

How community context affects entrepreneurial process: A diagnostic framework

Kevin Hindle*

*Centre for Entrepreneurship, Innovation and Community, Deakin University,
221 Burwood Highway, Burwood, VIC 3125, Australia*

This study reports a multi-faceted search to discover and articulate, in the form of a manageable framework, a diagnostic system for assessing the influence that community factors will have upon the conduct and outcome of any proposed entrepreneurial process. A methodological approach based on investigation of a rich empirical database supported by a wide examination of extant theory in several literatures, resulted in the production of a diagnostic system whose diagrammatic depiction employs a 'bridge' analogy. It depicts the culmination of the diagnostic procedure as the ability of different travellers (entrepreneurial actors and community members affected by their actions) to proceed *via* multiple pathways from an origin to a destination. The origin is a deep understanding of the community as an intermediate environment containing factors both conducive and hostile to any proposed entrepreneurial process. This deep understanding is founded upon intense local examination of the nature and interrelationship of three generic institutional components of any community: physical resources, human resources and property rights, and three generic human factors: human resources, social networks and the ability to span boundaries. The destination thus becomes a contextualised understanding and re-articulation of any proposed entrepreneurial process under consideration. Validation of the efficacy of the framework is being undertaken internationally as a key component of seven substantial projects, which simultaneously involve research and practice. Implications for research and practice are discussed.

Keywords: entrepreneurship; context; community; diagnostic; framework

1. Introduction

One perspective on the research treatment of entrepreneurship has always been at the heart of the mission of this journal and has been recently re-articulated by no less an authority than William Bygrave (2007). It is that the academic examination, exposition and explanation of the entrepreneurship phenomenon – however broadly entrepreneurship may be defined and however narrow may be the focal topic of current interest – ought to commence with seminal recognition of the status of entrepreneurship as a practical, professional discipline in which the fundamental questions are 'what should entrepreneurs do?' and 'how can we improve entrepreneurial practice?' This article is in total accord with that perspective and answers one focused part of the second massive question 'how can we improve

*Email: khindle@deakin.edu.au

entrepreneurial practice?' by providing a diagnostic regime capable of answering, in a great variety of cases and circumstances, the narrower but still vast question 'how does community context affect entrepreneurial process?'

It is both glib and hopeless to frame the broad answer to this question as: different communities, at different times, will affect different entrepreneurial actors and processes in different ways. Fortunately, though it is not an easy task, there is a way to transcend both glibness and hopelessness and to obtain some useful generality out of the vastness of this daunting and seemingly overwhelming diversity of the relationship between community context and entrepreneurial process. The way to do this is to develop a formal, robust, theoretically and empirically based diagnostic regime. An appropriate generic system of diagnostic investigation, if such a regime could be devised, could make sense of the particularities of each and every case coming under its auspices in a manner analogous to the way that patients presenting with certain symptoms are analysed systematically in the medical profession. Every patient suspected of a specific condition, despite displaying a combination of symptoms that may be unique to the patient, is submitted to the same set of proscribed diagnostic steps. In this way both uniqueness and comparison are served. Accurate diagnosis positions the patient simultaneously as a unique person and as a person displaying many salient features in common with others. When we ask the question 'how does community context affect entrepreneurial process?' we are, *de facto*, in search of a generic, diagnostic system applicable to a multitude of highly specific cases.

In addressing the question of the influence of environment/context/community on the likelihood of success of any actual or contemplated entrepreneurial process, this article has precedents though not many; they will be discussed presently. However, the utility of the study will best be judged by its contribution to what is *not* there rather than its comportment with what is. It fills a demonstrable gap in the literature of entrepreneurship research and the toolkits of practising entrepreneurs. Though there is overwhelming research-based evidence (Julien 2007) and abundant empirical and logical support for the proposition that community context influences process in entrepreneurship as it does in all other human endeavours (Dana 1997, 2008; Dana and Dana 2007; Mason, Dana, and Anderson 2009), there is simply no extant regime for systematic, widely applicable calculation of the likely effects of a particular community environment on the likely success of any proposed entrepreneurial initiative within that community. The search for a system capable of diagnosing the effect of community context on entrepreneurial process and its presentation in a formally structured diagnostic framework is the quest of this article.

This article travels in good if sparse company. The very first article in the very first issue of *Entrepreneurship and Regional Development*, addressed the issue of entrepreneurship in the community context. In common with this article, Johannisson and Nilsson (1989, 3) were concerned with 'the initiation and management of local initiatives for economic development' and their principal purpose was 'to suggest a framework...' However, Johannisson and Nilsson had both a far more limited aim and a far less formalised framework than is offered in this study. They were focused on what they called 'crisis management' as a response to a generic community event – exogenously introduced structural change that threatened established economic norms in a particular locality. They also focused

predominantly on only one type of entrepreneur within the community: a type they called the 'community entrepreneur'. This person was conceived as a change-agent, working to facilitate entrepreneurship by others. Community entrepreneurs were needed to facilitate 'crisis management'. The community entrepreneur was thus distinguishable from the 'autonomous entrepreneur' (the familiar, independent new-venturer pursuing entrepreneurship for personal profit, albeit in a community context). This 'community entrepreneur' was a 'social entrepreneur' under any definition of that rather woolly term. Johannisson and Nilsson (1989, 3) state:

Some entrepreneurs are facilitators of entrepreneurial events rather than promoters of the individual business ventures. They create a "context" for traditional or autonomous entrepreneurs. That is the role that can be ascribed to the corporate leader who encourages intrapreneurship. It is also the mission of community entrepreneurs. Both bridge business and community values and practices, i.e. take on the role of statesmen.

While acknowledging the debt we all owe to Johannisson and Nilsson (1989) this article addresses a far wider brief with what it claims to be a much more comprehensive and highly structured framework for a much broader task than they set themselves. In common with my distinguished forebears, I intend to build a bridge between business and community values but the travellers envisaged as using the bridge are not only the 'statesmen' of the community. Additionally, the types of entrepreneurship I envisage facilitating are not just 'statecraft' or 'crisis management' or 'community conducted' enterprises. The bridging framework assembled in this study, is designed as a diagnostic system to facilitate a large array of potential entrepreneurial initiatives, by a wide variety of community members, whether the community is in crisis or in calm. The diagnostic tool offered here can be used by ordinary people as well as 'statesmen' and for purposes as humble as assessing the likelihood of the success of one woman introducing a very small business into a remote community or as grand as developing a long-term enterprise education programme for a whole nation.

2. The 'where' gap in the entrepreneurship literature

Trite as it may seem, scholars in any social research discipline can never transcend the fundamental importance of the six generic questions at the heart of every human-focused enquiry: who, why, what, how, when, and where. This study is devoted to understanding the influence of community context upon the process of entrepreneurship: it is thus, overwhelmingly, a 'where' paper. This emphasis is based on the axiomatic premise that context has a profound influence upon process. A reasonably dextrous person can be taught how to play golf but the game simply cannot be played on a tennis court with a croquet mallet. Certain people can train to become excellent surgeons but they cannot operate optimally in a bombed hospital with blunt and rusty instruments. Similarly, people may acquire many a-contextual vocational and technical skills of entrepreneurship – both new venture creation and opportunity management skills – but implementation simply may not be possible in particular contextual settings.

A vitally important contextual issue for many people, applying in every aspect of their lives, centres on 'where they are from' in the sense of their membership of a particular community. The community is an intermediate, mediating and moderating environment. Community context profoundly influences both what kinds of

entrepreneurial initiatives can and should be undertaken and how they are and should be performed (Anderson, Honig, and Peredo 2006; Peredo and Chrisman 2006; Mazzarol 2007). The entrepreneurship literature is not short of evidence that demonstrates, ad hoc case by ad hoc case, the importance of community context (Mezias and Kuperman 2001). However, the literature is very short of *generic* formulations that can systematically embrace many cases and offer comprehensive and comparable descriptions and explanations of the extent of the influence played by community context on the entrepreneurial process. This article seeks to redress that imbalance through its provision of a comprehensive diagnostic framework.

A very brief and broad overview of the extant state of knowledge in the entrepreneurship discipline with respect to five of the six generic issues will suffice to position the study and allow concentration on the focal 'where' issue of community context and its influence upon the entrepreneurial process.

2.1. *There are two schools of thought and abundant research about 'what'*

'What is entrepreneurship?' is the perennially controversial question concerning definition, which bedevils the discipline. Yet, despite all the alleged variation in answers and seeming lack of agreement, scholarship indicates that two major schools of thought capture most of the variation pertaining to what it is that constitutes the distinct focus of entrepreneurship as a discipline. In a recent paper, Blackman and Hindle (2008) have enhanced Klyver's (2005) model that describes Davidsson's (2003, 2004) classification of the two principal 'schools' of definitional emphasis in the entrepreneurship literature: (1) 'the *emergence* perspective' and (2) 'the *opportunity* perspective'. The 'emergence perspective', emphasises the dynamics of new organisation creation, whether or not the venture includes innovation, in the sense of the development of new means-ends relationships (Shane 2003), as a core component. In this school, new venture creation is the primary issue and novelty, innovation and changing means-ends relationships are all secondary considerations. Following Shane and Venkataraman (2000) and Shane (2003) an alternative view, the 'opportunity perspective', suggests that the primary issue of the discipline should be a focus on entrepreneurial opportunities involving the discovery, evaluation and exploitation of *new* relationships between means and ends, irrespective of whether this involves the creation of a new venture or not. Here, new venture creation is a second-order issue: novelty, innovation and changing means-ends relationships are the primary concerns. Entrepreneurship, in this perspective, is defined as 'the discovery, evaluation and exploitation of opportunities whatever the organisational mode of pursuit' (Shane and Venkataraman 2000).

For the purposes of this study, both perspectives are valid and valued. The diagnostic framework produced here has equal relevance to both schools of thought. It is equally capable of diagnosing the influence of community factors on new venture creation or new value creation.

2.2. *Much is known about 'who' and 'why'*

The 'who' issue is inexorably linked to the 'why' issue. In the face of a renewed focus on research that emphasises the 'who and why' of entrepreneurship, the study of the cognitive processes used by entrepreneurs is proving to be more promising

(Mitchell et al. 2002, 2004; Baron and Ward 2004; Krueger 2007) than previous traits-based research (McClelland 1961; Gartner 1989; Baum and Locke 2004). Who becomes an entrepreneur and why is a duality that has spurred on numerous studies utilising Ajzen's (1988) theory of planned behaviour to formulate a stream of research on entrepreneurial intentions (Bird 1988; Krueger, Reilly, and Carsrud 2000; Shaver et al. 2001). Considering the growing interest in and utility of research targeted at the cognitive underpinnings of the entrepreneurial mindset, *who* does entrepreneurship and *why* they do it are twin issues of vital importance (Liebenstein 1968; Baron 2004; Sarasvathy 2004; Mitchel et al. 2007).

2.3. The 'how' literature is growing rapidly

Two aspects of the *how* of entrepreneurship – how entrepreneurs do it in practice and how that practice should be taught – are also richly served in the literature. Numerous studies can be found on the start up activities of entrepreneurs (Katz and Gartner 1988; Gartner 2004). Early work in this area points to the activities of resource acquisition and utilisation (Penrose 1959; Barney 1991) and knowledge discovery (Hayek 1968) as being important foundations for a rich and diverse set of literatures that examine how entrepreneurs start competitive new businesses. For many researchers, central to the entrepreneurial process are the organising activities of nascent entrepreneurs in emerging new ventures (Aldrich 1999). Planning, cognitive factors, and the very act of *starting* a business are all found to be relevant to the *how* of entrepreneurship (Gatewood, Shaver, and Gartner 1995; Carter, Gartner, and Reynolds 1996; Shane and Delmar 2004).

Transforming the *how* of entrepreneurial research into effective pedagogical processes is also gaining importance (McMullen and Long 1987; Vesper and Gartner 1997; Katz 2003; Kuratko 2005; Hindle 2007). The impact of entrepreneurship education in higher education institutions is a long debated and continuously studied area (Galloway and Brown 2002; Matlay 2006). Findings thus far are mixed, but the discussion has moved from whether or not entrepreneurship can be taught to what should be taught, and which processes are more effective (Hindle 2001; Ibrahim and Soufani 2002; Honig 2004; Fayolle, Benoît, and Narjisse 2006). A recent review of textbooks used in entrepreneurship courses across the United States points to a potential disconnect between what is being taught in higher education programmes and what is actually being practiced by entrepreneurs (Edelman, Manolova, and Brush 2008). Evidence such as this provides a compelling rationale for exploring new areas of research in the domain of *where* to help supplement the effectiveness of the *how* of fostering entrepreneurial capacity for improving the levels of new venture creation and performance.

2.4. We know too little about 'when'

Despite the undoubted importance of longitudinal studies such as the Panel Study on Entrepreneurial Dynamics (PSED) and repeated cross-sectional studies such as the Global Entrepreneurship Monitor (GEM) (Reynolds et al. 2001), the predominant mode of addressing the temporality issue in entrepreneurship research still relies on the use of crude so-called 'stage models' (Katz and Kahn 1978; Galbraith 1982; Churchill and Lewis 1983; Kazanjian and Drazin 1990; Hanks and Chandler 1994).

It is thus fair to say that the *when* of entrepreneurship, the importance of all aspects of temporality, is very under researched. According to Chandler and Lyon (2001) only 7% of the 416 empirical entrepreneurship articles published in nine journals between 1989 and 1999 were 'true' longitudinal studies. Introducing time-based concepts into the literature is both necessary and daunting and can have several ramifications for research. As long ago as 1995, Gartner and Shane (1995) suggested that there are three challenges associated with the measurement of entrepreneurial phenomena over time: (1) the divergent nature of the individual and firms, (2) differences between rate and stock measures and (3) which time frames are chosen and how they impact research results. At an individual level, salience issues, risk behaviour and the temporally dynamic principles associated with traits, characteristics, capacities, decision-making and intentions prove to be extremely challenging to model (Das and Teng 1997; Fischer et al. 1997; Krueger 2007). Concepts such as counterfactual thinking have been introduced to approach the study of issues of time and outcomes bias to help interpret an individual's conception of the flow of time on past behaviour (Baron 2000; Gaglio 2004). The implications of time can also be used to classify factors into resources or constraints, relevant to entrepreneurial processes (Slevin and Covin 1997).

This article will remain as guilty as most in failing to deal adequately with the time issue. It would be a fair criticism of the study about to be presented to say that it looks at a community in a kind of 'cross-sectional time slice'. The mitigating circumstances are space limitations and the desire to focus deliberately on 'where' rather than on 'when' given those space limitations.

2.5. *We have too much eclectic and two little generic knowledge about 'where'*

On the positive side of the 'where' ledger, it might be argued that the literature on entrepreneurial networks is substantially about contextuality. In common with, but without reference to, the literature on entrepreneurial intention – the literature on entrepreneurial networks developed from the 1980s as a reaction to the deterministic approach taken in many psychological studies of entrepreneurs. Whereas the literature on entrepreneurial intention changed our understanding of what was occurring *within* the minds of individuals, the entrepreneurial network literature has moved the focus away to the social surroundings affecting them and their decision-making. Owing heavy allegiance to the resource perspective developed by Wernerfelt (1984), entrepreneurial network literature argues that entrepreneurs obtain non-redundant resources from their network that makes them perform better. These resources have to be understood broadly and include, among other things, information, advice, social support and legitimacy. A subsequent section of the paper will deal more fully with this literature. One component of the diagnostic tool eventually developed will mandate the need to describe and evaluate the differing social networks prevailing within a studied community.

However, the ledger has a negative side despite the fact that the vital question of *where* – particularly in its simplest form of geographic locality – is superficially well served by the entrepreneurship literature. There are indeed abundant studies of locality and the influence of locality on the process of entrepreneurship. However, many of these studies are completely *sui-generis*: they lack a theoretically based conceptual or analytical framework capable of comparing them in any systematic way.

Entrepreneurship researchers have concentrated upon several levels of *where* in a geographical sense, such as regional clusters, spillover effects of entrepreneurial aggregation and national macro characteristics pertaining to culture, structure, and other factors (Shane 1993; Davidsson 1995; Audretsch and Keilbach 2004; Acs and Armington 2006). The question of *where* can also be attributed to the situational elements of the organisation, categorising research into corporate entrepreneurship, social entrepreneurship, institutional entrepreneurship, etc. which address a non-spatial context to the question of *where* (Zahra 1993; Aldrich and Fiol 1994; Chell 2007). However, very few researchers attempt to address the cross dimensional aspects of the *where* question. Steyaert and Katz (2004) adopt a societal approach to the phenomenon of entrepreneurship that brings together geographical, discursive and social dimensions. They see the future of entrepreneurship research migrating to a conceptual construction of spaces, discourses and stakeholders that will enrich the question of *where* by exploring these rich new theoretical domains.

Nevertheless, it is correct to argue that without a unifying framework, the proliferation of locality-based studies of entrepreneurship may add as much to confusion as to enlightenment. The currently fragmented status of locality-based entrepreneurship studies poses the question: If this process works *there* but not *here*, which process is right for my situation? Social network analysis alone cannot answer the question and neither can an answer be gained by ploughing in an unstructured manner through the legion of fragmented, *sui-generis*, location-based studies. Until the advent of Julien's seminal book in 2007 (discussed shortly), entrepreneurship scholars have largely avoided the generic task of diagnosing either the philosophical essence or the generically practical essence of the way in which context affects entrepreneurial process.

3. The process view of entrepreneurship and the importance of local knowledge

3.1. *The 'where' issue and the process perspective*

Steyaert (1997) argues that, to understand entrepreneurship as a process, researchers need to acquire, store and transmit local knowledge through 'stories'¹ that are highly contextually dependent and sensitive to local complexities. His argument is that traditional modernist generalisations – more suited to other disciplines than to entrepreneurship – are overly reductionist. By seeking as they do to reduce local complexities and fragmented realities into principles that are too minimal and too general, they actually miss what matters most: an understanding of the way that context affects process. William Bygrave (2007) expresses a longstanding lament that entrepreneurship as a discipline is sadly astray in overemphasising reductionist quantitative approaches to knowledge creation in a kind of 'physics envy'. Steyaert (1997, 16) echoes this sentiment and asks the field of entrepreneurship to be more focused on local context in both its choice of methodologies and its choice of units of analysis and, thereby, to start creating a relevant identity of its own 'instead of pursuing a nervous search' for the spurious 'progress' of over-generalisation.

3.2. *A four-element, process perspective on entrepreneurship*

Steyaert (2007) has argued cogently about the importance of conceiving entrepreneurship as a process. It is because the process is multi-faceted, plural in nature and

always dynamic that he prefers – and hopes others will prefer – to use the term ‘entrepreneurship’ (the participle of a verb and therefore redolent of action) rather than the term ‘entrepreneurship’ (a singular noun lacking the connotations he prizes). I share Steyaert’s conviction that entrepreneurship is best conceived of as a process and elsewhere (Hindle 2010) have developed and advocated a generic process model of entrepreneurship and its relationship to the wider context of innovation (Hindle 2009). However, in contrast to Steyaert, I remain happy to use the noun ‘entrepreneurship’ rather than the verb ‘entrepreneurship’ as a blanket term to embrace all the complexities covered by the concept. This is mainly a semantic preference. I prefer talking of ‘gardening’ not ‘gardenship’ but ‘entrepreneurship’ not ‘entrepreneurship’. There is no linguistic or logical rationale for my choice (which may disappoint etymological philosophers but is not a crucial issue for scholars of the actual phenomena as distinct from scholars of the *names* of the phenomena). Importantly, once semantic issues are set aside, I do maintain perfect conceptual consistency in my approach to both phenomena. I regard both gardening and entrepreneurship as activities best studied as processes heavily influenced by context and involving four elemental components.

I will use the analogy of gardening to illustrate the distinctiveness of four units of analysis needed to fully appreciate entrepreneurship as a process. First comes *the human agent*. There must be a defined human actor (an individual or group of human beings) involved: the gardener in one case and the entrepreneur in the other. Second, there needs to be a specific *object entity* or objective that is cultivated. This is the flower or tree or shrub in the gardening case and either or both of a new venture or a business opportunity when entrepreneurship is the process under consideration. Third, there is always what might be thought of as an *intermediate environmental context*, an area capable of some degree of control by the human agent but also exercising some degree of control over him or her. This is the garden in one case and the community in the other. Fourth, in both situations, there will always be a *macro environmental context* that is an influential constraint upon but uncontrollable by the human agent. For analysis of process, whether the process be gardening entrepreneurship or anything else, it is a crucially important issue to clearly distinguish the intermediate from the macro environment. As a subsequent section will demonstrate, with the exception of the work of Julien (2007), entrepreneurship research has been particularly poor at doing this in any generic sense. The low degree of attraction to scholars of the intermediate environment as an area worth researching may be explained because it is frankly easier to study one-way relationships than reciprocal relationships.

3.3. Conceptualising the third element of entrepreneurial process: The intermediate environment

In the four-element approach to understanding entrepreneurial process, the first element has a relatively simple relationship to the second. The human agent can apply a high degree of dominant, direct, virtually uni-directional control to the object entity (say, a new venture or the cultivation of a particular flower). The fourth process element, the macro environment, is effectively beyond any direct control by the human actor. It is arguably appropriate to treat it as an exogenous variable or set of variables. In contrast, the third element in the process can neither be explained

in linear fashion nor explained away to the exogenous background. The human actor enjoys a complex, reciprocal relationship with the intermediate environment. Both the garden and the community impose limits upon the human actor but can, at the same time, be modified by him or her to varying extent. This complicates study very significantly. By their very natures the garden and the community both shape and are shaped by the choices and actions of the gardener and the community member, respectively. This reciprocity provides both the fascination and the analytical importance of the intermediate environment. The topography, design and history of any particular garden will be very influential in defining a gardener's thinking and limiting the gardener's choices about what can and cannot be grown. Nevertheless, choice, in some degree, is still available within the parameters of a garden.

In sharp contrast, despite their undoubted importance to the gardening process, the gardener cannot control such macro-environment climatic variables as wind, rainfall and temperature. Similarly, an entrepreneur who is and wishes to remain a member of a particular community is subject to many limitations. However, at this level, he or she, within the constraints pertaining to community membership, still retains the possibility of making choices that are not available with respect to the macro factors determining the wider political, economic and social environment. So, despite the complexities involved, there is urgent need of a generic analytical framework capable of diagnosing the importance of this reciprocity between the intermediate environment and the entrepreneur. No adequate representation of entrepreneurship as a process can be entertained if the intermediate environment is covertly dismissed rather than actively embraced as part of the analysis.

Julien (2007) is the entrepreneurship scholar who has best articulated the fundamentally important role of what I have called, to this point, 'the intermediate environment' upon the process of entrepreneurship. He calls the intermediate environment that he is interested in 'the entrepreneurial milieu' and sees it as one of three main factors in the development of his challenging and comprehensive theory of local entrepreneurship in the knowledge economy. The arguments presented in this article are very closely aligned to the seminal scholarship and fundamental philosophical approach contained in Julien's book and I regard this study as complementary to and supportive of Julien's work. However, I regard his concept of 'entrepreneurial milieu' as a specific case of my more general notion of 'community'. The difference concerns the degree of pre-specification of intermediate environment as it affects entrepreneurial process. Julien's definition of 'milieu' is highly circumscribed. In contrast, the generic concept of 'community' that infuses this study is completely unfettered. Julien argues:

The milieu is both a place and the collective mechanism that explains and facilitates various social ties, allowing a collective entrepreneurial spirit to blossom and providing the basic resources, including information and tools needed to transform it into knowledge, to meet the challenges of the new economy (Julien 2007, 116).

3.4. Defining 'community' with respect to entrepreneurial process

So far, I would be happy to embrace this definition as the substantive heart of a definition of 'community' as it affects entrepreneurial process. However, Julien goes on to assert:

Obviously, for an entrepreneurial milieu to exist, there must be a minimum provision of population and resources, along with a medium-sized city (Julien 2007, 118).

From my perspective, this is over-specifying. My notion of and purview of 'community' – as a context for influencing entrepreneurial process – is much wider than Julien's concept of 'milieu'. At the level of generality in which I wish to operate for the purposes of this article, a community can be:

any context where a self-defined group of people see their mutual belonging to the community as distinguishing them (but not excluding them) from all other members of society at large and where continued membership of the community is valued highly enough to impose some constraints on behaviour.

In this conceptualisation, it is axiomatic that both the attributes of the community and the ways in which human actors regard their relationship to the community will be influential in affecting both the possibilities and actualities of entrepreneurship, as of everything else.

Thus, the purview of this study is wide indeed. A community can range from small in size and narrow of focus (for instance, a suburban club of stamp collectors) to vast in size and broad of focus (for example, the United States of America). Furthermore, the very purpose of the diagnostic framework I seek to develop is the ability to transcend this general definition of all communities so as to re-define each community uniquely. The framework I seek to develop will be a diagnostic tool because only by systematically but uniquely specifying the attributes of a particular community can we precisely specify the kinds of entrepreneurial activities that are likely to succeed within it. I do not come to the examination of any community on the basis of any pre-suppositions (such as the proximity of a reasonable sized city). The whole point of the analysis I wish my framework to be able to serve is to define and analyse *any* community context with respect to its entrepreneurial potential. It is the quest of the diagnostician. I want a robust and widely applicable diagnostic regime (in the form of an analytical framework) in order to specify the unique situation of any 'patient' (community) whatsoever. It may well turn out that a particular community, systematically and dispassionately analysed according to the formalised criteria, is so bereft of requisite physical, human and institutional resources that it is not, in its current state, a suitable context for any viable entrepreneurial initiatives. The deficiencies of the context thus defined, will then become the focal impediments that any programmes aimed at enhancing entrepreneurial capacity in that community must address.

Good diagnosis is a pre-requisite for good remedial treatment. Sadly, the general history of most economic assistance or development programmes in the long and largely ineffective saga of aid to developing countries and afflicted communities of all kinds is a history of remedies supplied in the absence of appropriate diagnoses.

So it is with the briefer but no more sanguine specific history of a-contextual entrepreneurship education and development programmes. This is the central objection that Sirolli (2003) has to the vast majority of entrepreneurship stimulation programmes foisted on particular communities by well-meaning but ill-advised aid agencies. Very recently, the work of Moremong-Nganunu (2009), conducting a detailed programme evaluation in Botswana, has demonstrated that the world's biggest, most expensive and longest-running entrepreneurship education programme operating in the developing world has been a complete and utter failure. The Start and Improve Your Business Programme (SIYB) was and is an educational initiative, conceived in Sweden, which has been funded for over 20 years with aid monies totalling in excess of 100 million US dollars and applied in over 20

developing countries. In a detailed, rigorous, quantitative programme evaluation, Moremong-Nganunu (2009) found that there were almost no statistically significant differences between the skills and attainments of people in Botswana who have undergone the SIYB entrepreneurship training and those who have not. Moremong-Nganunu attributes the principal reason for the abject failure of the SIYB programme to enhance entrepreneurial skills and improve entrepreneurial performance was its failure to take account of the community-specific context which distinguished factors important for the practise of entrepreneurship in Botswana as a national *community* from factors that could either be assumed to be important or assumed away altogether in the context of a developed Western economy.

In summary, what I have searched for in the study reported in this article is a diagnostic tool: an analytical framework of maximum generalisability, intended to be capable of providing productive insights into the manner in which communities might be defined with respect to their entrepreneurial potential. My intent has been that, for any scrutinised community, application of the diagnostic regime would be capable of articulating how community factors do and will influence entrepreneurial process. My contention has been that, if a diagnostic regime in the form of an analytical framework could be developed and was indeed applicable to a wide variety of community contexts, it would provide an important contribution to entrepreneurship theory and a useful tool for entrepreneurship policy and practice. The quest can now be formally stated.

4. Definitional basis and formal statement of the objectives of the study

4.1. Definitional basis

The study is grounded in the following definition of entrepreneurship:

Entrepreneurship is the process of evaluating, committing to and achieving, under contextual constraints, the creation of new value from new knowledge for the benefit of defined stakeholders.

Elsewhere, Hindle (2010) has critically evaluated the entrepreneurial process literature. He examined and critiqued the 24 extant frameworks contained in that literature to produce a unified entrepreneurial process model from which the above definition is derived. This section of this article briefly summarises the essential features of the perception of entrepreneurial process entailed in the definition. Most importantly, the definition and the approach it involves can assist in the harmonisation of three influential perspectives on entrepreneurship that are often considered to be mutually incompitble: the 'causal' approach featuring the opportunity-individual nexus (Shane and Venkataraman 2000; Shane 2003); the effectuation approach (Sarasvarthy 2004) and the bricolage approach (Baker and Nelson 2005).

First the definition emphasizes *evaluating*. Shane and Venkataraman (2000) posited four dimensions of opportunity: existence, discovery, evaluation and exploitation (implementation). In close accord with the four key ingredients of the Shane and Venkataraman approach, the current definition argues that the design of the possibility of achieving new value comes through the act of evaluation that begins with the questioning of whether an exploitable opportunity exists and can be discovered for defined stakeholders contemplating the creation of new value.

The definition contends that it is a second order conceptual issue not a first order one, whether evaluation (the designing sub-process) takes the form of purposive planning (causality), or re-thinking and recombination of existing resources (effectuation and bricolage). From the perspective of the practicing entrepreneur, the notion of evaluation culminates in the design of what needs to be done to convert a possible opportunity into some kind of blueprint for action. A virtue of this perspective, that stresses evaluation as a process of design rather than the production of a plan is that it relegates arguments of whether entrepreneurial opportunities exist objectively or are 'socially constructed' to the background rather than the foreground of debate. Importantly in this definition, evaluation subsumes discovery. The act of evaluation – an iterative, designing process – in a very real sense *is* the act of discovery. In this conception, you cannot and should not place discovery of an opportunity as a completely 'done deal' predicate to the next stage of the process. 'evaluation'. They occur together. To discover whether whether a design for achieving value from a suspected opportunity is potentially feasible you have to evaluate a range of possibilities, refine, adjust, fiddle, re-discover until you think you have something worthy of committing to and putting to the test. The statement of feasibility that emerges from the evaluation process can be called simply 'an action design' or a 'new means-ends framework' (Shane 2003), or an 'entrepreneurial business plan' (Hindle 2010), or the 'solution of the existence problem through effectuation' (Sarasvathy 2004) or whatever else you prefer to call it.

Second, the definition specifies *commitment*. It is one thing to possess a design (business model, means-ends framework, resource recombination). It is another thing to possess the commitment to implement it. There is an emerging literature on the vital importance of commitment to entrepreneurial process (Fayolle, Basso, and Tornikoski 2010).

Third, the definition articulates the need for *achievement*. Commitment to implement does not guarantee effective achievement/exploitation/implementation but, fortunately, the management literature deploys most of its weight and volume to guide us here.

Fourth, the definition mandates a nexus between *novelty* and value: 'the creation of new value from new knowledge'. It is totally uncontroversial that novelty is at the heart of entrepreneurship. The value sought from the process must derive from new knowledge but such new knowledge can be very broadly conceived, for instance the re-conceptualisations and recombinations of resources that feature in effectuation and bricolage certainly qualify as new knowledge. The new value may take many forms: economic, social, monetary, ecological, mental, physical, etc. It is possible but not necessary that a new venture be created to achieve the sought-after value. Finally, under the novelty heading, it is important to note that, in this definition, the actual creation of the new knowledge that serves as the basis of the entrepreneurial process is *not* part of the entrepreneurial process *per se*. Entrepreneurship involves the creation of new value *from* new knowledge: the new knowledge will have come not from the entrepreneurial process about to be embarked upon but from an invention process previously conducted. Hindle (2009) views the relationship between entrepreneurship and innovation in the following way: 'Innovation is the combination of an inventive process and an entrepreneurial process to create new economic value for defined stakeholders'. Invention and entrepreneurship together comprise innovation but entrepreneurship considered within its own processual

limits takes the output of the invention process as a starting-point. Thus, though entrepreneurs *can* be the creators of starting-point new knowledge, they do not *have* to be. Entrepreneurs do not have to be inventors. The processes are distinct.

Fifth, entrepreneurship is a process conceived for the benefit of *defined stakeholders*. Yes, the law of unintended consequences will often come into play and an entrepreneurial process may provide benefits beyond those contemplated and beyond the contemplating stakeholders. However, the process of entrepreneurship is about purposive action on behalf of specified and intended beneficiaries.

Sixth and finally the definition argues, as will the rest of this article that the entrepreneurial process cannot be conceived a-contextually. The entrepreneurial process is subject to the *contextual constraints* of the environment in which the process takes place. As previously and subsequently established, this article argues that the concept of community defines the intermediate environment in which any entrepreneurial process must take place and that community factors are vitally important contextual constraints on every entrepreneurial process and deserve overt diagnosis rather than being assumed away.

5. Objectives of the study

Accordingly, this study aims to develop a systematic and dispassionate regime for the diagnosis of the way that community context affects entrepreneurial process. At the maximum level of generality, the dominant objective is to discover, articulate and justify a diagnostic framework for the assessment of four aspects of any community as an entrepreneurial context. The word 'diagnostic' is preferred to the word 'analytical' because of its greater precision. The essence of diagnosis as a formal activity is that it employs *standard* procedures to define a *unique* situation.

Application of the proposed diagnostic framework must be able to provide, for any community to which it is applied:

- (1) a general assessment of the entrepreneurial potential of the whole community in its current state;
- (2) a specific assessment of the technical and contextual viability of any proposed entrepreneurial initiative by any set of community actors given the current status of community development;
- (3) the ability to articulate the foundations for design and execution of entrepreneurial projects (physical, institutional and educational) that are both feasible and desirable for a range of entities who are community members (this, importantly, also implies the opposite: the ability to recognise and reject inappropriate entrepreneurial initiatives before resources are wasted in pursuing them);
- (4) the ability to identify the focal areas where facilitations and programmes of varying kinds might be created to enhance the existing resources and skills of various community members and institutions, so that desired initiatives, which are not feasible at present, may become feasible in future.

If such a framework can be developed, it will help members of a community (as individuals, groups or the community as a whole) to learn and practice entrepreneurship (in both its 'emergence' and 'opportunity' perspectives) in ways

that both recognise community diversity but seek to preserve and enhance community integrity.

The assumption underpinning this quest is that both the attributes defining the community as a whole and an individual's or a group's attitudes and behaviours as a member of the community may influence the kinds of entrepreneurial process that are both feasible and desirable within that community. The corollary is that no allegedly helpful initiative (such as, for instance, a well-motivated but culturally inappropriate education or aid programme) designed to enhance entrepreneurship within a community can have any chance of success unless a systematic and dispassionate diagnosis of the entrepreneurial status and potential of that community is first performed. The performance of that task requires a diagnostic framework, based on sound theory and sound practice. The provision of that framework is the objective of the study reported in this article. I turn now to a brief description of the methodology employed to produce the desired framework.

6. Methodology

The study's methodology was built on the combined strength of four foundational elements:

- *empirical* – the re-examination (principally through content analysis of interview texts) of a rich primary database directly germane to the issue of the affect of community factors upon entrepreneurial process;
- *theoretical* – examination of the extant theoretical literatures appropriate to enhanced understanding of the categories generated as the result of that content analysis;
- *technical* – application of sound principles of analytic and diagnostic framework development as a means of structuring that enhanced understanding;
- *inspirational* – insight gained from contrasting the seminal works of two scholars who have approached the issue of economic and entrepreneurial development from two radically different perspectives.

7. Empirical foundation: A rich dataset re-visited

Much of my recent scholarship has been focused in the field of Indigenous (As a mark of respect to Indigenous peoples, the word 'Indigenous' is spelt with a capital 'I' throughout this article) entrepreneurship. With Peter Morz, I have distilled a definition of the field and a framework illustrating its major elements and themes (Hindle and Moroz 2010). A direct precursor of this article is a study I conducted with my colleague Michele Lansdowne. It was published in 2005 and subsequently republished in 2007 (Hindle and Lansdowne 2005, 2007). It was based on a very rich and deep dataset, which we realised from its conception would be useful for more studies than the one we were conducting at the time.

At a broad level of purpose-focused methodological classification, the study we conducted was a blend of ethnography (Cresswell 1994, 11) and grounded theory

(Glaser and Strauss 1967: *passim*). Its fundamental purpose – conceptually transcending the bounds of its application to any particular research question – was to understand the relationship between behaviour and culture (the realm of ethnography) in order to determine the domain of a field linking participants' perspectives to general social science theory (the realm of grounded theory).

Our empirical research objective in the original study – which we and users of it now colloquially call the 'Brave Spirits' study (Hindle and Lansdowne 2005, 2007) – was to discover and articulate the essential elements, boundaries and laws describing a paradigm of Indigenous entrepreneurship research from the consensus elements contained in the discourse of 40, purposively chosen, individually interviewed experts representing two different cultural traditions. However, we were always professionally aware that the data we were collecting were capable of being used to answer many more questions than the one we were currently asking. The discourse of our respondents was broad in range but singular in essential focus: it was fundamentally about the nature of entrepreneurial process in community context. At the time of the Brave Spirits study, we were interested in distilling from this wide-ranging discourse of expert respondents a very particular answer to a very particular question. For the purposes of the current study I have returned to the data to address the broader quest defined, above, in the previous section of this article.

Between December 2001 and April 2002, 40 semi-structured depth interviews were conducted: 20 in Australia and 20 in the USA. If similar patterns of opinion could be detected among representatives of such strongly distinct Indigenous traditions as pertained in Aboriginal Australia and Indian America, the claim for global relevance of any discoveries would be enhanced. On the grounds that Indigenous enterprise could not avoid interface with mainstream enterprise, it seemed appropriate to include a minority of non-Indigenous respondents knowledgeable in the field. We arbitrarily determined that a minimum of 28 of the 40 depth interviews (70%) should be with respondents of Indigenous status. Every respondent – Indigenous or non-Indigenous – had to possess credentials recognised in both the mainstream state and at least one Indigenous nation as a person knowledgeable in and respected for:

- their wisdom about general, fundamental issues affecting Indigenous development in at least one major community;
- their deep knowledge of and experience in mainstream government policy and programmes affecting Indigenous people; and
- their knowledge of the technical and managerial issues relevant to entrepreneurship, startup, business development and business success in mainstream culture.

Our investigation was conducted to include the use of a modified operationalisation of an aspect of the GEM research model (Reynolds et al. 2001). The GEM model postulates, and the interview structure utilises, nine 'entrepreneurial framework conditions': financial support; government policies; government programmes; education and training; R&D transfer; commercial infrastructure; internal market openness; access to physical infrastructure; and cultural and social norms. These describe the most salient features of the opportunity and motivational environment

in which would-be entrepreneurs create and develop their ventures. Construct validity and reliability of results were strengthened by detailed research protocols, archival regimes and adherence to Hindle and Rushworth's (2001) preference that respondents not be cloaked in anonymity. All respondents stood then and stand now willing to repeat the views contained in their depth interviews in open forums, including media interviews. Many are prominent national and international figures (including, for instance, the then Chairman of the Finance Committee of the Senate of the United States of America, the deputy leader of the Northern Territory government, and Indigenous leaders with substantial global reputations and effective community power). Space constraints alone prevent my supplying a full list of respondents and their affiliations as an appendix. Analytical techniques employed included cognitive mapping (Jones 1985), content analysis (Krippendorff 1980: *passim*) and appropriate techniques of statistical description, especially iterative cross-tabulation of coded data. All of these techniques were employed as tools in the service of 'the constant comparative method' (Glaser and Strauss 1967: *passim*). Finally, we selected a formal framework for reporting our findings.

In the Brave Spirits study, Lansdowne and I were searching and coding the rich database of these 40 depth interviews in search of a paradigm of Indigenous entrepreneurship research rooted in the beliefs of Indigenous people themselves. The two questions guiding our investigations were: 'what, if anything, makes Indigenous entrepreneurship different from mainstream entrepreneurship?' and 'what are the fundamental issues that should distinguish the research field of Indigenous entrepreneurship?' Methodologically, the constant comparative method (Glaser and Strauss 1967: *passim*) was the fundamental technique we used to distill the core paradigm concepts and relationships from the communication blocs contained in our interview data, even though we were aware that our approach was quite distinct from 'pure' grounded theory. We nevertheless found it justifiable and productive to use the Glaser–Strauss inspired iterative process of theory development whereby concepts and relationships were formulated as categories and their properties. The data were constantly revisited seeking ever more parsimonious categorisation until we believed we had obtained the minimum set of fundamental issues, boundary conditions and laws capable of defining the paradigm, which was our quest at the time. At this point, the categories were 'theoretically saturated' so that further data revisits and new incidents in the data ceased to contribute to understanding. What is important for this article is that much of the work done to answer the first question of the previous investigation threw up remarkable insights into the ways in which community context influenced entrepreneurial possibilities and processes.

So, for this article, I revisited the rich data set of the 'Brave Spirits' study, re-acquainting myself with the insights of those 40 expert respondents, using the same techniques of qualitative data analysis as before, but with a more vigorous application of content analysis in the early stages of the process and this time wearing a more 'generic' hat (i.e. looking for insights generalisable to all communities not just Indigenous communities) and guided by the question 'what are these people telling us are the most important factors *always* resident in *every* community that *always* influence *any* entrepreneurial process'. The findings of this investigation are reported in the next major section of this article and became the structural elements of the bridge framework soon to be presented.

8. Theoretical foundation: Many literatures re-visited

The second component of the methodological approach to what turned out to be 'building the diagnostic bridge' was to revisit, in detail, the literatures which addressed the key issues and categories identified in the analysis of the data generated in the empirical study just presented. In the interests of efficient presentation, I have chosen to categorise the results of these focused examinations of selected literature under the heading of 'rationale' in each of the components of the framework that will shortly be revealed as the major 'finding' or 'result' or 'artefact' of this study rather than in this section.

9. Technical foundation: The principles of analytical and diagnostic framework development

Since the intention of this study was to build a diagnostic framework, which is a subset of the more general category of analytic framework, the question of how to build an analytic framework in a principled, justifiable manner was an important methodological issue for this study (as for many others). However, a chasm now looms. The social sciences are full – some might say overfull – of conceptual and analytical frameworks covering a vast array of topics. It is therefore interesting that the social science literature contains virtually no systematic advice on how to create a conceptual or analytical framework according to robust principles. Researchers and practitioners in many areas of the social sciences just go ahead and do it: seemingly never stopping to reflect on the principles (if any) involved in *the way* that they do it. In searching for some guidance on the principles pertaining to *conceptual* framework building, practice-oriented management researchers interested in *analytical* frameworks might make peripheral use of arguments concerning the core principles of good theory building such as those provided by Whetten (1989). Britain's National Centre for Social Research (www.natcen.ac.uk/natcenlearning/nl_cis_intro_to_framework.htm) offers a web-based course outline which has a sub-section enticingly labelled 'principles behind creating an analytical framework' but the details of these can only be revealed to those prepared to pay for the course which is about how to use a proprietary qualitative data management package. So, sadly, the various social science literatures provide negligible help to anyone interested in building *analytical* frameworks in a systematic rather than an ideosyncratic manner. Fortunately, help lies elsewhere.

With respect to the principles embracing development, design and quality control of analytical framework building, the place to look is in the information technology (IT) literature. IT professionals are in the business of systems analysis and systems diagnosis through the logically structured development of generic regimes for such things as code design; making sense of vast arrays of data and all the various arcana of the software profession. Typical of works from this field that provide guidelines for the creation of robust analytical frameworks are Arlow and Neustadt (2003) and Lieberman (2007), who has written:

Analysis patterns have been used in software development for many years to provide solutions for data access, transaction monitoring and management, security, messaging, user interfaces, and other application needs. They are not meant to be implemented into code, but rather to permit analysts to understand complex problem domains (Lieberman 2007, 2).

Lieberman argues (and illustrates the argument with numerous tables and worked examples) that an analytical framework is composed of five major components: an assortment of tools, a set of useful solution patterns, one or more model forms, multiple research techniques and skills, and methods for grouping complex information. In building the framework presented in this article I have followed and adapted Lieberman's five-component approach. Given the space limitations of this article, the application of these principles is embedded in the major section of this article following the methodology, where the resultant artefact is simultaneously presented and justified.

10. Inspirational foundation: Perspectives from two seminal works

The work of the great Peruvian economist, Hernando De Soto, is inspiring: especially as embodied in his influential book, *The Mystery of Capital* (De Soto 2000). Equally inspiring, but grounded in an entirely different perspective, is the work of Ernesto Sirolli: especially as embodied in his influential book, *Ripples from the Zambezi: passion, entrepreneurship and the rebirth of local economies* (Sirolli 2003). I have introduced the work of these scholars to many students and friends over the years and it was in conversation with my colleague Dr Brent Mainprize who was one of a number of 'human sounding boards' that I used as I developed ideas in my quest to establish a diagnostic framework for assessing community factors' influence on entrepreneurial process, that we hit on the notion of 'two pillars'. De Soto we observed was a representative, par excellence, of the best in the tradition of the economic development literature, where non-human agents such as 'forces', 'institutions', 'factors of production' and other disembodied conceptual phenomena are featured prominently, by scholars whose mother discipline tends to be economics or economic sociology (Helpman 2004). The vast body of such work might be thought of as a 'macro-institutional' cluster of scholarship. Sirolli, in stark contrast, is a representative par excellence of the best in a tradition of seeing human beings as the key change and facilitation agents in introducing entrepreneurship and innovation into challenged communities. His work lies in a tradition that might be thought of as the 'micro-human' cluster of scholarship in this area. Both clusters offer solid foundational insights to the scholar of entrepreneurial process in community context.

From actual clusters I moved to metaphorical pillars. The notion arose that it would be useful to depict two pillars underpinning any well-balanced approach to understanding how entrepreneurship could be developed in a range of community contexts. One pillar, capstoned by De Soto's articulation of the massive importance of property rights to the development of a successful capitalist economy, was steeped in a literature of what might be labelled generic structural factors. The other pillar, capstoned by Sirolli's powerful examples of successful enterprise facilitation at the face-to-face level, was steeped in a literature based on generic human factors. Reflection indicated that these two pillars together provided the foundations for understanding how any would-be entrepreneurial protagonists in a community might move from merely wanting to practice entrepreneurship to actually doing it.

With pillars under a pathway – a metaphorical device generated in the Brave Spirits study (Hindle and Lansdowne 2005, 2007) – I was then able to proceed to a clear picture of the shape of the framework I sought to build. It would be a bridge.

11. Resultant artefact: The diagnostic framework

11.1. Categories derived from the empirical study

As indicated, the basis of the arguments, analysis and modelling embodied in this article are the results of a process of ever-increasing generalisation that arose from my specifically focused interest in the emerging field of Indigenous entrepreneurship. The genesis of the study was an initial desire to discover and classify the ways in which the condition of membership of one particular category of community – an Indigenous community – affected the possibility and feasibility of various forms of entrepreneurship. Empirical evidence clearly demonstrates that many concepts and practices that are well established in mainstream entrepreneurship literature simply do not apply and cannot be translated to the Indigenous community context (Hindle and Lansdowne 2005; Hindle and Moroz 2010). This is not necessarily a negative finding. Exploration in the specific field of Indigenous entrepreneurship revealed that when community context is sensitively incorporated into the design and execution of entrepreneurial initiatives, the results can be a win-win situation: a strengthening of the community's traditional aspirations simultaneously with the application of innovative business venturing, to create new value for a range of community stakeholders. Closer consideration of the factors that make for successful entrepreneurship in the specifically Indigenous context raised the exciting possibility that it might be possible to develop a generic procedure – a general analytical framework – as a diagnostic tool for determining the influence on *any* entrepreneurial process of *any* community context. If such a framework could be articulated, it could fill a pronounced gap in the extant literature and serve as the basis for both operationalising focused research and designing effective practice and policy. Thus, as previously described in the methodology section, a rich database (Hindle and Lansdowne 2005) was re-analysed. The following key findings emerged.

Whereas the initial scrutiny of the database had focused on the pathway linking heritage (arguably just one aspect of 'community') and innovation in an *Indigenous* context, the new emphasis in listening to hear what the respondents had to say was the search for a pathway linking all aspects of community to the possibility of any form of entrepreneurial process. The following key distinct but related categories emerged from that analysis described in the methodological section of this article.

Emergent category (1): *understand the basics of the land*. Stripped to its essence this category focuses on the fundamental importance of taking detailed, realistic stock of the *physical* assets of a community. As one respondent put it: 'You've got to know where the rocks are or you can't farm well. Most people don't'.

Emergent category (2): *understand who the people are and what they can do*. Stripped to its essence this category focuses on the fundamental importance of taking detailed, realistic stock of the *human* assets of a community and their skills. As one respondent put it: 'If you don't know how many warriors you can count on, you can't ride out to fight'.

Emergent category (3): *understand how different individuals within the community think about the world and how different groups within the community form close ties, largely based on common ways of viewing the world*. Stripped to its essence this category focuses on the fundamental importance of taking detailed, realistic stock of the world-views and networks within a community. As one respondent

put it: ‘Scratch around these reservations and you soon find more interest in faction than action’.

Emergent category (4): *understand the role of governance and institutions*. As one respondent put it: ‘the rules rule: sometimes the governments – even the tribal government – just won’t let you do stuff you know would be good’.

Emergent category (5): *understand the relationship between owning land and using it to benefit people and the enterprises they want to create*. Stripped to its essence this category focuses on the fundamental importance of the management and assertion of property rights as a component of entrepreneurial possibility. As one respondent put it ‘What’s the use of owing millions of acres of potentially rich land if the banks won’t lend to any of us because the land is collectively owned? In terms of capital for building businesses we might as well own nothing’. And another typical remark was: “‘Aboriginal Title’ is just words on paper. It’s what you can do with it that matters. Anyway, if you don’t use your title, you lose it. That’s the history of my people’.

Emergent category (6): *find a way to overcome the obstacles within the community itself*. Stripped to its essence this category articulates respondents’ pervasive beliefs that there has to be some kind of ‘binding agent’ if any entrepreneurial process is to be possible in communities that are often ‘... just like [collections of] running sores. Everybody’s hurting but you can not see your neighbour’s type of hurt... and you think he is there to hurt you more... and you can’t help one another’.

Emergent category (7): *assistance demands empathy*. Nearly every respondent expressed words to the effect that most mainstream ‘help programmes’ for entrepreneurship or any purpose whatsoever can only ever work if they are based on a genuine understanding of the way the community is structured and operates. They asserted that the vast majority of alleged mainstream help programmes fail on empathy grounds. As one respondent put it: ‘...it gets dropped on you like a bomb... it’s a big impact for a short time but probably does more harm than good’.

11.2. Theoretical support

The above are the seven categories that emerged from further scrutiny of the empirical data. The next task was to search for, assemble and evaluate any extant research and theoretical work that might be useful as either supporting or contradicting an argument for the validity and utility of the categories and for arranging them in structured relationship to one another as components of a diagnostic system. A wide-ranging investigation of a number of relevant literatures was found to be highly supportive of the seven categories generated in the analysis and enabled refinement of the categories so that they could become the elements of the diagnostic framework about to be presented. Details of the key insights gained from examination of the theoretical literature will be presented, below, as part of the rationale for each component of the developed framework.

12. Resultant artefact: The framework in overview

Figure 1 is a diagrammatic depiction of the proposed diagnostic framework for evaluating the effect of community context upon entrepreneurial process. The bridge analogy figures prominently.

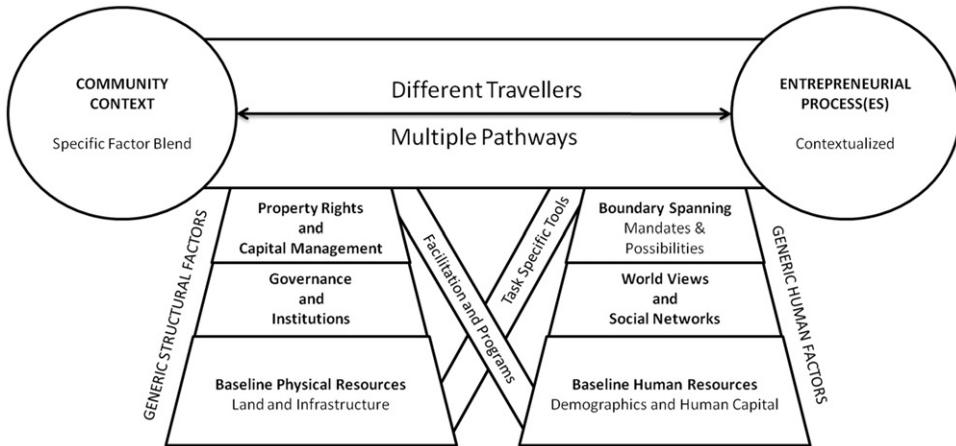


Figure 1. How community context affects entrepreneurial process: a diagnostic framework.

Two ‘pillars’ (generic structural factors and generic human factors) hold up a ‘roadway’, which permits the passage *via* multiple pathways (new venture creation and/or various forms of transformation of new knowledge into new value) of different potential entrepreneurial ‘travellers’. The travellers are both entrepreneurial actors and members of the community affected by their actions. Entrepreneurial actors can include individuals, teams, institutions, the community as a whole or various subsets of it, operating as entrepreneurs either for-profit or from social-value motives. Passage from understanding community context to performing contextually sensitive entrepreneurial processes originates in a deep understanding of the uniqueness of any individual community, which, in turn, derives from the *particular blend* of the *generic* components (represented as ‘pillars’ in the diagram). Utilising the component blocks of these pillars, an analyst is able to diagnose and define the condition of the community when it comes to performing a contemplated entrepreneurial process. For diagnosis of the original (current) ‘entrepreneurial condition’ of the community, utilisation is made of the six knowledge blocks that comprise the pillars.

There are three sub-components of community infrastructure that may be regarded as fundamental data: baseline physical resources, governance and institutions, and the system of property rights and capital management³ prevailing in the community. There are two sub-components of human infrastructure that may be regarded as fundamental data: baseline human resources and a component comprising world-views and social networks. One sub-component of human infrastructure is not data: it involves intensive analysis of data; but it involves a human agent and is fundamental to understanding the entrepreneurial capacity of a community. It is boundary spanning: the ability to analyse all of the key obstacles (boundaries) that create ‘problem territory’ and to find ways of surmounting the problems first in a statement of what must be done (mandates) and then by articulating how it might be done (possibilities). Once the boundary-spanning agent (individual or team) has performed this analysis on the five data areas, we can say that the origin of the analytical ‘journey’ has been appropriately specified: the community has been comprehensively defined with respect to the entrepreneurial process under contemplation. However, the roadway is not yet necessarily safe for

travellers to use. The bridge may need some underpinning. This is represented by two cross-braces in the diagram.

If the boundary spanning exercise has revealed inadequacies in the human resource base – particularly lack of requisite human capital in the form of skills needed to perform the proposed entrepreneurial process, there will be a need for both enterprise facilitation of the kind articulated by Sirolli (2003) and perhaps some programme implementation of a more traditional nature⁴. This ‘brace’ is shown proceeding downwards from the detailed definition of community to the strengthening of its baseline human resources. A final brace, completing construction of the diagnostic framework proceeds upward. Task specific tools can be employed to compensate for identified weaknesses in the community’s current physical resource base. For instance, if a given small community needs a basic road-network built to improve infrastructure fundamental to the feasibility of a given entrepreneurial initiative, it may need to acquire the services of a bulldozer.

With the underpinnings of the bridge thus strongly framed by two pillars and two braces and the point of origin (community context) thus uniquely defined, the analytical journey can proceed from the origin to the desired destination. The proposed entrepreneurial process or processes now stand a chance of being successfully designed and implemented because they have been systematically contextualised.

13. Detailed sequence of stages in implementing the framework

This section of the paper works through the framework sequentially and in detail. When expanding on the details of the various subsections of the framework, broadly outlined in the preceding section, the order of item discussion is important because I wish it to be the order in which I think the diagnostic analysis should be performed. Figure 2 represents the order – a sequence of 11 ‘phases’ – in which the diagnostic analysis ought to be conducted.

In Figure 2, each stage of the diagnostic analysis process is simply represented by a number: where ‘1’ corresponds to ‘stage one’ and so on.

In explaining each stage of the process under the headings that follow, the presentation procedure is that each stage (key component of the diagnostic framework) is stated as a one-line, mandated activity, for instance, ‘Stage 3. Describe and assess world-views and social networks’. This is the bald, unadorned statement of what needs to be done at this stage of the diagnostic analysis. The exposition provided under each numbered heading is then subdivided into two components.

First, for each numbered element in the framework comes its *rationale*. The exposition here provides theoretical and empirical *justification* of the prescribed activity. Each ‘rationale’ sub-heading provides a brief outline of the mix of theoretical, and logical arguments that support the component, which, as has been previously demonstrated, emerged from the empirical study. Each rationale section answers the question of *why* theory supports practice, prescribing this activity as an integral component of the diagnostic framework.

Second, for each numbered element in the framework comes a brief amplification of the practical activities to be performed as an *action mandate*. Its exposition provides a succinct answer to the question of *what* must be done at this stage of the diagnosis. Of course, given the very high level of generality presented in this section

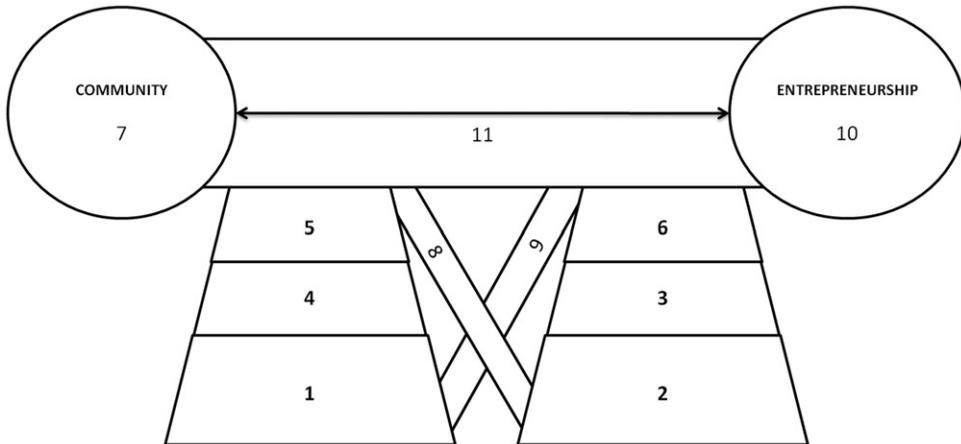


Figure 2. Working through the framework sequentially.

of this article, very little detail can be prescribed about how to implement the mandate or how extensive and detailed an analyst-diagnostician should be. This will depend on individual contexts, cases and circumstances to such a vastly varied extent that the provision of detailed examples is not possible or desirable given the scope and limitations of this article. Future work will concentrate on applications and illustrations of how to construct the diagnostic process in specific contexts.

What follows now is a sequential exposition – rationale and action mandate – of each element of the diagnostic framework, in the order indicated in Figure 2.

13.1. Stage 1. Describe and assess baseline physical resources: Land and infrastructure

13.1.1. *Rationale*

The most basic and most ‘objective’ defining element of any community is the set of physical resources it owns or controls. There is no substitute for the prosaic task of taking inventory. How much land and other fundamental property⁵ (if any) does the community own? What is the nature volume and productive capacity of improvements (if any) to that land? Are there factories, roads, communications’ systems, or other relevant physical resources?

The mandate here is to list and evaluate all salient items and attributes of the fundamental physical resources pertaining to the community. This segment of the community-defining task is based, in a disciplinary sense, in both general economic theory, where the three classical factors of production are land, labour and capital, and the theory of economic development. There is simply no substitute for a thorough, dispassionate *classification* of physical resources. Resources, both absent and present, are a critical component of the economic feasibility of any proposed entrepreneurial projects. If, for instance, the task was to compare the entrepreneurial potential of two communities and one owned a large, fertile territory with a mixture of old and new infrastructure and the other community held a small, infertile territory with virtually no infrastructure, there are some obvious and widely differing implications for entrepreneurial potential generally and for each and every

entrepreneurial initiative that might ever be contemplated in either community. Initial implications in any other (less 'land-based') setting are analogues. A club or society that owns its own premises is a very different community from a club with no physical communal resources. A large, rich country is, *ceteris paribus*, better positioned than a small poor one with respect to entrepreneurial potential.

If this task of listing physical resources seems so basic as to be trivial, one only need reflect on the vast number of large and serious studies that simply fail to do it. One example suffices to illustrate the amazing prevalence of oversight of this truly fundamental issue. In July of 1989, the Canadian government announced the launch of the Canadian Aboriginal Economic Development Strategy (CAEDS) (Elias 1991, 32). The CAEDS was created 'to address the economic disparities between Aboriginal peoples and other Canadians' and to assist Indigenous 'peoples' to achieve 'economic self-reliance'. Approximately, one billion dollars was allocated for the first 5 years' operation of the strategy. Eventually, the Auditor General of Canada found the programme to be a total failure and attributed this, in large measure, to an approach which threw all communities under the one conceptual blanket instead of paying detailed attention to the very real physical differences which distinguished one community from another. The result was that some bands in remote communities – who may have been 'more concerned about their immediate needs, such as housing and health care' – and who may have had few employment or business opportunities, would receive the same amount of funding as a band located near an urban centre or one with access to developed natural resources (Auditor General of Canada 1993). The Auditor General found that:

The three departments responsible for implementing the CAED Strategy could not demonstrate that the variety of funding methods and amounts provided under the strategy were appropriate in the circumstances. In addition, despite some positive examples of Aboriginal economic development, they could not demonstrate that, after spending at least \$900 million from the beginning of its implementation in 1989 to early 1993, they were meeting the strategy's objectives (Auditor General of Canada 1993).

Finally, the Auditor General recommended that the three departments involved in the programme's implementation 'adopt funding methods based on identified needs, priorities, constraints and opportunities' instead of, for example, using a prefabricated a-contextual approach that ignored fundamental differences between communities (Auditor General of Canada 1993).

13.1.2. *Action mandate*

So, though it may be very difficult or very tedious and time-consuming to do in practice, the first guiding principle of the diagnostic analysis is both simple to state and uncontroversial in nature. The analyst must list and classify the physical and infrastructural resources, whether controlled by the community or others, that the analyst/diagnostician deems to be directly germane to the unique definition and operation of the community.

13.2. *Stage 2. Describe and assess baseline human resources: Demographics and human capital*

13.2.1. *Rationale*

In the neo-classical economic model, labour is the second principal factor of production. In this study's emerging framework, attention now switches to the

human pillar underpinning community definition and the requirement now becomes a dispassionate, thorough classification and codification of what might be called 'the human inventory' of the community. This involves both an objective description of *who people are* (articulation of the standard demographic variables – age, sex, education, income, health variables, etc.) and *what they can do* (the human capital embodied in their skill-sets). Human capital may be thought of as the stock of productive skills and technical knowledge embodied in a community's labour force. Given the limitations of size and scope affecting this article, the need for demographic articulation of a community is taken as axiomatic and the argument for the need to assess human resources is treated very briefly.

Information related to economic opportunity is distributed unevenly across economic marketplace participants (Kirzner 1979, 1982). This affects both the opportunities for arbitrage in the existing economy and the opportunity to create new ventures. It has been argued that individuals develop unique knowledge that produces a state of readiness, allowing some individuals to be more alert to new venture opportunities and create and develop a larger variety of implementation possibilities than those without such knowledge corridors (Kirzner 1979). Implicit within human capital theory, is the presumption that the cognitive ability of individuals is increased by the accumulation of knowledge stocks that allows some individuals to perceive and act more efficiently and effectively in the marketplace through new venturing activity than others.

In their recent study of the role of human and social capital and technology in nascent ventures, Schenkel, Hechavarria, and Matthews (2009) have provided a succinct summation of the under-utilised relevance of human and social capital in the modelling that scholars conduct when studying the new venture creation phenomenon. This article defers to their analysis for its argument of the need to assess, overtly, both human capital (this phase of the diagnostic analysis) and social capital (next phase of the diagnostic analysis). They argue that research on human and social capital derives from the ideas that actors are both shaped by and contribute to the social construction of their respective economic contexts, citing, inter alia: Aldrich and Zimmer (1986), Burt (1992), Coleman (1988), Davidsson and Honig (2003) and Granovetter (1985).

From a human capital perspective, individuals develop "corridors" of knowledge from information exposure and practical experience that lead them to being alert to new venture opportunities that they could not see previously (Kirzner, 1979), as well as better prepared to engage in successful exploitation efforts (Becker, 1993; Davidsson & Honig, 2003). Similarly, from a social capital perspective individuals presumably develop social relationships throughout time that play a significant role in the enhancement of their alertness to entrepreneurial opportunity (Singh, 2000). Such relationships also allow individuals to engage more effectively in efforts to form new ventures because of the socially constructed (Larson & Starr, 1993) and continuously evolving (Aldrich & Zimmer, 1986) nature of these forms of economic organization over time (Schenkel, Hechavarria, and Matthews 2009, 157).

For these reasons, any diagnosis of the manner in which community affects entrepreneurial process must embrace the following action mandate.

13.2.2. Action mandate

The analyst should attempt as comprehensive a demographic classification of the community members as is possible given relevant constraints, basically time

and money. Once a demographic tabulation is made, the profile it produces can be cross-tabulated with the skills inventory compiled under the heading of 'human capital'.

13.3. Stage 3. Describe and assess world-views and social networks

At this stage of the analysis, the attention is still on people but the focus now moves from who they are and what they can do, to how they view the world and how they relate to one another.

13.3.1. Rationale

The English phrase 'world view' is the closest the language can get to the complex meaning entailed in the German word 'Weltanschauung'. It is a concept fundamental to German philosophy and epistemology and refers to the intricate network of ideas and beliefs through which an individual interprets the world and interacts with it. In a practical sense, an individual's world view is the core of their philosophical approach to the world and distinguishes both the preconceptions influencing observations and the methods that the individual brings to the task of evaluating what is perceived. The notion of world view involves a high degree of conceptual abstraction but, in a practical sense, it is often not overly difficult to articulate, especially in a comparative analysis. For instance, if the community under scrutiny were a university, it is not difficult to recognise this, at the highest level of generalisation, as an environment where two distinctive and conflicting world-views co-habit. Whereas the administrators in a university see the environment (their 'world' as construed by them) in managerial and bureaucratic terms (students have to be enrolled, classrooms allocated, payments collected etc) the academics see the environment from an entirely different perspective. In the academics' world view, the key issues are likely to be far more abstract and altruistic educational values, such as 'knowledge transfer', 'pursuit of truth' and similar lofty abstractions. When administrators and academics are brought together in committee and charged with the responsibility for designing strategies, programmes and initiatives for the organisation, the clash of world-views may become a fundamental impediment to the design of mutually-agreed policy and the pursuit of mutually-agreed innovations.

To augment understanding of the core philosophical stances of different individuals and groups within the community, the analyst now needs to classify the important linkages between people and groups. This brings us to the need to identify and describe the social networks that prevail within the community. They form a very important determinant of community identity. Here, the reader is referred back to the arguments of Schenkel, Hechavarria, and Matthews (2009) cited in the previous section. A further brief expansion of the importance of determining social capital through analysing social networks is warranted.

In common with the literatures of planned behaviour and entrepreneurial intentions (Ajzen 1991; Krueger, Reilly, and Carsrud 2000), the literature on entrepreneurial networks has emerged since the 1980s as a reaction to the deterministic approach taken in many psychological studies of entrepreneurs. A key aim of social network theory is to classify the linkages between people in a social situation. The attempt to classify world-views focuses on what goes on within

the minds of individuals that causes them to see things the way that they do, the attempt to classify social network literature shifts the focus to groups and the way that social interactions influence behaviour. Drawing heavily on the resource perspective developed by Wernerfelt (1984), entrepreneurial network literature (Birley 1985; Aldrich and Zimmer 1986) argues that entrepreneurs obtain non-redundant resource from their network that makes them perform better. The resources entrepreneurs obtain from their networks have to be understood broadly and include, for instance information, advice, social support and legitimacy. Klyver and Schøtt (2008) have produced a detailed analysis of the way in which social network structure shapes entrepreneurial intentions. They measured six properties of social network structure and reached the conclusion that network density, business network size and having other entrepreneurs in the network influence development of entrepreneurial intentions. So, evidence from the social and entrepreneurship network literatures demonstrates powerfully that entrepreneurs obtain valuable resources from their networks that help them achieve entrepreneurial goals.

13.3.2. *Action mandate*

Though it may appear very difficult and at the risk of oversimplification, the analyst on the way to diagnosing any community with respect to its entrepreneurial potential must make an overt listing and comparison of the different world-views that are of crucial significance to relevant individuals and groups within the community, taking special note of any strongly conflicting perspectives. In association with the classification of world-views, the analyst must strive to describe and evaluate the principal components of the major social networks operating within the community.

13.4. *Stage 4. Describe and assess governance mechanisms and the nature and role of institutions*

Attention now returns to the infrastructural underpinnings that define a community. We return to the left hand 'bridge pillar' depicted in Figures 1 and 2.

13.4.1. *Rationale*

Bartos (2007) has described governance as 'the processes whereby decisions important to the future of an organisation are taken, communicated, monitored and assessed'. Another definition (Australian National Audit Office 2003) describes governance as: '... the processes by which organisations are directed, controlled and held to account. It encompasses authority, accountability, stewardship, leadership direction and control exercised in the organisation'. Fundamental principles involved in the concept of governance are: the rule of law; accountability; ethics and probity; performance measurement and managing risk. Cornell and Kalt (2004) define the essence of governance in a community perspective.

This is governance: establishing rules we can depend on to coordinate our actions and achieve our goals. Certainly there is more to governance than that. It also involves making decisions and establishing policies and getting things done. But the basic rules are the critical piece of the puzzle (Cornell and Kalt 2004, 4).

Cornell and Kalt (2004, 5) then develop a corollary definition of government.

In addition to adopting a set of rules that we all follow when we interact with each other, we could identify a set of offices or positions that are charged with determining for us what those rules should be, enforcing them, making and implementing decisions, and resolving the disputes among us, and then we could choose individuals to fill those positions or offices and carry out these essential tasks. In short, we could create an organization to do these things: a government.

Strong evidence that governance is a vitally important issue in defining the entrepreneurial potential of communities was presented in a study of major importance in the emerging field of Indigenous entrepreneurship by Cornell and Kalt (2000). They observed that since the mid-1970s, hundreds of American Indian reservations in the United States have been afforded substantial powers of self-government and the result has been a set of diverse efforts to overcome widespread poverty with equally diverse outcomes. They argued, on the basis of several case studies of Indigenous economic development, that resource or human capital endowments do not hold keys to launching viable Indian economies.

Instead, tribal constitutional forms appear to be make-or-break keys to development. Development takes hold when these forms provide for separations of powers and when their structures match Indigenous norms of political legitimacy Cornell and Kalt (2000, 443).

The research underpinning the diagnostic regime being developed here agrees with Cornell and Kalt that it is vitally important to define the governance structures and institutions which operate within the community and indicate the likelihood of various positive and negative effects which these rules and institutions are likely to have upon the conduct of any entrepreneurial initiative under consideration. However, my evidence does not indicate that physical and human resources are *always* less important than governance as factors in economic and entrepreneurial development. This may be the case in some communities and not in others. My belief, based on empirical investigation and supported by theory and evidence from several fields, is that what needs to be determined and critically examined as we seek to assess the entrepreneurial potential of each community is the *particular mixture* of factors, physical, human and institutional that inter-react to form the unique recipe that distinguishes this community from all others. All the ingredients, physical, human and institutional are always likely to be important to some degree but the proportions in which they matter will differ from case to case. In one case it may be that governance issues are overwhelmingly important: change some governmental structures and you may, in this case, have removed 90% of the obstacles to successful entrepreneurial endeavour. In another case, the regulatory system may be highly conducive to entrepreneurial initiative but there simply are not enough community members skilled in new venture creation. In this situation, a well-conceived, culturally sensitive education programme is likely to be of more benefit than any tweaking or fine-tuning of the governance rules.

In parallel with governance, the nature, role and power of institutions within and without the community must also be overtly addressed for the effect on entrepreneurship which they are likely to produce. North's theoretical essay delves deeply into economic history to demonstrate the importance of the role of institutions 'in the performance of markets' to economic performance and change. The essence of his argument is that the set of institutions along with the 'standard' economic constraints determine the transaction and production costs and hence the

profitability and feasibility of engaging in entrepreneurial behaviour (North 1991, 97, 100 and 111). This is obvious enough to be almost a truism: the point scarcely warrants extensive theoretical justification. One illustration suffices to justify the need to assess institutional influence on entrepreneurial process.

In 1978, in Canada, Jack Beaver was commissioned by the Department of Indian Affairs and the National Indian Brotherhood to conduct a study of government policies, programmes and institutional structures as they affected the economic capacity of Indigenous Canadians subject to Canada's Band system of governance. The following excerpt is from that report (cited in Allard 2002, 136).

[Indian Affairs] has taken on the exclusive control over the definition and purported satisfaction of almost all the basic human needs (healing, teaching, provision of food and shelter, burying the dead) to the point that it prevents or inhibits the natural competence of the people to provide for themselves... The effect of the policies of the Government of Canada has been to impose the consumption of standard products (nurses, teachers, welfare officers, frame houses, and undertakers) that only the Government can provide. This in turn has created a deep-rooted dependency on the very commodities and services that Indian Affairs, Health and Welfare, and others deem to be 'in the public good'.

Kayseas (2009) has gone as far as to argue that unless the institutional nature, structure and operation of the Department of Indian Affairs in Canada is substantially changed, any entrepreneurial initiative in any band-based Canadian Indigenous community is nearly impossible, by definition.

13.4.2. *Action mandate*

Define the governance structures and institutions which operate within the community and articulate the positive and negative effects that these rules and institutions are likely to have upon the conduct of the entrepreneurial initiative or initiatives under consideration.

List all the relevant formal institutions that could affect the entrepreneurial process under consideration and describe the ways in which these institutions, alone or in combination, might influence the contemplated entrepreneurial process.

13.5. *Stage 5. Describe and assess the property rights system and capital management regimes*

13.5.1. *Rationale*

Dabla-Norris (2004, 391) argues the critical importance of property rights to entrepreneurial process. When property rights are not well defined, enforced or enforceable, participation in the market economy and entrepreneurial activity is discouraged because of the likelihood that participants will not receive the full or even sufficiently adequate benefits for their efforts.

The literature and evidence of the importance of the issue addressed under this banner is so vast, persuasive and pervasive that I will be readily excused for proceeding rapidly to conclusions in the absence of a mass of citations. First, in mainstream economics, the issue of property and property rights has been the guiding theme of practical politics and theoretical views of the nature of society and economics for centuries. The essence of the principal conflict of the twentieth century – the battle between capitalism and communism – was fundamentally based

in divergent views about the ownership of and rights to private property. For most non-mainstream communities – certainly for many Indigenous communities – the issue of their relationship to the land is *the* fundamental issue (Hindle and Moroz 2010). In another work (Pasco and Hindle 2009) a colleague and I have explored the issue that *assertion of title* is regarded by many communities as the most important yardstick by which to measure whether a particular entrepreneurial initiative may be regarded conceptually as ‘Indigenous’ or not. When it comes to the practice of entrepreneurship in Indigenous community contexts, the classic, broad-brush scenario germane to many Indigenous communities in this regard is the simple fact that most mainstream banks will not make loans to individual Indigenous entrepreneurs if the loan applicants live and operate their businesses on communal property. So, in both the literature of economics and economic development, and the entrepreneurship literature, the evidence for the importance of property rights to entrepreneurship in any community context is overwhelming. It featured in every depth interview of the empirical database used in this study (Hindle and Lansdowne 2005). Property rights are at the heart of the work of Hernando De Soto (discussed above), one of the inspirational foundations of this study. Feder and Feeny amplify the point:

...both historically and in the contemporary world the assumption of exclusive, transferrable, alienable, and enforceable rights is frequently inaccurate and potentially misleading (Feder and Feeny 1991, 135).

Accordingly, it can be simply stated that there is a demonstrated need to address the ways in which property rights operate and how they can be used to develop the various kinds of capital needed to underpin various economic and entrepreneurial initiatives in a community context. Unless this task is performed, a community context remains inadequately defined in terms of its ability to affect entrepreneurial process.

Despite the massive importance of the land/property/capital formation/capital management issue, a caveat is warranted. The previously stated argument (under the heading of governance) that the *mixture* of factors in particular cases is more important than any assignment of predetermined ranking of analytical importance to any one factor, holds just as strongly with respect to the issues of property rights and capital management as it does to governance and every other factor that forms a component of the overall diagnostic framework. One of the seminal influences on my development of the diagnostic framework being presented in this study is Hernando De Soto’s (2000) book, *The Mystery of Capital*. My one critique of the powerful arguments presented in that work is that, just as Cornell over-specifies the weight to be applied to governance in every community evaluation exercise, so De Soto may over-specify the relative importance of property rights and capital formation.

He argues that the major stumbling block that keeps the poorer parts of the world from benefiting from capitalism is its inability to produce capital in the form of well articulated, trustworthy property rights. Despite the poor already possessing the assets they need to make a success of capitalism they cannot do so because they hold their resources ‘in defective forms’ (De Soto 2000, 5).

In the West, by contrast, every parcel of land, every building, every piece of equipment, or store of inventories is represented in a property document that is the visible sign of a vast hidden process that connects all these assets to the rest of the economy. Thanks to this representational process, assets can lead an invisible, parallel life alongside their

material existence. They can be used as collateral for credit... Third World and former communist nations do not have this representational process... Without representations, their assets are dead capital. (De Soto 2000, 6)

I argue, in agreement with De Soto, that assessment of the role of property rights and capital formation/management relevant to a community is a sine qua non of effective evaluation of any entrepreneurial potential possible within it, but that this remains one of *many* relevant factors and operates in concert with them. It neither stands alone nor does it enjoy any predetermined priority in importance.

13.5.2. *Action mandate*

The mode and detail needed to describe and assess the property rights system and capital management regimes pertaining in particular communities obviously will vary from case to case. The mandate here is simply to be clinical and be thorough. Adroit use of flowcharting and diagrammatic techniques will have obvious benefits in trading off comprehensiveness against parsimony.

13.6. *Stage 6. Describe and assess the mandates and possibilities of boundary spanning*

13.6.1. *Rationale*

Boundaries are a defining aspect of any organisation (Aldrich and Pfeffer 1976). The general concept of boundary spanning has emerged as a tool by which to establish the identity of an organisation, determine its interaction with the environment, and understand the way in which knowledge is acquired, transferred and utilised (Katz and Kahn 1966). A boundary is defined as: 'the demarcation line or region between one system and another, that protects the members of the system from extra-systemic influences and that regulates the flow of information, material and people into or out of the system' (Leifer and Delbeq 1978). Boundary spanning thus becomes any set of processes or activities pursued by individuals or groups that bridges, links, or potentially even blurs the nature of two or more separate boundaries (Aldrich and Herker 1977; Warner 2005).

There are two ways in which boundaries may be established: formally, *via* internal strategic choice or externally, as imposed by environmental conditions or influential actors (Allen, Tushman, and Lee 1979). The existence of informal boundaries may also be observed in groups working toward the same ends, sharing similarities in language and operating within a common social system (Kuhn 1962/1970; Crane 1972). As organisations can be conceptualised as a series of nested systems, with each subsystem interacting with various different external sectors, formal and informal groups operating within an organisation may differ systematically in the mode or process by which they interpret the environment around them (Daft and Weick 1984). Thus, boundaries define shared sets of mental models that represent the culture, goals, language and interests of a group of people. They localise the way that problems are defined and are highly influential determinants of the manner in which novelty and innovation are handled (Tushman 1977; Weick 1995; Carlile 2002).

Although most research on boundary spanning has tended to be covered as an organisational phenomenon (Katz and Kahn 1966; Miles and Snow 1978),

boundary *spanning* is conducted by individuals and teams from many different functional areas and is distinct from boundary *objects* such as symbols, processes and language (Golden and Veiga 2005). Whether performed by an individual or a team, the activities of boundary spanners embrace three core areas: resource flows, information flows and the management of expectations through the establishment of trust (Williams 2002). Unlike social networking theory that is focused upon the establishment of personal relationships between people and the value derived from these relationships (Granovetter 1979), the boundary spanning literature focuses on the transfer and understanding of knowledge within a system. Boundary spanning can be framed within two different perspectives of practice: community-like practice that distinguishes a joint engagement of agents in the production of shared objects, or a market-like practice that consists of exchanging separately produced objects (Levina and Vaast 2006). Ultimately, the role of the boundary spanner is defined through the intentionality or process of achieving organisational or 'communal' goals. The boundary spanner acts to distinguish the identity of the organisation (which could of course be a community) from that of the individual (or team) through sensitivity to the normative characteristics and values of different groups (Katz and Gartner 1988).

The relationship between boundary spanning and entrepreneurship is not precisely outlined in the extant literature. The assumption that entrepreneurs automatically engage in boundary spanning activities often confuses this term with other closely related but distinguishable concepts, such as networking and social capital (Granovetter 1979; Aldrich and Zimmer 1986). The linkages between them are often explored within the context of the development of new organisations and firms (Katz and Gartner 1988; Bloodgood, Sapienza, and Carsrud 1995). In one study focusing on the organisational level, boundary spanning activities have been somewhat narrowly specified as relating to the routines and processes used by R&D firms to scan, acquire, assimilate and exploit knowledge for gaining or sustaining competitive advantages (Cohen and Levinthal 1989). At an individual level, boundary spanning activities have been equated with and predicted by the observation of personal characteristics such as creative thinking, rule breaking and opportunism (Williams 2002).

Busenitz et al. (2003) argue that focusing entrepreneurship research upon the interrelated dimensions represented by the individual, the opportunity, modes of organising and the environment will define the field and enhance its legitimacy. How individuals and teams within new ventures work to span boundaries across markets, suppliers, competitors and the environment in general may provide a better understanding of the entrepreneurial process (Gartner 1985) and the concept of boundary spanning may be useful in exploring a rich variety of entrepreneurial processes focused upon opportunities. The literature contains intimations that the boundary spanning process could help to develop a deeper contextual understanding of complex units of analysis such as communities, geo-spatial systems and entrepreneurial events (Steyaert 2007). In summary, boundary spanning has deep roots in the organisational literature and growing tentacles in the entrepreneurship literature and is an appropriate conceptual label for formalising the sixth category that emerged from the empirical study presented above and repeated here. In the empirical study, emergent category (6) was: *find a way to overcome the obstacles within the community itself*. Stripped to its essence this category articulated

respondents' pervasive beliefs that there has to be some kind of 'binding agent' if any entrepreneurial process is to be possible in communities. That is another way of describing what extant theory recognises as the need for boundary spanning and a boundary spanner.

13.6.2. *Action mandate*

In the context of the diagnostic framework being developed in this article, the prescription 'to describe and assess the mandates and possibilities of boundary spanning' is the key *analytical* prescription of the entire diagnostic system being proposed. The five previous tasks have been largely descriptive. In a sense, the five tasks set so far have been about the production of lists: physical resources; human resources and skills; world-views and network structures; governance rules and institutional arrangements; property rights and modes of capital formation and management. Now must come the assessment: the sensemaking and the agenda setting. The first question is: what factors in the lists so far compiled may be regarded as positive forces (supporters and drivers) for the contemplated entrepreneurial initiative and what factors are negative (barriers and brakes) likely to impede the ability to perform this? The answer, of course, produces another list, albeit a highly annotated one. Now comes the second question, the one that gives this component of the diagnostic system and indeed the whole system its potency. The analyst/diagnostician needs to ask: what boundaries is it obligatory to span (the mandatory component comprising obstacles to success that simply must be overcome if the entrepreneurial initiative is to be feasible) and what possible ways (if any) can be found and implemented to span those boundaries (overcome the obstacles)?

A moment's reflection will indicate both the obviousness and importance of highly recognisable boundaries as generic types and the highly specific and widely varied nature of the specific manifestations that these types of boundaries will assume from case to case. In general terms, the major boundaries will emerge as a direct result of the 'listing' activities performed in the previous five stages of the diagnostic process. The absence of physical resources, human resources, human capital (skills) all set current limits (boundaries) to what is entrepreneurially possible given the current status of the community. Some of these boundaries simply must be spanned or else the entrepreneurial initiative under contemplation becomes objectively impossible.

For instance, if a particular initiative mandates particular skills and they are absent from the community, the proposed initiative will remain a pipe dream until the relevant skills are acquired by the relevant people. This mandates the creation and implementation of a requisite training programme; and so on. In this as in every other aspect of the diagnostic procedure, the entity performing the boundary spanning task must articulate the boundary (here a missing skill) and the method for spanning it (perhaps, in this case the introduction of a specialist training programme). The boundary spanning task is massively important when it comes to conflicting world-views. For instance, in a case I encountered on a reservation in Montana, an individual entrepreneur making and selling teepees on an Indian reservation met massive hostility from community members who resented his earning 'private' money through what they regarded as the trivialisation and selling of a 'tribal' heritage item. Skilful intermediation by an elder – the boundary spanner in this case – was able to reconcile what had been two diametrically opposed

world-views and facilitate the emergence of a vastly improved business that provided both enhanced profitability to the entrepreneur combined with economic, social and cultural benefits to the community.

In every other area of the diagnosis of the community, boundaries (obstacles) will emerge and must be spanned (overcome). A few instances will suffice for illustrative purposes. Certain social networks may be acting as intra-community cartels, blocking fair access to resources and opportunities for non-network members. Certain rules in the governance structure (as previously illustrated) may proscribe desirable possibilities. Institutions may be impediments. Land and property rights may place other initiatives out of the realms of possibility: literally out of bounds.

In summary, boundary spanning is the critical analytical task of the entire diagnostic system. Wherever they exist the boundaries that fence off entrepreneurial possibility must be recognised and ways to transcend them must be articulated.

13.7. Stage 7. Define community context through synthesis of the six components

13.7.1. Rationale

The entire rationale for the six preceding steps has been to define the community with respect to its potential as a viable intermediate environment for the entrepreneurial process under contemplation. When this has been done, in the six detailed stages described above, it should then be possible to provide a succinct summary of all the salient features of the community that are likely to impact on the feasibility of the contemplated initiative.

13.7.2. Action mandate

Use all previous data gathering and analysis, to provide a summary definition of the community as a context for the proposed entrepreneurial initiative.

13.8. Stage 8. Articulate any required facilitation initiatives and programmes

Given the infinity of contingent possibilities, it is not possible to specify details of the rationale and action mandate for this stage of the diagnostic framework beyond repeating argument given in the overview of the framework where it was stated that, if the boundary spanning exercise has revealed inadequacies in the human resource base – particularly lack of requisite human capital in the form of skills needed to perform the proposed entrepreneurial process – there will be a need for both enterprise facilitation of the kind articulated by Sirolli (2003) and perhaps some programme implementation of a more traditional nature. The essence here is that, having obtained a detailed empathy for the community's situation viz a viz a proposed entrepreneurial initiative, it will be possible to design appropriate and culturally sensitive skills enhancement programmes to equip people to span the boundaries separating the current situation from the desired situation. 'Programs', conceived of in the widest sense, are devices to strengthen a community's human resource base.

13.9. Stage 9. Indicate any task specific tools required as fundamental prerequisites

Again, given the infinity of contingent possibilities, it is not possible to specify details of the rationale and action mandate for this stage of the diagnostic framework beyond repeating the argument given in the overview of the framework. To span an identified resource boundary, specific tools can be identified and employed – a bulldozer to grade a road; a construction programme to build a schoolhouse etc. ‘Tools’, conceived of in the widest sense, are devices to strengthen a community’s physical resource base.

13.10. Stage 10. Provide a contextualised summary of the required entrepreneurial process

The entire analysis to this stage has pointed to a redefinition of the entrepreneurial process under consideration. Steps 1–9 will have provided systematic diagnosis of the likely affects and influences of the principal factors that define the community as an intermediate entrepreneurial environment. Step 10 is the requirement to summarise the salient features of the diagnosis into a succinct overall re-definition of the previously a-contextual entrepreneurial process so that it takes overt account of the contextual issues likely to be most critical to success. For instance, if a given community was contemplating the creation of a roadside shopping facility on land it controlled, a full utilisation of the diagnostic regime outlined in this article would have augmented the merely technical aspects of creating such a venture with a detailed appraisal of all relevant community contextual factors. For instance, it may emerge that the site is suitable and affordable (perhaps gifted to the project by the tribe that owns it) and there are plenty of people with the requisite skills to be appropriately employed in the venture and that all governance and institutional issues can be negotiated satisfactorily with all relevant parties and that project capital adequate for construction and seed funding is available through government grant. All looks great for the venture except one thing: there is a group of traditionalists who are vehemently opposed to construction on the grounds that it will desecrate what they deem to be a significant area of territory. Unless the boundary between their view of the world and that of the majority in favour of the project can be spanned, the project is doomed to be cursed from its inception to the day it fails from lack of customers, driven away by hostile protesters. The essence of success in this particular project boils down to the ability to reconcile conflicting world-views of significant community groups. In an infinity of other projects, there will be an infinity of other and widely different salient features. The common ground is simply that in all cases where the diagnosis of community factors has been adequately performed, there will be no naive approach because the proposed entrepreneurial initiative will have been systematically contextualised.

13.11. Stage 11. Articulate the implications for relevant stakeholders

The diagrammatic presentation of the diagnostic system developed in this article (Figure 1), employs a bridge analogy. It depicts the culmination of the diagnostic procedure as the ability of different travellers (entrepreneurial actors and community members affected by their actions) to journey *via* multiple pathways from an origin to a destination. The origin is a deep understanding of the community as an

intermediate environment containing factors both conducive and hostile to any proposed entrepreneurial process. This deep understanding is founded upon intense local examination of the nature and interrelationship of three generic institutional components of any community (physical resources, governance/institutional arrangements and property rights) and three generic human factors (human resources, world-views/social networks and the ability to span boundaries). The destination thus becomes a contextualised understanding of any proposed entrepreneurial process under consideration. The destination now embraces the ability to conceive of and deal with the influence that community factors will have upon the likely success of any proposed entrepreneurial process.

So, moving from metaphorical travellers to prosaic stakeholders, the final stage of the diagnostic process is the need to articulate – as parsimoniously as possible but as comprehensively as necessary – the ways that community factors will impact both those community members performing the entrepreneurial process and those who will be affected by it. When this is done, the diagnostic process is complete.

14. Validation, implications and conclusion

14.1. *Validation versus validity: The value of work in progress*

Given the practical orientation of the quest motivating this study, ‘what is valid?’ and ‘what is useful?’ are questions intimately intertwined in an assessment of the value of the resultant artefact. Accordingly, to gauge the value of the diagnostic framework offered here, it will be better to think as Leitch and Harrison (2009) do when they assess the quality of qualitative research. They do not think of ‘validity’ as an issue that can be determined as an output of a pre-fabricated investigative approach (as it can be when using multivariate statistics to evaluate quantitative evidence). They think not of ‘validity’ as an output but instead of ‘validation’ as a process. Given the utility entwined nature of my quest in this study, this is the appropriate orientation to take in assessing the worth of the diagnostic system proposed here. It is too early to pronounce the new artefact as either a success or a failure or something in between. One thing that can be indicated though is an appropriate approach to assessing the utility, validity and value of the proposed diagnostic system: that is to use it. As proof of this pudding, I will be looking to the nutritional satisfaction of those eating it. Since the work is so new, there are no examples of completed applications of the framework, but here, I briefly, cite seven examples of potentially significant work that is both underway using the framework and includes a commitment to detailed chronicling and critical assessment of it.

McMurray and Hindle (2008) have won a substantial competitive grant from the Australian Research Council (ARC). They and their colleagues will be using the framework presented in this article as the theoretical and practical basis for investigating the role of community issues in determining the relationship between the traditional values resident in the Indigenous communities of the State of Victoria, Australia and the practice and profitability of the businesses of over 180 Koori entrepreneurs emanating from those communities. Kayseas (2009) is applying the framework to an examination of the factors defining successful entrepreneurship in those Indigenous communities of Canada that are organised under the band system, defined by Canada’s Department of Indian Affairs. Mainprize (2008) is utilising aspects of the framework within a longitudinal programme directed at facilitating

productive entrepreneurship as the Nisga'a nation of British Columbia seeks to re-shape its economic future. Pasco (2009) is using the framework as a key component of his research into strategic alliances in the Indigenous context. These are all examples of the interface between Indigenous communities and entrepreneurial process. Three non-Indigenous examples are provided by Admans, Al Shanfari and Moroz. Admans (2009) is employing the framework to design a comprehensive programme for evaluating the entrepreneurial potential of a 'rust-belt' region of Australia. The programme, supported by substantial government funding, is scheduled to commence in September 2010. Al Shanfari (2009) is employing the framework as part of his research aimed at designing a national policy environment for fostering high-aspiration entrepreneurial ventures in developing countries, with a special emphasis on national economic communities dominated by a single commodity. Moroz (2009) is employing the framework in his examination of key aspects of the entrepreneurial capacity of universities throughout the world.

When this work-in-progress has become work completed it will constitute a very detailed 'report card' on the strengths and weaknesses of the proposed framework.

14.2. Implications

14.2.1. Research and theory

14.2.1.1. *Integration of diffuse case studies.* As discussed in the introduction, the entrepreneurship field does not lack an abundance of case studies involving scrutiny of entrepreneurial process in a range of community settings. The problem is that these case studies are fragmented and isolated: nothing links them and therefore very few cumulative knowledge effects can be gained from studying them. Imagine, in future, that every case study of entrepreneurship that dealt with some aspect of entrepreneurial process (and even 'retrofitted' cases from the past) were to include a succinct 'contextual positioning statement' derived from application of the diagnostic framework presented in this article. The researchers, before proceeding to the technical aspects of a particular area of entrepreneurial process that was the heart of their study, might provide the following. They would position the context of their study in its intermediate environment (community) through provision of a formal, summary description of the contextual situation confronting the entrepreneurs regarding:

- resources (physical and human);
- important stakeholder perspectives (world-views) and networks;
- governance and institutional constraints;
- the economic benefits feasibly desired by the entrepreneur and benefit implications for others (property rights);
- and a list of the 'pluses and minuses' in the context facing the entrepreneur (boundaries in need of spanning).

The context of the case they were studying would thus be specified.

A summary statement addressing these points might be as brief as a paragraph or far more extensive, depending on the nature and purpose of the case study. This positioning statement might be thought of as a rough analogue of the list of descriptive statistics that provides, effectively, a contextual positioning statement concerning the population and the sample in every quantitative research study.

The point is that every researcher working to derive knowledge from the scrutiny of entrepreneurial behaviour in a given situation ought to tell us overtly and systematically what that given situation was. At the moment, this is seldom done. Many studies are arguments about process in the absence of context. If the contextual positioning was not only done, but done in a consistent, systematic manner, the respect for and cumulative learning effects gained from case studies of entrepreneurial process would increase substantially.

14.2.1.2. *A generator of questions and a framework for theory as well as practice.* The artefact developed here as a diagnostic framework can also serve as a theoretical framework, in whole or in part. Questions concerning the relationship between entrepreneurial process and any component part of the system can be sharply focused and may lead to more integrated streams of research than was possible prior to the formalisation of an accessible approach to study of the context of entrepreneurial process.

As a random and partial illustration of a vast potential, I generate a few possibilities as food for thought. A study might show that it was the failure to recognise and to span boundary A in community B that accounted for the failure of entrepreneurial process C. Another study might compare flexible governance structures in one community with inflexible governance structures in another and draw valuable lessons for all entrepreneurial process. Another study might search for a generalisable model of entrepreneurial capital formation. And so on. The framework offered in this study offers abundant scope to generate meaningful research questions and provide structural aid to their solution.

14.2.2. *Practice*

The opening sentence of this study positioned it to accord with William Bygrave's (2007) commitment to seminal recognition of the status of entrepreneurship as a practical, professional discipline in which the fundamental questions are 'what should entrepreneurs do?' and 'how can we improve entrepreneurial practice?' The late Tip O'Neill, former leader of the house in the US Congress famously summarised: 'All politics is local politics'. Pierre-Andre Julien (2007) has theoretically argued from strong evidence, that all entrepreneurship is local entrepreneurship in the sense that without understanding the context of the intermediate environment – the 'milieu' in his system or the community as I have defined it – it is impossible to assess the viability of any entrepreneurial process. In this article, I have developed a diagnostic framework and now offer it for critical examination and practical application by all with a need to understand entrepreneurial process in contextual settings. I believe it will have wide application and strong utility.

It is too early to predict what range of applicability the framework may obtain in the hands of people yet to use it. As shown by the seven substantial works-in-progress previously discussed, specific domains of application are already indicated. The diagnostic framework is at work in the areas of Indigenous entrepreneurship, regional economic development, university innovative practice and local government management. Other application areas are predictable. I offer only two 'for instances': readers will be quick to think of many other application areas. First, it is not hard to imagine the framework being put to work as a useful tool in the field of

corporate entrepreneurship. Every large company fits the definition of community on which the framework is based: that is, 'any context where a self-defined group of people see their mutual belonging to the community as distinguishing them (but not excluding them) from all other members of society at large and where continued membership of the community is valued highly enough to impose some constraints on behaviour'. Any company seeking to practice innovation in general or wishing to evaluate any proposed entrepreneurial initiative in particular might put the diagnostic framework to very good use. Second, the framework has great potential for enhancing the focus, relevance and potency of entrepreneurship education. In an article devoted to entrepreneurship education at university (Hindle 2007) I have already argued the importance of local content and emphases to the development of dynamic and relevant entrepreneurship courses.

What matters here is the attempt to find subjects about entrepreneurship that are worthy of the 'plus-zone' and relevant to students' personal and intellectual development as well as to their professional development and a host of other contexts: national, economic and cultural. What matters is the conscious attempt to create an exciting 'plus zone' which will enable different universities and different teachers to exert their special flavors and influences on a program of entrepreneurial studies and make it something truly special for the student (Hindle 2007, 121).

I based much of this argument, about the importance of community context to the vitality of entrepreneurship education on the educational philosophy of Alfred North Whitehead (1929):

...the first requisite for educational reform is the school as a unit, with its approved curriculum based on its own needs, and evolved by its own staff. If we fail to secure that, we simply fall from one formulation into another, from one dung-hill of inert ideas into another. (Whitehead 1929/1967, 13)

The diagnostic framework developed in this article has potential to significantly enhance the capacity of those who employ it to develop contextually sensitive entrepreneurship education and this is a burning issue not just for regions or nations but for continents (Moremong-Nganunu 2009).

14.2.3. *A brief note on degrees of difficulty and cumulative effects*

Before concluding the study it is important to provide a very brief discussion of the issues entailed in assessing the relative degree of difficulty in actually performing the full set of prescribed diagnostic activities.

In general terms, it is likely that the hardest tasks mandated in the diagnostic regime concern: articulation and meaningful clustering of various world-views; the mapping of social networks; the articulation of various *informal* property rights and the decision about what constitutes and how one describes 'boundaries' and how they might be spanned. In contrast, the tasks of describing and listing physical and human resources, governance rules, institutional establishments and formal property rights (especially for communities for which good statistical data exist) may be vast and tedious but they are of a relatively lower degree of conceptual difficulty. These latter categories in the diagnostic system are also the most 're-usable'. Irrespective of the particular entrepreneurial process which propelled an initial investigation of community factors, it is likely that the work done with respect to classifying physical and human resources, governance rules, institutional establishments and formal

property rights can be used over and over again (until the passage of time or significant environmental change make it obvious that an updated analysis is required). One might almost say that these are the fixed cost items in diagnosing the entrepreneurial potential of a community. The decision of which world-views and social networks within a community are relevant to a case, what informal property rights are directly germane and what boundaries are most important in a case will depend on the particularities of that case. One might almost say that these are the variable cost items in diagnosing the entrepreneurial potential of a community.

15. Conclusion

Any given or proposed process of entrepreneurship, under the definition subscribed to in this study, involves evaluating, committing to and achieving, under contextual constraints, the creation of new value from new knowledge for the benefit of defined stakeholders. The most important area of 'contextual constraint' is the community in which an entrepreneurial process occurs or potentially might occur. This article provides a comprehensive framework for diagnosing the effect that the nature and structure of any community will have upon any entrepreneurial process contemplated or conducted within it.

To perform the task, we have to bridge boundaries. Boundaries can be regarded as those key components of a community that simultaneously define it as a unique environment in which entrepreneurship might be conducted and limit the kinds of entrepreneurship that might currently be contemplated. Resources (both physical and human) and rights (particularly property rights as they affect capital formation) must be critically articulated and analysed. Institutional and governance impediments to innovation and thus to entrepreneurial process must be exposed. Differences among members of the community must be sympathetically confronted. In particular, this requires an articulation of the different skills people have, the different world-views that dominate the way they perceive and behave and the different linkages they form through the social networks that the community contains. This combination of factors, well diagnosed and appropriately addressed, can yield the end sought by so many communities: contextualised entrepreneurship; entrepreneurship with empathy.

The vast majority of economic development programmes throughout recent history have been monumental failures because they are based on false premises such as 'modernisation equals doing it our way instead of your way'. There can be no effective entrepreneurship in the absence of empathy. Community context is a key determinant of the sheer possibility and likely success of any entrepreneurial initiative anywhere in the world at any time. It just so happens that most academically generated entrepreneurial models since the recent revival of the discipline (say from the late 1970s until the present) have nearly all come from the context of advanced Western democracies, with abundant resources, educated populaces, a dominant, profit-centred weltanschauung, well defined social networks, governance structures and institutions and a set of well-coded, legally enforceable property rights. For most scholars of entrepreneurship as well as for most practitioners – predominantly the residents and beneficiaries of that vast and diffuse community we might call 'the Western democracies' – all these things have been so prominent as to be invisible. We simply have not had to think about them.

These things could all be assumed to be ‘givens’. This will no longer suffice. We need to define and approach entrepreneurship in a manner capable of dealing theoretically and practically with the influence upon entrepreneurial process of the human and physical contextual factors prevalent in the community where the entrepreneurial process actually or potentially takes place.

At long last the ‘affluent’ western world as a whole, and the myriad communities within it, especially communities faced with massive personal and economic dislocation inflicted by the recent global financial now can clearly see their commonality with the rest of the less affluent world because old economic certainties have so recently and dramatically disintegrated. Comfortable assumptions and easy elisions – such as failing to confront key contextual issues in entrepreneurial process – are no longer tenable. Every community in the world has recently been buffeted in some way by the financial crises that burst in 2008 and represents the profoundest shock to the West’s collective perception of economic wisdom since the great crash of 1929. Now more than ever, every community needs entrepreneurship, the midwife of new wealth and sustainable prosperity. Audretsch (2007) has shown us, retrospectively, both that an entrepreneurial culture is desirable and that it radically changes the nature of communities. However, until this article the literature has lacked a mechanism for systematic, *prospective* investigation of the relationship between entrepreneurship and community. We need this tool now. We can no longer entertain any hope of meaningful practice or research in entrepreneurship that lacks the empathy of community context. The community is the garden of entrepreneurship. No entrepreneurial venture can flower in isolation. No entrepreneur transcends the gulf between aspiration and achievement by walking on thin air. The necessary bridge must be built on solid foundations.

I hope that the diagnostic framework developed in this article and illustrated in the form of a bridge, might prove useful to many diverse communities and the people within them who are prepared to examine their potential for creating new value and new ventures critically, contextually and systematically as they search for a path to entrepreneurship built on genuine empathy for the attributes of the community that is its home.

Acknowledgements

I would like to thank the following colleagues for their invaluable help throughout the long genesis of this article: Deborah Blackman (first among equals), Brent Mainprize, Peter Moroz, Bob Kayseas, Dhafar Al Shanfari and Matt Pasco. In various critical ways they challenged and assisted the development of my ideas. Without them the paper would not exist.

Notes

1. Just such a story will be used in a subsequent section of this article as a means of demonstrating the utility of the diagnostic framework as an output of this research.
2. I regard a diagnostic framework as a particular subset of the larger category of analytic framework.
3. The notion of ‘capital formation’ is fundamental to modern economic theory. I have preferred to use the term ‘capital management’ because it is more embracing. It recognises that many social science and humanities disciplines and a wide array of non-economic factors have a role to play in understanding the process whereby accumulated surplus value becomes available for investment in new economic initiatives.

4. Space limitations proscribe expansion of this point, which must be reserved for a subsequent paper. Briefly, Sirolli has a near total disdain for any top-down, externally imposed programmes. However, sometimes such a programme is genuinely in the interest of a community. An example is the case of disease. If the thing stopping a community's children from getting to school is malaria, a mandatory, highly imposed, top down, vaccination programme is going to be more efficacious in improving the human resource base than a one-by-one, ad hoc approach. The facilitation approach has its limits.
5. There are some communities where the concept of 'land' may not be appropriate but the concept of 'fundamental property' may well be. For instance, if the community under scrutiny for its entrepreneurial potential were a world-wide, intellectual community whose prime communication mechanism was the internet, it is unlikely that they would own any land in common. However, the community may hold common title to such things as patents, royalty streams, copyrights, and so on. In the context of this intellectual community, the intellectual property so owned would be strongly analagous to the land on which a physically located tribal community was situated. By extension, the economist would have no trouble in thinking of the attributes of this factor of the productive capacity of the virtual community in a manner similar to the treatment of 'land' as the basic physical resource in more classical settings.

References

- Acs, Z.J., and C. Armington. 2006. *Entrepreneurship, geography, and American economic growth*. Cambridge: Cambridge University Press.
- Admans, D. 2009. *Evaluating the innovative and entrepreneurial potential of port adelaide: A comprehensive, research-based action program*. Vol. 1, No. 2, *Enterprise Connect Innovative Regions Centre Project Papers*. Geelong, Australia: Innovative Regions Centre Publications.
- Ajzen, I. 1988. *Attitudes, personality, and behavior*. Chicago: Dorsey.
- Ajzen, I. 1991. The theory of planned behaviour. *Organizational Behavior and Human Decision Processes* 50: 179–211.
- Aldrich, H. 1999. *Organizing evolving*. Thousand Oaks, CA: Sage.
- Aldrich, H.E., and E.R. Fiol. 1994. Fools rush in? The institutional context of industry creation. *Academy of Management Review* 19: 645–70.
- Aldrich, H., and D. Herker. 1977. Boundary spanning roles and organizational behavior. *Academy of Management Review* 2, no. 2: 217–31.
- Aldrich, H.E., and J. Pfeffer. 1976. Environments of organizations. *Annual Review of Sociology* 2: 79–105.
- Aldrich, H.E., and C. Zimmer. 1986. Entrepreneurship through social networks. In *The art and science of entrepreneurship*, eds. D.L. Sexton and R.W. Smilor, 3–23. New York: Ballinger.
- Allard, J. 2002. Big Bear's treaty: The road to freedom. *Inroads: The Canadian Journal of Opinion* 11: 125–52.
- Allen, T.J., M.L. Tushman, and D.M.S. Lee. 1979. Technology transfer as a function of position in the spectrum from research through development to technical services. *Academy of Management Journal* 22, no. 4: 694–708.
- Al Shanfari, D. 2009. *Designing a national policy environment for fostering high-aspiration entrepreneurial ventures in developing countries: The Omani case*. Melbourne: Swinburne University of Technology. Doctoral dissertation in progress.
- Anderson, R., B. Honig, and M. Peredo. 2006. Communities in the new economy: Where social entrepreneurship and indigenous entrepreneurship meet. In *Entrepreneurship as social change*, eds. C. Steyaert and D. Hjorth, 56–78. Cheltenham: Edward Elgar.
- Arlow, J., and I. Neustadt. 2003. *Enterprise patterns and MDA: Building better software with archetype patterns and UML*. New York: Addison-Wesley Professional.

- Auditor General of Canada. 1993. 1993 Report of the Auditor General of Canada. http://www.oag-bvg.gc.ca/internet/English/parl_oag_199312_11_e_5950.html#0.2.L39QK2.DVW2PL.LZGQFE.RG (accessed 20 February 2009).
- Audretsch, D.B. 2007. *The entrepreneurial society*. Oxford: Oxford University Press.
- Audretsch, D.B., and M. Keilbach. 2004. Entrepreneurship and regional growth: An evolutionary interpretation. *Journal of Evolutionary Economics* 14, no. 5: 605–16.
- Australian National Audit Office. 2003. *Australian public sector governance, Vol. 1 & 2 of better practice guides*. Canberra: Australian Government Printer.
- Baker, T., and R.E. Nelson. 2005. Creating something from nothing: Resource construction through entrepreneurial bricolage. *Administrative Science Quarterly* 50: 329–66.
- Barney, J. 1991. Firm resources and sustained competitive advantage. *Journal of Management* 17: 99–120.
- Baron, R.A. 2000. Counterfactual thinking and venture formation: The potential effects of thinking about “what might have been”. *Journal of Business Venturing* 15, no. 1: 79–91.
- Baron, R.A. 2004. The cognitive perspective: A valuable tool for answering entrepreneurship’s basic “why” questions. *Journal of Business Venturing* 19, no. 2: 221–39.
- Baron, R.A., and T.B. Ward. 2004. Expanding entrepreneurial cognition’s toolbox: Potential contributions from the field of cognitive science. *Entrepreneurship Theory and Practice* 28: 553–73.
- Bartos, S. 2007. Public sector governance and accountability. Presentation delivered to Australian Command and Staff College. Canberra: Australian Command and Staff College.
- Baum, J.R., and E.A. Locke. 2004. The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth. *Journal of Applied Psychology* 89, no. 4: 587–98.
- Becker, G.S. 1993. *Human capital: A theoretical and empirical analysis, with special reference to education*. Chicago: University of Chicago Press.
- Bird, B. 1988. Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review* 13, no. 3: 442–53.
- Birley, S. 1985. Encouraging entrepreneurship: Britain’s new enterprise program. *Journal of Small Business Management* 23, no. 4: 6–12.
- Blackman, D., and K. Hindle. 2008. Would using the psychological contract increase entrepreneurial business development potential? In *International handbook of entrepreneurship and HRM*, Chap. 19, eds. Rowena Barrett and Susan Mayson, 382–97. Cheltenham, UK; Northampton, MA, USA: Edward Elgar.
- Bloodgood, J.M., H.J. Sapienza, and A.L. Carsrud. 1995. The dynamics of new business start-ups: Person, context, and process. In *Advances in entrepreneurship, firm emergence, and growth*, eds. J.A. Katz and R.H. Brockhaus, 123–44. Greenwich: JAI Press.
- Burt, R.S. 1992. *Structural holes: The social structure of competition*. Cambridge, MA: Harvard University Press.
- Busenitz, L.W., G.P. West, D. Shepherd, T. Nelson, G.N. Chandler, and A. Zacharakis. 2003. Entrepreneurship research in emergence: Past trends and future directions. *Journal of Management* 29, no. 3: 285–308.
- Bygrave, W.D. 2007. The entrepreneurship paradigm (I) revisited. In *Handbook of qualitative research methods in entrepreneurship*, eds. Helle Neergaard and John Palm Ulhoi, 17–48. Cheltenham, UK; Northampton, MA, USA: Edward Elgar.
- Carlile, P.R. 2002. A pragmatic view of knowledge and boundaries: Boundary objects in new product development. *Organization Science* 13, no. 4: 442–55.
- Carter, N., W.B. Gartner, and P. Reynolds. 1996. Exploring start-up sequences. *Journal of Business Venturing* 11, no. 3: 151–66.
- Chandler, G.N., and D.W. Lyon. 2001. Issues of research design and construct measurement in entrepreneurship research: The past decade. *Entrepreneurship Theory and Practice* 25, no. 4: 101–13.

- Chell, E. 2007. Social enterprise and entrepreneurship. *International Small Business Journal* 25, no. 1: 5–26.
- Churchill, N.C., and V.L. Lewis. 1983. The five stages of small business growth. *Harvard Business Review* 61, no. 3: 30–50.
- Cohen, W.M., and D.A. Levinthal. 1989. Innovation and learning: The two faces of R&D. *The Economic Journal* 99, no. 397: 569–96.
- Coleman, J.S. 1988. Social capital in the creation of human-capital. *American Journal of Sociology* 94: 95–120.
- Cornell, S., and J.P. Kalt. 2000. Where's the glue? Institutional and cultural foundations of American Indian economic development. *Journal of Socio-Economics* 29, no. 5: 443–70.
- Cornell, S., and J.P. Kalt. 2004. *Sovereignty and nation-building: The development challenges in Indian country today*, 1–38. Boston: Harvard Project on American Indian Development.
- Crane, D. 1972. *Invisible colleges*. Chicago: University of Chicago Press.
- Cresswell, J.W. 1994. *Research designs: Qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
- Dabla-Norris, E.S. 2004. Enforcement of property rights and underdevelopment. *Review of Development Economics* 8, no. 3: 391–405.
- Daft, R., and K. Weick. 1984. Toward a model of organizations as interpretation systems. *Academy of Management Review* 9, no. 2: 284–95.
- Dana, L.-P. 1997. The origins of self-employment in ethno-cultural communities: Distinguishing between orthodox entrepreneurship and reactionary enterprise. *Revue Canadienne des Sciences de l'Administration* 14, no. 1: 52–68.
- Dana, L.-P. 2008. Community based entrepreneurship in Norway. *Entrepreneurship and Innovation* 9, no. 2: 77–92.
- Dana, L.-P., and T. Dana. 2007. Collective entrepreneurship in a Mennonite community in Paraguay. *Latin American Business Review* 8, no. 4: 82–96.
- Das, T.K., and B.-S. Teng. 1997. Time and entrepreneurial risk behaviour. *Entrepreneurship Theory and Practice* 22, no. 2: 69–88.
- Davidsson, P. 1995. Culture, structure and regional levels of entrepreneurship. *Entrepreneurship and Regional Development* 7, no. 1: 41–62.
- Davidsson, P. 2003. The Domain of entrepreneurship research: Some suggestions. In *Advances in entrepreneurship, firm emergence and growth*, eds. J. Katz and S. Shepherd, 315–72. Oxford, UK: Elsevier/JAI Press.
- Davidsson, P. 2004. *Researching entrepreneurship*. New York: Springer.
- Davidsson, P., and B. Honig. 2003. The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing* 18, no. 3: 301–31.
- De Soto, H. 2000. *The mystery of capitalism. Why capitalism triumphs in the west and fails everywhere else*. New York: Basic Books.
- Edelman, L.F., T.S. Manolova, and C.G. Brush. 2008. Entrepreneurship education: Correspondence between practices of Nascent entrepreneurs and textbook prescriptions for success. *Academy of Management Learning and Education* 7, no. 1: 56–70.
- Elias, P.D. 1991. *Development of aboriginal people's communities*. North York, Ontario: Captus Press.
- Fayolle, A., O. Basso, and E. Tornikoski. 2010. Entrepreneurial commitment and new venture creation. In *Handbook of new venture creation research*, eds. K. Hindle, and K. Kim, Cheltenham, UK. Northampton, MA, USA: Edward Elgar (forthcoming).
- Fayolle, A., G. Benoît, and L.C. Narjisse. 2006. Assessing the impact of entrepreneurship education programmes: A new methodology. *Journal of European Industrial Training* 30, no. 9: 701–20.
- Feder, G., and D. Feeny. 1991. Land tenure and property rights: Theory and implications for development policy. *The World Bank Economics Review* 5, no. 1: 135–53.

- Fischer, E., A.R. Reuber, M. Hababou, W. Johnson, and S. Lee. 1997. The role of socially constructed temporal perspectives in the emergence of rapid-growth firms. *Entrepreneurship Theory and Practice* 22, no. 2: 13–30.
- Gaglio, C.M. 2004. The role of mental simulations and counterfactual thinking in the opportunity identification process. *Entrepreneurship Theory and Practice* 28, no. 6: 533–52.
- Galbraith, J. 1982. The stages of growth. *Journal of Business Strategy* 3, no. 4: 70–9.
- Galloway, L., and W. Brown. 2002. Entrepreneurship education at university: A driver in the creation of high growth firms? *Education and Training* 8, no. 9: 398–405.
- Gartner, W.B. 1985. A conceptual framework for describing the phenomenon of new venture creation. *Academy of Management Review* 10, no. 4: 696–706.
- Gartner, W.B. 1989. Some suggestions for research on entrepreneurial traits and characteristics. *Entrepreneurship Theory and Practice* 14, no. 1: 27–37.
- Gartner, W.B. 2004. *Handbook of entrepreneurial dynamics: The process of business creation*. Thousand Oaks, CA: Sage.
- Gartner, W.B., and S.A. Shane. 1995. Measuring entrepreneurship over time. *Journal of Business Venturing* 10, no. 4: 283–301.
- Gatewood, E.J., K.G. Shaver, and W.B. Gartner. 1995. A longitudinal study of cognitive factors influencing start-up behaviors and success at venture creation. *Journal of Business Venturing* 10, no. 5: 371–91.
- Glaser, B.G., and A.L. Strauss. 1967. *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine Publishing.
- Golden, T., and J. Veiga. 2005. Spanning boundaries and borders: Toward understanding the cultural dimensions of team boundary spanning. *Journal of Managerial Issues* 17, no. 2: 178–97.
- Granovetter, M. 1979. *Perspectives on social network research*. New York: Academic Press.
- Granovetter, M.S. 1985. Economic action and social structure: The problem of embeddedness. *American Journal of Sociology* 91, no. 3: 481–510.
- Hanks, S.H., and G. Chandler. 1994. Patterns of functional specialization in emerging high tech firms. *Journal of Small Business Management* 32, no. 2: 23–36.
- Hayek, F.A. 1968. Competition as a discovery procedure. In *New studies in philosophy, politics, economics and the history of ideas*, 179–90. Chicago: University of Chicago Press.
- Helpman, E. 2004. *The mystery of economic growth*. Cambridge, MA; London, England: The Belknap Press of Harvard University.
- Hindle, K.G. 2001. Entrepreneurship education at University: The plus-zone challenge. *Small Enterprise Research: The Journal of SEAAANZ* 9, no. 2: 3–16.
- Hindle, K. 2007. Teaching entrepreneurship at university: From the wrong building to the right philosophy. In *Handbook of research in entrepreneurship education*, ed. A. Fayolle, Vol. 1, Chap. 5, 104–26. Cheltenham, UK: Edward Elgar.
- Hindle, K. 2009. The relationship between innovation and entrepreneurship: Easy definition, hard policy. Paper published in the refereed stream of the 6th AGSE International Entrepreneurship Research Exchange, February 3–6, in Adelaide, South Australia, Australia.
- Hindle, K. 2010. Skillful dreaming: Testing a general model of entrepreneurial process with a ‘unique’ narrative of business formation. *Entrepreneurial Narrative: Theory, Ethnomethodology and Reflexivity* 1, no. 1 (in press).
- Hindle, K., and M. Lansdowne. 2005. Brave spirits on new paths: Toward a globally relevant paradigm of Indigenous entrepreneurship research. *Journal of Small Business and Entrepreneurship* 18, no. 2: 131–41.
- Hindle, K., and M. Lansdowne. 2007. Brave spirits on new paths: Toward a globally relevant paradigm of indigenous entrepreneurship research. In *International handbook of*

- research on indigenous entrepreneurship*, eds. Léo-Paul Dana and Robert B. Anderson, Chap. 2, 8–19. Cheltenham, UK: Edward Elgar.
- Hindle, K., and P. Moroz. 2010. Indigenous entrepreneurship as a research field: Developing a definitional framework from the emerging canon. *International Entrepreneurship and Management Journal* (in press). <http://www.springerlink.com/content/2270530x07w1207g> (accessed 10 October 2010).
- Hindle, K.G., and S. Rushworth. 2001. *Yellow Pages® global entrepreneurship monitor: GEM Australia 2001*. Melbourne: Swinburne University Press.
- Honig, B. 2004. Entrepreneurship education: Toward a model of contingency based business planning. *Academy of Management Learning and Education* 3, no. 2: 258–73.
- Ibrahim, A.B., and K. Soufani. 2002. Entrepreneurship education and training in Canada: A critical assessment. *Education and Training* 44, no. 8/9: 421–30.
- Johannisson, B., and A. Nilsson. 1989. Community entrepreneurs: Networking for local development. *Entrepreneurship and Regional Development* 1, no. 1: 3–19.
- Jones, S. 1985. Depth interviewing. In *Applied qualitative research*, ed. Robert Walker, 45–55. London: Gower Publishing Company.
- Julien, P.-A. 2007. *A theory of local entrepreneurship in the knowledge economy*. Cheltenham, UK; Northampton, MA, USA: Edward Elgar.
- Katz, D., and R.L. Kahn. 1966. *Organizations and the system concept. The social psychology of organizations*. New York: John Wiley & Sons, Inc.
- Katz, D., and R.L. Kahn. 1978. *The social psychology of organizations*. New York: Wiley.
- Katz, J. 2003. The chronology and intellectual trajectory of American entrepreneurship education 1876–1999. *Journal of Business Venturing* 18, no. 2: 283–300.
- Katz, J., and W.B. Gartner. 1988. Properties of emerging organizations. *The Academy of Management Review* 13, no. 3: 429–41.
- Kayseas, R. 2009. Understanding how indigenous community factors affect indigenous entrepreneurial process. Melbourne: Swinburne University of Technology. Doctoral dissertation in progress.
- Kazanjian, R.K., and R. Drazin. 1990. A stage-contingent model of design and growth for technology based ventures. *Journal of Business Venturing* 5, no. 3: 137–50.
- Kirzner, I.M. 1979. *Perception, opportunity, and profit*. Chicago: University of Chicago Press.
- Kirzner, I.M. 1982. The theory of entrepreneurship in economic growth. In *Encyclopedia of entrepreneurship*, eds. C.A. Kent, D.L. Sexton and K.H. Vesper, 272–6. NJ: Prentice-Hall.
- Klyver, K. 2005. Entrepreneurship and social network development: A life cycle approach. PhD diss., University of Southern Denmark.
- Klyver, K., and T. Schøtt. 2008. Who will develop entrepreneurial intentions? How social network structure shapes entrepreneurial intention. Paper presented at ICSB Conference, June 20–21, in Halifax, Canada.
- Krippendorff, K. 1980. *Content analysis: An introduction to its methodology*. Beverly Hills: Sage Publications.
- Krueger, N.F. 2007. What lies beneath? The experiential essence of entrepreneurial thinking. *Entrepreneurship Theory and Practice* 31, no. 1: 123–38.
- Krueger, J.N., M. Reilly, and A. Carsrud. 2000. Competing models of entrepreneurial intentions. *Journal of Business Venturing* 15, no. 5–6: 411–32.
- Kuhn, T. 1962/1970. *The structure of scientific revolutions*. Chicago: University of Chicago Press.
- Kuratko, D.F. 2005. The emergence of entrepreneurship education: Development, trends, and challenges. *Entrepreneurship Theory and Practice* 29, no. 5: 577–98.
- Larson, A., and J.A. Starr. 1993. A network model of organization formation. *Entrepreneurship Theory and Practice* 17, no. 2: 5–15.
- Leifer, R., and A. Delbeq. 1978. Organizational/Environmental interchange: A model of boundary spanning activity. *Academy of Management Review* 3, no. 1: 40–50.

- Leitch, C., and R. Harrison. 2009. Fighting a rearguard action? Reflections on the philosophy and practice of qualitative research in entrepreneurship. Paper presented at the refereed proceedings stream of the 6th AGSE Entrepreneurship Research Exchange, February 3–6, in Adelaide, Australia.
- Levina, N., and E. Vaast. 2006. Turning a community into a market: A practice perspective on information technology use in boundary spanning. *Journal of Management Information Systems* 22, no. 4: 13–37.
- Liebenstein, H. 1968. Entrepreneurship and development. *American Economic Review* 58, no. 2: 72–83.
- Lieberman, B. 2007. Constructing and analytical framework. Updated version of Part one of The Art of Modeling. USA: Developer Works. www.natcen.ac.uk/natcenlearning/nl_cis_intro_to_framework.htm (accessed 9 February 2009).
- Mainprize, B. 2008. *Entrepreneurship and autonomy: Building the Nisga'a future*. Victoria, Canada: Venture Intelligence Institution Publications.
- Matlay, H. 2006. Researching entrepreneurship and education. *Education and Training* 48, no. 8/9: 704–18.
- Mazzarol, T. 2007. Different strokes for different folks: Stimulating entrepreneurship in regional communities. In *International handbook of research on indigenous entrepreneurship*, eds. L.-P. Dana and R.B. Anderson, 494–507. Cheltenham, UK; Northampton, MA, USA: Edward Elgar.
- McClelland, D. 1961. *The achieving society*. Princeton: D. Van Nostrand.
- McMullen, W.E., and W.A. Long. 1987. Entrepreneurship education in the nineties. *Journal of Business Venturing* 2, no. 3: 261–75.
- McMurray, A., and K. Hindle (Chief Investigators). 2008. Indigenous entrepreneurship in Australia: Reconciling mainstream business practice and Indigenous community values. Australian Research Council Linkage Projects: Project ID LP0883371. Canberra: Australian Research Council.
- Meis Mason, A., L.-P. Dana, and R.B. Anderson. 2009. A study of enterprise in Rankin Inlet, Nunavut: Where subsistence self-employment meets formal entrepreneurship. *International Journal of Entrepreneurship and Small Business* 7, no. 1: 1–23.
- Mezias, S.J., and J.C. Kuperman. 2001. The community dynamics of entrepreneurship: The birth of the american film industry, 1895–1929. *Journal of Business Venturing* 16, no. 3: 209–33.
- Miles, R., and C. Snow. 1978. *Organizational structure strategy and process*. New York, NY: McGraw-Hill.
- Mitchell, R.K., L.W. Busenitz, B. Bird, C.M. Gaglio, J.S. McMullen, E.A. Morse, and J.B. Smith. 2007. The central question in entrepreneurial cognition research. *Entrepreneurship Theory and Practice* 31, no. 1: 1–27.
- Mitchell, R.K., L.W. Busenitz, T. Lant, and P.P. McDougall. 2002. Toward a theory of entrepreneurial cognition: Rethinking the people side of entrepreneurship research. *Entrepreneurship Theory and Practice* 27, no. 2: 93–104.
- Mitchell, R.K., L.W. Busenitz, T. Lant, P.P. McDougall, E.A. Morse, and J.B. Smith. 2004. The distinctive and inclusive domain of entrepreneurial cognition research. *Entrepreneurship Theory and Practice* 28, no. 6: 505–18.
- Moremong-Nganunu. 2009. Entrepreneurship education in developing countries: A program evaluation of the Start and Improve Your Business Program (SIYB) in Botswana. Melbourne: Swinburne University of Technology. Unpublished doctoral dissertation in progress.
- Moroz, P. 2009. The university as an entrepreneurial community capable of entrepreneurial process: Old technological transfer versus new knowledge transformation. Melbourne: Swinburne University of Technology. Doctoral dissertation in progress.
- North, D.C. 1991. Institutions. *Journal of Economic Perspectives* 5, no. 1: 97–112.

- Pasco, M. 2009. Strategic alliances in the Indigenous context. Melbourne: Swinburne University of Technology. Doctoral dissertation in progress.
- Pasco, M., and K. Hindle. 2009. What contexts qualify as Indigenous entrepreneurship? Perspectives on the legitimacy of colonially defined communities. Vol. 5, No. 1, Australian Graduate School of Entrepreneurship Research Report Series. Melbourne: Swinburne University of Technology. ISSN 1448-7128.
- Penrose, E. 1959. *The theory of the growth of the firm*. New York: Oxford University Press.
- Peredo, A.M., and J.J. Chrisman. 2006. Toward a theory of community-based enterprise. *Academy of Management Review* 31, no. 2: 309–28.
- Reynolds, P.D., M. Camp, W.D. Bygrave, E. Autio, and M. Hay. 2001. *Global entrepreneurship monitor 2001 executive report*. Kansas City, MO: Kauffman Center for Entrepreneurial Leadership.
- Sarasvathy, S.D. 2004. The questions we ask and the questions we care about: Reformulating some problems in entrepreneurship research. *Journal of Business Venturing* 19, no. 5: 707–17.
- Schenkel, M.T., D.M. Hechavarria, and C.H. Matthews. 2009. The role of human and social capital and technology in nascent ventures. In *New firm creation in the United States: Preliminary explorations with the PSED II Data Set*, eds. P.D. Reynolds and R.T. Curtin, 157–83. New York City, NY: Springer.
- Shane, S. 1993. Cultural influences on national rates of innovation. *Journal of Business Venturing* 8, no. 1: 59–73.
- Shane, S. 2003. *A general theory of entrepreneurship: The individual-opportunity nexus*. Cheltenham: Edward Elgar Publishing.
- Shane, S., and F. Delmar. 2004. Planning for the market: Business planning before marketing and the continuation of organizing efforts. *Journal of Business Venturing* 19, no. 6: 767–85.
- Shane, S., and S. Venkataraman. 2000. The promise of entrepreneurship as a field of research. *Academy of Management Review* 25, no. 1: 217–26.
- Shaver, K.G., B.G. William, C. Elizabeth, B. Karolina, and J.G. Elizabeth. 2001. Attributions about entrepreneurship: A framework and process for analyzing reasons for starting a business. *Entrepreneurship Theory and Practice* 26, no. 2: 5–32.
- Singh, R.P. 2000. *Entrepreneurial opportunity recognition through social networks*. London: Garland Publishing Inc.
- Sirolli, E. 2003. *Ripples from the Zambesi. Passion. Entrepreneurship and the rebirth of local economies*. Gabriola Island, Canada: New Society Publishers.
- Slevin, D., and J.G. Covin. 1997. Time, growth, complexity, and transitions: Entrepreneurial challenges for the future. *Entrepreneurship Theory and Practice* 22, no. 2: 53–69.
- Steyaert, C. 1997. A qualitative methodology for process studies of entrepreneurship: Creating local knowledge through stories. *International Studies of Management and Organization* 27, no. 2: 13–33.
- Steyaert, C. 2007. Entrepreneurship as a conceptual attractor? A review of process theories in 20 years of entrepreneurship studies. *Entrepreneurship and Regional Development* 19, no. 6: 453–77.
- Steyaert, C., and J. Katz. 2004. Reclaiming the space of entrepreneurship in society: Geographical, discursive and social dimensions. *Entrepreneurship and Regional Development* 16, no. 3: 179–96.
- Tushman, M. 1977. Special boundary roles in the innovation process. *Administrative Science Quarterly* 22, no. 4: 587–605.
- Vesper, K.H., and W.B. Gartner. 1997. Measuring progress in entrepreneurship education. *Journal of Business Venturing* 12, no. 5: 403–21.
- Warner, B. 2005. In *Encyclopedic dictionary of organizational behavior*, eds. N. Nicholson, P. Aidia and M. Pillutla, Vol. XI, 17–29. Oxford: Blackwell.

- Weick, K. 1995. *Sensemaking in organizations*. Thousand Oaks, CA: Sage.
- Wernerfelt, B. 1984. A resource-based view of the firm. *Strategic Management Journal* 5, no. 2: 171–80.
- Whetten, D.A. 1989. What constitutes a theoretical contribution? *Academy of Management Review* 14, no. 4: 490–95.
- Whitehead, A.N. 1929/1967. *The aims of education and other essays*. New York: The Free Press. First published 1929.
- Williams, P. 2002. The competent boundary spanner. *Public Administration* 80, no. 1: 103–24.
- Zahra, S.A. 1993. Predictors and financial outcomes of corporate entrepreneurship: An exploratory study. *Journal of Business Venturing* 6, no. 4: 259–85.

Copyright of Entrepreneurship & Regional Development is the property of Routledge and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.