



An Effectual Approach to International Entrepreneurship: Overlaps, Challenges, and Provocative Possibilities

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In this paper, we outline several interesting observations about international entrepreneurship (IE) research through the theoretical lens of effectuation. In doing so, we show how an effectual approach can help resolve four central conflicts and knowledge gaps identified in two recent comprehensive reviews of IE. We then present an illustrative case study from India that provides an intriguing comparison with the most recent modification of the Uppsala model to integrate with effectuation theory. Finally, we offer four provocative possibilities for future research at the intersection of IE and effectuation research.

Introduction

In this paper, we outline several interesting observations about international entrepreneurship (IE) research when perceived through the theoretical lens of effectuation. In this task, we were aided by extant work that has already begun building bridges between effectuation research and IE (e.g., Mainela & Puhakka, 2009; Schweizer, Vahlne, & Johanson, 2010). In particular, we found the explicit suggestions offered in Schweizer et al. as useful springboards to both elaborate effectuation theory into IE and develop new insights for future work at the intersection of the two literature streams.

We begin with a brief summary of effectuation research followed by a rather high-level review of research in IE. For the latter endeavor, we used a recent spate of review

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articles on IE (Coviello, McDougall, & Oviatt, 2011; Jones, Coviello, & Tang, 2011; Keupp & Gassmann, 2009; Zahra, 2005). Based on their review of 323 relevant journal articles, Jones et al. argue that given the “multi-disciplinary and multi-theoretical nature of IE,” advances in theory development in IE need to be accomplished through an “iterative process of debate, discussion as well as testing,” as propounded by Weick. Jones et al. also highlight some important thematic areas of research in IE that they consider as “more recent and under researched” and imply that further debates and discussions can be around these themes. Significantly, one such theme identified in their review is opportunity recognition, wherein they call for the application of the logic of effectuation (Jones et al., p. 648).

Our approach of relying on these recent reviews has allowed us to anchor our observations in deeper waters than if we had attempted a literature review on our own. We did, however, follow the dominant traces back from these reviews to the most cited classics and seminal empirical works. Careful reading of these classics allowed us to develop a more textured and nuanced understanding of the history of IE.

We hope to contribute to the IE conversation in three ways: first, we forge links between the burgeoning body of work in effectuation and the recent stocktaking of scholarship in IE; second, we identify specific topics of interest within IE that offer promise for empirical work involving effectuation; third, we suggest provocative new possibilities for future research at the intersection of the two fields.

A Brief Summary and Update on Effectuation Research

Effectuation posits a theoretical framework describing how expert entrepreneurs utilize resources within their control in conjunction with commitments and constraints from self-selected stakeholders to fabricate new artifacts such as ventures, products, opportunities, and markets (Sarvasvathy, 2001; Wiltbank, Dew, Read, & Sarvasvathy, 2006). A variety of studies in multiple industries have shown that expert entrepreneurs commonly utilize a set effectuation heuristics (Read, Song, & Smit, 2009; Sarvasvathy & Dew, 2005; Wiltbank, Read, Dew, & Sarvasvathy, 2009). However, only recently, studies have started to explore broader empirical measures of effectuation (Brettel, Mauer, Engelen, & Kuepper, 2012; Chandler, DeTienne, McKelvie, & Mumford, 2011) and how it may affect firm performance (Fischer & Reuber, 2011; Read et al., 2009).

Studies of expert entrepreneurs have distilled their heuristics into four effectual principles: means orientation, affordable loss, building partnerships, and leveraging contingency (Dew, Read, Sarvasvathy, & Wiltbank, 2009). However, effectuation is also a dynamic process with two concurrent cycles of acquiring means and constraining goals: “The first is an expanding cycle that increases the resources available to the venture, and the second accretes constraints on the venture that converge into specific goals over time” (Sarvasvathy, 2008, p. 101; Sarvasvathy & Dew, 2005, p. 543). In the following review, we conceptualize effectuation as the sum of these principles and processes. Combined, these elements show effectuation to be one type of nonpredictive strategy (Wiltbank et al., 2006). Stated another way, effectuation consists of heuristics that embody nonpredictive forecasting control as opposed to predictive tools (henceforward referred to, in short, as an emphasis of control over prediction). Because effectuation uses means currently within the actor’s control as the basis for action, it does not require predictions about the future. As such, effectual heuristics are particularly useful in situations of

unpredictability such as those in which new ventures often are formed (Knight, 1921; Sarasvathy & Dew).

Since the publication of the foundational article on the topic in the *Academy of Management Review* (Sarasvathy, 2001), effectuation has generated a great deal of interest among entrepreneurship scholars (e.g., Brettel et al., 2012; Chandler et al., 2011; Chiles, Gupta, & Bluedorn, 2008; Dew, Read, et al., 2009; Endres & Woods, 2010; Goel & Karri, 2006; Harmeling, 2011; Mitchell et al., 2007; Read et al., 2009; Wiltbank et al., 2009). With her original study, Sarasvathy sought to identify and understand the teachable and learnable elements of entrepreneurial expertise. In her sample, 63% used “effectual” rather than “causal” logic for about 75% of the time (Sarasvathy, 2001) showing that expert entrepreneurs tend to shy away from prediction-based strategies; rather, they often (1) use a means-based approach, (2) manage their level of affordable loss, (3) forge partnerships, and (4) leverage contingency (see Read et al.; Sarasvathy, 2008). Finally, (5) because they use a logic of nonpredictive control, expert entrepreneurs learn to see the future as cocreated through human action rather than unfolding through inevitable trends outside the purview of human action.

Effectuation Principles

With a view to working out its practical and pedagogical applications, the five principles and the overall logic of effectuation have since been named as follows in the full-length treatment of the subject in Sarasvathy (2008): (1) bird-in-hand; (2) affordable loss; (3) crazy quilt; (4) lemonade; (5) pilot-in-the-plane.

Bird-in-Hand. Effectuation begins with a central actor (the entrepreneur) who has three categories of means: identity (who I am), knowledge (what I know), and networks (whom I know). This focuses the entrepreneurial question on “What can I do?” based on the means at hand rather than “What should I do?” based on a predictive analysis. The means-based approach relies on identity, knowledge, and networks to generate potential opportunities. While causal and effectual logic are integral parts of human reasoning, empirical research has teased out the extent to which means-based logic is used. In a meta-analysis of existing studies, Read et al. (2009) found a significant and positive correlation between a focus on means and new venture performance. In this analysis, means-based logic was measured through constructs such as resource-based capabilities (who I am), the number of years of industry experience (what I know), and size and breadth of networks (whom I know). By relying on means rather than ends, effectuation encourages entrepreneurs to be open to new possibilities and to be finely attuned to their own capabilities.

Recent work (Fischer & Reuber, 2011) has suggested that active engagement in social interaction can trigger new cognitions regarding both the entrepreneur’s means, and the effects they can create with those means. Further, McKelvie, Haynie, and Gustavsson (2011) found that opportunity-specific expertise moderates the effect of uncertainty and action under unpredictable conditions; they propose that experts may be more likely to downplay the importance of prediction and rather focus on their abilities to create new markets and firms based on their expertise (what they know) (Blume & Covin, 2011).

Affordable Loss. While means are an important precursor of new firm emergence, an entrepreneur’s perception may not be solely based on means; their risk perception also influences their decision to actually start the business (e.g., Kahneman & Lovallo, 1993).

The plunge decision has traditionally been modeled either as a choice between venturing and the opportunity cost of a wage job (Astebro, Chen, & Thompson, 2011; Cramer, Hartog, Jonker, & van Praag, 2002; Evans & Leighton, 1989; Lucas, 1978) or as a real options problem (McGrath, 1999). Expert entrepreneurs utilizing effectual strategies, however, have been shown to focus on what they can afford to lose (Dew, Sarasvathy, Read, & Wiltbank, 2009; Sarasvathy, 2008) rather than on prediction of possible gains. By focusing on affordable loss, the need to predict future returns is eliminated, thus implying less time engaged in planning. The use of the affordable loss principle in innovative research and development (R&D) projects has been shown to lead to higher process efficiency (Brettel et al., 2012). Affordable loss can be calculated relatively quickly because the entrepreneur knows what she and her nearest environment have and she can estimate how much is affordable to lose. Chandler et al. (2011) provide empirical support for the principle of affordable loss, successfully differentiating entrepreneurial action that focuses on only risking what they can afford to lose from more causal approaches, as well as other principles of effectuation.

Crazy Quilt. An effectual approach risks only resources that can be affordably lost; thus, it also drives partnerships as the central method to expand resources. Rather than engaging in extensive planning and research to identify specific stakeholders to target based on preselected goals, an effectual approach calls for entrepreneurs to rapidly engage in conversations with a variety of people they already know or come into contact with, some of whom end up making actual commitments to the new venture. One critical distinction of this process is that rather than entrepreneurs seeking to legitimize their business and thus secure commitments from targeted stakeholders (Aldrich & Fiol, 1994), effectual entrepreneurs seek to create avenues for stakeholder self-selection. In the effectual process, stakeholders put “skin in the game” because they see opportunity in cocreating the venture with the entrepreneur. Entrepreneurs may build many relationships, but only those in which both parties share the risk of the venture and benefit from the success of the venture constitute effectual partnerships (Chandler et al., 2011).

Lemonade. An effectual approach leverages uncertainty by treating surprises as opportunities to control the newly emerging situation. Since entrepreneurs often operate in conditions of enhanced uncertainty, effectuation posits that they may benefit from embracing surprises rather than following a linear and goal-oriented process that seeks to avoid deviations from the plan. Embracing new, discomfiting information allows unfruitful experiments to be abandoned and emergent possibilities to be leveraged (Chandler et al., 2011). This opens up the resource of serendipity, unintended discovery, as part of the opportunity development process (Corner & Ho, 2010; Dew, 2009). Beyond the realm of entrepreneurial ventures, Brettel et al. (2012) found support for the concept of “acknowledging the unexpected” (p. 168) having a positive impact on R&D output in highly innovative (uncertain) research settings. The process of turning “lemons to lemonade” by embracing contingency plays out through the effectual process, based on the evolving means, goals, and stakeholders of the venture.

Pilot-in-the-Plane. While empirical research has built on Sarasvathy’s (2001) insight of nonpredictive control as an overarching logic embodied in the four principles discussed above, Sarasvathy (2008) added the logic itself as a fifth principle that emphasizes the role of human beings rather than trends in determining the shape of things to come. The pilot-in-the-plane principle is an explicit rejection of inevitable trends. Faced with a highly uncertain event space, effectual entrepreneurs seek to learn more about it not with

a view of updating their probability estimates, but rather with a view of intervening in the event space itself to transform and reshape it, at least partially, with other effectual actors (Sarasvathy, Menon, & Kuechle, 2013). In other words, effectual entrepreneurs do not see history running on autopilot, but rather consider themselves one of many who copilot the course of history.

Effectual Processes

While the five principles above may be observed even in static studies of effectuation, to understand the effectuation framework, one must take into account its dynamics. The static principles are enacted through two concurrent cycles: expanding means and converging goals. Prior research has provided insights about these cycles: “The first cycle (*expanding means*) increases the resources available to the venture by increasing stakeholder membership in the effectual network; and the second (*converging goals*) accretes constraints on the venture that converge into specific goals that get embodied in an effectual artifact over time” (Sarasvathy & Dew, 2005, pp. 543–544). In other words, using effectual principles, entrepreneurs will grow their means through an expanded stakeholder network while simultaneously converging on goals through stakeholder self-selection and executing on commitments made with them.

The venture starts out as an ambiguous idea at the beginning of the effectual process and develops through the commitments executed by the growing network of stakeholders who have a voice in shaping the goals of the venture. An important distinction regarding this process is brought to light by a recent study on uncertainty avoidance and business planning. Brinckmann, Grichnik, and Kapsa (2010) find that in cultures with higher levels of uncertainty avoidance, the benefit of business planning is significantly reduced. They explain this finding in terms of the effectual process; their findings suggest that business planning is not in and of itself harmful, nor helpful, but the process through which entrepreneurs converge on business plan goals, yet remain open to contingency, is critical for performance. This distinction illustrates that the effectual process is one of expanding means and converging goals, but remains open to embracing contingency.

In recent years, the principles of effectuation embodied in the dual cycle process have begun to seep into IE in interesting ways. We next turn to that literature.

A Review of International Entrepreneurship Research and Its Implications for Effectuation

Just in the last 5 years, several reviews and special topic forums in IE research have been published (Aspelund, Madsen, & Moen, 2007; Coombs, Sadrieh, & Annavarjula, 2009; Coviello et al., 2011; Cumming, Sapienza, Siegel, & Wright, 2009; Di Gregorio, Musteen, & Thomas, 2008; Engelen, Heinemann, & Brettel, 2009; Jones et al., 2011; Keupp & Gassmann, 2009). According to Jones et al., the current consensus on core topics of interest to researchers in IE includes (1) entrepreneurship crossing borders, i.e., entrepreneurial internationalization, as well as (2) comparative studies of entrepreneurship across borders. This consensus embraces the definition of IE offered in Oviatt and McDougall (2005, p. 540): *International entrepreneurship is the discovery, enactment, evaluation, and exploitation of opportunities—across national borders—to create future goods and services*. Similarly, in their review of 179 articles on IE published in 16 journals over 14 years, Keupp and Gassmann (p. 603) emphasize the need for studies in

IE that “are grounded in frameworks from entrepreneurship theory.” More recently, in their review of 323 IE articles, Jones et al. (p. 643) point out that relatively few studies on entrepreneurial internationalization have entrepreneurship as their primary theme and emphasize the need to incorporate frameworks from entrepreneurial cognition combined with a dynamic view of networks, knowledge, and firm-level capabilities.

There are at least three characteristics of conducting cross-border business that call out for theories from entrepreneurship in general and effectuation in particular.¹

1. **Cross-border uncertainty.** Conducting cross-border business often injects additional uncertainty into a firm’s environment, even in the case of well-established firms operating in mature markets. In other words, even nonentrepreneurial firms may have to become more entrepreneurial in tackling cross-border business issues.
2. **Limited resources.** Operating in contexts involving multiple risks such as political, economic, sociocultural, etc. is common to international business and IE, but having to do so with limited resources makes it a peculiarly entrepreneurial problem for IE research.
3. **Network dynamics.** Creating, maintaining, growing, and managing networks, whether at the individual, organizational, or interorganizational level, becomes more challenging across borders because of geographic and cultural distance, both of which make communication more complex.

When we consider the specifics of IE research in terms of the “Why? When? Where? How? How fast?” of the internationalization decision, we begin to see how the principles of effectuation may offer useful explanatory variables for empirical work and open up new avenues for theorization as well. Let us outline a few empirical possibilities first before embarking on possible new theorizing.

Cross-Border Uncertainty and Effectuation: Bird-in-Hand and Pilot-in-the-Plane

The decision to internationalize is usually modeled as a process and not a deliberate, goal-oriented, strategic decision at a single point in time. The two traditional approaches—the Uppsala internationalization model (Johanson & Vahlne, 1977; Johanson & Wiedersheim-Paul, 1975) and the innovation model (Cavusgil, 1980)—both embrace process perspectives that cohere well with effectuation models. In a comparative analysis of traditional versus born-global models of internationalization, Chetty and Campbell-Hunt (2004) explicated the more processual aspects of the former and a stronger role for competitive strategy in the latter. Yet, even in the born-global case, effectual aspects of the internationalization process are difficult to overlook. In particular, both prior knowledge or experience of the entrepreneurs as well as their access to international networks form key components of born-globals’ IE capabilities.

In general, we should expect that effectual variables such as who the founding entrepreneurs are, what they know, and whom they know will be important to IE research. Yet, there are virtually no studies in IE that seek to characterize entrepreneurs as a holistic bundle of identity, knowledge, and networks. We are cognizant of the importance of avoiding theory soups in formulating empirical studies. From a methodological standpoint, it might be useful to separate these three sets of variables out and even to design

1. We thank an anonymous reviewer for helping us synthesize insights from IE into these three characteristics.

entirely disparate studies for each set. Yet, given that a number of studies have already examined each individually, it might be time to begin putting the pieces together to develop more coherent and comprehensive models of the active agents driving the internationalization process. A simple way to accomplish this could be to conduct a meta-analytic review of the characteristics of entrepreneurs from extant IE research.

A slightly more nuanced approach would involve “effectual” modifications to existing theories. IE models typically posit prior knowledge, experience, and network characteristics as antecedents to the internationalization process. In other words, people with certain types of prior knowledge or network structures are more or less likely to internationalize. Effectuation suggests an additional consideration. Not only *whether* different types of identity, knowledge, and networks result in internationalization, but *which types* of these variables lead to *how* and *how fast* firms may internationalize. The model developed by Oviatt and McDougall (2005) offers an exemplar of such theorization. Here, the dependent variable is internationalization speed. In the model, entrepreneurs’ perceptions of technology, competition, and opportunity are moderated by their knowledge and networks in explaining internationalization speed.

An effectual lens coheres well with this model and simply adds dynamism and endogeneity into the model. Specifically, technology, competition, and opportunity may be modeled not only as antecedents, but also as artifacts of the entrepreneurial (or more precisely in this model, the entrepreneurial internationalization) process. Not only does it matter who the entrepreneurs are (bird-in-hand), but also the environment they are in gets transformed due their acting on it (pilot-in-the-plane). This implies that as entrepreneurs internationalize, not only their *perceptions* of technology, competition, and opportunity may change, but also the actual technologies, competitive landscapes, and opportunities themselves may change and be reshaped through the actions, reactions, and interactions of entrepreneurs and their stakeholders (Venkataraman, Sarasvathy, Dew, & Forster, 2012).

Limited Resources and Effectuation: Affordable Loss, Lemonade and Pilot-in-the-Plane

As noted above, the bird-in-hand principle in effectuation suggests specific modifications in current IE models and opens up new research designs. Similarly, the other effectual principles also offer ways to deepen and widen current IE research. In a study of 212 foreign market entries by 87 new ventures, Shrader, Oviatt, and McDougall (2000) showed how entrepreneurs may manage the multiplicity of risks involving cross-border businesses by exploiting simultaneous trade-offs between these risks. One specific example offered in the study exemplifies the affordable loss principle: . . . *selling outputs in a risky country was accompanied by employing an operating mode that committed fewer resources* (Shrader et al., p. 1243). Note that this too is an example of *how* to internationalize rather than *whether* to internationalize. It is also important to note that affordable loss may be used both causally and effectually (Dew, Sarasvathy, et al., 2009). Therefore, ventures may make the *whether* to internationalize decision in a deliberate, planned, goal-driven, causal way and may still use an effectual affordable loss approach on designing the *how*. More generally, it would be interesting to empirically examine how new ventures mix and match predictive (causal) and nonpredictive (effectual) approaches, with a view to building contingency models (as opposed to linear and static models) in IE.

Why some firms as opposed to others are able to internationalize early and rapidly is an interesting empirical puzzle in the IE literature. In seeking to explain this, scholars run into conflicting predictions from theories based on the resource-based view (RBV) (Hitt,

Hoskisson, & Kim, 1997) as opposed to theories based on dynamic capabilities (Katila & Shane, 2005). The former argues for the necessity of specialized resources, while the latter counters such necessity and shows that capabilities may be developed under conditions of resource scarcity. As Sapienza, Autio, George, and Zahra (2006) argue, whereas additional resources may be necessary and even offer advantages in some cases, certain attributes of existing resources, such as fungibility, may allow them to be put to alternate uses, thereby allowing firms to internationalize without having to garner large additional endowments of resources.

Effectual entrepreneurs view and treat *all* resources as fungible. They see fungibility not as an attribute of resources but as the *de facto* side effect of a lemonade strategy of exaptation in the face of unexpected contingencies; for these entrepreneurs, attributes arising due to adaptation within particular environments at particular points of time may then be exapted to other environments at a future date (Dew, Sarasvathy, & Venkataraman, 2004). Exaptation is a strategy found in biological evolution (Gould & Vrba, 1982) and in the history of new technologies and new products (Mowery, 1992). So an effectual approach, by taking an active and agentic stance toward resources—i.e., what people *do* with resources matters more than the attributes of resources themselves—resolves the theoretical conflict between the quantity versus the quality (fungibility) of resources being necessary conditions for early and rapid internationalization (Prashantham & Dhanaraj, 2010; Yli-Renko, Autio, & Tontti, 2002).

When viewed through an effectual lens, particularly in terms of the pilot-in-the-plane principle, the problem at hand becomes one of leveraging existing resources, whether large or small, specific or fungible. Effectuation acknowledges and assumes variations in starting points. This heterogeneity in starting points implies that different entrepreneurs can take up completely different actions and interactions using the same exact effectual process. Add to that the fact that the unexpected is figured into the effectual process, and it is easier to see how the principles may be widely generalized across phenomena that involve seemingly intractable variations both at the starting and end points in the process (Autio, George, & Alexy, 2011; Prashantham & Floyd, 2012).

Network Dynamics and Effectuation: Crazy Quilt

Yet another way to incorporate effectuation into extant IE research could be to dive deeper into the role of networks and social capital in the internationalization process. IE researchers are increasingly paying empirical attention to entrepreneurs' social capital and social networks (Chen & Chen, 1998; Coviello & Munro, 1997; Ellis & Pecotich, 2001; Harris & Wheeler, 2005; Qiu, 2005; Rutashobya & Jaensson, 2004; Sharma & Blomstermo, 2003). In a recent study of 665 international ventures founded by entrepreneurs in four Chinese cities, Ellis (2011) demonstrated the idiosyncratic nature of social ties as drivers of internationalization and both their value and inhibiting effects in fostering success down the road.

Although these studies provide ample evidence for the “whom you know” component of the bird-in-the-hand principle, they overlook the crucial emphasis that effectuation urges with regard to networks, namely, their dynamics rather than statics such as structure and composition. Lately, this oversight is beginning to be remedied. In a fascinating study of network dynamics in IE, Coviello (2006) showed for IE what effectuation argues for resources in general, namely that it is not networks themselves that matter. Rather, it is what entrepreneurs *do* with those networks. In this sense, the findings from Coviello directly imply an effectual model of network dynamics in IE.

Additionally, Coviello (2006) found that these network dynamics mattered in “*pre-internationalization, pre-growth and even pre-commercialization*” (p. 723). This finding further coheres with the dynamic effectuation model developed in Sarasvathy and Dew (2005) and incorporated into the new theoretical model synthesized in the following section. This model, which we will henceforth refer to as the Effectual Uppsala (UE) model, builds on and derives from a recent article by the original authors of the Uppsala model, in which they explicitly incorporate entrepreneurial theories including effectuation (Schweizer et al., 2010).

Synthesizing Effectuation and IE: The UE Model

The UE model is built on an earlier revision of the Uppsala model that already emphasized the importance of networks and relationships (Johanson & Vahlne, 2009). The insight in that paper had to do with the observation that internationalization is often a by-product of efforts by firms to improve their position within their network(s). In other words, good entrepreneurs and managers within firms do what they need to do to steer the firm toward better performance. In the process, they leverage their networks and even their personal relationships, the latter more so in the case of entrepreneurs.

The new UE model takes this argument to the next level and builds a compelling case for the importance of networks and relationships to both entrepreneurship and internationalization. At the same time, it also explicitly models entrepreneurial capabilities such as the use of effectual logic. As in the insight developed in Johanson and Vahlne (2009), the UE model posits internationalization as a by-product of entrepreneurs leveraging their extant networks to move their ventures forward. But it also considers an increasingly globalized and technological economy, in which these entrepreneurs (and entrepreneurial managers) face multiple uncertainties. To the extent that they are responsive to these uncertainties, they begin to learn that predictive rationality does not work in an environment characterized by Knightian or complete uncertainty (Knight, 1921). And as they become proficient in dealing with Knightian uncertainty, presumably, they also gain expertise in effectual strategies and techniques. It stands to reason, therefore, that internationalization processes in general, and those based on the UE model in particular, should exhibit substantial evidence for the use of effectual logic. Effectual entrepreneurs should gain certain specific advantages in internationalizing their ventures—for example, more creative use of extant resources and relationships as well as the ability to exploit unexpected contingencies. These advantages are amply illustrated and specifically argued for by Schweizer et al. (2010) in their abductive analysis of the Abigo case study on a Swedish pharmaceutical company founded by Jan Smith.

The UE model incorporates more than elements of effectuation. It builds bridges between the opportunity recognition literature (Ardichvili, Cardozo, & Ray, 2003) and the literature on dynamic capabilities (Sapienza et al., 2006). Yet, it strongly and explicitly emphasizes the role of effectuation in the internationalization process. In fact, the authors aver that the new UE model eschews predictive rationality in favor of an approach that embraces uncertainty, contingency, and possibility:

We also believe that the processes described in this paper are effectuation processes. In employing an effectuation perspective, we distance ourselves from the prevailing literature on internationalization, as well as from mainstream research on entrepreneurship, which we see as very much dominated by a predictive rationality view.

In other words, we agree with Sarasvathy (2001) who points out that, in general, the literature describes and understands business ventures as causation processes that every now and then result in an increasing involvement in international operations, that is, internationalization (Welch & Luostarinen, 1988). In contrast, we concur with Sarasvathy and Dew (2005) that entrepreneurs attempt to exercise control over what can be done with available resources (effectuation rationality) rather than decide what ought to be done given a set of predictions about what happens next (predictive rational view). Such a view of rationality corresponds better with the often unintentional internationalization of a company as the result of managerial or entrepreneurial efforts . . . (Schweizer et al., 2010, p. 368)

As Schweizer et al. (2010) point out, this could mean that early and rapid internationalization may not even be an interesting dependent variable to pursue in our studies (we referred to this in the previous section as the *whether* to internationalize decision). The more important lessons may be embedded in a more generalized processual view (*how* to internationalize). The latter involves dependent variables such as trust, commitment, cooperative, and contingent contractual terms, and conflict resolution.

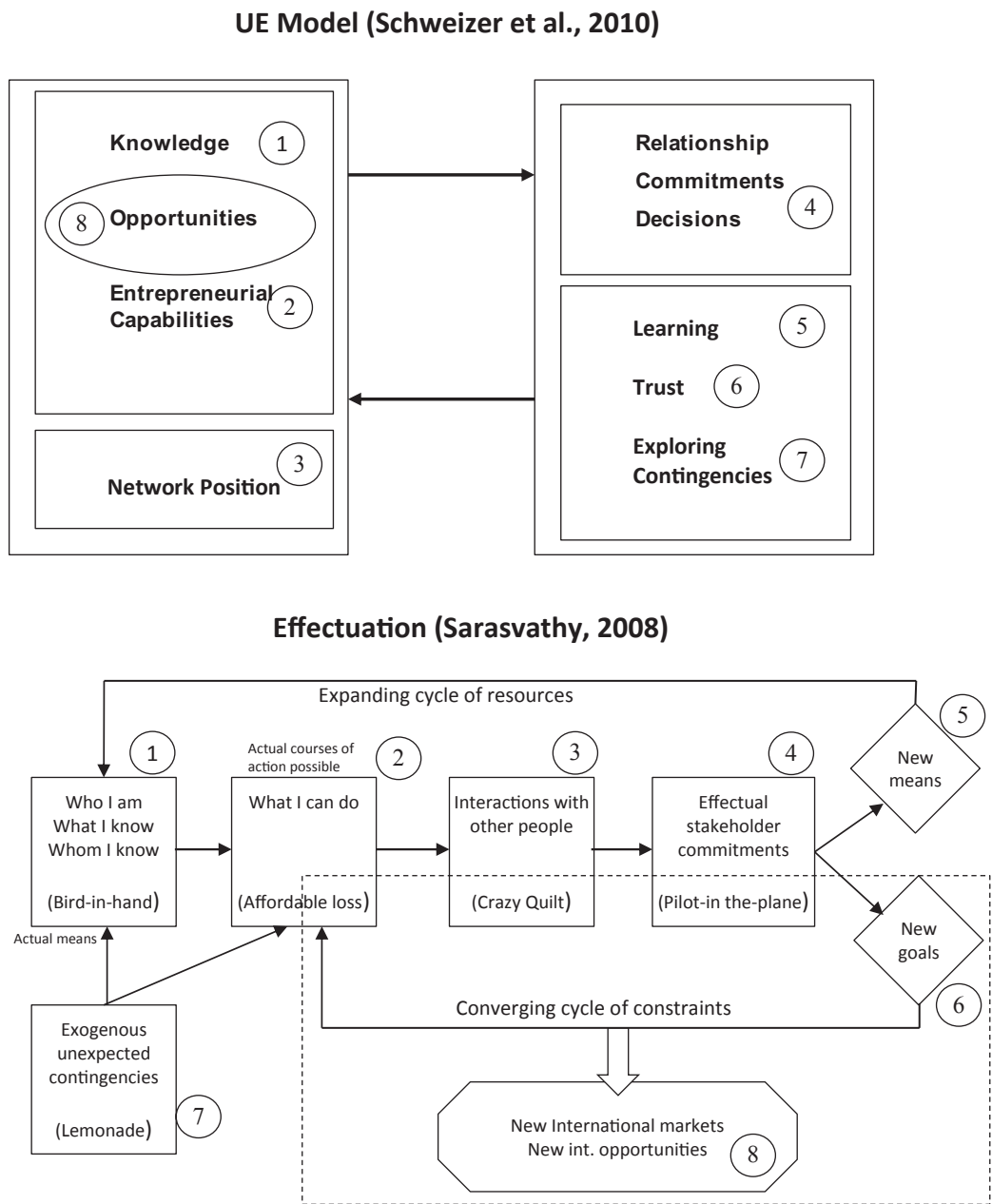
With a view to fleshing out our observation that the UE model does substantially incorporate theorizing from the effectuation literature, we decided to graphically compare figure 2 in Schweizer et al. (2010) with a more comprehensive diagram of the effectual cycle from Sarasvathy (2008). The UE model consists of two sets of two boxes (one containing state variables and the other containing change variables) connected by two arrows going in opposite directions suggesting iteration and dynamism. The effectuation model consists of five boxes connected by arrows in one direction suggesting a step-by-step process (periodically impacted by the unexpected), and two diamonds signifying branching points that connect back to the step-by-step process in two cycles, one expanding and another converging—and finally a box at the bottom containing the outcome of the process.

As you can see from the numbering of the boxes and arrows in Figure 1, almost all the elements of the effectual cycle are incorporated into the UE model except for two major differences. First, the effectual process involves several cycles of interactions between stakeholders. Second, opportunities are not taken as given or exogenous to the process in effectuation. For ease of perception, we have marked opportunities with a dotted oval in the UE model and also cordoned off the outcome component of the effectual process with a dotted rectangle. Taken together, the two mismatched pieces emphasize the impact that stakeholder self-selection in the effectual process has on the formulation of new ends. These new ends then constrain and enable future courses of action available for the new venture and its internationalization process. We believe that using a state-variable or change-variable framework precludes a non-teleological depiction of the process. Put more simply, when we view the world through the lens of state or change variables, we eliminate room in the model for purpose (i.e., teleology) and how that evolves and changes over time.

In the effectuation model, opportunities may be endogenous outcomes of the process and not merely an antecedent variable objectively related to other variables as in the UE model. Hence, we marked them off with a dotted oval in the UE model depicted in Figure 1. In spite of these rather interesting and perhaps inadvertent differences, the two models do cohere with an overall worldview based less on prediction and more on relationships and networks—whether extant, emergent, or actively shaped. Below, we provide an illustrative case study of how an effectual version of the UE model depicted in Figure 1 may cohere with empirical reality.

Figure 1

Comparing the UE Model with Effectuation (Differences or Omissions Within Dotted Lines)



Empirical Illustration of the UE Model

In this section, we present a single case study from India that offers a slew of promising empirical applications for either the UE model or effectuation or both. We chose this case study because on the one hand, it provides a stark contextual contrast to the Abigo case in Schweizer et al. (2010) in terms of internationalization. On the other hand, it illustrates very well how the UE and effectuation models can be generalized not only into emerging economies, but also to very traditional, as opposed to high-tech, products within rather conservative family businesses, and to product markets that involve cultural components that at first blush seem to offer major hindrances to internationalizing.

Additionally, the case study contributes to a substream of IE focused on emerging economies. In a recent review of 88 published papers in this substream, Kiss, Danis, and Cavusgil (2012, p. 278) find that while this literature is more theoretically informed than the broader IE literature (71% of the studies focused on emerging economies are theory-based as opposed to approximately 50% in IE), it still draws from a rather narrow sliver of possible theories. Note that the review does include one study built on effectuation (Mainela & Puhakka, 2009), but we hope our own efforts in the ensuing empirical work will serve as yet another contribution to this substream as well as to scholarship more broadly in IE.

Sarathy Perfumery Works (SPW): A Case Study of Internationalization from India

SPW is a third-generation family firm located in Bangalore, India. SPW manufactures *agarbatti*—incense sticks traditionally used in Hindu homes for religious purposes. Dating back to 1500–1000 BCE, the Vedic texts mention the use of incense sticks during Hindu religious ceremonies. Traditional fragrances include florals such as rose and jasmine and other specialties native to India including sandalwood and camphor. In recent years, due to internationalization, SPW has pioneered international or “foreign” fragrances such as frankincense and myrrh, chocolate, vanilla, and lavender. Packaging also has changed with the need to offer pouches to be hung from hooks on supermarket shelves as opposed to the card-boxes, in which incense sticks are usually sold on bazaar carts in Indian street markets and corner stores.

The company was started in 1945 when the young son of a farmer quit school in seventh grade and hitchhiked to the city of Bangalore in search of a way to make a living. He hoped to start a business and met someone who taught him how to make and sell *sambrani*—a form of benzoin resin that was and still is used to scent and treat hair and prevent infections. After bathing, for example, babies are exposed to the *sambrani* smoke that helps dry their hair quickly, thereby avoiding colds or pneumonia-like ailments that might result from wet hair.

According to the founder’s grandson, “He started making sambrani with someone he found here, who taught him how to do it and then he progressed a little bit further and he started selling that and eventually brought the family here. After that he discovered a way to make Agarbatti . . . it was completely a new field for him.” It took over a decade to begin sourcing natural ingredients from all over India, creating a firm called SPW and a brand called Tulasi that consisted mostly of traditional Indian incense sticks. But as the firm grew, it also began sourcing synthetic ingredients from Bombay. In the 1960s, one of the suppliers introduced a Sindhi (a community from Northern India) family living in Nigeria who wanted to import incense sticks mostly for their own use and for the small community in which they lived. SPW was happy to supply the intermediary in Bombay who ended up

exporting SPW's products to Nigeria. It turned out, however, that other people in Nigeria, even non-Hindus, became interested in using the sticks as room fresheners. So a small but growing demand for exports began.

Around that time, the founder's son joined the business and found exports to other countries particularly fascinating. Over the next 20 to 25 years, SPW began to export to several countries including Nigeria, Australia, Italy, Ethiopia, Singapore, Malaysia, Dubai, and Mauritius. As his son, the third-generation owner of SPW put it during our in-depth interview with him:

We had a good domestic market—very big in Andhra (southeastern state in India), in Maharashtra (west-central state) we were doing very well. So he felt that the challenge lay in exports. So my father needed a challenge—it was really challenging because there was no internet, very difficult to find customers. You literally had to fly there and then go to the market and find vendors and then find who the importer is and it was a long-term process. So he found that more challenging.

When asked about how the firm chose which market to enter next and which entry mode, the answer was tied to the “who I am” box in the effectuation model rather than any particular strategic intent (whether fueled by threat or opportunity) for the firm. In the words of the grandson describing the development of the firm under the second generation—namely, his father:

His character was to try something different. So if he has been to Europe once then he goes to Australia next time and then somewhere else. So it's the spirit of adventure somewhat apart from just how much money you are making. So that's how he is. He likes to try things and he likes to explore new markets. Even today I think he is more adventurous than me. New idea, new product—where I am more worried about producing the goods and supplying what we have but he is more concerned about something new and re-inventing ourselves every time . . .

While the first generation was effectual because of circumstances, it appears that the second generation was effectual due to lessons learned from the previous generation combined with the preferences of the decision maker in conjunction with relational issues arising from a growing network of stakeholders around the world. The third generation, however, began to focus on more causal management and supply chain issues that nevertheless have allowed the supply side of the business to internationalize in interesting ways. For example, the firm now sources its sticks from Vietnam and does market research in the United States for a line of organic products. It is relevant to reiterate here that while effectual approaches open up and create new markets at low costs of failure, causal approaches can help stabilize and establish leadership in those new markets. Both are needed in sustaining the growth and survival of established enterprises; expert entrepreneurs who choose to build large ventures, as opposed to building a portfolio of smaller ones, have to become good at using both causal and effectual toolboxes and more importantly, to know when and how to use which and also to mix and match as needed.

Returning for our purposes here to the second generation of SPW's use of an effectual approach, we find considerable evidence for all five principles of effectuation steeped in the logic of nonpredictive control. As we can see in the story narrated thus far, the second-generation entrepreneur began with who he was, what he knew, and whom he knew to take action on things within his affordable loss levels and stitched together a growing network of stakeholders in several different countries. He also exploited contingencies along the way to cocreate and proactively shape the future. For example, when the

government of India announced a duty-free, income tax-free, sales tax-free scheme called export-oriented unit (EOU) for firms that were 100% export oriented, he quickly moved to set up the very first EOU to sell incense sticks. This was not at all an easy task. As the son of the entrepreneur explained:

In fact the Government of India did not have norms for agarbatti. Initially they refused to give us EOU status because the business was too small and my father had to fight it out with them for more than a year saying that “The Act does not specify what should the size of the business be. So people-in-charge cannot really dictate how big the business should be because that’s not the intention of the Act.”

This effectual entrepreneur did not take the environment as given. Instead, he worked to transform and reshape it. This was also evidenced in his initiating and leading lobbying activities for the industry as a whole, without being paranoid about competition. In fact, he appeared to welcome and even help train his competition, a surprising attitude that was also evidenced in the think aloud protocols of the original expert entrepreneur study from which the theory of effectuation was first developed (Sarasvathy, 2008). In the words of the son in response to a specific question about whether his father worried about competition:

No. He didn’t care about those things. When he wants to do something he does it and he takes things as they come. He doesn’t worry too much about planning before actually visiting the place. So he will take up a challenge as it comes and then overcome it and then move forward.

In sum, there are intriguing parallels between Abigo (Schweizer et al., 2010) and SPW—the latter case being about the second generation of a very traditional family business making a culture-specific product that has been exapted into multiple purposes in multiple countries with different cultural tropes and the former a typical modern technological venture in a developed country making a universal product in human health. Both cases provide ample evidence in support of the UE model as well as for the principles of effectuation. More importantly, both emphasize the centrality of *relational* as opposed to solely economic motivations, strategies, and modes of entry, development, and performance.

Although a more detailed and formal comparative analysis of the two case studies is outside the scope of this largely theoretical essay, we hope to have offered sufficient promise here for future researchers to delve deeper and collect more rigorous data to flesh out and clarify both the UE model and the more general effectuation model as they apply to IE.

Provocative Theoretical Challenges for the Future

We began this paper by building on recent reviews of IE research to connect key findings to effectuation research. In particular, we found that effectuation research has important implications not for the *whether to internationalize* question. Rather, different principles of effectuation may be useful in developing a deeper understanding of the *how to internationalize* question including *why*, *when*, *where*, and *how fast*. Our review of the IE literature also led us to the UE model that has already taken a leading stride in accomplishing the task of relating effectuation to IE. Thereafter we offered an illustrative case study from India that both paralleled and contrasted with the Abigo case study from Sweden that had previously illustrated the UE model. The case showed how both the

UE model and effectuation could be empirically evidenced in an emerging economy. Furthermore, we outlined how the two overlapping theories may be generalizable to more traditional industries and family businesses. In either case, the focus was on how firms internationalize rather than on whether they do or ought to.

We would now like to take up the task of building on effectuation research to move the theoretical frontier of IE research into new terrain. We speculate on four possibilities as a way to kick-start an exciting conversation:

1. In terms of generalizability: toward social ventures and innovative organizational forms,
2. In terms of method: toward counterfactual analyses,
3. In terms of unit of analysis: toward the intersubjective,
4. In terms of scope: toward transnational and post-national ventures.

In Terms of Generalizability: Toward Social Ventures and Innovative Organizational Forms

A phenomenon of rising interest and excitement in entrepreneurship research has to do with social ventures—namely, ventures that look beyond profit motives and explicitly embrace additional objectives such as environmental sustainability, responsibilities toward the community, and/or aspirations to tackle large societal problems. As many social ventures take place across international borders (Dacin, Dacin, & Matear, 2010) and in developing economies (Kistruck, Webb, Sutter, & Ireland, 2011) this emerging literature has much to learn from IE. An effectual approach, including the UE model, could help to build this bridge, by focusing on the role of identity, relationships, and networks in creating international social ventures. Zahra, Gedajlovic, Neubaum, and Shulman (2009) provide a review of social entrepreneurship and offer a typology for future research. Scholars are not only beginning to apply existing theoretical frameworks such as institutional theory (Mair & Marti, 2006), corporate demography (York & Lenox, 2013), market and government failure (Santos, 2012), and even effectuation (Corner & Ho, 2010) to social entrepreneurship, they are also beginning to collect rigorous data sets and moving toward higher sophistication in method and analyses (Short, Moss, & Lumpkin, 2009).

It would be interesting to consider choice of organizational forms, such as social ventures, and innovations in organizational forms more explicitly in IE, whether as dependent or independent variables in theoretical models. The role of the 100% EOU created by the Indian government and fought for by the owner–entrepreneur of SPW in our case study earlier is a case in point. Governments around the world are either proactively introducing or reluctantly having to deal with innovations in organizational forms. Entrepreneurs may be caught unaware by regulatory fabrications of new organizational forms or have to fight to obtain regulatory approval for the innovations in organizational forms they themselves have fashioned (as in the case of Grameen Bank—where a coup followed by direct action by the government enabled the creation of a new kind of bank). Yet we do not find much discussion of this in the IE literature.

We believe that taking explicit account of innovations in organizational forms will allow IE theories to become more generalizable across disciplines and also open up new methodological toolboxes for use in future research. We suggest one such method next.

In Terms of Method: Toward Counterfactual Analyses

In addition to the methods used so far in IE, as well as those suggested by the recent reviews of IE literature cited at the beginning of this article, we would like to offer a method used in effectuation research that may be particularly useful in IE research. In a recent article published in this journal, Harmeling and Sarasvathy (2011) used the method to develop a new theoretical framework to study entrepreneurial responses to contingency. The data for the study consisted of rich qualitative material on two cases of academic entrepreneurs, one in the United States and the other in Croatia. But counterfactual analysis can also be used with quantitative and historical data (Tetlock & Lebow, 2001) as well as experimental data (Smith, 2003).

Counterfactual analysis involves creating counterfactual cases (quantitative or qualitative) that lay out what could have happened but did not actually happen, and comparing those with what actually happened. The objective of counterfactual cases is less to describe what actually happened and more to use disciplined imagination to induce and clarify theoretically interesting dimensions of what actually happened. In other words, what happened is not used to test and support or refute theory. Instead, a theoretical framework is imposed on what happened to flesh out and make more precise the different dimensions and nuances of the framework.

In the Harmeling and Sarasvathy (2011) study for example, the factual case studies chronicle the histories of two academic entrepreneurs, Steve Mariotti and Slavica Singer, who built entrepreneurship education programs, the former in the United States and the latter in Croatia. Each entrepreneur experienced contingencies that triggered their entrepreneurial journeys. The contingencies they experienced could have happened, and do indeed happen, to other people as well. Yet the particular response they chose to tackle contingencies led them to build the education programs they did. But in both cases, the types of responses they chose were not usual or obvious. Individuals who experience similar contingencies do not usually end up building educational programs, and definitely not education programs in entrepreneurship. That is why a counterfactual method was particularly appropriate to analyze these responses. When relevant theory drawn from two economic historians, Gerschenkron and Baumol, were imposed on the factual cases, three additional possible responses were uncovered and a new theoretical framework for studying and explaining the role of contingency in entrepreneurship emerged.

Interestingly, the above study can directly be seen as a study in IE as well as in entrepreneurship because both organizations have rapidly grown to operate in multiple countries (10 in the case of Mariotti, and programs reaching to all Eastern and even some Western European countries in the case of Singer). In IE, we can further apply the counterfactual method to a variety of other case histories such as those of Abigo, and SPW alluded to in this paper by juxtaposing contrasting yet related theoretical frameworks such as RBV and dynamic capabilities. The question now is not which of these two theories fit the data better, but which other courses of action that the two conflicting theories prescribe were *not* in evidence. And what difference would it make if other courses of actions or events had actually occurred.

Counterfactual analysis could be especially useful when studying interactions between human beings and their environments, whether physical, interpersonal, organizational, social, macroeconomic, cultural, or regulatory. In his dense yet powerful Nobel lecture, Vernon Smith repeatedly calls for counterfactual designs in the laboratory to better clarify the links between micro-behavior and macro-outcomes, and vice versa: *Again, studying what is not helps us to understand what is* (Smith, 2003, p. 486). This swapping of figure and ground in the way we observe and analyze reality is not only useful as a method; it also suggests a way to tackle a new unit of analysis in IE.

In Terms of Unit of Analysis: Toward the Intersubjective

In a recent article in *Academy of Management Review*, Venkataraman et al. (2012) discussed the importance of the intersubjective as a unit of analysis for entrepreneurship research. Given the movement in IE toward incorporating more entrepreneurship theories within international business frameworks, it would be interesting to examine the role of the intersubjective in IE. The notion of the intersubjective differs from the dyad in networks. Instead of being an interaction between two monadic individuals embedded in a larger social network, “intersubjective” refers to the taken-for-granted epistemic basis for all knowledge modeled as an inseparable tripod of subjective–intersubjective–objective. This idea was worked out in excruciating detail by the philosopher Davidson (2001) and explained with relevance to entrepreneurship in Venkataraman et al. In a nutshell, Davidson’s exposition of the intersubjective suggests a move away from cultural differences and toward the shared meaning emerging from common human experience. Put simply, human trumps culture when the focus is on the intersubjective.

Just as an effectual perspective approaches all resources as fungible given the inherent creativity of action and interaction (Joas, 1996), the intersubjective approaches all human experience as transferable, translatable, and transformable across individuals and environments, given the constitution of knowledge (Davidson, 2001). This suggests that there may be more room for internationalization than we assume in our models. And it raises the provocative possibility that *internationalization* could be the “norm,” while *being confined within national boundaries* the “phenomenon” to be explained. At first glance, this may seem a rather trivial inversion, especially to the extent that we tend to model internationalization as a 0–1 variable. But when we consider the influence of the internet, social media, and mobile devices, most of humanity lives within a global epistemic net that is hard to escape.

The point here is not to diminish the role of culture or national borders or diversity, but to bring into relief the fact that these differences lie enmeshed in shared human experience that enmeshes the globe. When Starbucks opened its first shop in Istanbul, it went to some length to develop and offer Turkish coffee on its menu. Business pundits predicted dim prospects for the endeavor because the Turkish were too proud to let their coffee culture be adulterated with a crass commercial experience fabricated in America. Yet, as Howard Schultz explained in a television interview, the day the shop opened, there was a line around the block. And when the people waiting patiently in line came up to the counter, what they wanted most was a frappuccino. Sometimes a focus on cultural differences in the foreground hides the vast intersubjective tapestry in the background. Ignoring that has real impact in practice. It might behoove us to examine whether it has real impact in our scholarship. We next provide one outlier example that might support the need for such a self-reexamination in the field.

In Terms of Scope: Toward Transnational and Post-National Ventures

Blueseed is a project to station a ship 12 nautical miles from the coast of San Francisco, in international waters. The location will allow startup entrepreneurs from anywhere in the world to start or grow their company near Silicon Valley, without the need for a US work visa. The ship will be converted into a co-working and co-living space, and will have high-speed Internet access and daily transportation to the mainland via ferryboat. So far, over 1000 entrepreneurs from 60+ countries expressed interest in living on the ship. The project is backed by PayPal founder and Facebook early investor Peter Thiel. (Source: blueseed.co)

In empirical science, it is usual to ignore the outlier. And Blueseed is clearly not the norm in IE. But sometimes the outlier can be the key to breakthroughs such as in the case of the kinky orbit of Mars that forced Kepler to throw away his beautiful model of circular orbits and discover the laws of planetary motion based on elliptical orbits. Or the case of the anomalies Darwin observed on his visit to the Galapagos islands that led to the *Origin of Species*. Blueseed is a gross anomaly and that is precisely why it is important for IE researchers not to ignore it or other enterprises like it. Blueseed seeks to subvert the very notion of “nation” and seeks to invent a transnational and even post-national future for economic enterprise. A long view of history argues that if nations could be invented, they could also be made obsolete. The relevant question for IE researchers is not only whether that would obsolete IE, but also how such an obsolescence could actually emerge from the current international conditions for commerce and enterprise. Which current theories and models predict the feasibility of such a transmutation? Which point to pathways and which to obstacles? And which assumptions within existing models would such a possibility challenge the most?

In a recent summary of effectuation research titled “Worldmaking,” Sarasvathy (2012) spelled out the need to proactively *choose between* Type I-Type II errors as an essential ingredient of worldmaking explicated by philosophers such as Nelson Goodman. Under Knightian uncertainty, actors seeking to build new worlds are always prone to either Type-I error (rejecting a vision of a new world that later turns out to become real) or Type-II error (accepting a vision of a new world that later turns out not to come to be). They can therefore either seek to avoid these errors (a causal approach) or embrace them by biasing their choices toward one error and away from the other (an effectual approach). This philosophical generalization of the logic of effectuation argues for tackling in IE research not only extant empirically real phenomena, but also imagined possibilities such as the one expounded by the renowned sociologist Saskia Sassen, author of *Global City* (2001):

Pivotal in my research is that the global—whether an institution, a process, a discursive practice, or an imaginary concept—both transcends the exclusive framing of national states, and also partly emerges and operates within that framing. Seen this way, globalization is more than its common representation as growing interdependence and formation of self-evidently global institutions. It also includes sub-national spaces, processes, and actors.

Part of her thesis urges the importance of looking for globalization within cities rather than “out there” somewhere across the ocean. She argues for a subversive rather than a revolutionary path toward a post-national future. Another intriguing thesis comes from sociologist Jacobson (1996) who studies transnational migration and the decline of citizenship as a result of an emphasis on human rights, even for noncitizens. These ideas about the post-national within national borders or the trumping of human rights over citizenship are not speculative fantasies to be left to science fiction writers. Seeming aliens from the future such as Blueseed are already here and can be uncovered and studied using the same techniques we use to study more mundane phenomena.

Conclusion

We believe that bringing together frameworks from effectuation and IE highlights intriguing new possibilities for future research. Whether these involve new methods, or new organizational forms, or a new unit of analysis, we need invest no more than we have

to lose to push forward the current frontiers. Even taking outliers like Blueseed seriously and putting them within our analytical scope will allow us to sail out into uncharted waters and discover exotic new territories that will ultimately help us understand the present and the “normal” in deeper ways. This meeting of IE and effectuation research is a toast to that exploration. Bon voyage!

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