

AFTER THE VENTURE: THE REPRODUCTION AND DESTRUCTION OF ENTREPRENEURIAL OPPORTUNITY

MATTHEW S. WOOD^{1*} and WILLIAM MCKINLEY²

¹Department of Entrepreneurship, Hankamer School of Business, Baylor University, Waco, Texas, U.S.A.

²Department of Business Administration, University of Zurich, Zurich, Switzerland

Research summary: *The endogenous formation of entrepreneurial opportunity has become an important theoretical perspective. Research to date focuses on initial opportunity creation dynamics leading to venture formation. This excludes the ongoing enactment of opportunity that takes place after venture founding. We focus on this phenomenon, arguing that opportunities must be continually reproduced through maintenance of consensus among stakeholders about their viability. If consensus fails, the objectivity of the opportunity is ‘destroyed’ in a process we label ‘opportunity de-objectification.’ We identify predictors of opportunity de-objectification and summarize their effects in propositions suitable for future empirical testing. Implications for future theory and research are also discussed.*

Managerial summary: *Previous entrepreneurship research has focused attention on the process through which opportunity ideas become objectified and perceived as external facts by entrepreneurs and their stakeholders during venture formation. While such attention is critical, we argue that venture founding marks the beginning, rather than the end, of a dynamic process in which the fact-like status of opportunities is maintained. If stakeholder consensus about opportunity viability is disrupted, it raises questions about this factual status and opens up the possibility that the opportunity is a subjective cognition of the entrepreneur rather than an objective reality. We call this phenomenon ‘opportunity de-objectification,’ and we identify a number of factors that precipitate it. We also suggest that entrepreneurs may reduce the likelihood of this phenomenon by managing some of the factors that induce it. Copyright © 2016 Strategic Management Society.*

INTRODUCTION

Researchers have devoted considerable scholarly attention to understanding the origins of entrepreneurial opportunities. Early investigations

conceptualized opportunities as exogenous phenomena available for ‘discovery’ by enterprising individuals (Gaglio and Katz, 2001; Kirzner, 1979; Shane, 2003). However, a number of recent formulations, collectively labeled ‘creation theory’ (Alvarez and Barney, 2007), have distanced themselves from the discovery approach by advancing that opportunities emerge endogenously from the interplay between entrepreneurs and their environments (Alvarez and Barney, 2010; Felin and Zenger, 2009; Foss *et al.*, 2008; Klein, 2008).¹ This conceptualization represents an

Keywords: entrepreneurial opportunity; social constructivist; enactment; destruction; venture

*Correspondence to: Matthew S. Wood, Department of Entrepreneurship, Hankamer School of Business, Baylor University, One Bear Place, Waco, TX 76798, U.S.A.
E-mail: ms_wood@baylor.edu

important shift, because instead of viewing opportunity as an *ex ante* outcropping of economic discontinuity, creation theory involves the notion that opportunities ‘are enacted in an iterative process of action and reaction’ (Alvarez and Barney, 2007: 15). In that way, opportunities are the product of a construction process that involves stakeholders, whose collective action builds markets (Alvarez, Barney, and Anderson, 2013; Mitchell *et al.*, 2012) and market niches (Luksha, 2008).

While the creation approach to entrepreneurial opportunities has evolved considerably, many aspects remain undeveloped. Indeed, recent literature has drawn attention to conceptual weaknesses of theories using opportunity enactment as a core construct (cf. Welter, Mauer, and Wuebker, 2016; Arend, Sarooghi, and Burkemper, 2015; Ramoglou and Tsang, 2016). This article responds to these discussions and strengthens the foundations of the constructivist perspective on the nature of opportunity by focusing on the period after initial opportunity enactment. In this period, entrepreneurs’ actions not only bring opportunities into existence and set them in motion, but subsequently maintain the credibility of opportunities among diverse sets of stakeholders. This is important because one crucial overlooked aspect of the creation approach concerns the fact that the construction of opportunity is an ongoing endeavor even after a venture has been formed and an economic exchange initiated. In other words, initial opportunity enactment has traditionally been the focus of opportunity creation research; but the ongoing, iterative, and dynamic processes that sustain enacted opportunities after venture establishment have been neglected.

Accordingly, we seek to understand more completely the maintenance of constructed entrepreneurial opportunities, and we are principally concerned with the circumstances under which such opportunities may cease to exist as sensed realities for the entrepreneur. In this investigation, we draw on the logic in social constructionism (Gergen, 1985; 1994) and the social construction of reality (e.g., Berger and Luckmann, 1966; Raskin, 2002) to build on Alvarez and Barney’s

(2007) notion that opportunities are socially constructed enactments. From this base, we then draw on Wood and McKinley’s (2010) assertion that opportunity enactments are the product of ‘objectification’ in which opportunity ideas are externalized by the entrepreneur and sensed as objective realities. However, we uniquely emphasize that after a venture is established, objectification must be maintained in the face of feedback from the venture’s stakeholders. If stakeholder consensus about opportunity viability is disrupted, it begins to ‘destroy’ the objectivity of the opportunity, as the entrepreneur starts to attribute the opportunity to his/her internal psychological states rather than an objective phenomenon. In other words, eroding consensus raises questions about the existence of an external reality that transcends the subjectivity of the entrepreneur.

This is a process we label ‘opportunity de-objectification,’ and we posit that factors that produce dissensus about opportunity viability can initiate opportunity de-objectification. Such factors include the decline of a venture (Whetten, 1987), a rise in the death rates of similar ventures, or a decline in the birth rates of similar ventures. We develop propositions about the effects of these factors on opportunity de-objectification, as mediated by erosion of consensus about opportunity viability. We also discuss methods by which these propositions could be tested, in order to stimulate future empirical research based on our theory.

It should be noted that opportunity de-objectification is not experienced by the entrepreneur as a mistake in detection. Rather, opportunity de-objectification is a growing awareness of the subjectivity of sense data about the opportunity. This can be disconcerting for the entrepreneur, because the target the entrepreneur has been striving for is no longer perceived as existing outside the entrepreneur’s mind. This, in turn, raises questions about the mission of the venture. In extreme cases, the outcome of opportunity de-objectification may be ‘cosmology episodes’ similar to those discussed by Weick (1993) in his paper about smoke-jumpers. Because of the disruptive cognitive effects of opportunity de-objectification, we feel it is an interesting focus for study.

The major contributions of this article are, therefore, the introduction and clarification of the concepts of opportunity propagation and opportunity de-objectification, with a central focus

¹For a thorough discussion of the ontological and epistemological differences between the creation and discovery perspectives, see the debate in the January 2013 issue of *Academy of Management Review*.

on developing a conceptual model of opportunity de-objectification. The introduction of these concepts has broad implications for conversations about the endogenous formation of opportunity because they emphasize the dynamism of opportunities after the enactment stage. The various enactment perspectives such as creation (Alvarez and Barney, 2007) and effectuation (Sarasvathy, 2001) share assumptions of dynamic and iterative opportunities, but do not explore how these assumptions play out in the period following initial opportunity enactment and venture formation. This is an important gap because it ignores the principle that the social construction of reality (e.g., opportunities) is a continuous, never-ending process (Berger and Luckmann, 1966). Our model begins to fill this gap by extending constructivist logic in entrepreneurship theory into the post-venture enactment stage. This extension has the potential to energize theoretical and empirical research that will clarify how opportunities are propagated, and sometimes become de-objectified, well after venture establishment.

THE SOCIAL CONSTRUCTIVIST PERSPECTIVE

Social science research makes assumptions about the nature of the social world (Hudson and Ozanne, 1988). These assumptions reflect the scholar's ontological position and, in the range of positions, constructivism has become an important perspective explaining the emergence of entrepreneurial opportunity. There are several variants of constructivist ontology. At one end of the spectrum, scholars advance a view that suppresses notions of reality and objectivity (Bhaskar, 1978), while at the other end, theorists argue that humans do indeed experience a reality that is largely a product of collective agreement (Searle, 1995). We are inspired by the interpretive approach that falls in between these perspectives but resonates most closely with the latter. Specifically, we adopt the logic embedded in the social construction of reality paradigm (e.g., Berger and Luckmann, 1966; Shotter, 1993, 2005; Weick, 1985, 1995) that acknowledges objectively real physical objects, but argues that those objects take on meaning only in relation to the constructs imposed on them. A tire iron is a tool when it is conceptualized as a means to fix a

flat tire, but it can also be a deadly weapon when conceptualized as such. The mass of rock composing a mountain is only a 'mountain' when conceptualized in terms of that construct. Hence, from a constructivist perspective, individuals do not discover the inevitability of an objective reality (Weick, 1985), but instead experience a social universe that is a product of reifications and typifications of objects and actions into social facts (Berger and Luckmann, 1966; Shotter, 2005). These social facts have no material status apart from the individuals and structured behavior patterns that sustain them (Von Glasersfeld, 1995).

Utilizing this approach, it is helpful to consider two concepts developed by constructivist scholars: objectification and enactment. *Objectification* is defined as 'social phenomena attaining, over time, the status of things' (McKinley, 2011: 809). Thus, objectification parallels the concept of 'reification' (Berger and Luckmann, 1966) mentioned earlier. Objectification is also similar to Weick's (1979) concept of 'effluent sensemaking'—sensemaking that is conducted internally, but projected into the world. The essence of objectification is that it is a modality of consciousness where products of human activity are apprehended as if they were something other than human, 'such as facts of nature' (Berger and Luckmann, 1966: 89). Thus, objectification is realized when a perceiver loses awareness that a socially constructed entity is human authored, instead viewing it as detached from human origins.

Closely related to objectification is the constructivist concept of *enactment*, defined by Weick (1979) as the process by which individuals act and, in doing so, create the conditions that become the constraints and opportunities they face. In other words, enactment describes situations where people bring events and structures into existence and set them in motion. It has been well documented that human actions produce structures, constraints, and opportunities that did not exist before the actions occurred (cf. Shrivastava, 1987). In that way, 'people produce part of the environment they face' (Weick, 1995: 30). An example of an enacted environment would be the infrastructure of video stores built by Blockbuster, which eventually constrained their strategy in competition with Netflix and other video-streaming services.

The concepts of objectification and enactment have been used widely to explain the actions of

corporate managers as they construct environmental states and then react to them (cf. Barley and Tolbert, 1997; McKinley, 2011). In entrepreneurship, the concepts have received less attention, but as far back as Shaver and Scott (1991), scholars have acknowledged the enacted aspects of entrepreneurship. More recently, Wood and McKinley (2010) advanced a model in which individuals produce opportunities when ideas become objectified and emerge into the center of attention for entrepreneurs, thereby attracting resources to organize business ventures to pursue these enacted opportunities. Likewise, Alvarez *et al.* (2013) and Mitchell *et al.* (2012) see opportunities as enactments. Alvarez *et al.* (2013) conceptualize entrepreneurial action as a source of competitive market imperfections, while Mitchell *et al.* (2012) view initiation of economic exchange as the origin of opportunity. The net effect is a growing scholarly awareness that entrepreneurial opportunities can be understood as products of the objectification and enactment processes that are central to constructivist theory. For reference, we provide definitions of opportunity objectification and enactment, along with other constructs central to the theory developed in this article, in Table 1.

OPPORTUNITY AS ENACTMENT

As one begins to consider the idea that opportunities are created via entrepreneurs' and stakeholders' actions, the notion that entrepreneurs must be detectors of economic discontinuities gives way to the assertion that they instead must be meaning makers and consensus builders (Burns *et al.*, 2016; Sarasvathy, 2004; Wood *et al.*, 2014b). The important shift here is a greater focus on the social realm and how people participate in, interpret, and react to social discourse. Wood and McKinley (2010) built on this logic to argue that opportunities begin with ideas that develop in the minds of entrepreneurs through exposure to information about the environment. Entrepreneurs who experience such cognitions seek input from knowledgeable peers about the viability of the opportunity idea. If the entrepreneur sees other people converging around the opinion that the idea is viable, the possibility that the idea reflects his/her own idiosyncratic psychological state becomes less feasible. In other words, a consensus on positive viability judgments

serves as a target for stakeholder bonds (Burns *et al.*, 2016), and makes it harder to attribute the idea to subjective internal psychology on the part of the entrepreneur. In this way, the opportunity becomes objectified for the entrepreneur.

Given consensus, it is also harder for any external observer to question the emerging reality of the opportunity, because the deviant observer faces potential disapproval or even ostracism from colleagues if he/she exhibits such behavior. In these ways, a consensus on viability objectifies an opportunity for the entrepreneur, separating it from his/her mind and externalizing it as a seemingly objective phenomenon. Practically speaking, opportunity objectification is evidenced, for instance, by the language entrepreneurs use when talking with others as they switch from using the phrase 'this is my idea for a potential business' (i.e., internal attribution) to the phrase 'this is the business opportunity I am pursuing' (i.e., external attribution).

According to Wood and McKinley (2010), objectified opportunities become the focus of intense attention by entrepreneurs and serve as an impetus for action—forming a venture through which the opportunity can be exploited. The venture, if successfully formed, serves as the visible carrier of the objectified opportunity, the public forum by which others interact with it, and the vehicle for organizing physical objects (e.g., plant, equipment, computers, and so on) needed to facilitate social and economic exchanges. In that way, establishment of the venture serves as a marker of objectified opportunity, but it does not mean the end of enactment, as some models have implied (e.g., the creation process unfolds until it reaches the 'end' (Alvarez *et al.*, 2013: 308). Rather, the venture serves as an indicator that an *ongoing* enactment process is underway. Thus, the specification of first sale or venture formation as end points of enactment in prior research is conceptually problematic.

Ongoing enactment rests critically on entrainment, defined as the synchronic adjustment of an individual's beliefs and behaviors in rhythm with the beliefs and behaviors of others (Ancona and Chong, 1996; Standifer and Bluedorn, 2006; see Table 1). According to Wood and McKinley (2010), entrainment activities occur prior to venture launch via interactions between the entrepreneur and his/her peers and also between the entrepreneur and initial resource providers. However, once the venture is established, we assert that entrainment efforts

Table 1. Definitional summary of key constructs and processes

Construct	Definition	Conceptual base
Opportunity objectification	<ul style="list-style-type: none"> A modality of consciousness where one loses awareness of the human-authored nature of opportunity and, thus, imparts external status to an opportunity idea so that the idea is seen as an entity outside the entrepreneur's mind. 	McKinley (2011) Wood and McKinley (2010)
Entrainment	<ul style="list-style-type: none"> Entrepreneurs' efforts toward synchronic adjustment of stakeholders' beliefs and behaviors in rhythm with the beliefs and behaviors of the entrepreneur, thereby producing support for the venture. 	Ancona and Chong (1996) Burns <i>et al.</i> (2016) Standifer and Bluedorn (2006)
Opportunity enactment	<ul style="list-style-type: none"> Situations where entrepreneurs produce part of the environment by acting to bring opportunities into existence and set them in motion; manifest as market imperfections resulting in economic exchanges. 	Alvarez and Barney (2010) Alvarez <i>et al.</i> (2013) Mitchell <i>et al.</i> (2012)
Opportunity propagation	<ul style="list-style-type: none"> Continuous, routine entrainment of stakeholders such that a positive consensus around the target of the venture's value proposition is maintained or bolstered, fostering an expectation of future economic exchanges. 	Berger and Luckmann (1966) Weick (1979)
Opportunity de-objectification	<ul style="list-style-type: none"> A shift in the entrepreneur's modality of consciousness such that he/she begins to attribute sense data about the opportunity to internal psychological states rather than to an external phenomenon. The opportunity previously externalized as reality becomes increasingly subjective. 	Berger and Luckmann (1966)

continue and incorporate a much larger set of stakeholders (e.g., investors, customers, and employees) in hopes that mutually beneficial linkages will be maintained between 'persons, organizations and things' (Letiche and Hagemeijer, 2004: 368). The entrepreneur engages important others in his/her venture to generate 'a consensually constructed coordinated system of action' (Taylor and Van Every, 2000: 275). This parallels Burns *et al.*'s (2016) notion of 'stakeholder enrollment' and highlights entrainment as a critical stage in the process. If investors are not entrained to provide capital or customers are not entrained to buy the product or

service, then economic exchanges do not materialize and opportunity enactment cannot continue.

Social constructionists such as Berger and Luckmann (1966) and Shotter (1993) draw our attention to the fact that enacted subuniverses must be 'carried' by the collective through continuous production of the meanings that underpin enactment. This suggests that the enactment of opportunity must be sustained through ongoing social processes, such as persuasion, consensus, and the like. In other words, enacted opportunities must be actively and continually reproduced (Weick, 1995) by entrepreneurs such that opportunity objectification and

stakeholder entrainment is at a minimum preserved, or more optimistically strengthened, as the venture ages. This is a phenomenon we call *opportunity propagation* (see Figure 1).

It is important to note that we conceptualize opportunity propagation as an extension of the enactment process articulated by Wood and McKinley (2010), with propagation involving the cognitions and behaviors of a wide range of participants. A key distinction between opportunity enactment and opportunity propagation is that propagation narrows the entrepreneur’s field of vision to the routines that emerge in support of the continuous entrainment of stakeholders. Routines such as product promotion, customer ordering processes, and the like become a daily set of constraints that keep the entrepreneur and stakeholders focused on the objectified opportunity. Alvarez, Young, and Woolley’s (2015) story of king crab entrepreneur Lowell Wakefield illustrates this, as Wakefield initiated routines around innovative crab processing and quality control that facilitated stakeholder entrainment during the co-creation of the king crab industry. Essentially, habitualized entrainment activities become what Berger and Luckmann (1966) called the ‘self-evident routines of everyday life’ that transform opportunity enactment into a long-term maintenance process that supports the venture and its opportunity.

Routines, however, are collective phenomena that involve interactions between multiple actors (Becker, 2004) and are subject to potential disruption when some participants begin to act in a divergent manner (Weick, 1993). Routines that propagate the opportunity are embedded in collective understanding and, as the number of dissenters grows, a threat to the taken-for-granted nature of the opportunity may begin to crystallize. Returning to the king crab example (Alvarez *et al.*, 2015), Wakefield experienced this dynamic when public objections surfaced over the utilization of trawling methods and the extensive use of crab pots, resulting in a temporary ban on trawling and limits on the number of crab pots per boat. These disruptions in crab harvesting routines created an environment conducive to the de-objectification of the market opportunity for king crab. Building on this example, we now present a formal theory of opportunity de-objectification and the factors that precipitate it.

OPPORTUNITY DE-OBJECTIFICATION

We have just argued that the propagation of opportunity rests on continual objectification and entrainment of stakeholders; however, sometimes this propagation is threatened by the de-objectification of a previously objectified opportunity. Opportunity

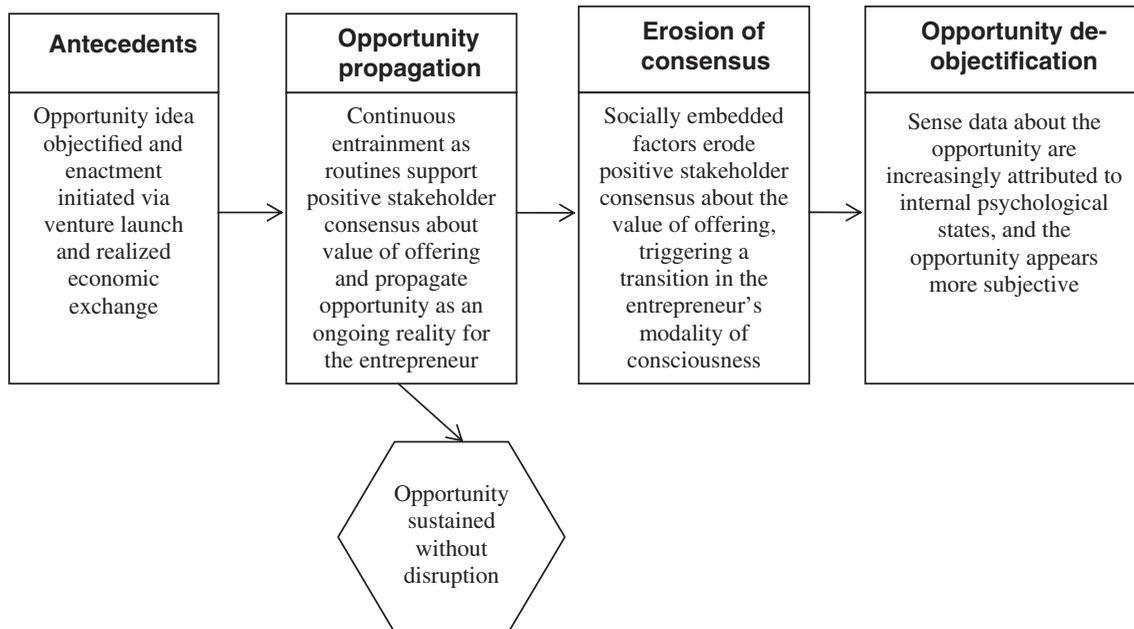


Figure 1. Opportunity propagation and de-objectification processes

de-objectification is a shift in the entrepreneur's modality of consciousness such that he/she begins to attribute sense data about the opportunity to his/her internal psychological states rather than to an external phenomenon. In this way, the opportunity he/she has been pursuing becomes increasingly subjective, and the entrepreneur becomes doubtful that the opportunity exists as an external reality outside his/her mind. We emphasize that opportunity de-objectification is not the same thing as acknowledging a mistake in detection, a cognition that is consistent with the discovery perspective (Shane and Venkataraman, 2000). If an entrepreneur realizes that he/she has made a mistake in detection, his/her uncertainty decreases; while opportunity de-objectification increases uncertainty because it changes the locus of attribution to idiosyncratic internal psychology, rather than an external reality. In opportunity de-objectification, the opportunity is experienced as 'imaginary combinations' (Davidsson, 2015: 675) that occur in the mind.

We also stress that opportunity de-objectification is not just a reversal of opportunity propagation. Instead, it is a much more restricted phenomenon, since propagation involves the coordinated behavior of many actors, as well as the promulgation of routines that underpin extended enactments; while de-objectification includes only the cognitions of the entrepreneur. Opportunity de-objectification might eventually cause an interruption or reversal of propagation, but it is also possible that de-objectification occurs but propagation routines continue because of the entrepreneur's unwillingness to respond to de-objectification. Opportunity de-objectification is more akin to a failure of sense-making (Weick, 1995) than to an admission of inadequacy in venture management or the acknowledgement that an existing opportunity is not an opportunity 'for me' (McMullen and Shepherd, 2006). Opportunity de-objectification entails a sense of ontological collapse that is not present in admission of failure to adequately exploit an exogenous opportunity. Thus, opportunity de-objectification is expected to be emotionally traumatic for the entrepreneurs who experience it.

Dissensus as the trigger

We argue that opportunity de-objectification is triggered by erosion of consensus among a venture's stakeholders about the viability of the opportunity. If stakeholders begin to disagree about the viability

of an opportunity after initial objectification and venture formation, it becomes easier for the entrepreneur to attribute sense data about the opportunity to his/her internal psychological states rather than to an objective opportunity. In other words, cognitions that were previously externalized now begin to appear more subjective. As dissensus spreads and those who believe in the viability of the opportunity become more isolated, it becomes more and more credible that their belief is impelled by idiosyncratic internal psychology rather than an objective opportunity. This process de-objectifies the opportunity for the entrepreneur, leading to uncertainty on his/her part about the external status of the opportunity.

An important aspect of this process is that dissensus can be self-reinforcing. As dissensus develops, it becomes easier for individual stakeholders to question the viability of the opportunity, and dissensus is likely to spread even more widely. The fear of ostracism and critique directed at any stakeholder questioning the viability of the opportunity lessens as dissensus expands and there are more like-minded stakeholders with whom a critical evaluator can align. This self-reinforcing dynamic accelerates opportunity de-objectification and can precipitate an ontological collapse through a transition in the entrepreneur's modality of consciousness from experiencing the opportunity as an objective reality to experiencing it as a subjective cognition.

Based on this reasoning, we can state the following proposition that marks the first step in our development of a theory of the determinants of opportunity de-objectification:

Proposition 1: Erosion of stakeholder consensus about the viability of a previously objectified opportunity precipitates opportunity de-objectification.

The social context of opportunity de-objectification

The implication of our first proposition is that maintenance of stakeholder consensus about the viability of an opportunity is critical for preserving opportunity objectification. However, the degree of consensus experienced by stakeholders is a function of the social context in which they find themselves. By 'social

context,' we mean the venture itself and the competing organizations operating in the same market niche, as well as the general market environment. Aspects of this social context, such as growth in venture revenues or an increase in the birth rate of competitors seeking to tap the same market, can solidify consensus about opportunity viability. On the other hand, decline in venture revenues, a decrease in the birth rate of similar ventures, or unfavorable developments in the general economic environment can erode consensus about opportunity viability. The degree of collective agreement is exogenous to the entrepreneur, yet if it dissipates, it can become the impetus for an endogenous shift in the entrepreneur's conceptualization of opportunity. This is consistent with a long line of research that links exogenous data (in this case, about the level of consensus) with changes in cognitions, where mental constructions are molded by sensemaking processes (Kosslyn, Thompson, and Ganis, 2006; Weick, 1995).

In discussing the social context of opportunity de-objectification, it is important to maintain a sharp distinction between ventures and stakeholders. Ventures are the organizations formed by entrepreneurs to initiate and continuously reproduce the enacted opportunity (cf. Alvarez *et al.*, 2015). Specifically, ventures are what constructivists consider a 'way station on the road to a consensually constructed coordinated system of action' (Taylor and Van Every, 2000: 275). Because enactments rest on social processes such as rhetoric, negotiation, and complicit cooperation (Pearce and Cronen, 1980), ventures are the mechanisms by which entrepreneurs and stakeholders interact to those ends. Stakeholders, though, are individuals such as investors and customers who interact through the medium of the venture but remain separate from it. It is their behavior and their expressed consensus/dissensus manifest in the interactions and communications that occur through the venture that are critical for the entrepreneur's experience of the opportunity as objective or subjective.

Individual predictors of opportunity de-objectification

Having established a general conceptual foundation for our theory of opportunity de-objectification, we now move forward to consider individual predictors of this phenomenon. These are the attributes of the social context we have just described, and they

operate through the changes in stakeholder consensus that they generate. One such factor is a prolonged period of decline in the sales of the venture organized to pursue an objectified opportunity. There has been extensive research on the phenomenon of organizational decline (e.g., Mone, McKinley, and Barker, 1998; McKinley, Latham, and Braun, 2014; Zammuto and Cameron, 1985), but no one, to our knowledge, has discussed the effect of venture decline on entrepreneurs' modalities of consciousness about opportunities. We maintain here that if a venture formed to pursue an objectified opportunity experiences a long period of decline in sales, the consensus among stakeholders about the viability of the opportunity will begin to erode. Brief episodes of decline can be explained away by temporary mismanagement or transitory environmental shifts, but as an episode of decline becomes prolonged, venture managers, investors, and other stakeholders will begin to question the viability of the opportunity itself.

If decline continues and this erosion of consensus increases, it becomes easier to attribute sense data about the opportunity to the idiosyncratic traits of the remaining believers, rather than an objective reality. This de-objectifies the opportunity for the entrepreneur, leading to a change in his/her modality of consciousness about the opportunity. The opportunity now appears more subjective, and the entrepreneur is no longer certain that it constitutes an entity external to his/her own mind. Further prolongation of organizational decline and further erosion of consensus about viability may eventually cause the founding entrepreneur to attribute his/her sense data about the opportunity to his/her own subjectivity, and the ontological status of the opportunity will be transformed. Based on this logic, we specify a proposition about the effect of prolonged organizational decline on opportunity de-objectification:

Proposition 2: The longer the period of decline experienced by a venture formed to pursue an objectified opportunity, the more likely the de-objectification of that opportunity.

The ontological collapse that we argue entrepreneurs experience as a result of long periods of venture decline is likely to be personally threatening to the entrepreneur, and he/she is likely to centralize

control of the venture in an effort to deal with this threat. This is consistent with Staw, Sandelands, and Dutton's (1981) argument that organizational decline leads to a threat-rigidity response in which managers centralize decision making and increase formalization. To the extent that this reaction feeds back to promote further decline (McKinley, *et al.*, 2014), organizational decline, opportunity de-objectification, and the threat it produces will evolve in a series of self-reinforcing loops. The result will be a cascade of negative affect for an entrepreneur caught in an extensive period of decline.

Figure 2 shows the effect of prolonged venture decline on opportunity de-objectification, as mediated by increasing stakeholder dissensus.

As suggested earlier, stakeholders may take cues about the viability of a previously objectified opportunity not only from the decline of the venture formed to exploit it, but also from the rate of formation (birth) of similar ventures. Population ecologists (e.g., Hannan and Freeman, 1984; Hannan and Carroll, 1992) have conducted extensive research on organizational birth rates and have studied how those rates vary over time with conditions of the organizational population or the environment. The effect of birth rates on the cognitions

of entrepreneurs or venture stakeholders has received very little attention; but, Wood, McKelvie, and Haynie (2014) recently reported a positive relationship between industry founding rate and entrepreneurs' impressions of opportunities within the industry. Hence, we argue that if the birth rate of ventures in a focal venture's market niche begins to decline, stakeholders of the focal organization will begin to infer that the window of opportunity that once existed for such ventures is closing. This will foster dissensus among the stakeholders about the viability of the focal venture's opportunity and this will, in turn, facilitate attribution of sense data about the opportunity to subjective psychological states. The consensus that sustains the objectified opportunity will be disrupted, and the opportunity will become de-objectified.

For example, if stakeholders of a marijuana retail outlet in a Colorado city notice a declining birth rate of similar stores, they may begin to discuss the meaning of this decline. If some stakeholders attribute it to a shrinking opportunity and begin to argue about it, that very disagreement undercuts the entrepreneur's sense of the opportunity as an external reality that exists beyond individual subjectivity. As stakeholder dissensus emerges and the entrepreneur begins to question the existence of an opportunity that he/she once

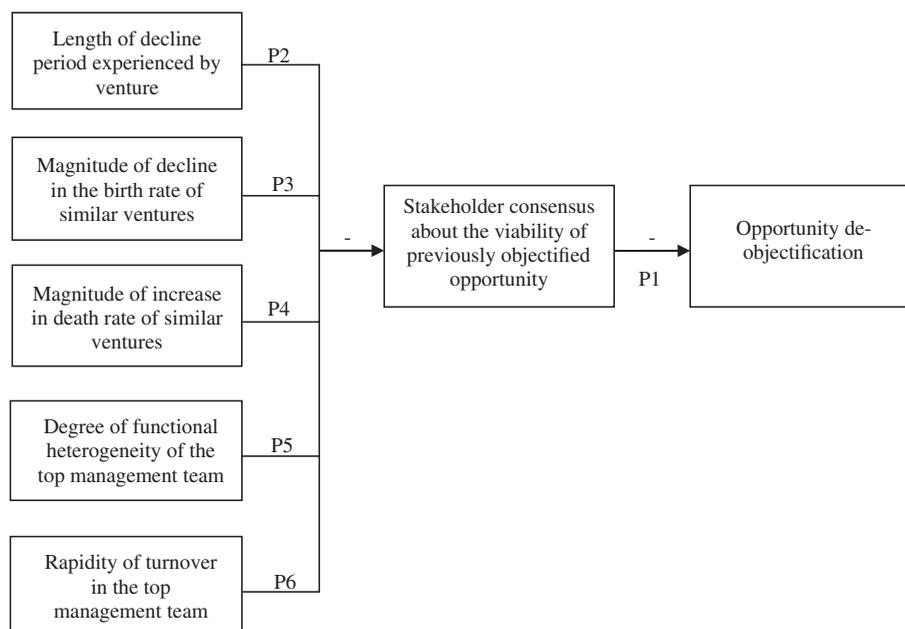


Figure 2. Individual predictors of opportunity de-objectification

thought was solidly real, he/she will pay increased attention to the declining birth rates and the dissensus they are causing. If declining birth rates continue and dissensus among stakeholders expands, the entrepreneur's modality of consciousness will be transformed and opportunity de-objectification will occur. This suggests a third proposition:

Proposition 3: The greater the decline in the birth rate of ventures similar to a focal venture, the more likely the de-objectification of a previously objectified opportunity.

We think that rising death rates of similar ventures will also carry meaning for a focal venture's stakeholders and will trigger dissensus about viability that can lead to opportunity de-objectification. Like birth rates, organizational death rates have been of great interest to population ecology researchers, and many studies have been devoted to identifying the predictors of death rates (see, for example, Bruderl and Schussler, 1990; Hannan and Carroll, 1992; Singh, Tucker, and House, 1986). Here we are concerned with the inferences that stakeholders of a focal venture will make if they observe rising organizational death rates in the venture's market niche. We think that such increases will lead to a belief by some stakeholders that the opportunity the venture was formed to pursue is disappearing. This will trigger discussion and disagreement among stakeholders, as some claim that the opportunity is eroding and some defend its continued existence. This dissensus will, in turn, raise the possibility that remaining believers are being influenced by subjective psychological states, initiating opportunity de-objectification and corresponding ontological inversion for the entrepreneur. This logic can be summarized in a fourth proposition:

Proposition 4: The greater the increase in the death rate of ventures similar to a focal venture, the more likely the de-objectification of a previously objectified opportunity.

In Propositions 2 to 4, we have concentrated on variables related to the entrepreneur's venture and market niche as exogenous factors that trigger stakeholder dissensus and then opportunity de-objectification. However, there are other potential determinants of opportunity de-objectification that

are part of the entrepreneur's social context but reside at the top management team level. One such factor, which can trigger opportunity de-objectification through the erosion of consensus, is increasing heterogeneity in the functional backgrounds of the venture's top management team. If an entrepreneur successfully presides over objectification of an opportunity and attracts enough resources to launch a venture to pursue it (Wood and McKinley, 2010), a top management team is typically formed to administer the venture. Much prior theory and research has been devoted to top management teams (e.g., Hambrick, Cho, and Chen, 1996; Hambrick and Mason, 1984; Simons, Pelled, and Smith, 1999), but most of it has focused on corporations, rather than entrepreneurial ventures. We argue here that as the functional heterogeneity of a venture's top management team increases, the number of different criteria used to evaluate the viability of the opportunity being pursued will also expand.

In other words, heterogeneity in the top management team introduces a diversity of interpretive frames (Barreto, 2012). For example, managers with accounting or operations backgrounds may assess an opportunity as viable only when the venture is profitable, while managers with marketing backgrounds may base their evaluations on market potential, as measured by focus groups or customer surveys. This suggests that in functionally diverse top management teams, interpretive frames are less likely to converge. When this occurs, there will be dissensus among top management team members about the viability of the opportunity, and this dissensus will initiate opportunity de-objectification. The consensus that transcends subjectivity will be disrupted, and the opportunity will become de-objectified for the entrepreneur. This is particularly likely if divergent viability criteria isolate the believers in the opportunity into a restricted group that is surrounded by nonbelievers. Based on this logic, we can articulate a fifth proposition:

Proposition 5: The greater the functional heterogeneity of the top management team of a venture formed to pursue an objectified opportunity, the more likely the de-objectification of that opportunity.

Yet another attribute of the top management team that may cause opportunity de-objectification

is rapid turnover. The topic of turnover has received considerable attention in organizational behavior research (e.g., Griffeth, Hom, and Gaertner, 2000; Huselid, 1995), but most of this work has focused on rank and file employees and has examined turnover as a dependent variable. Here we consider turnover as a predictor, and we argue that rapid turnover in a venture's top management team increases the chances that divergent opinions on opportunity viability will be incorporated into the team. Rapid turnover also means that many members of the top management team will not have been present at the founding of the venture, making it easier for them to dissent about opportunity viability. Therefore, rapid turnover, or 'churn,' is corrosive to consensus about opportunity viability, a consensus that is instrumental in maintaining the entrepreneur's sense of an objective opportunity. This logic suggests a sixth proposition:

Proposition 6: The more rapid the turnover in the top management team of a venture formed to pursue an objectified opportunity, the more likely the de-objectification of that opportunity.

In summary, we have argued that consensus about the viability of a previously objectified opportunity is necessary to maintain the objective status of the opportunity for the entrepreneur. The entrepreneur judges the existence of the opportunity not by seeing it in the same way he/she would see a stone or a tree, but by observing how much consensus peers and stakeholders have about its viability. The existence of consensus reinforces the sense of an external reality that transcends individual subjectivity, just as the existence of consensus about a scientific phenomenon (e.g., a quark) solidifies the reality of the phenomenon for a scientific observer. If consensus is disrupted, by whatever means, the sense of external reality begins to erode, and it is easier to question that reality. This is true for a previously objectified entrepreneurial opportunity as well as for quarks, so we argue that eroding consensus among venture stakeholders is the key precipitator of opportunity de-objectification. Also, we have identified several exogenous factors that can undercut such consensus and summarized their effects in a series of propositions emphasizing the ontological inversion associated with opportunity

de-objectification. These propositions will hopefully stimulate future empirical research, and to increase the likelihood of such research, we now consider methods for testing the propositions.

TESTING THE PROPOSITIONS

In order to test the propositions we have specified, one would first need to select a sample of new ventures that had been through the opportunity objectification and enactment processes described by Wood and McKinley (2010). In other words, these would be ventures in which the founding entrepreneur had started with an opportunity idea, the idea had become objectified through consensus of a peer group, and the objectified opportunity had become the focus of attention by the entrepreneur, who had assembled resources to pursue the opportunity. It would be easier to identify such a sample if one had detailed histories of a group of start-up companies, but that seems unlikely since entrepreneurs do not tend to write down what is happening as they form their ventures. However, one might be able to utilize web logs as a source of such histories (Autio, Dahlander, and Frederiksen, 2013). An alternative would be to select a sample of ventures working on innovative, cutting-edge projects that are likely to have originated with an opportunity idea, rather than an opportunity that preexisted the entrepreneur. Here we are thinking of ventures such as Airbnb or Youtube, which probably grew from entrepreneurial cognitions about what could be (Dimov, 2011), rather than opportunities that were present before the entrepreneur came on the scene. Of course, the ideas that these companies started with have now been objectified, so the companies appear to be responding to real market imperfections, but it is doubtful that these market gaps originated from exogenous sources that were there before the founders acted. Given selection of such a sample, which would have to range beyond the well-known names we listed (to avoid success bias), one could then proceed to measure the extent to which their objectified opportunities have become de-objectified and to what extent any de-objectification is attributable to the independent variables in our propositions.

The dependent variable, opportunity de-objectification, refers to a transition from sensed external reality to sensed subjectivity. This transition could

be assessed by surveying the founding entrepreneurs in the study sample and asking them to what extent the opportunity they are pursuing is an objective reality outside their minds. Such items as 'Please assess the extent to which the opportunity you are targeting is outside your mind and in the world' might serve to tap the dimension of opportunity de-objectification. One might also add items such as 'To what extent do you attribute the perception of opportunity to your internal psychology rather than an objective phenomenon?' This would measure the displacement of attribution for sense data about the opportunity toward subjective psychological states. An average of scores on items such as these could provide an aggregate index of the extent of opportunity de-objectification for each of the sampled founding entrepreneurs.

Given measures such as those described in the preceding paragraph, one could then set out to examine whether the independent variables in our propositions are associated with the degree of opportunity de-objectification experienced by each founding entrepreneur. In order to test Proposition 1, one could identify those ventures in the sample that are undergoing erosion in stakeholder consensus about the viability of the opportunity and see whether the degree of dissensus is associated with opportunity de-objectification for the entrepreneur. The answer is not obvious because some entrepreneurs who are confident in their ability to assess opportunities might ignore erosion of consensus about opportunity viability. However, if our reasoning is correct and most entrepreneurs do not, Proposition 1 would be supported.

In order to test Proposition 2, one could identify those ventures in the sample that have declining sales and see whether the duration of those declines is correlated with the degree of opportunity de-objectification experienced by the founding entrepreneur. If greater duration of decline is positively correlated with the extent of opportunity de-objectification, under controls for possible confounding variables, there would be support for Proposition 2.

Propositions 3 and 4 suggest that declining birth rates and rising death rates of similar ventures send a signal to stakeholders of a focal venture that opportunity may be fading, and this disrupts their consensus about opportunity viability. Disruption of this consensus in turn triggers opportunity de-objectification for the founding entrepreneur. Population ecologists (e.g., Hannan and Freeman, 1987)

have developed standard measures that can be used to assess organizational birth and death rates in populations, and these measures could be used to derive difference scores that capture the change in birth or death rates over a specified period of time. These difference scores could be calculated for the local market niche of each venture in the sample. If greater declines in birth rates and greater increases in death rates were positively associated with greater opportunity de-objectification, Propositions 3 and 4 would be confirmed.

Finally, Propositions 5 and 6 have independent predictors at the top management team level of analysis. Standard indices of heterogeneity (e.g., Hambrick *et al.*, 1996) could be used to measure the functional heterogeneity of each venture's top management team, and these heterogeneity indices could be related to the opportunity de-objectification measures described earlier. If, under appropriate controls, more functionally heterogeneous top management teams were associated with greater opportunity de-objectification for the founding entrepreneur, Proposition 5 would be supported. The rapidity of executive turnover in top management teams could also be measured, and if ventures with more rapid turnover exhibited higher opportunity de-objectification scores for the founding entrepreneur, Proposition 6 would also be supported.

DISCUSSION

This article has contributed to the current discussion of the ontological status of entrepreneurial opportunities (e.g., Alvarez and Barney, 2007, 2010) by emphasizing the fluid nature of constructed opportunities in the post-venture establishment era. The opportunity objectification described by Wood and McKinley (2010) is not necessarily permanent, and a number of factors can intervene to disrupt the stakeholder consensus that maintains this objectification. If these factors undercut consensus deeply enough, the founding entrepreneur becomes increasingly aware of the possibility that the perceived opportunity may be subjective. This can be thought of as inversion of the 'efferent' process (Weick, 1995) that originally pushed the entrepreneur's opportunity idea out into the world (Wood and McKinley, 2010). In the same way that individuals sometimes come to realize that

institutions are human made (Munir, 2005) or that management action portrayed as inevitable (McKinley, Zhao, and Rust, 2000) is actually under management control, the veil is ripped away from objectified opportunities, and their subjectivity becomes manifest.

Implications for entrepreneurship theory

Our framework has a number of important implications for entrepreneurship theory. First, our approach opens the black box of dynamic processes that underpin the endogenous formation of opportunity. While prior work in the area has advanced the idea that created opportunities incorporate the views of multiple stakeholders (Welter and Alvarez, 2015), who sometimes become strongly enrolled in the entrepreneur's project (Burns *et al.*, 2016), it fails to address the reality that understanding opportunity enactment is incomplete without grasping the ongoing, iterative processes that sustain enacted opportunities. We provide a detailed conceptual treatment of these considerations by emphasizing that the perceived objective status of entrepreneurial opportunities is a function of the communal behavior of stakeholders via their ongoing positive consensus. This has significant implications for research on entrepreneurial search because it suggests that is not developing alert antennae (Kirzner, 1979), engaging in comprehensive planning (Schoemaker, 1995), or conducting market research (Collinson and Shaw, 2001) that are the essential elements of opportunity pursuit, but rather whether stakeholder consensus is, and continues to be, achieved.² This is the heart of the social constructivist perspective, and evoking it shifts the focus away from the 'hero-individual' who uniquely recognizes market imperfections to the social collective where generating and maintaining positive stakeholder agreement is what really matters.

A second implication flows from our conceptualization of opportunity propagation as an extension of the enactment processes articulated by Wood and McKinley (2010). Our model is based on the premise that the prelaunch dynamics that Alvarez and Barney (2007) discuss and that Wood and McKinley (2010) describe in the production of

opportunity do not cease once the venture is up and running. Rather, these dynamics remain in play with a continued focus on co-creation (Alvarez *et al.*, 2015) through consensus building and maintenance. Our model highlights how the conceptualization the entrepreneur experienced as a result of the initial enactment may reverse into subjectivity in the post-enactment period if positive consensus begins to break down. We have developed the construct of opportunity de-objectification to represent this reversal, and the consequent emotional fallout from it may provide an explanation for why individuals make erratic strategic decisions (Mitchell *et al.*, 2012) or why people fail to react in productive ways to organizational decline (Cameron, Whetten, and Kim, 1987).

Third, critics of the constructivist view of entrepreneurial opportunities have argued that the opportunity enactment or creation perspective is largely linguistic innovation, and what is created are 'not opportunities but organizations, institutions, products, services, and so on' (Ramoglou and Zyglidopoulos, 2015: 74). This critique has greater force to the extent that enactment scholars confine their attention to the pre-venture launch period. Given such a restricted focus, it is easy to miss the ongoing co-creation of opportunities that characterizes the social context surrounding the entrepreneur after venture launch. As such, an implication of our theory is the realization that propagation of opportunities must be continuous and may be interrupted by de-objectification. This extends the range of enactment theory in ways that respond to the critiques cited earlier. Specifically, it highlights the point that the construction and deconstruction of opportunities is an ongoing process that parallels (and is embedded in) the construction of organizations and institutions that Ramoglou and Zyglidopoulos (2015) describe.

A final implication of our theoretical framework is that opportunity de-objectification can be expected to engender emotional and behavioral responses as well as ontological transformation. These responses can be manifested as frustration, discouragement, or stress (Shepherd, Patzelt, and Wolfe, 2011) and may lead to strategic change (Zajac, Kraatz, and Bresser, 2000). One possible strategic change may be abandonment of the venture formed to pursue the previously objectified opportunity. This might involve actually closing the business because the increasing subjectivity of

²We are indebted to an anonymous reviewer for this insight.

the opportunity does not seem to warrant keeping it running. However, new ventures represent considerable sunk costs (Garland and Newport, 1991), and these costs may motivate the entrepreneur to try (consciously or intuitively) to objectify new opportunities that the existing venture could pursue. This resembles the ‘effectuation’ process discussed by Sarasvathy (2001), in which entrepreneurs have a set of resources and effectuate opportunities that can be successfully pursued with those assets. The development of theory about the emotional and behavioral effects of opportunity de-objectification could draw on recent research using sensemaking to explain the entrepreneurship process (Pryor *et al.*, 2016). Such theoretical work could enhance our knowledge of how entrepreneurs and their ventures behave in the aftermath of opportunity de-objectification.

Implications for empirical research

In addition to tests of the propositions, this article has other interesting implications for future empirical research. Specifically, the extant research has centered on entrepreneurs’ interactions with their environments in the prelaunch stage, focusing on phenomena like entrepreneurial action (McMullen and Dimov, 2013) or entrepreneurial judgment (Foss and Klein, 2012). Our theory suggests the possibility of a broader empirical research program that would investigate how entrepreneurs interact with their environments after venture establishment. In our framework, we have focused on interactions between the entrepreneur and the microenvironment composed of the firm’s stakeholders. However, one could also study exchanges between the entrepreneur and the macro-environment. For example, would changes in the macro-environment, such as broad technological transformations, be sufficient to de-objectify a previously objectified opportunity? Here one thinks of companies like Blockbuster, in which technological transformations in video streaming may have de-objectified the opportunity produced earlier by the firm through creation of a chain of video stores where customers could come to check out videos. By making films instantly available to customers in their homes, video streaming may have eliminated Blockbuster managers’ sense of an external opportunity constituted by attracting customers into

bricks and mortar stores. Such dynamics suggest that studies of interactions between humans who have produced and/or maintained opportunities and the wider macro-environment would be a worthy target of future empirical research.

Empirical researchers could also move to the other extreme and study the effects of the entrepreneur’s personal history on the propagation and de-objectification of opportunities. For example, it is possible that serial entrepreneurs (those with a series of past ventures to their credit) may be less threatened by a particular episode of opportunity de-objectification than first-time entrepreneurs. Ucbasaran *et al.* (2010) find that serial entrepreneurs who experience failure do not make downward adjustments to their comparative optimism, and this suggests that the serial entrepreneurs might be more inclined to resist de-objectification. In what other ways does an entrepreneur’s past history affect his/her capacity to propagate opportunity, resist de-objectification, and react proactively to de-objectification if it does occur? Does the entrepreneur’s reputation in the entrepreneurial community (Shane and Cable, 2002) have any influence on these phenomena? Does the extent to which a past entrepreneurial career has been a function of push versus pull forces (Schjoedt and Shaver, 2007) have an effect? Attention to such questions would provide an important focus for empirical research on the process of opportunity de-objectification.

Also, one wonders about the personal histories of the *stakeholders* who play a mediating role in the propositions we have articulated. How do the personal histories of these stakeholders influence the extent of consensus in the face of factors like organizational decline, rising death rates of similar ventures, or falling birth rates of similar ventures? Do those stakeholders who have more experience with the vicissitudes of entrepreneurship have a greater capacity to maintain consensus about opportunity viability in the face of de-objectification stimuli? Are more seasoned stakeholders more or less likely to contribute to the eroding consensus about viability that can be triggered by top management team heterogeneity? Future investigators could explore such possibilities, and we anticipate that the results of such research would contribute to a better understanding of the maintenance and possible destruction of entrepreneurial opportunities.

Implications for entrepreneurial practice

Our theory also provides insights for practicing entrepreneurs by highlighting the value of interpretive framing (Weick, 1995; Barreto, 2012) for entrepreneurs who wish to propagate opportunities. For example, though the entrepreneur cannot directly control birth and death rates of other ventures in the same population, he/she can interpret those rates in ways that are conducive to the maintenance of the sense of an objective opportunity. Increasing death rates and falling birth rates are normally seen as negative signs, but if the entrepreneur can frame these conditions as niche-clearing events (reducing competition), he/she might be able to argue that they actually enhance external opportunity. Customers who become available through the demise of other ventures, for example, can be interpreted as evidence that the focal firm has gained competitive advantage (Rindova and Fombrun, 1999). This would reverse the dynamic predicted in Proposition 4, but it would require extensive effort by the entrepreneur to change the meaning of the signals that rising death rates normally send and limit the dissensus they can cause. The entrepreneur would have to be entrepreneurial not only in creating ideas for the business and organizing consensus to support them, but in developing interpretive frames that would modify processes that could be destructive to an objectified opportunity.

Further, our framework suggests that entrepreneurs could develop some control over opportunity de-objectification by manipulating some of the factors that instigate it. There is little evidence that an entrepreneur can control rates of birth or death of other ventures in the same population (Hannan and Freeman, 1987), but the entrepreneur can exert influence over things like the composition of the top management team. In that vein, an entrepreneur seeking to avoid opportunity de-objectification might establish limits to the functional heterogeneity of the top management team, lest excessive heterogeneity trigger stakeholder dissent about opportunity viability and, therefore, opportunity de-objectification. The paradox is that heterogeneous teams exhibit a greater propensity for action (Hambrick *et al.*, 1996). Therefore, if de-objectification does occur, top management team heterogeneity may be of value in the aftermath when the continuity of the venture is supported by

actions leading to objectification of new opportunity ideas. Entrepreneurs aware of this dynamic could expand the heterogeneity of the top management team after an episode of opportunity de-objectification by bringing in diverse experts to enact new opportunity ideas. If consensus on the viability of one of these ideas were established, that could be the foundation for renewed opportunity objectification and provide the rationale for the acquisition of new resources. The overall implication is that entrepreneurs may seek to actively manage opportunity de-objectification through activities such as varying the heterogeneity of their top management teams to account for the ongoing and dynamic nature of enacted opportunities.

CONCLUSION

We hope this article highlights the fact that enacted opportunity must be continually maintained via positive consensus among stakeholders. If consensus fails, the objectivity of the opportunity is undercut in a process we have called opportunity de-objectification. As suggested by the high death rate of new firms (Stubbart and Knight, 2006), many ventures do not last much beyond the very early enactment stage, and the theory developed in this article may clarify some of the reasons why. Most entrepreneurs are not cognitive or administrative heroes and, therefore, they will have difficulty continually entraining stakeholders in support of the entrepreneurial project. Much of the research on opportunities is retrospective and focuses on successful firms (Denrell, 2003; Dimov, 2011), and this obscures all the contingencies that can derail the movement toward success. By outlining post-venture enactment processes in the life of entrepreneurial firms, with emphasis on possible opportunity de-objectification, we hope to highlight the vulnerability of opportunities as social constructions.

ACKNOWLEDGEMENTS

An early version of this article was presented at the 2014 Entrepreneurship Research Exemplars Conference. We would like to thank David Williams and Will Drover for insightful feedback on prior versions of the article. We also thank Associate Editor Sharon Alvarez and the anonymous SEJ reviewers for insights and suggestions that improved our contribution.

REFERENCES

- Alvarez SA, Barney JB. 2007. Discovery and creation: alternative theories of entrepreneurial action. *Strategic Entrepreneurship Journal* **1**(1/2): 11–26.
- Alvarez SA, Barney JB. 2010. Entrepreneurship and epistemology: the philosophical underpinnings of the study of entrepreneurial opportunities. *Academy of Management Annals* **4**: 557–583.
- Alvarez SA, Barney JB, Anderson P. 2013. Forming and exploiting opportunities: the implications of discovery and creation processes for entrepreneurial and organizational research. *Organization Science* **24**(1): 301–317.
- Alvarez SA, Young SL, Woolley JL. 2015. Opportunities and institutions: a co-creation story of the king crab industry. *Journal of Business Venturing* **30**(1): 95–112.
- Ancona D, Chong C-L. 1996. Entrainment: pace, cycle, and rhythm in organizational behavior. *Research in Organizational Behavior* **8**: 251–284.
- Arend RJ, Sarooghi H, Burkemper A. 2015. Effectuation as ineffectual? Applying the 3E theory-assessment framework to a proposed new theory of entrepreneurship. *Academy of Management Review* **40**(4): 630–651.
- Autio E, Dahlander L, Frederiksen L. 2013. Information exposure, opportunity evaluation, and entrepreneurial action: an investigation of an online user community. *Academy of Management Journal* **56**(5): 1348–1371.
- Barley SR, Tolbert PS. 1997. Institutionalization and structuration: studying the links between action and institution. *Organization Studies* **18**(1): 93–117.
- Barreto I. 2012. Solving the entrepreneurial puzzle: the role of entrepreneurial interpretation in opportunity formation and related processes. *Journal of Management Studies* **49**(2): 356–380.
- Becker MC. 2004. Organizational routines: a review of the literature. *Industrial and Corporate Change* **13**(4): 643–678.
- Berger PL, Luckmann T. 1966. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. Doubleday: New York.
- Bhaskar R. 1978. *A Realist Theory of Science*. Harvester Press: Hemel Hempstead, U.K.
- Bruderl J, Schussler R. 1990. Organizational mortality: the liabilities of newness and adolescence. *Administrative Science Quarterly* **35**: 530–547.
- Burns B, Barney J, Angus R, Herrick H. 2016. Enrolling stakeholders under conditions of risk and uncertainty. *Strategic Entrepreneurship Journal* **10**(1): 97–106.
- Cameron KS, Whetten DA, Kim MU. 1987. Organizational dysfunctions of decline. *Academy of Management Journal*, **30**(1): 126–138.
- Collinson E, Shaw E. 2001. Entrepreneurial marketing: a historical perspective on development and practice. *Management Decision*, **39**(9): 761–766.
- Davidsson P. 2015. Entrepreneurial opportunities and the entrepreneurship nexus: a re-conceptualization. *Journal of Business Venturing*. **30**(5): 674–695.
- Denrell J. 2003. Vicarious learning, undersampling of failure, and the myths of management. *Organization Science* **14**(3), 227–243.
- Dimov D. 2011. Grappling with the unbearable elusiveness of entrepreneurial opportunities. *Entrepreneurship Theory and Practice* **35**: 57–81.
- Felin T, Zenger T. 2009. Entrepreneurs as theorists: on the origins of collective beliefs and novel strategies. *Strategic Entrepreneurship Journal* **3**(2): 127–146.
- Foss NJ, Klein PG. 2012. *Organizing Entrepreneurial Judgment: A New Approach to the Firm*. Cambridge University Press: New York.
- Foss NJ, Klein PG, Kor YY, Mahoney JT. 2008. Entrepreneurship, subjectivism, and the resource-based view: toward a new synthesis. *Strategic Entrepreneurship Journal* **2**(1): 73–94.
- Gaglio CM, Katz JA. 2001. The psychological basis of opportunity identification: entrepreneurial alertness. *Small Business Economics* **16**: 95–111.
- Garland H, Newport S. 1991. Effects of absolute and relative sunk costs on the decision to persist with a course of action. *Organizational Behavior and Human Decision Processes* **48**(1): 55–69.
- Gergen KJ. 1985. The social constructionist movement in modern psychology. *American Psychologist* **40**(3): 266–275.
- Gergen KJ. 1994. *Toward Transformation in Social Knowledge*. SAGE Publications: London, U.K.
- Griffeth RW, Hom PW, Gaertner S. 2000. A meta-analysis of antecedents and correlates of employee turnover: update, moderator tests, and research implications for the next millennium. *Journal of Management* **26**(3): 463–488.
- Hambrick DC, Cho TS, Chen MJ. 1996. The influence of top management team heterogeneity on firms' competitive moves. *Administrative Science Quarterly* **41**: 659–684.
- Hambrick DC, Mason PA. 1984. Upper echelons: the organization as a reflection of its top managers. *Academy of Management Review* **9**(2): 193–206.
- Hannan MT, Carroll G. 1992. *Dynamics of Organizational Populations: Density, Legitimation, and Competition*. Oxford University Press: New York.
- Hannan MT, Freeman J. 1984. Structural inertia and organizational change. *American Sociological Review* **49**: 149–164.
- Hannan MT, Freeman J. 1987. The ecology of organizational founding: American labor unions, 1836–1985. *American Journal of Sociology* **92**: 910–943.
- Hudson LA, Ozanne JL. 1988. Alternative ways of seeking knowledge in consumer research. *Journal of Consumer Research* **14**: 508–521.

- Huselid MA. 1995. The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal* **38**(3): 635–672.
- Kirzner IM. 1979. *Perceptions, Opportunity, and Profit*. University of Chicago Press: Chicago, IL.
- Klein PG. 2008. Opportunity discovery, entrepreneurial action, and economic organization. *Strategic Entrepreneurship Journal* **2**(3): 175–190.
- Kosslyn SM, Thompson WL, Ganis G. 2006. *The Case for Mental Imagery*. Oxford University Press: New York.
- Letiche H, Hagemeyer RE. 2004. Linkages and entrainment. *Journal of Organizational Change Management* **17**(4): 365–382.
- Luksha P. 2008. Niche construction: the process of opportunity creation in the environment. *Strategic Entrepreneurship Journal* **2**(4): 269–283.
- McKinley W. 2011. Organizational contexts for environmental construction and objectification activity. *Journal of Management Studies* **48**(4): 804–828.
- McKinley W, Latham S, Braun M. 2014. Organizational decline and innovation: turnarounds and downward spirals. *Academy of Management Review* **39**(1): 88–110.
- McKinley W, Zhao J, Rust KG. 2000. A sociocognitive interpretation of organizational downsizing. *Academy of Management Review* **25**(1): 227–243.
- McMullen JS, Dimov D. 2013. Time and the entrepreneurial journey: the problems and promise of studying entrepreneurship as a process. *Journal of Management Studies* **50**(8): 1481–1512.
- McMullen JS, Shepherd DA. 2006. Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. *Academy of Management Review* **31**: 132–152.
- Mitchell J, Mitchell R, Mitchell B, Alvarez S. 2012. Opportunity creation, underlying conditions, and economic exchange. In *Entrepreneurial Action: Advances in Entrepreneurship, Firm Emergence and Growth* (Vol. 14), Corbett A, Katz J (eds). Emerald Group Publishing: Bingley, U.K.; 89–124.
- Mone MA, McKinley W, Barker VL. 1998. Organizational decline and innovation: a contingency framework. *Academy of Management Review* **23**(1): 115–132.
- Munir KA. 2005. The social construction of events: a study of institutional change in the photographic field. *Organization Studies* **26**(1): 93–112.
- Pearce WB, Cronen VE. 1980. *Communication, Action, and Meaning: The Creation of Social Realities*. Praeger: New York.
- Pryor C, Webb JW, Ireland RD, Ketchen DJ. 2016. Toward an integration of the behavioral and cognitive influences on the entrepreneurship process. *Strategic Entrepreneurship Journal* **10**(1): 21–42.
- Ramoglou S, Tsang EW. 2016. An ontological development of the opportunity-discovery framework. *Academy of Management Review*. **41**(3): 410–434.
- Ramoglou S, Zyglidopoulos SC. 2015. The constructivist view of entrepreneurial opportunities: a critical analysis. *Small Business Economics* **44**(1): 71–78.
- Raskin JD. 2002. Constructivism in psychology: personal construct psychology, radical constructivism, and social constructionism. *American Communication Journal* **5**(3): 1–25.
- Rindova VP, Fombrun CJ. 1999. Constructing competitive advantage: the role of firm-constituent interactions. *Strategic Management Journal* **20**(8): 691–710.
- Sarasvathy SD. 2001. Causation and effectuation: toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review* **26**: 243–263.
- Sarasvathy SD. 2004. Constructing corridors to economic primitives: entrepreneurial opportunities as demand-side artifacts. In *Opportunity Identification and Entrepreneurial Behavior*, Butler J (eds). Information Age Publishing: Greenwich, CT; 291–312.
- Schjoedt L, Shaver KG. 2007. Deciding on an entrepreneurial career: a test of the pull and push hypotheses using the panel study of entrepreneurial dynamics data. *Entrepreneurship Theory and Practice* **31**(5): 733–752.
- Schoemaker PJH. 1995. Scenario planning: a tool for strategic thinking. *Sloan Management Review* **36**(2): 25–40.
- Searle J. 1995. *The Construction of Social Reality*. Free Press: New York.
- Shane S. 2003. *A General Theory of Entrepreneurship: The Individual-Opportunity Nexus*. Edward Elgar: Cheltenham, U.K.
- Shane S, Cable D. 2002. Network ties, reputation, and the financing of new ventures. *Management Science* **48**(3): 364–381.
- Shane S, Venkataraman S. 2000. The promise of entrepreneurship as a field of research. *Academy of Management Review* **25**(1): 217–226.
- Shaver KG, Scott LR. 1991. Person, process, choice: the psychology of new venture creation. *Entrepreneurship Theory and Practice* **16**(2): 23–45.
- Shepherd DA, Patzelt H, Wolfe M. 2011. Moving forward from project failure: negative emotions, affective commitment, and learning from the experience. *Academy of Management Journal* **54**(6): 1229–1259.
- Shotter J. 1993. *Cultural Politics of Everyday Life: Social Constructionism, Rhetoric, and Knowing of the Third Kind*. University of Toronto Press: Toronto, Canada.
- Shotter J. 2005. Acknowledging unique others: ethics, ‘expressive realism,’ and social constructionism. *Journal of Constructivist Psychology* **18**(2): 103–130.
- Shrivastava P. 1987. *Bhopal: Anatomy of a Crisis*. Ballinger: Cambridge, MA.
- Simons T, Pelled LH, Smith KA. 1999. Making use of difference: diversity, debate, and decision comprehensiveness

- in top management teams. *Academy of Management Journal* **42**(6): 662–673.
- Singh JV, Tucker DJ, House RJ. 1986. Organizational legitimacy and the liability of newness. *Administrative Science Quarterly* **31**: 171–193.
- Standifer R, Bluedorn A. 2006. Alliance management teams and entrainment: sharing temporal mental models. *Human Relations* **59**(7): 903–927.
- Staw BM, Sandelands LE, Dutton JE. 1981. Threat rigidity effects in organizational behavior: a multilevel analysis. *Administrative Science Quarterly* **26**: 501–524.
- Stubbart CI, Knight MB. 2006. The case of the disappearing firms: empirical evidence and implications. *Journal of Organizational Behavior* **27**: 79–100.
- Taylor JR, Van Every EJ. 2000. *The Emergent Organization: Communication as its Site and Surface*. Erlbaum: Mahwah, NJ.
- Ucbasaran D, Westhead P, Wright M, Flores M. 2010. The nature of entrepreneurial experience, business failure, and comparative optimism. *Journal of Business Venturing* **25**(6): 541–555.
- Von Glasersfeld E. 1995. Radical constructivism: a way of knowing and learning. *Studies in Mathematics Education (Series 6)*. Falmer Press: Bristol, PA.
- Weick KE. 1979. *The Social Psychology of Organizing* (2nd edn). Addison-Wesley: Reading, MA.
- Weick KE. 1985. Cosmos vs. chaos: sense and nonsense in electronic contexts. *Organizational Dynamics* **14**: 50–64.
- Weick KE. 1993. The collapse of sensemaking in organizations: the Mann Gulch disaster. *Administrative Science Quarterly* **38**: 628–652.
- Weick KE. 1995. *Sensemaking in Organizations*. SAGE Publications, London, U.K.
- Welter C, Alvarez S. 2015. The state of opportunities: clarifying the transitions between opportunity types. *Management Decision* **53**(7): 1398–1411.
- Welter C, Mauer R, Wuebker R. 2016. Bridging behavioral models and theoretical concepts: effectuation and bricolage in the opportunity creation framework. *Strategic Entrepreneurship Journal* **10**(1): 5–20.
- Whetten DA. 1987. Organizational growth and decline processes. *Annual Review of Sociology* **13**: 335–358.
- Wood MS, McKelvie A, Haynie JM. 2014a. Making it personal: opportunity individuation and the shaping of opportunity beliefs. *Journal of Business Venturing* **29**(2): 252–272.
- Wood MS, McKinley W. 2010. The production of entrepreneurial opportunity: a constructivist perspective. *Strategic Entrepreneurship Journal* **4**(1): 66–84.
- Wood MS, Welter C, Artz K, Bradley S. 2014b. Discerning opportunity types: implications for entrepreneurial action and entrepreneurship education. In *Advances in the Study of Entrepreneurship, Innovation, and Economic Growth* (Vol. 24), Hoskinson S, Kuratko D (eds). Emerald: Bradford, U.K.
- Zajac EJ, Kraatz MS, Bresser RK. 2000. Modeling the dynamics of strategic fit: a normative approach to strategic change. *Strategic Management Journal* **21**(4): 429–453.
- Zammuto RF, Cameron KS. 1985. Environmental decline and organizational response. In *Research in Organizational Behavior* (Vol. 7), Cummings LL, Staw BM (eds). JAI Press: Greenwich, CT; 223–262.