recruit employees. In their study, they observed how entrepreneurs added novel analogies or metaphors (e.g., of the venture organization as a family) that they had “made up on the fly to make their fledgling firms seem comfortable and normal—that is, legitimate—to potential employees” and how, in turn, such social constructions “became part of employee expectations and the emerging culture of the organization after the people [had] joined the firm” (Baker et al., 2003: 263).

Proposition 7: Because of the high pressures for effectance in relation to potential employees and business contacts during the planning of the venture, it is likely that entrepreneurs elaborate or extend in their speech the previously articulated scene for the novel venture.

Launch of the venture. Once entrepreneurs have acquired initial support and capital they are able to launch the venture commercially in its industry. To ensure the venture’s

survival entrepreneurs are likely to concentrate their interactions at this stage on key resource providers for growing the venture such as prospective customers, venture capital firms and other investors (e.g., Hite & Hesterley, 2001). Issues of growth and profit making are salient which are likely to strengthen perceptions of uncertainty about the venture and concerns about its legitimacy. The motivation for effectance is heightened and in response entrepreneurs are likely to tune their communication to each of these resource providers. They are also likely to extend or elaborate the previously constructed scenes for the venture in such a way that their accounts make direct references to implications for growth (Baum & Locke, 2004; Baron & Markman, 2003; Chen et al., 2009). “Tuning” refers to the process of an entrepreneur adjusting, whilst speaking, an encoded scene and its associated elaborating elements towards a particular audience with these additional and “later verbal articulations [providing] a framework for developing shared understanding” with each of these constituencies (Hill & Levenhagen, 1995: 1071). The understanding of an encoded scene may vary between resource providers, and based on their familiarity with the scene, it may have to be embellished, extended or can even be coasted without much further effort. The mentioned example of the CareerBuilder website emerged from an analogical match between familiar retail distribution and unfamiliar distribution via the internet that led to an emergent scene of the company operating as an interactive, sophisticated internet job site. At the planning stage, employees had immediately understood the new encoded scenario for the venture. However, given the insecurity surrounding the commercial possibilities of the internet at the time (early 1990s) and the need for the novice entrepreneurs behind the company to demonstrate control, the encoded scene was thickened for investors with a further narrative that emphasized the commercial growth potential of the internet and the

venture's strategic position to move along with, and hence capitalize from, such growth. Similarly, the Global Reporting Initiative (GRI) was initially metaphorically envisioned as a vehicle for "positioning" businesses across the globe at the "heart" of the sustainability debate. When the GRI was re-launched globally, after a dismal start in the US, the entrepreneurs "tuned" their communication around a strong analogical link between environmental reporting and the taken-for-granted practice of financial reporting. As a result of this parallel and the familiarity with financial reporting, businesses came to accept the basic scenario of GRI becoming the international standard for environmental reporting. Hence, in both examples, the initial (analogically or metaphorically) constructed scene for a venture was elaborated and extended with further (metaphorical or analogical) elements as a result of speaking with others. These elaborated visions for these ventures also became, as a result of these interactions, "social constructs that guide[d] subsequent actions of these entrepreneurs and others associated with an industry or market – including customers and suppliers" (Alvarez & Barney, 2007: 15).

Proposition 8: Because of the high pressures for effectance in relation to customers and investors after the launch of a venture, it is likely that entrepreneurs elaborate or extend in their speech the previously articulated scene for the novel venture.

Achievement of early growth. The stage of early growth is the point at which novel ventures are able to deliver a turnover and early growth, as an indicator of their profit-making ability (Hite & Hesterley, 2001; Zimmerman & Zeitz, 2002). When ventures reach this stage, it is likely that the pressure for effectance diminishes as there will generally be less uncertainty about a venture's ability to grow and persist. Entrepreneurs will also become less reliant on inductive reasoning as more direct and performance-related experiences with a new

venture and its industry become available (Hill & Levenhagen, 1995). As mentioned earlier, this suggests that analogies and metaphors may initially serve as an automatic base for induction, and may be elaborated and extended as a result of the need for effectance, but may in time be overcome by deliberate reasoning or external information that becomes available about a venture and its industry (Aldrich & Fiol, 1994). The motivational process of effectance, thus, follows a temporal pattern whereby it is likely to increase in strength over time during the exploration, planning and launch stages of a novel venture and until the early growth stage when it is likely that uncertainty is satisfied and legitimacy for a venture attained, at which point the motivation diminishes. This also means that the vision or scene that has been iteratively and socially constructed during earlier stages may still feature in an entrepreneur's ongoing communication with constituencies, but is less likely to be significantly further elaborated or revisited as a basis for the venture (Alvarez & Barney, 2007).

Proposition 9: Once a venture demonstrates early signs of growth, it is likely that entrepreneurs rely increasingly less on inductive (analogical or metaphorical) reasoning in their speech and increasingly more on direct, literal references to market information or performance figures for the novel venture.

In summary, based on the activation and strength of two determinants (prior experience and effectance) during the early stages of venture creation we have described four processes; the (verbal) encoding of a scene for the venture, coasting, thickening and tuning, that together form a grammar (Pentland & Rueter, 1994) that can be used to provide consistent descriptions of the developmental paths of different entrepreneurs and their ventures (Alvarez & Barney, 2007). Specifically, we have hypothesized that depending on their prior experiences and the pressure to interact effectively with relevant others,

entrepreneurs will encode scenes for their ventures, in and through their language, and will elaborate, adjust and reinforce these scenes in their continued communication to others in order to decrease uncertainty and attain acceptance and legitimacy for their ventures. Thinking-for-speaking is central to this process because it creates, whilst speaking, the rationale for both the entrepreneur to develop and commercialize a venture as well as for key constituencies to invest in and support the venture, enabling it to survive and persist.

DISCUSSION

In this article, we have outlined a model of new venture creation that highlights the role of an entrepreneur's thinking whilst speaking about a new venture to others whose understanding and support is critical to a venture's success. We have argued that in the absence of a performance trajectory, entrepreneurs rely upon inductive (analogical or metaphorical) speech to create and justify a rationale for a novel venture that accounts for a venture's existence and garners the support from relevant constituencies and resource providers. We next discuss the implications of our model for theory and research on entrepreneurship and new venture creation.

Implications for the Study of Entrepreneurship and New Venture Creation

First, we believe this article illustrates the significant potential that exists for a focus on language - and an entrepreneur's speech in particular - to contribute to existing theories and concerns within entrepreneurship research. To date, research on entrepreneurial cognition and the institutionalization of novel ventures has tended to remain relatively self-referential (e.g., Alvarez & Barney, 2007) and with a significant gap between them as a result of the rather different scholarly traditions and methods associated with positivist psychology and

interpretive sociology (e.g., DiMaggio, 1997). While this may have been necessary for each of these research streams to develop a strong set of theoretical and methodological principles (e.g., Baron & Ward, 2004; Mitchell et al., 2002), we believe that it is time to integrate their insights into a more comprehensive and processual understanding of how entrepreneurs develop and explore ideas for a novel venture, plan and launch their ventures, and seek to acquire support and legitimacy to sustain and grow their ventures over time. The “thinking-for-speaking” approach that we have introduced and developed in this paper focuses on how entrepreneurs, whilst speaking, construct meaning about novel ventures for themselves and others at different stages of the venture creation process (i.e., the entrepreneurial exploration, planning and launch stages of a venture and the stage of (early) growth). This particular approach provides a fertile area for such integration, with its assumptions regarding the socially constructed nature of reality and its singular focus on the verbal speech acts through which entrepreneurs simultaneously envision and rationalize the potential for novel ventures and socially justify their ventures to relevant constituencies and resource providers. In developing our model, we have attempted to show not only the common threads that cut across the areas of entrepreneurial cognition and institutional theory but also how systematic, empirically useful theory can be derived from their integration. Specifically, we have combined determinants (prior experience and the effectance motivation) derived from cognitive and institutional theory and have specified how together they impact the entrepreneurial process by which new ventures are identified, developed and sustained over time. Thus, we believe our work highlights that the connection between cognitive and institutional theory in entrepreneurship has significant potential for both theory development and empirical research.

A second implication involves the specification of varieties of inductive analogical and metaphorical reasoning about novel ventures. Whilst induction is recognized as central not only to how entrepreneurs envision and identify novel opportunities (e.g., Baker & Nelson, 2005; Baron & Ward, 2004; Sarasvathy, 2001, 2004; Shackle, 1979; Sternberg, 2004) but also to how they legitimize those opportunities to others (e.g., Lounsbury & Glynn, 2001), very little of the existing research on entrepreneurship has provided a theoretical specification of when and how entrepreneurs use specific analogical or metaphorical comparisons as an inductive anchor to reason about a venture in a novel, unfamiliar industry. We address this shortcoming by defining the determinants and variety of analogical and metaphorical reasoning in venture creation processes and in doing so contribute directly to central questions about how opportunities for a novel venture are identified or created (e.g., Alvarez and Barney, 2007; Baron & Ward, 2004) and how the institutionalization of a novel venture occurs over time (e.g., Lounsbury & Glynn, 2001; Phillips et al., 2004). Our model extends the cognitive tradition by specifying processes and conditions of inductive reasoning by which entrepreneurs envision and identify opportunities for novel ventures. Within this tradition, these processes have often been implied as invariant and automatic psychological processes (e.g., Baron & Ensley, 2006) rather than directly theorized (Baron & Ward, 2004; Ward, 2004). Our model also extends institutional research on entrepreneurship and begins to explain how and why through inductive reasoning institutionalization of a venture may occur (e.g., Lounsbury & Glynn, 2001; Phillips et al., 2004). Institutional research has been largely silent on how the content or structure of speech reflects and shapes the institutionalization process and how entrepreneurs, through inductively generated associations and arguments,

claim and establish shared understanding, support and legitimacy for their ventures (e.g., Douglas, 1986; Weber & Glynn, 2006; Zott & Huy, 2007). Such associations and arguments may be connected to already institutionalized commitments and conventions in any given industry but may also be creative comparisons or blends that are the very basis for institutionalization (Weber, 2005; Weber & Glynn, 2006). GRI's drawn analogy between environmental and financial reporting is a good example of how an original analogy became a standard expectation about environmental reporting. Hence, by identifying these varieties of inductive reasoning, we point to a number of integrated predictions and explanations as a means to begin studying processes of induction in the creation and institutionalization of new ventures.

A third implication concerns the empirical examination of speech and communication in entrepreneurship research. The constructs and propositions in our model can be readily connected to techniques for the identification and analysis of analogies and metaphors (e.g., Putnam & Fairhurst, 2001) and their use in the context of entrepreneurial accounts and narratives (e.g., Lounsbury & Glynn, 2001). We therefore believe that a key strength of our model is that it provides a potential foundation for empirical studies of the proposed links among an entrepreneur's prior experience and speech, social contexts of speaking, and institutionalized discourses and conventions in an industry, using either a qualitative or quantitative research design. For example, each of the proposed links we have elaborated and formalized in our propositions could provide the focus for intensive qualitative investigations that might serve to confirm or refute our arguments, as well as flesh out the details of these complex relationships. Such a qualitative approach might, for instance, examine the link

between prior experience and previous commitments by an entrepreneur or others in an industry and an entrepreneur's (analogical) framing of a novel venture, as well as situations where entrepreneurs are unconstrained by past commitments and are primed to construct metaphorical narratives with suggested courses of action and outcomes laid out over time. The model could also inform a quantitative examination of the dynamics of entrepreneurial speech and the institutionalization of ventures in an industry over time, with the propositions that we have developed forming the basis for a set of testable hypotheses. This would require the assembly of a large enough database of novel ventures in particular industries, speech acts of novice and experienced entrepreneurs, and the measurement of performance outcomes and the legitimacy of ventures over time to allow for systematic comparisons; such a study might easily be done in the form of a longitudinal study of novel ventures in a particular set of industries so that other factors might be at least partially controlled.

Conclusion

In this article, we have theorized how inductive reasoning through analogies or metaphors is not only central to how entrepreneurs envision and identify an opportunity for a novel venture but also to the way in which they communicate about that venture for it to be made understood, acceptable and legitimate in the eyes of key constituencies. Connecting strands of prior cognitive and institutional research, we demonstrate that varieties of inductive reasoning are guided and shaped by the prior experience of an entrepreneur and the need to demonstrate efficacy towards key constituencies when novel ventures are perceived as uncertain and as lacking legitimacy. Taken together, both determinants (prior experience and the effectance motivation) outline a process with dynamic contours that is consequential for

the entrepreneurial process by which new ventures are identified, developed and sustained over time. These contributions can be used to re-conceptualize and guide the study of how entrepreneurs envision and come to identify venture opportunities and of how they simultaneously develop and legitimize new ventures to exploit such opportunities.

Figure 1: The Interpenetration of Language and Thought in Thinking-for-Speaking

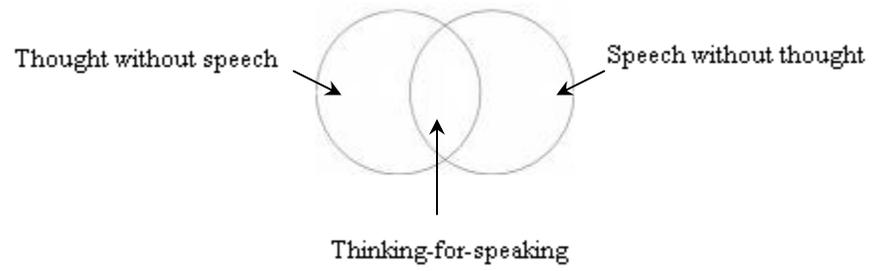
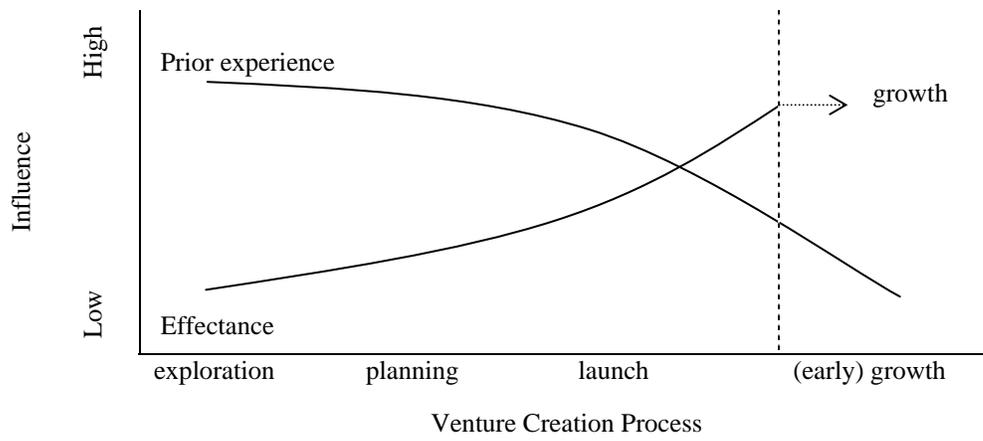


Figure 2: The Influence of Prior Experience and Effectance on an Entrepreneur's Thinking-for-Speaking at Different Stages of the Venture Creation Process



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