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DIALOGUE

On Opportunities: Philosophical and Empirical Implications

In their recently published article, Ramoglou and Tsang (2016) try to position continuing debates about the objectivity and subjectivity of entrepreneurial opportunities within a broader debate about critical realism and social constructionism. The authors adopt a view originally proposed by Bhaskar (1998), which suggests that all science—both physical and social—can be understood through a critical realist lens. However, the approach taken in Ramoglou and Tsang's article has three important weaknesses: (1) it misrepresents modern applications of constructionism in the field of entrepreneurship, (2) it approaches the study of opportunities in a tautological way, and (3) it shifts attention from important empirical research that needs to take place in the field of entrepreneurship.

THE SOCIAL ONTOLOGY OF OPPORTUNITIES

First, while some philosophers continue to search for a single philosophy for all kinds of science, most have abandoned this effort in favor of a view that acknowledges that the study of the social world and the study of the physical world are different in important ways (Gilbert, 1992; Searle, 1995; Tuomela, 2013). In particular, physical facts (e.g., that hydrogen atoms have one proton) can be distinguished from social facts (e.g., that Paris is the capital of France) because the former are true regardless of anyone's beliefs, whereas the latter are true precisely *because* of people's beliefs. In this sense social phenomena are, at their core, ontologically subjective.

It does not follow, however, that social phenomena cannot be studied. Indeed, if beliefs about social phenomena are widely held and stable, such phenomena and their effects are epistemologically objective, even though they are ontologically subjective. The effects of these epistemologically objective social phenomena can be every bit as "real" as the effects of physically objective phenomena, a point made by Alvarez and Barney for the case of entrepreneurs:

> Of course, this does not mean that "reality" is unimportant in understanding creation opportunities. After all, actors test their beliefs about an opportunity against the market—itself a social construction—and based on feedback, they refine those beliefs and continue to do so until they give up or form an opportunity. Trying to engage in activities that the market, in aggregate, does not socially define as an opportunity will have the same detrimental impact as running into an objectively real brick wall (2013: 308).

In this context, to suggest that constructionists argue that "agents can willingly create their own realities as long as they regard them as real" or that the "objective world is an illusion" (Ramoglou & Tsang, 2016: 413, Table 1) is to radically misrepresent the modern constructivist perspective (Searle, 1995). While Ramolgou and Tsang acknowledge the limitations of this caricature of constructivism in footnote 1, they use it as a basis for their argument in the body of the article.

Indeed, that social phenomena are ontologically subjective does not imply that physical facts are irrelevant in the study of the causes and consequences of social facts. The implications of the law of gravity are as important for entrepreneurs looking to build hovercraft skateboards as are their beliefs about the market demand for such machines. However, one need not assume—as do Ramoglou and Tsang (2016)—that studying social phenomena, like entrepreneurship, is the same as studying electromagnetism to incorporate objective phenomena into social research.

Indeed, to maintain the assertion that the physical and social can be studied within a single philosophical framework, Ramoglou and Tsang adopt an extreme variant of the realist position, one that builds on "Popperian propensities" (Bhaskar, 1998; Popper, 1990). In this perspective every possible state of the world is equally real, even if a state of the world does not exist. This means that the opportunity to profit from teleportation machines—right now—is just as real as Apple's opportunity to continue selling iPhone 7 model phones, which is equally as real as a version of Earth where there are no humans and

dinosaurs still roam the continents. This is realism gone off the rails.

Indeed, most of the scholars that Ramoglou and Tsang (2016) label as constructionist (e.g., Alvarez & Barney, 2007; Cornelissen & Clarke, 2010) acknowledge the importance of studying objective as well as subjective phenomena in the social world. They are also interested in studying the processes through which ontologically and epistemologically subjective phenomena become epistemologically objective (Alvarez & Barney, 2013; Alvarez, Young, & Woolley, 2015). Not all subjectivists believe we live in whatever world we can imagine. Nor should all realists believe, as suggested by Ramoglou and Tsang, that everything is equally as real as gravity.

TAUTOLOGY AND THE STUDY OF ENTREPRENEURIAL OPPORTUNITIES

Second, in their application of critical realism to entrepreneurship, Ramoglou and Tsang end up adopting a tautological approach to the study of opportunity:

> In the examples of the iPhone and the electric light bulb the very fact that they eventually led to profits testifies to the objective preexistence of the related opportunities (2016: 419).

And "the [failed] design and pricing of the Edsel model in the 1950s were arguably a nonopportunity" (2016: 420).

The tautology underlying these statements is reasonably clear: ex post profits (or losses) are the only criteria used to identify supposedly preexisting opportunities (or nonopportunities). But, of course, if one assumes that profits are caused by the prior existence of objective opportunities, and profits are observed, then one has found the prior existence of objective opportunities. This does not prove that opportunities are always objective; it just proves that if you assume that only preexisting objective opportunities lead to profits, and profits are found, then, by tautological assumption, such opportunities must exist. So if entrepreneurs generate economic wealth, they must have recognized and exploited a preexisting opportunity. Why? Because, by assumption, preexisting opportunities are the only things that lead to profit, and they were preexisting because they led to profit.

This tautological approach to the study of opportunities and wealth generation makes it impossible to empirically study a wide variety of relationships among opportunities, entrepreneurial action, and wealth creation. For example, it may be the case that entrepreneurs can be successful in discovering or creating opportunities, but fail to act to exploit them; they can create or discover opportunities and then try to exploit them, but be unsuccessful in their efforts; or they can also be successful in both forming and exploiting these opportunities. These different outcomes depend, at least in part, on the actions the entrepreneurs take in forming and exploiting opportunities—actions that might include learning, business planning, enrolling critical stakeholders (Alvarez et al., 2015; Burns, Barney, Angus, & Herrick, 2015), and so forth—that cannot be studied in the tautological approach adopted by Ramoglou and Tsang (2106). Put differently, a tautological approach to the study of opportunities and wealth creation makes empirical research on entrepreneurial action and opportunities impossible.

This tautological approach also makes it impossible for entrepreneurial scholars to give substantive guidance to entrepreneurs. Such efforts would be reduced to uncomfortable observations that successful entrepreneurs "obviously did know how to generate wealth" and less successful entrepreneurs "obviously did not know how to generate wealth."

While some entrepreneurship scholars adopt tautological approaches to the study of opportunities (e.g., Eckhardt & Shane, 2003), nontautological approaches to their study do exist in the literature. For example, Alvarez and Barney suggest that opportunities exist when "competitive imperfections exist in product or factor markets" (2004: 622; see also Alvarez & Barney, 2007: 13, 2010: 559, 2013: 302). Specific examples of these market imperfections include asymmetric and imperfect information, transaction-specific investments, economies of scale and scope, externalities, heterogeneously distributed resources and capabilities, mismatches between supply and demand, and unmet latent demand (Barney, 1991; Kotler & Armstrong, 2016; Mahoney & Qian, 2013). According to Mahoney and Qian (2013: 1021), when competitive imperfections exist in product or factor markets, tangible and intangible assets are not being used in their most efficient and effective manner. Those who act in these settings to help reallocate assets to a more efficient use can generate wealth from their actions. It is in this

sense that competitive imperfections in product or factor markets can be thought of as opportunities.

In the discovery view, these competitive imperfections are formed by exogenous shocks to existing markets (Shane, 2003). For example, exogenous changes in technology may alter transactions costs that could create an entrepreneurial opportunity (e.g., Ray, Xue, & Barney, 2013). To the extent that individuals are differentially alert to these opportunities, they can discover and exploit them to create wealth (Shane, 2003).

Alternatively, in the creation view, entrepreneurs themselves can form the market imperfections they then exploit to create wealth. For example, entrepreneurs can introduce new products or reposition existing products that create new, unmet demand. In this view, entrepreneurs both create and exploit a market imperfection.

THE NEED FOR EMPIRICAL WORK

Finally, rather than trying to "rehabilitate" a critical realist approach to entrepreneurship (Ramoglou & Tsang, 2016), maybe our collective efforts would be more fruitfully applied to the study of the empirical implications of current entrepreneurship theories. In this context, it can be argued that the creation view is a particularly attractive theoretical framework to guide this empirical research because it acknowledges fundamental differences between the physical and social worlds and adopts a nontautological approach to studying opportunities. Consider just three examples.

First, the formation and exploitation of opportunities under conditions of uncertainty (Knight, 1921) involve learning from experiments, but the outcomes of such experiments will often be deeply ambiguous. An entrepreneur, for example, may learn that her hypothesis about forming a particular opportunity does not hold yet not know why it does not hold or what alternative hypotheses should be tested next. How does an entrepreneur know what to learn in this setting?

One potentially fruitful approach to learning in these deeply ambiguous settings focuses on how entrepreneurs learn and apply "simple rules" (Sull & Eisenhardt, 2012) or other rational heuristics (Bingham & Eisenhardt, 2011) to make sense of their context. Such tools may enable entrepreneurs to learn through the actions they take and the experience those actions create (Sarasvathy, 2001). However, additional work needs to be done to understand how these heuristics evolve, how they are applied, and their implications for the formation and exploitation of opportunities.

Second, consider the problem of enrolling stakeholders in the formation and exploitation of an entrepreneurial opportunity under conditions of uncertainty (Knight, 1921). Current work on stakeholder theory focuses on how firms can respond to sometimes conflicting stakeholder preferences (Mitchell, Weaver, Agle, Bailey, & Carlson, 2016). But what if no firm exists? Or, even more fundamentally, what if the entrepreneurial opportunity in question has yet to be formed? How are critical stakeholders enrolled in the process of forming and exploiting an opportunity when that opportunity is itself evolving both rapidly and in unpredictable ways (Alvarez et al., 2015; Burns et al., 2015)?

Again, prior work in a variety of different fields may have something to say about this enrollment process. For example, charisma (Conger & Kanungo, 1987), trust in prior relationships (Alvarez & Barney, 2005), and work on narrative and storytelling in communicating the potential of an opportunity (Martens, Jennings, & Jennings, 2007) may all be important in the enrollment process. However, all these perspectives require further development when applied to an uncertain entrepreneurial context.

Finally, consider the role of individual differences in the formation and exploitation of opportunities under uncertainty. Certainly, individual-difference models of entrepreneurial action have a "bad name" in the field (Gartner, 1988). Indeed, with the exception of the extent to which certain cognitive biases are manifest among entrepreneurs and nonentrepreneurs (e.g., Busenitz & Barney, 1997), individual differences do not seem to explain much of the difference between these two groups.

However, that cognitive differences between entrepreneurs and nonentrepreneurs have been identified is suggestive. In particular, the conditions of uncertainty assumed to exist in a creation approach to entrepreneurship are precisely those conditions under which cognitive biases are most likely to be efficacious (Bingham & Eisenhardt, 2011). As noted by Welter, Mauer, and Wuebker (2016), it may well be the case that other individual differences between entrepreneurs and nonentrepreneurs exist but that these differences have been obscured by failing to separate those entrepreneurs who prefer to operate under

conditions of risk from those who prefer to operate under conditions of uncertainty. Individual characteristics including, for example, tolerance for ambiguity, creativity, and persistence may be very important for entrepreneurs operating under conditions of uncertainty, but much less important—and perhaps even counterproductive—for entrepreneurs operating under conditions of risk.

CONCLUSION

It is the case that debates about the philosophical underpinnings of entrepreneurial research will continue for some time; after all, similar debates have simmered in the field of philosophy for several thousand years. It can be argued that, to this point, these debates have helped the field of entrepreneurship make important theoretical advancements. For example, we now understand that even if entrepreneurial opportunities are ontologically subjective, they can still be epistemologically objective and, thus, the object of empirical study. We can also study the process through which an ontologically subjective opportunity becomes epistemologically objective. All this suggests that opportunities endogenously created by entrepreneurs are just as legitimate an object of study as opportunities formed by exogenous shocks to a market or industry. Moreover, we also know that it is possible to approach the study of opportunities—both discovered and created—in a nontautological way. This means that empirical research on entrepreneurial opportunities can go forward on a solid philosophical base.

However, in the midst of these philosophical debates, it may be time for the field of entrepreneurship to begin to more systematically address the empirical implications of entrepreneurship theories, many of which may be conflicting. In our enthusiasm for the philosophical, it is important to not ignore the empirical—the need to examine implications of our theories that have yet to be examined.

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Opportunities, Time, and Mechanisms in Entrepreneurship: On the Practical Irrelevance of Propensities

Since the notion of opportunities is still a central construct in entrepreneurship studies, we applaud Ramoglou and Tsang's (2016) recent effort to engage its philosophical underpinnings and related theoretical and practical value. The authors ground their arguments in Roy Bhaskar's critical realism, where a distinction is made between three ontological domains: the real, the actual, and the empirical. In this stratified ontology it is only the entities and generative mechanisms operating in the domain of the real that have propensities and causal agency. Events in the domain of the actual (i.e., events that happen) or the empirical (i.e., events that we experience) are merely actualized manifestations of the empirically unobservable entities and generative mechanisms that continuously operate under the surface. Based on this metatheory, Ramoglou and Tsang argue that opportunities exist as independent entities on the level of the real in terms of "the propensity of market demand to be actualized into profits" (2016: 411). These opportunities-as-market-demand-propensities are then actualized, or not, as profitable ventures on the level of the actual. To illustrate, Ramoglou and Tsang use the analogy of a seed whose innate propensity to become a flower will be actualized should circumstances be right, but will remain unactualized should they not.

The authors paint a very deterministic picture that downplays the many empirical and conceptual accounts of entrepreneurship as an open-ended and collective process that unfolds in real time and transforms individuals, ventures, and environments in largely unpredictable ways (Gartner, Bird, & Starr, 1992; Garud, Gehman, Kumaraswamy, & Tuertscher, 2016; Korsgaard, Berglund, Thrane, & Blenker, 2016; McMullen & Dimov, 2013; Sarasvathy & Dew, 2005a). In fact, the analogy of a seed actualizing into a flower treats time as something that influences only whether and how fast a seed becomes a flower; regardless of time passed, the seed will never be anything but a flower.

Yet time in social systems is often said to introduce true uncertainty or, at the very least, effective unpredictability, partly by dint of transformative human action and interaction (Knight, 1921; Lane & Maxfield, 2005). Stated in the terminology of critical realism, this means that any propensity existing at the deeper ontological level can be manifested in a multitude of different ways at the level of the actual. However, since these manifestations will take place in the future, the connection between the opportunity-as-market-demand-propensity (on the level of the real) and the actualization of a profitable venture (on the level of the actual) is very difficult to establish, since whatever profitable venture is actualized will, in fact, have depended on an