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The Individual-Institutional-Opportunity Nexus in Entrepreneurship: Bridging Perspectives in Entrepreneurship and Community and Regional Economic Development

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This article is intended to explore the complex space between entrepreneurs, local institutions, and sources of opportunity, and to describe the promise of this approach for both regional science and entrepreneurship research. Busenitz et al. (2003) described the nexus between these three areas as the "unique domain of entrepreneurship [research] (297)," noting also that, prior to their writing, few articles had attempted to co-examine all three components at the same time. This article explores how differences in this dynamic three-way relationship, across bounded places such as a communities or regions, may be associated with differences in entrepreneurship rates, collective knowledge about entrepreneurship, and the ability of entrepreneurs to thrive and collaborate locally. It is anticipated that a better understanding of how this complex space differs from place to place may strengthen efforts to build a more entrepreneurial region, and may work hand-in-hand to enhance current entrepreneurship development techniques such as entrepreneurship development systems (Lichtenstein and Lyons 2008, 2001) and entrepreneurial community development (Markley and Macke 2003).

A Regional and Community Approach to Theory Development

There is a well-documented, important conceptual link between entrepreneurship and the development of communities, regions, and neighborhoods – both economically and socially. Entrepreneurship has been touted as central to innovation and economic growth (Schumpeter 1934), a key to economic dynamism and job creation (Reynolds et al. 2001), and a primary driver of technological advance and human well-being (Baumol 2007). Entrepreneurs are commonly viewed as the critical mechanism by which innovations take root in the marketplace (Small Business Administration 2005). Small businesses with annual revenues of less than $90,000 represent 95 percent of nonemployer firms (sole proprietorships) and 25% of all employer firms (Davis et al. 2005). Henrikson and Johansson (2009) have surveyed empirical studies since 1990 and found a very strong association between small businesses, *especially* high-growth firms, and job creation worldwide – not only in high-tech sectors, but especially in the service sector.

Beyond evidence that entrepreneurship is critical to economic growth on a global scale, entrepreneurship also has a non-quantifiable importance. In the words of Davis (2008), "Researchers argue about the link between entrepreneurship and growth, but everyone wants entrepreneurship even if the link to growth is not clear (39)." The *perception* of community-wide benefits from entrepreneurship may be more important than the actual experienced effects of entrepreneurship and small business creation on the economy. An engaged local business sector (comprised of locally-controlled entities) has been found to have an important impact on the citizen's perception of local well-being (Tolbert et al. 2002, 1998). And about 70% of Americans would prefer to be self-employed, even though about 7.3% actually are (Blanchflower et al. 2001), making entrepreneurship a widely sought-after – but remarkably frustrated – endeavor in the United States.

To the regional scientist, however, entrepreneurship takes on a variety of new dimensions as one travels from location to location. Differences in entrepreneurship rates across place, space, and time have opened new lines of inquiry within the regional and social sciences, and these. Several studies have begun to follow these lines of inquiry. For example, which cities embody attributes that are most useful to starting a business (Nolan 2003, Birch 1995) and attracting a young, creative talent pool (Florida 2002)? Which local institutions and support structures seem to matter most to small business creation and income returns to self employment (Goetz 2008, 2006)? How does the local culture contribute to the creation and growth of new businesses (Hustedde, 2007)? What regional attributes contribute not only to heightened entrepreneurship levels, but local economic growth as well (Acs and Armington 2006)? Is there a difference between rural and urban entrepreneurship, and what attributes tend to drive the breadth and depth of businesses in each (Henderson et al. 2007)? Most of these studies focus on differences between the characteristics of places and the people living there, and the association of these differences with differences in startup and small business success rates. Regardless, this plurality of regional factors has notable effects on entrepreneurship rates and the success of small businesses beyond the traits and characteristics of the founder (Fritsch and Schmude 2006).

A lesser focus in the literature has been to examine how *interaction* within and between key economic actors (like entrepreneurs) and related institutions (like chambers of commerce, the local government, or small business development agencies) may itself be a factor associated with the level of entrepreneurship locally. Entrepreneurship studies are well along a path that shuns the idea that entrepreneurial behavior as inherent in

certain individuals or exhibited by individuals or firms with certain traits. There is recognition that, to understand entrepreneurship, one must understand the *processes* through which ordinary individuals with extraordinary ideas act to make those ideas a reality (Davidsson 2008, Busenitz et al. 2003). While the heterogeneity of entrepreneurs, a multitude of potential motivations for starting a business, and the difficulty of conducting longitudinal research on entrepreneurs all present barriers to process-oriented scholarship (Davidsson 2008), understanding *how* entrepreneurship "works" – beyond identifying individual and firm-level traits associated with entrepreneurship – contains promising seeds for the advancement of research in the field. At the community and regional level, understanding the process of purposive interaction, the creation of supportive and informative personal and business networks, and how entrepreneurs work collectively to exploit local advantages, promote local well-being, and develop clusters of shared knowledge – is central to the understanding of how localities may differ in their capacity to generate and sustain small businesses.

Furthermore, entrepreneurship theory has recently shifted toward a more thorough focus on the concept of *opportunity*. Scott Shane's well-known *General Theory of Entrepreneurship* (2003) conceptualizes the phenomenon of entrepreneurship as existing at the nexus of individuals and opportunities. As will be explained later in this article, a regional or community science approach would necessarily require an analysis of how local and regional institutions associated with entrepreneurship may also play a part in the development of opportunities along with individual entrepreneurs. The current debate in the literature between opportunity as *discovered* (Shane 2003, Kirzner 1973) versus opportunity as *created* (Sarasvathy 2006, Bhave 1994) could have considerable import

for local levels of entrepreneurship, as well as for developing a richer theoretical understanding of entrepreneurship as it becomes manifest at the local level.

In practice, the division between *discovery* and *creation* perspectives may not be so divided after all. Rather, opportunity discovery and creation may be different parts of the same process, used by different entrepreneurs, or used in different situations entirely (Dew et al. 2009, Sarasvathy et al. 2003). It is hypothesized here that *coordination* about these views, rather than which specific view entrepreneurs and institutions choose, is important to identifying, creating, or acting on local opportunities. In cases where entrepreneurial assistance organizations are highly fragmented, uncoordinated, and competitive in nature for the same entrepreneurs (Lichtenstein and Lyons 2001), or when entrepreneurs tend to see themselves as lone individuals apart from a broader community of local small businesspeople (Fortunato 2008), a locally-constructed knowledge of how opportunities are developed may be equally fragmented. Such fragmentation may lead to the inefficient or ineffective efforts to stimulate local entrepreneurship, as uncoordinated views among entrepreneurs, institutions, or between these two groups may lead to confusion over who is responsible for opportunity development. Some areas, by contrast, may boast a coordinated system of identifying or creating local opportunity based on local talent and assets. Opportunity-centered entrepreneurship in this sense is reliant upon both individual *and* collective understanding to translate into entrepreneurial outcomes.

This rest of this article is dedicated to analyzing the conceptual "pieces" of the individual-institutional-opportunity nexus, and to understand how, together, this complex space may provide useful insights for entrepreneurship research. First, we problematize

the concept of *opportunity* in communities, underscoring the importance of learning about opportunity from the point of view of local actors – and examining differences in the perception of opportunity from place to place. Socio-cultural differences in how entrepreneurs and local institutions conceptualize opportunity and perceive of the nature and origins of opportunity may have localized effects on the efficacy with which individuals can mobilize to either discover or create opportunities for entrepreneurship. Following this discussion, another dimension of community action – the level of interaction within and between entrepreneurs and local institutions – is discussed. Interactional field theory (Wilkinson 1991, 1970, Kaufman 1959) is used to understand how communities may differ with regards to the ability of key social groups to interact regularly to meet broader community needs – those beyond a pure profit motive for small businesses. These differences may enhance a broader culture of entrepreneurship in some places while inhibiting its emergence in others. Then, the "pieces" of the individual-institutional-opportunity nexus are integrated, with special attention given to the interdependencies of local entrepreneurs, their stakeholder institutions, and the way these groups perceive of opportunity. Finally, the implications of this theory for community and regional development are discussed, and we attempt to light a pathway toward future research in this area, as well as the development of purposive, community-minded networks of entrepreneurs that improve the well-being of local citizens.

The Opportunity Dimension of Entrepreneurship Development

An orientation toward seeing (or creating) opportunities is, in essence, the "heart" of entrepreneurship research (Stevenson and Jarillo 1990), as entrepreneurship is increasingly viewed as a set of ideas, beliefs, and actions that *enable* the creation of future goods and

services in the absence of current markets for them (Venkataraman 1997). Sarasvathy et al. (2003) expanded this idea, classifying an entrepreneurial opportunity as:

- New idea/s or invention/s that may or may not lead to the achievement of one or more economic ends that become possible through those ideas or inventions;
- Beliefs about things favorable to the achievement of possible valuable ends; and;
- Actions that generate and implement those ends through specific (imagined) new economic artifacts (the artifacts may be goods such as products and services, and/or entities such as firms and markets, and/or institutions such as standards and norms) (p. 143).

In recent years, two broad perspectives have emerged encapsulating the attributes listed above, but differentiate the ways that many entrepreneurship researchers view opportunity (Berglund 2007)[1]. The more traditional approach, opportunity *discovery,* assumes that opportunities are separate from the entrepreneur, that they exist "out there somewhere," waiting to be found by skilled individuals capable of both identifying and exploiting these opportunities (Shane 2003, Kirzner 1973). Under this perspective, opportunities generally arise through some change or disequilibrium in a market, such as unexpected occurrences, incongruities, process needs, changes in industry structures or markets, demographic changes, changes in perception, and new knowledge (Drucker 1985, p.

[1] A third approach to opportunity, the *allocative* approach, deals with the reallocation of economic inputs to achieve more optimal outputs (Sarasvathy et al. 2003). For example, by combining machine processes from two different product lines in a manufacturing facility, we may be able to create a new product that combines the attributes of both of the original products, potentially unlocking new sources of demand. However, since many of the requisite assumptions under this perspective (perfect competition/information, known risks and outcome probabilities, Pareto "zero-sum" optimality) are not conditions frequently found in the realm of newer businesses (Sarasvathy et al. 2003), this perspective is omitted from this discussion, although it may, in part, contribute to the understanding of phenomena like corporate entrepreneurship.

35). Skilled entrepreneurs anticipate these changes by conducting market research, setting goals to be met, and then launching a business with the intent of reaching those goals (Berglund 2007; Alvarez and Barney 2007).

In a very different sense, scholars who support the notion of opportunity *creation* do not believe that opportunity is external to the entrepreneur. Using this approach, opportunities cannot be identified in advance because they are yet to be created (Berglund, 2007; Shackle, 1988). Instead, entrepreneurs tend to assemble or *effectuate* opportunities out of the mundane realities of their everyday existence (Sarasvathy 2006). This approach suggests that opportunities can only be identified in retrospect and cannot be known in advance. Human action is required to convert everyday means (the entrepreneur's own personal assets, networks, knowledge, and capabilities) into productive ends (a small business with an uncertain probability of success). In this view, research and forecasting on markets for goods and services are essentially frivolous endeavors, as future outcomes are totally random and cannot truly be known[2]. Rather, incremental learning occurs throughout the entire process of launching and managing an entrepreneurial endeavor and is not entirely antecedent to the endeavor (Sarasvathy 2006). Put in simpler terms, in the *discovery* approach, opportunity exists prior to the actions of the entrepreneur, whereas in the *creation* approach, opportunity only exists following the actions of the entrepreneur.

Apart from representing two different ways of thinking about entrepreneurship, the division between *discovery* and *creation* approaches leads to very different predictions about

[2] Following from Knight's (1921) thesis, *risk* is present when one can mathematically deduce the probability of future success, i.e., the probability of making a profit in an entrepreneurial business. The probability of success is therefore known, but the actual outcome is uncertain. *Knightian uncertainty,* on the other hand, exists when neither the outcome nor probabilities of success are known in advance. The future is essentially a totally random series of events that cannot be conjectured. It therefore makes sense that *discovery* scholars, who espouse market research and the exploitation of market inefficiencies given good information, generally use the notion of risk to explain entrepreneurial action. *Creation* scholars, on the other hand, rely on Knightian uncertainty in their explanations, and may see research and forecasting as totally unnecessary since the future is random and cannot be known or predicted.

how entrepreneurial action affects the ability of entrepreneurs to produce new products and services (Alvarez and Barney, 2007). In terms of entrepreneurship development strategies in communities, each approach suggests that different parties are responsible for the development of local opportunities using different sets of techniques. A *discovery* strategy might place more emphasis on the enhancement of local opportunity through the strengthening of the local small business environment. Since many of these environmental factors (infrastructure, taxes, formal and informal small business support institutions) are controlled by or manifest in local institutions, it is these institutions that are primarily responsible for creating an environment that is well-stocked with potential identifiable opportunities. Equally important in this approach is the development of skills among local entrepreneurs (or aspiring entrepreneurs) to identify and exploit those opportunities (Shane 2003). Conversely, a *creation* strategy would place more emphasis on the ability of entrepreneurs to "fabricate" opportunities out of their own set of productive means, irrespective of the local environment. It is the entrepreneur's responsibility to use his or her imagination and creativity to take what he or she has and turn it into a productive endeavor that is relevant to the local marketplace. Building personal skills, such as personal innovation, creativity, and practical business management skills among individuals and would-be entrepreneurs, would be a more effective strategy for entrepreneurship development in this case.

Shane's *General Theory* (2003) and Sarasvathy's *Effectuation* are frequently cited in opportunity research precisely because they offer very distinct positions on the nature of opportunity, the role of uncertainty, the intentionality of human action, and the ontological status of opportunities (Berglund 2007, p. 245, Chiasson and Saunders, 2005). However, several researchers are coming to the understanding that the true

ontological nature of opportunity probably exhibits some mix of *discovery* and *creation* properties (Berglund 2007, Alvarez and Barney 2005). Sarasvathy's *creation* stance does not take into consideration that the means that people use as the grist for effectuating opportunity may be moderated by attributes of place. In fact, the local society may affect the frequency and recognition of "opportunity fragments" that get effectuated together. The local culture may also influence whether or not one is capable of effectuating in the first place. On the other hand, Shane's *discovery* stance discounts the individual's ability to innovate new (local) markets that are not "preexisting," or to learn new entrepreneurial skills throughout the process of starting a business. Recent works have suggested that experienced, serial entrepreneurs tend to operate from a *discovery* perspective, seeking out new opportunities in the environment through careful planning, while novice entrepreneurs tend to thrive under the more creative and flexible *creation* framework, using incremental learning to create new products and services from their surroundings (Dew et al., 2009). Furthermore, *discovery* methods may be more appropriate in some situations, like those where the entrepreneur's outcomes are reasonably well-known, while a *creation* approach may be more effective in cases of true uncertainty (Sarasvathy et al., 2003).

Even though there is some tension between these frameworks, regional and community science is well-positioned to answer questions about the nature of opportunity. Rather than assuming that entrepreneurs, as a "class," uniformly perceive of opportunity in the same way, comparative regional studies can discover whether there is a difference in how entrepreneurs describe opportunity in high- and low-entrepreneurship areas. For example, entrepreneurs in high-entrepreneurship areas may view opportunity

according to the *discovery* or *creation* perspective, or they may have insights about how these two perspectives fit together in their community. In low-entrepreneurship communities, however, a lack of interaction among entrepreneurs may lead to a multitude of disconnected views of opportunity and its local roots.

This brings up another point – that local interaction among entrepreneurs and between entrepreneurs and their local institutions may lead to a better coordinated understanding of how opportunities occur. If this "collective knowledge" about opportunity is widely understood, entrepreneurs and local institutions may already have programs, work groups, and innovative techniques in place to define everyone's role in exploiting these opportunities. Furthermore, the perception of collective efficacy in the locale (perhaps read as a "together, we can do it" attitude) may contribute to an understanding of how entrepreneurs overcome feelings of fear of acting on opportunities associated with risk, even if the individual attitudes of entrepreneurs may differ somewhat (Krueger 2003, Shepherd and Krueger 2002). It is hypothesized that high-entrepreneurship areas will contain entrepreneurs and community leaders that have coordinated views about how entrepreneurial opportunities are eventually discovered or created[3], while in low-entrepreneurship areas, entrepreneurs and institutions may instead "point the finger" at the other party as the cause of the lack of opportunity, or hold ambivalent views about the role of the other party in the development of opportunities. The more coordinated the knowledge, the more likely each actor would be to understand the role they play in developing local opportunity. The pursuit of a local culture that

[3] This paper does not presuppose that *discovery* or *creation* is the "correct" approach to understanding opportunity, or that one method is in any way superior to the other. What matters more is the level of *coordination* between entrepreneurial and institutional perspectives, the lack of which may lead to the coordination problem discussed at the very beginning of this document and covered in detail in Lichtenstein and Lyons (2001).

values entrepreneurship as a *collective* endeavor is predicted to lead to higher levels of local entrepreneurial engagement and opportunity generation within the local society.

Table 1 is a summary table of the two approaches comparing the main tenets and implications of *discovery* approaches like Shane's to *creation* approaches like Sarasvathy's.

Table 1: Comparison of Tenets of Shane's *Discovery* Approach and Sarasvathy's *Creation* Approach

Concept	Discovery	Creation
Locus of Opportunity Control	External: Opportunity appears in environment, and is found and exploited by the entrepreneur	Internal: Opportunity cannot be understood apart from the entrepreneur
Process of Opportunity Exploitation	Opportunity exists *prior* to entrepreneurial action	Opportunity exists as the result of entrepreneurial action
Risk versus Uncertainty	Risk: Future outcomes can be estimated and planned	Knightian Uncertainty: Future outcomes cannot be known
Nature of Markets	Pre-existing: Entrepreneur finds a new niche in an existing market	Improvised: Entrepreneur creates a new market through the recombination of existing inputs
Means vs. Ends Orientation	Ends: Means are put into play when an optimal goal has been set	Means: End goals cannot be known, strategy is based upon the utilization of what one has and who one knows
Source of Opportunity	Market disequilibria and inefficiencies	Assembled from mundane surroundings into something novel and synergistic
Role of Learning	Market research prior to business launch: determination of an optimal goal	Continuous learning: "Learn as you go" approach. Market research frivolous if the end goal cannot be known.
Rigidity of Goals	Goals are relatively static, since the opportunity is externally given	Goals are dynamic and evolutionary, and change due to changing means and conditions
How Business Begins	Identification, then exploitation of an external opportunity	Effectuation, or "assembly" of a wide variety of potential outcomes given static means.
Responsibility for Developing Opportunities	Those that have control or influence over environmental factors, such as local institutions	Individual entrepreneurs

Entrepreneurs and Institutions: The Community Orientation Dimension of Entrepreneurship Development

Individual- and firm-level analyses are common in the entrepreneurship literature, as is a growing corpus of research measuring entrepreneurship by nation, state, and region. This section seeks to blur these lines, however, envisioning entrepreneurship as both an individual and collective endeavor with important local attributes. Specifically, we wish to take discussions of regional entrepreneurial success beyond an analysis of local social and institutional structure and the personal networks of entrepreneurs, as these do not necessarily

guarantee a more "entrepreneurial" region, nor does a discussion of networks provide grist for the development of better quality local innovation. Instead, local interaction may be more aptly studied as it relates to the purposive activity of developing the community and building collective entrepreneurial and collective efficacy. Additionally, the interaction that occurs between entrepreneurs and local business support institutions is expected to relate to a better collective understanding of local opportunity, and how to identify or create opportunity using local assets.

Before venturing into deep theoretical waters, it is best to start with a brief discussion of structural networks – without which there could be no interaction in the first place. There is support in the literature for the notion that entrepreneurs who are "well-networked" tend to be more profitable, sustainable, and successful (for example, see Witt 2004, Aldrich and Zimmer 1986). "Well-networked" means that social relationships exist between the entrepreneur and a diversity of actors across society including customers, suppliers, fellow entrepreneurs, and business support institutions. Such structural network perspectives have their roots in a theory by Granovetter (1973) stating that extensive networks of *weak ties,* or informal acquaintances, lead individuals to better, more diverse sources of information that can be used to further one's personal success (in terms of employment, access to resources, etc.). Further, Burt (1995) stated that the goal of developing a complex network of social contacts is to bridge *structural holes,* or information gaps. Bridging these gaps can lead to productive endeavors such as the recognition and exploitation of entrepreneurial opportunities. Therefore, the size, diversity, and completeness of one's network, and one's location within the network, are important to the pursuit of personal economic gain.

The presence of social networks for entrepreneurs is largely influenced by the community in which an entrepreneur does business. A dearth of weak tie relationships, and an over-dependence on strong, kin-based ties has been cited as a challenge to rural economic

development in general (Wilkinson 1991). A confirming study found that individuals in larger urban communities in Belgium and Finland with more diffuse networks (plenty of weak ties) were overall more likely to perceive the existence of imminent business opportunities in their local community than individuals with fewer weak ties and less-diverse networks in more rural areas (Areneus and De Clercq, 2004).

The structural network perspective is useful for understanding how individual entrepreneurs and firms can bridge knowledge and information gaps to become more successful. This activity occurs *within* communities when entrepreneurs become engaged in public and private forums to socialize with other like-minded individuals, share ideas, and coordinate activities. However, this perspective stops short of explaining the development *of* communities[4] as a goal beyond making profits (as might be the case for entrepreneurs or local private institutions like banks) or winning an important election (as might be the case with local government leaders, for example).

Interactional field theory conceptualizes community development as the development of capacity of community members to engage in action that improves the well-being of all community members in a way that cross-cuts and incorporates a broad diversity of representative local viewpoints, with individual community members often setting aside their own interests and agendas to do so (Wilkinson 1991). Building capacity requires the development of social networks through social interaction, just as in the structural network perspective above. However, the end goal of interactional field theory transcends personal or firm-specific measures of success – it is the improvement of overall community well-being through collaboration rather than personal, firm- or organization-specific economic gain.

[4] The development *of* communities refers to a process of social interaction that leads to collective improvement in well-being for *all* community citizens. This is contrasted with development *in* communities that tends to benefit only select stakeholders and interests within the local society, sometimes at the expense of other community members and their well-being (Wilkinson, 1991).

Specifically, various *social fields* (spheres of specific common interests within a community, such as the local small business community and the local government) combine to form the *community field* – a field of common interest in the local society that intersects with every *social field* in the local society (Wilkinson 1991). When people collaborate to address their common issues and problems, they exhibit community agency, or collective action (Bridger and Luloff 1999).

Entrepreneurship development can be seen as an economic development strategy within the broader realm of community development (Korsching and Allen 2004). In a community with well-developed capacity for collective action, the coordination of entrepreneurial agency to solve community problems (like a stagnating job market or lack of high-quality services) in excess of their own profit goals is expected to be present. In short, community needs and challenges may be seen as sources of opportunity themselves. It is hypothesized that entrepreneurs and community institutional leaders in communities with higher levels of entrepreneurship already regularly interact to identify or create local opportunities. Such interaction for these purposes is expected to occur less often, or not at all, in low-entrepreneurship communities. Regional science may therefore seek to understand the extent to which entrepreneurs and community institutional leaders see entrepreneurship as part of a broader community development agenda, and the extent to which these entities regularly interact for the purpose of improving the total well-being of the community through entrepreneurship.

Integrating Individuals, Institutions, and Local Sources of Opportunity: A Complex Relationship

The individual-institutional-opportunity relationship is one of complexity and embeddedness. Complex relationships exist where it is difficult to separate cause and effect

in changes in the relationship. For example, when observing the relationship between individuals and institutions, each can be seen as both an independent and dependent variable (Schmid 2004). Institutions continuously structure and order the behavior of individuals within that institutional arrangement, but they are also continuously being changed and adapted by individuals within those institutions. The same is true for individuals, who are both continuously affecting and being affected by institutional cultures that constrain or encourage their behavior (Schmid 2004). Due to the interdependencies between social structures, culture, and the actions of individuals, it is sometimes very difficult to conceptually "untangle" the root causes of social phenomena like entrepreneurship.

Busenitz et al. (2003) posit that the domain of entrepreneurship, and therefore all entrepreneurial activity, is primarily governed by a complex, three-way relationship between individuals, modes of organizing (such as institutions in the community case), and opportunity. This relationship is further bounded and structured by environmental factors such as local or industry conditions. Social theories account for the relationship between individuals and their social structure (Giddens 1984), between economic actors and their social structure (Granovetter 1985), and institutional economists consider the relationship between individuals and institutions (Schmid 2004). Busenitz offers a novel perspective by viewing opportunity as a sort of "active partner" embedded with individuals and institutions. Even in the *creation* approach to opportunity, opportunities do not effectuate themselves. However, the presence of opportunity, whether discovered or created, extant or effectuated, can influence individuals (who may pursue the opportunity as a business) and institutions (who may promote the opportunity to would-be entrepreneurs) alike.

Likewise, opportunities themselves may be structured by individuals (who effectuate, or who create new opportunities through their endeavors) and institutions (whose productive local efforts may open new markets or create new demand). Opportunities cannot actually *do* anything, but they are capable of influencing the structure and order of human activity and organization, and they may equally produce and be produced by human activity and organization. In this sense, they are likely just as embedded with individuals and institutions as individuals and institutions are with one another: creating the three-way nexus at A in Figure 1.

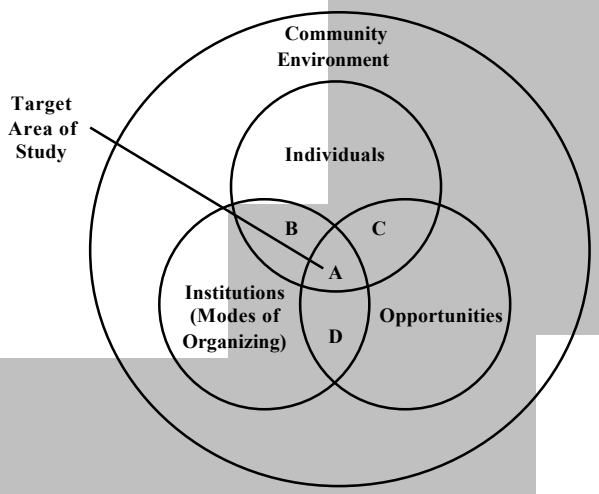

Figure 1 – Conceptual Domain of Entrepreneurship with Target Study Area. Adapted from Busenitz et al. (2003, p. 297).

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This conceptual model assumes that the outcomes of the actions of one part of a complex relationship necessarily affect the other parts. Perceptions and beliefs about opportunity – the core driver of entrepreneurial action (Berglund 2007) – must therefore affect the relationship between local entrepreneurs and their community institutions. At the same time, the relationship between entrepreneurs and community institutions, and the nature of the interactions contained within these relationships, may quite plausibly affect the ability of local entrepreneurs to transform local opportunities – either by discovery or by creation – into productive ventures. Furthermore, and essential to this field of study, the capability of

community members to see this process as a *community-wide* rather than *individualistic* endeavor may have implications for the well-being of members of that community. Communities with more frequent, more productive interactions between local entrepreneurs and community institutions are hypothesized to have shared perspectives about local entrepreneurship. Shared perspectives may lead to a greater understanding of how to strategically uncover local opportunities, how to view entrepreneurship as inseparable from community development, and eventually lead to higher levels of sustained entrepreneurship, economic returns to entrepreneurship, and possibly increased levels of community well-being. Future research may more thoroughly uncover the specific attributes of these individual-institutional-opportunity relationships that lead to higher levels of entrepreneurship in the community.

In summary, Table 2 presents a matrix of what the individual-institutional-opportunity relationship is expected to look like in practice. The level of community orientation is found on one axis (representing nexus B between local entrepreneurs and community institutions), and the extent of shared perceptions about opportunity is on the other axis (representing nexuses C and D between local entrepreneurs and opportunity, and community institutions and opportunity).

Table 2 – Entrepreneurship Development across Two Dimensions

	Extent of Community Orientation (Nexus B)		
Shared Views of Opportunity (Nexuses C and D)	**Transcendent – Community Development**	**Ambivalent – Entrepreneurship in Isolation**	**Conflict – Working at Cross Purposes**
Shared Views of Opportunity	Entrepreneurs and community institutions work together and regularly communicate to identify or create new opportunities for small business to contribute to community economic	Institutions work to improve the local small business environment, and small businesses work to develop locally-relevant businesses, but with no formal coordination or	Community institutions and small businesses agree on each other's role in the entrepreneurship process, but disagree over what constitutes community economic

	goals above and beyond their own institutional or business agenda	communication between the two	development (i.e., industrial recruitment vs. small business development)
Uncoordinated Views of Opportunity	Entrepreneurs and community institutions work together or see the potential value of working together to meet community economic goals, but disagree over who should take responsibility for encouraging local entrepreneurship	Institutions may give verbal support for entrepreneurship but believe that it is the entrepreneur's job to act on opportunity, while entrepreneurs claim that local institutions are important but should do a better job at enhancing local opportunities – limited or no formal interaction	Community institutions and small businesses do not interact, or view each other with hostility, and have conflicting economic goals, i.e., balancing small business interests with the interests of larger industries or employers

The Implications of Opportunity and Interaction for Community and Regional Development

Interactional and opportunity-based views of development have implications not only for entrepreneurship research, but also for theory development and applied practice. We advance the notion here that a robust understanding of entrepreneurship process, of local innovation, and of collective knowledge generation and empowerment across geographic space will require a different set of research questions than one typically sees in studies of entrepreneurship. A holistic regional science approach using multiple methods, frameworks, and disciplinary insights can help to explain why entrepreneurship is different from place to place, both in terms of inputs and outcomes. The following section offers tenets that can be used to differentiate regional science studies (including those in economics, sociology, urban planning, political science, psychology, and other base disciplines) from other, more traditional approaches in entrepreneurial inquiry. Where appropriate, a different set of

research questions is elaborated with the intention of providing a different array of insights and findings that may explain regional- and community-level entrepreneurship variation[5].

A Unified Social Science Approach. Flyvbjerg (2001) has made the case that the future of a pragmatic social science rejects approaches held by the natural sciences and seeks a more holistic, comprehensive understanding of social phenomena from multiple scholarly perspectives. We argue here that regional analyses and econometric approaches can lend excellent insights into the functioning and efficiency of small business, and into many measurable differences and performance benchmarks between regions. However, interaction is not easily quantifiable, as the contents of that interaction may differ in terms of its substance, in terms of power differentials that may exist, and in terms of the expectations each party has of the other. Further research is needed to penetrate deep into the nature of local interactions among entrepreneurs and between entrepreneurs and the institutions that are intended to support them. Such insights are unlikely to come exclusively from econometric approaches, and will likely require a multiplicity of studies that measure both the breadth and depth of local interaction around entrepreneurship and innovation.

Additionally, Davidsson (2008) has stressed the importance of theoretical and research development that sees opportunity as a central concept in *social processes* that lead to entrepreneurship, especially given the heterogeneity of markets, people, and places. Furthermore, studies of economies around the world have found that the concept of "opportunity" is very much culture-dependent (Dana 1995). Social norms and extra-personal influences have an effect on whether or not individuals perceive themselves as entrepreneurial in the first place (Krueger 2003). These statements are a nod to the regional

[5] Not just variation in terms of the number of startups or small businesses, but also the nature of these businesses, differences in the processes of how these businesses came to exist, and different outcomes given the heterogeneity of local markets.

sciences to conduct work that can analyze these processes across geographic space, given differences in local cultures and capacities for meeting local needs. We advance the idea that opportunity is "bound up" with indicators of community interaction. While still awaiting further empirical evidence[6], we hypothesize that local entrepreneurs who prefer the *discovery* over the *creation* approaches to opportunity (or vice-versa) will have little association with local start up rates and returns to self-employment. Rather, we predict that the ability of entrepreneurs to *communicate* and *coordinate* their views about opportunity to one another, and to regularly discuss these views with local support institutions, will lead to the development of an enriched collective knowledge and culture that may foster higher levels of small business sustainability and, ideally, local innovation. This regular interaction may be more important to local entrepreneurship than falling somewhere on the discovery-creation spectrum, since communities are in a perpetual state of dynamism (Wilkinson, 1991), and different aspects of discovery and creation approaches may be more appropriate in certain situations relative to others (Sarasvathy et al., 2008). Further, the perception of innovation and collective support expressed through a local society may be more important than the actual existence of that support (Krueger 2003), giving local culture enormous weight in influencing entrepreneurial outcomes.

Interaction, therefore, is expected to drive local entrepreneurship processes through enhanced communication and understanding among its stakeholders. The nature of these interactions may also be structured and constrained by local opportunities (discovered and/or created) that may or may not be present. And, rather than support one type of entrepreneurial outcome as "successful," multiple outcomes due to local idiosyncrasies are not only likely,

[6] Michael Fortunato is currently completing his dissertation on the subject, examining local interactions and perceptions about opportunity in high- and low-entrepreneurship communities in Maine, Wisconsin, and Pennsylvania.

but perhaps desirable, in developing a richer understanding of local entrepreneurship (Davidsson 2008).

Innovation Communities and Collective Space. Despite a growing reliance on the internet for interpersonal communication, local communities continue to rely on local interaction to meet local needs. Place-based strategies take, as a starting point, the idea that the social and economic situations of communities and regions are unique, and are often best served by local action rather than through blanket policies at the state and federal level (Bridger and Alter 2008). Following from interaction field theory, higher levels of community interaction give communities a forum for facing challenges collectively, bringing a diversity of ideas to bear to improve community well-being (Wilkinson 1991). While a wide diversity of actors from across the community are expected to reduce information asymmetry and contribute to the exchange of ideas (Burt 1995; Granovetter 1973), interactive field theory is distinctively *purposive* in nature, meaning that community stakeholders act for reasons that transcend their own self interest to meet the needs of the entire community (Wilkinson 1991).

The idea of creating and fostering "dialogues" and interactions between entrepreneurs (and would-be entrepreneurs) and institutions for community and regional development requires an appropriate, purposive forum for doing so (Wilkinson 1991). One way to do this is through the creation of an "innovation space" in communities where these parties can feel both comfortable and empowered to generate new ideas that not only benefit entrepreneurs as a collective social group, but that also generate broader local development goals and benchmarks created as a result of this activity. Such spaces may exist most effectively in the form of formal institutions that structure the roles of actors and the rules of interaction either through informal mores or formal contracts (Schmid 2004), or they may be as informal as serendipitous (but regular) chats at the local coffee shop or grocery store. Furthermore, Web

2.0 could enhance these processes by enabling interaction and collective knowledge development over the internet, even in remote areas (Mason and Rennie 2007). More research must be done to discover similar initiatives that already engage in this type of collective interaction and innovation[7], to understand how these processes have been encouraged and what their outcomes have been in various places.

Entrepreneurship as Specialized Collaboration. If the primary driver of capitalism is competition, and entrepreneurs are the cornerstone of Schumpeterian capitalist innovation, an interesting question that complicates entrepreneurship in practice may be "*who* competes?" In the local community or region, views and perceptions about the role of competition in local capitalism may either enhance or impede the process of local entrepreneurship. It is generally understood that firms compete to bring goods and services to the market, and that new challengers may force markets into disequilibrium through innovation (Schumpeter 1934) or exploit inefficiencies in current markets through alertness, and by bringing organizational and technological advancements to bear (Kirzner 1973). Within these firms, individuals may compete for prime positions, and individual entrepreneurs may compete with one another to innovate faster than the competition.

However, is the firm an appropriate *de facto* boundary for competition? Within firms, individuals often collaborate to innovate. In many regions (especially those in dispersed rural areas), businesses are relatively disadvantaged in terms of their access to critical resources for business and consumer support relative to urban competitors and large industries (Dabson 2001). Is it plausible to redraw the lines of competition so that multiple firms, individuals, and institutions may collaborate in order to bring better, more competitive

[7] A nod to our colleague (and specialist on the matter) Dr. David Evans at the University of Sydney, whose input continues to shape our understanding of social and institutional arrangements for collective, purposive innovation.

innovations to the marketplace[8]? This question gets at the growing recognition of *public-private partnerships* (Grimsey and Lewis 2004) as an alternative means of organizing to tackle large projects that might be impossible for smaller firms to handle. However, we are not suggesting that such means of organizing need to be so formalized. A regional science of entrepreneurship may benefit from the examination of formal *and* informal means by which local entrepreneurs and business-related institutions collaborate to develop better ideas – the result of a multiplicity of local talent, previous knowledge, and practical experience. Rather than competing directly, can communities and regions develop indigenous specialties that are adequately differentiated from specialties in other regions in order to fulfill specific niches in society? The rise of clusters in some areas may be evidence of this, although we do not wish to direct attention exclusively to this very specific (and well-studied) form of organizing. A more relevant question would be how various forms of collaboration – within and between firms, institutions, and local societies – may affect local forms of innovation. A perspective that views entrepreneurship as both an individual *and* collective enterprise, and reliant upon both individual *and* collective knowledge with varying degrees of formality and heterogeneous local conditions, is central to the understanding of entrepreneurship across regions – especially where regional culture, history, and identity impact individual and collective knowledge.

[8] Our goal here is *not* to rewrite the tenets of capitalism, nor to criticize it. Rather, we wish to make the point that different means of organizing within a market-driven system may lead to more efficient forms of innovation. The success and efficiency of this innovation may be measured in various different ways, and may have multiple outcomes depending on the social and geographical context of the location in which the innovation occurs, the capacities of the innovation's stakeholders, and the positioning of the innovation compared to other goods and services in existing marketplaces. This type of thinking would open some exciting new lines of inquiry, and problematize the nature of competition. For example, who competes – individuals, firms, communities, regions, nations, supra-national entities, interest-based communities, or other entities? What are the outcomes of these various forms of competition in terms of innovation, efficiency, and social well-being, and who benefits from each? In summary, this perspective takes a much broader view of entrepreneurial competition and innovation than a firm vs. firm approach.

Entrepreneurship as Empowerment. We have raised several new questions about entrepreneurship in the regional context during the course of this writing, but we have saved the most important for last: "Why entrepreneurship?" Given much of the empirical literature on entrepreneurship and growth, it is clear that high-growth firms contribute a significant amount of both jobs and productive capacity to macro-economies. From the standpoint of economic growth, it is difficult to argue against entrepreneurship of fulfilling Schumpeterian ideals of innovation, job creation, and creative destruction – the replacement of old technologies by entirely new, progressive industries (Schumpeter 1934). If the link between entrepreneurship and economic development (and hence the link between economic development and collective well-being) is that clear, society would be well-advised to abandon other forms of economic development in favor of aggressive policies and initiatives supporting entrepreneurship.

However, these links are *not* clear, even if everybody seems to support the idea of bolstering entrepreneurship across society (Davis 2008). Scott Shane himself has raised concerns about viewing entrepreneurship as panacea for economic woes. Shane (2009) caveats entrepreneurship as a slow, tedious approach that often leads to little job creation and includes the reality of business failure. Furthermore, it is troublesome to assume that economic growth leads seamlessly to human development and well-being. While there is certainly a probable link between economic development and human well-being, such as the provision of jobs, life-saving technologies, and improved access to basic necessities (Baumol 2007), the question of *who* benefits from such development (relative to others) persists.

Regional science can begin to unpack many of these problems through research that balances both social and economic perspectives. One of the most troubling aspects of a growth-oriented approach to entrepreneurship is that it sees the creation of jobs and economic value as tantamount to *development* without asking who (and where) these high-growth

entrepreneurs may operate. In general, growth-oriented and serial entrepreneurs tend to have an investment mentality (Dabson 2007) and higher educations with more access to capital (Blanchflower 2007) than other types of entrepreneurs. Also, high-growth firms are less common in many rural areas, instead being drawn toward areas with dense business support networks and accessible venture capital (Henderson 2002). These factors may be important to individuals who are relatively disadvantaged in terms of access to information, education and capital who want to start a business. In fact, a unitary focus on high-growth entrepreneurship to the exclusion of other forms of entrepreneurship (such as lifestyle entrepreneurship, necessity entrepreneurship – intended to support one's self and perhaps a few other individuals – see Dabson 2007) serves as a barrier to particular regions and classes of people from participating meaningfully in collective innovation processes like entrepreneurship.

Although entrepreneurship development is frequently seen as an alternative to industrial recruitment (Dabson 2007), high-growth entrepreneurship may have essentially the same effect – creating more employees with a select few individuals in control of these productive efforts – thus restricting the enfranchisement of local individuals to use entrepreneurship as a means of local innovation. Regional science may borrow from *agency theory* (see Eisenhardt 1989 for a well-known critique) and from studies of *citizen-centered* and democratic approaches to local action (see, for example, Boyte 2004, Sen 1999) when considering the differential ability of individuals and collectives to participate in the process of entrepreneurship across geographic space. Furthermore, we believe it is important to advance the view of entrepreneurship as a means of *empowerment* in regional and community economic development – thus contributing to the overall development of local well-being – and not merely a miracle cure for fixing a broken local economy.

Conclusions

While studies to continue to appear that utilize the concept of *opportunity* as central to an understanding of entrepreneurial process, and that the level and content of local interaction may either enhance or hinder entrepreneurship in some areas, this article presents a conceptual framework for understanding how interactions between individual entrepreneurs, local institutions, and sources and perceptions of local opportunity are all fundamentally interdependent and interrelated. Of particular interest to the regional science, this relationship may differ across geographic space, and thus may affect the nature of local entrepreneurship. This framework relates directly to the concerns raised earlier in the article by Lichtenstein and Lyons (2001) and by Fortunato (2008), alluding to the idea that uncoordinated entrepreneurial support and social gaps between entrepreneurs and local support institutions may lead to inefficiencies and missed opportunities in the community or region. Furthermore, the debate over opportunity as *discovered* versus *created* is hypothesized to exhibit variation between places based on the nature of local interaction and the coordination of individuals and institutions in their views and perceptions of local opportunity.

Going forward, we wish to open the lines of discussion about the potential impact of seeing entrepreneurship as more than economic activity at the individual-opportunity nexus (Shane 2003), but moreover as equally structured by local institutions including cultural norms and values as they relate to small business. While this level of complexity certainly complicates analysis, it also potentially opens the door to new avenues of exploration that lead to a deeper understanding of entrepreneurial *process* as situated in the places where entrepreneurship occurs (or fails to occur). It is our desire to see this area of research grow beyond a mere understanding of how to bolster local individual and collective entrepreneurship, but also to incorporate a well-meaning critique of the limitations of local

entrepreneurship development, and to foster a broader understanding of the non-economic and social benefits of entrepreneurship as a form of empowerment, agency, and problem solving. Eventually, it will be interesting to see new perspectives emerge that envision entrepreneurship as one possible technique for the creation and capture of local opportunity, and for collaboration behind the improvement of local well-being and the fulfillment of innovative community and regional goals.

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