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**Creating new institutions
In Canadian entrepreneurship**

CREATING NEW INSTITUTIONS IN CANADIAN ENTREPRENEURSHIP

ABSTRACT

This paper provides a synopsis of institutional theory and newly emerging dynamic institutional theory, to show how individual economic actors enact new institutions thereby acting as institutional entrepreneurs. We then suggest “sustainable entrepreneurship,” as a new institution for Canadian Entrepreneurship. Sustainable entrepreneurship is defined as *the expectation that individuals, organizations, and economies will create value that benefits the economic, social, and environmental welfare of stakeholders*. Herein we apply the new dynamic institutional logic of institutional entrepreneurship to identify and explain the forces that make it possible for universities and other actors to help to create sustainable entrepreneurship as a new institution in Canadian entrepreneurship.

INTRODUCTION

It is not intuitive that individuals possess the ability to nearly single-handedly create new institutions. Nor is it intuitive that this ability is a core skill that is at the centre of entrepreneurial value creation. Yet when enacted, the processes that trigger institutionalization have a dramatic and far-reaching impact on economic activity.

In this paper, we summarize the markers that map the path toward a more supportive institutional environment. In particular, we look at institutional formation with its attendant implications for a truly Canadian entrepreneurial institution: the creation of a transacting environment that is supportive of “sustainable entrepreneurship.” Sustainable entrepreneurship as later explicitly defined, is entrepreneurship that creates triple-bottom-line value: economic, social and environmental. Where better for such an institutional environment to be enacted than in Canada—a world leader and example of economic, social, and environmental value creation?

This paper proceeds first to provide a synopsis of institutional theory, and newly emerging dynamic institutional theory, as a framework useful for making explicit the crucial bridge from individual economic actors to the enactment of new institutions in entrepreneurship; and second, to conduct an analysis of implications for sustainable entrepreneurship as a new institution for Canadian Entrepreneurship.

INSTITUTIONAL THEORY

Associated with the rise of the modern world are both organizations: sets of production technologies and administrative structures for coordinating complex activities, and institutions: certain beliefs and cognitions about the nature of the world and the way in which things happen (Ellul, 1954). From an institutional theory perspective, the term “organization” suggests a lean, no-nonsense system of consciously coordinated activities—a rational instrument engineered to do a

job, and as such an expendable tool; whereas an “institution” is more nearly a natural product of social needs and pressures—a responsive, adaptive organism” (Selznick, 1957: 5). Social reality has been conceptualized as a human construction created through social interaction (Berger & Luckmann, 1967). The process by which given actions within this context are repeated and accorded similar meaning by an individual and also by other persons, is defined as “institutionalization” (Berger & Luckmann, 1967; Scott, 1987; Scott, 2001).

Through the institutional lens, economic success may be seen to depend upon factors beyond organization, i.e., beyond the efficient coordination and control of productive activities. Institutional theory suggests that independent of their productive efficiency, socioeconomic tools (e.g., transactions, organizations, economies) succeed in highly elaborated institutional environments because they become isomorphic with these environments, thereby gaining the legitimacy and resources needed to survive and thrive (Meyer & Rowan, 1977: 352). Accordingly, in addressing the question: What makes organizations so similar, DiMaggio & Powell (1983) argue that within a set of organizations that has emerged as a field (institutional group), the engine of rationalization and bureaucraticization leads rational actors to make their organizations increasingly similar as they try to change them, through three isomorphic processes: coercive (forced behaviour), mimetic (mimicry), and normative (standards-setting/ following behaviour) that lead to this outcome.

Human socioeconomic tools (transactions, organizations, economies) may therefore be conceptualized cognitively: as created states of consciousness (Scott, 1987) that are based upon, and in fact develop in consonance with institutions, where the term institutions is taken to mean beliefs that arise from repeated social interactions as they are affected by social needs and pressures (e.g.: (1) the belief that the work process has a machinelike functionality that supports efforts to satisfy the demand for mass production, (2) the belief that all actions within the work process are

reproducible that supports notions that humans can be “managed” as a resource, (3) the belief that productive activity entails participation in an organization and in some sequence of production that supports the aggregation of capital to enable large-scale projects and economies of scale (Mill, 1848), and (4) the belief that all work being performed is measurable, that supports the idea of scientific management (Taylor, 1911), and so on. Institutional theory emphasizes the idea that such beliefs are widely held by people in a society, and are continually being created and reinforced by a wide range of socioeconomic actors and forces: e.g., lawmaking, mass media, professional groups, public opinion, the state, universities, etc. Thus institutional theory suggests that the socioeconomic space is occupied by both the systems/tools (e.g. transactions, organizations, economies) that human beings create to consciously coordinate economic activities (relating to access to information and resources for the production of goods and services), and by institutions (which specify the information, rationalized myths, rules, procedures, and roles that are economically rewarded) (Scott, 1987: 154-155).

It is useful to further explore that portion of the socioeconomic space that is occupied by institutions, because of the pervasive influence that institutions exert on the effectiveness of the socioeconomic interface between organizational factors and institutional factors. Institutional factors and organizational factors are like the white and the yolk of an egg as they apply to the hatching of a chick. Without the presence of either part, the purpose of the entire egg is defeated. In the case of organizational factors as social tools (transactions, organizations, economies), their rise and fall has been traced—according to institutional theory—to their legitimacy relative to relevant institutions. Within the socioeconomic space, we can therefore conceptualize the idea of an effective interface as the productive interaction of two social surfaces: organizational factors, and the institutional factors with which they must comport.

How are these two social surfaces brought into proximity such that they can interact to create value? To answer this question it is now necessary to turn to the logic of new dynamic institutional theory.

THE NEW DYNAMIC INSTITUTIONAL LOGIC

A new dynamic institutional logic suggests that economic actors can successfully generate institutions. This new logic argues that economic actors can and do intervene in institutional processes, effectively engaging in institutional entrepreneurship (Garud, Jain, & Kumaraswamy, 2002). Thus, we next explore a key idea that connects economic actors to the creation of an effective socioeconomic interface, and examine the reasoning that explains the basis for institutional entrepreneurship, to see how institutions can arise through the specific focused action of individuals.

It is well known that in philosophical reasoning an argument is sound only when it is valid and its premises are true. Thus, within this subsection of the paper, we shall present for your review first the premises that form the basis of the new dynamic institutional logic, along with the research that supports their veracity; and then second we shall present the argument itself.

Premises

The first premise of the new logic comes from the old. It is that institutions change—that is, that institutions are dynamic. While this idea has been around for some time (Berger & Luckmann, 1967), it has not been extensively investigated until recently (Scott, 2001). At present, “. . . the topic of institutional change has (now) emerged as a central focus for organizational researchers” (Dacin, Goodstein, & Scott, 2002: 45).

The second premise is that institutional change is bi-directional. Institutions form; but institutions also weaken and disappear (Scott, 2001: 182). The dynamic range of institutional

development therefore includes processes of institutionalization, as well as processes of deinstitutionalization. Interestingly, Scott (2001) suggests that “. . . the weakening and disappearance of one set of beliefs and practices (institutions) is likely to be associated with the arrival of new beliefs and practices” (2001: 184), supporting the premise that institutional change is in fact bi-directional.

The third premise of the new logic suggests that institutional change arises due to pressure on institutionalized norms or practices (Oliver, 1992). According to this reasoning, the three major sources of this pressure are: functional, political, and social (Dacin et al., 2002: 46-47). Functional pressures arise from perceived problems in performance: i.e., where the utility of norms or practices is called into question. Political pressures arise from shifts in the power that supports existing institutional arrangements. Social pressures arise from the social discord that results from revised social structures (e.g. when two organizational cultures clash after a merger). We therefore suggest that Oliver’s (1992) sources of pressure are in fact “institutional imperfections,” since they may be traced to the common source of socioeconomic imperfections.

The fourth premise suggests that, like the socioeconomic tools that are created to interface with institutions, institutions themselves may be influenced and even shaped by the actors who use these tools, and that in turn these actors are also affected. Garud, et al. (2002), for example, suggest that the institutional entrepreneurship implicit in a firm’s sponsorship of its technology as a common standard (normative isomorphism) is beset by several challenges that arise from a standard’s property to enable and constrain, even as potential competitors agree to cooperate on its creation. Their examination of Sun Microsystems’ sponsorship of its Java technology suggests that standards in the making generate both new institutions and the seeds of self-destruction, which requires a kind of institutional entrepreneurship to manage effectively.

Further, the temporal dynamics of institutionalization involve both pace (time to legitimation: slow, medium, high), and stability (the longevity of institutional legitimacy: low, high), and depending upon the manner in which institutionalization occurs (influence-based, force-based, discipline-based, domination-based—or some combinations thereof) result in alternative institutionalization outcomes (Lawrence, Winn, & Jennings, 2001: 626, 634). In particular, the relevant institutionalization outcome in the current study is that of sustainable entrepreneurship.

Thus, with these premises specified, we can then combine them into our argument for sustainable entrepreneurship as a new dynamic institution. The logic goes as described in the following paragraphs.

Premise 1 suggests that institutions change, and Premise 2 suggests that this change is bi-directional. If institutions change, and change bi-directionally, it is reasonable to expect that they do so for some reason. Premise 3 suggests that the pressure on institutional norms and the influence of institutional imperfections are likely the reasons for such bi-directional institutional change. Premise 4 suggests that certain economic actors are able to influence the rise and fall of institutions themselves. Increased legitimacy stabilizes the socioeconomic characteristics of relevant institutions as a social surface, which then creates a known point of interface which can be used by these economic actors to create socioeconomic tools for effective institutional interface.

For example, it is well accepted that a single economic actor was the catalytic force that produced TQM as an institution. W. Edwards Deming was one of the world's best-known advocates for quality, and he revolutionized production and service processes around the world by transferring his deep conviction that the solutions to quality problems would be simple if we would only turn from the comfortable but ineffective process attitudes of the past, and embrace the concept of minimization of variation (along with all its very unfamiliar ramifications) (Tortorella, 1995). As can be illustrated by citing this case-in-point about the institutionalization of the quality movement,

and as is illustrated by more recent examples already in the dynamic institutional theory literature noted earlier—Sun Microsystems’ sponsorship of common technical standards (Garud et al., 2002: 196)—a very few individual economic actors can almost single-handedly create new institutions, and that as such, they can be termed institutional entrepreneurs.

SUSTAINABLE ENTREPRENEURSHIP IN CANADA

We take a similar approach, and argue that sustainable entrepreneurship is a reachable institutional goal, which may be achieved through the focused efforts of relatively few individuals. We see within Canada an environment where such institutional entrepreneurship is attainable. In this section, we therefore utilize the above premises to provide a framework with which to set forth sustainable entrepreneurship as a new and relevant institution in the domain of entrepreneurship (Venkataraman, 1997) because it represents both the recognition of an opportunity for institutional entrepreneurship, but more importantly, identifies both social and environmental value creation as relevant opportunity environments. We then discuss institutional change as the interface between current organizations and the newly developing institution of sustainable entrepreneurship.

Institutional Opportunity

Our observation, then, is that Canada in the early 21st Century is a likely location for the introduction of sustainable entrepreneurship as a new institution. Like Japan in the 1950’s, Canada offers fertile ground for the germination and growth of the seed of sustainable entrepreneurship that creates value across the triple-bottom-line spectrum: economic, social, and environmental. Canada has created an economy that ranks in the top half of first tier world economies in terms of GDP per capita (World Bank, 2000). Canada possesses an entrepreneurial and innovative social, political, and economic culture (Hardin, 1974) that is based upon institutional practices across a wide range of activities, that together indicate a greater willingness to engage in economic activities grounded

in a more collective, socially beneficial set of values (Wilson, 1997). And finally, Canada is a likely location for the demonstration and enactment of sustainable entrepreneurship institutions because there is both leadership and social consensus (e.g., for support of the Kyoto Accords). In commenting on the Kyoto Protocol, Canada's Prime Minister states:

Now that the (Kyoto) Protocol has been ratified, we will move forward to implement the Climate Change Plan for Canada. Developed in consultation with all sectors and segments of the population, we know this plan will get results . . . It is a truly Canadian plan that sets the stage for all Canadians to do their part to achieve the results we need. It builds on the work of provincial, territorial and municipal governments. It draws on the commitment of industry to work with us to seek out more efficient and effective ways of operating. We intend to keep improving the plan to ensure it reflects and responds to Canadians' priorities (Creti n, 2002).

Enacting Institutional Entrepreneurship

We also must identify the core idea that can drive sustainable entrepreneurship as a new institution. Interestingly at present, the idea of introducing the principles of sustainability to entrepreneurship is relatively new to the field. Some authors within entrepreneurship research, however, have begun to suggest that the field needs to go beyond traditional strategic management research questions and performance dependent variables to examine issues such as the societal wealth implications of new venture creation (Venkataraman, 1997). The field has been in search of the appropriate dependent variable, which could adequately capture the social (and we add environmental) wealth implications of entrepreneurial action in addition to the economic action of narrower models. Thus, a multi-faceted dependent variable in entrepreneurship research, which accounts for the triple bottom line (economic, societal, and environmental value creation) may provide a solution to the dependent variable conundrum for entrepreneurship research, and more importantly better articulate the comprehensive nature of entrepreneurial value creation (Cohen & Winn, 2003).

We define sustainable entrepreneurship to be: *the expectation that individuals, organizations, and economies will create value that benefits the economic, social, and environmental welfare of stakeholders*. As the statement of an expectation, sustainable entrepreneurship is thus institutionally normative because it expresses values, beliefs and norms within a transacting population. Furthermore, it is becoming increasingly clear that the expectation of sustainability on (all inclusively) economic, social, and environmental fronts is an essential design criterion for the continued realization of desirable economic outcomes (Hawken & McDonough, 1993; McDonough, 2000). It appears to us as author-observers that the issue of the sustainability of value creation will continue to increase in importance as continuing globalization strains economic, social, and environmental support systems (Friedman, 2000), and as threats to abundance galvanize political actors to find and create solutions (e.g., Yew, 2000). Thus, it appears that the idea of sustainable entrepreneurship is a timely one—suggesting that the creation of such a discipline is competitive in the marketplace . . . especially in the marketplace of ideas. Institutional entrepreneurship that enacts sustainable entrepreneurship as a new institution within Canada will therefore rely—as noted previously—on the premises of the new institutional logic: the bi-directionality of entrepreneurial institutions, response to current pressures on institutional norms and practices, and the actions of relevant economic actors.

Bi-directionality of Entrepreneurial Institutions

Value creation is at the heart of entrepreneurial activity. Entrepreneurial actors create value and change by reducing transaction costs through a process of creative destruction (Mitchell, 2001). That value creation is at the heart of entrepreneurship is undeniable, and is an institutionalized belief among most actors in the entrepreneurial process. The current challenge to this institutionalized belief, however, is that it has been infused by the notion (borrowed from strategic

management theorists), that the most relevant dependent variable for entrepreneurship is a measure of firm financial performance. Interestingly, firm performance does not in fact fully account for the economic element of the triple bottom line, because the majority of entrepreneurship models leave out, for example, such key components as opportunity costs for the entrepreneur (Venkatarman, 1997).

Thus, according to premise 2 (introduced above), the institutionalized profit maximization hypotheses in the entrepreneurship field are likely to weaken and disappear as the field seeks to capture more comprehensively the value creation of the phenomena it studies. We do not seek to argue that the economic component of value creation is not essential. Rather we suggest that the creative destruction of entrepreneurs has social and environmental implications which need to be considered and measured when conducting entrepreneurship research that is relevant along a much wider value spectrum.

Furthermore there has been an underlying institutional sentiment that may also weaken and disappear: that seeking economic gain is mutually exclusive from seeking social and environmental improvement. Virtually all of the research published in mainstream management and entrepreneurship journals assume only a financial bottom line. Unfortunately, these journals have not been a forum for a new subfield of entrepreneurship which has emerged, known as social entrepreneurship. This area seeks to identify and explore how actors in non-profits create social value for their communities (Mort, Weerawadena, & Carnegie, 2003). We argue that traditional entrepreneurship research and social entrepreneurship research have developed in isolation due to the present institutionalized belief that the pursuit of entrepreneurial wealth creation is at odds with the pursuit of social and environmental gain. An increase in the broad-spectrum relevance of entrepreneurship research may therefore necessitate a deinstitutionalization of this belief among researchers and entrepreneurial actors that would move the field toward a larger view of the role of

entrepreneurship: in supporting the movement towards sustainability that encompasses not only economic, but social and environmental wealth creation. As suggested by Scott (2001) the weakening of the present institutional norms is likely to be precipitated by the arrival of new and better norms to replace them, made necessary by current pressures on presently institutionalized norms and practices.

Current Pressures on Institutional Norms and Practices

While globalization has led to unprecedented proliferation in technologies and innovations that have changed how people live and work, it is becoming increasingly difficult to limit awareness of the social and environmental challenges that have been created as a result. Today, there is growing consensus in the scientific community that climate change is, if not caused, then certainly accelerated, by collective human activity (Bolin, 1997; IPCC 2001). Consisting of 2,000 scientists from 100 countries, the Intergovernmental Panel on Climate Change (IPCC) concluded that the world will likely warm 1.5 to 4 degrees the end of the 21st century, with parts of the U.S. warming up by 6 to 8 degrees. According to the IPCC, the continued warming of the earth is primarily due to the burning of fossil fuels, which significantly raises the levels of carbon emissions into the atmosphere, posing significant health risks to all.

Global climate change is just one, albeit a particularly large-in-scope aspect of changes and degradation to the eco-systems whose services sustain all life, including economic endeavor, on earth. “Ecosystem services are the benefits human populations derive, directly or indirectly, from ecosystem functions” (Costanza et al., 1997). One recent survey of the challenges faced by five of earth’s most critical ecosystems is a collaborative effort by the World Resources Institute, the World Bank, and the United Nations: the Pilot Analysis of Global Ecosystems (PAGE; World Resources Institute, 2000). Table 1 provides an overview and lists some of the challenges. The outlook for these ecosystems is of concern: each is suffering diminishing capacity due to human causes (such as deforestation, destruction of the

rainforest and associated loss of biodiversity, pollution, and excessive consumption of freshwater), and the ecosystem services associated with each can be expected to suffer accordingly.

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Furthermore, pressures of the modern age on social systems can and do result in social degradations such as through the health impacts of global warming, pollution, and community degradation. Global warming, attributed at least in part to business activity, leads to increased frequency and severity of tropical hurricanes, typhoons, flooding and drought (Hawken, Lovins, & Lovins 1999). These natural disasters in turn cause significant social impacts through the devastation of agricultural land, displacement of residents, the spread of disease and death. Pollution also leads to significant social problems around the globe. The World Health Organization estimates that 500,000 people a year die in Asia alone, due to diseases resulting from air pollution. Consumer products companies have experienced a backlash from the media, watchdog groups, and their own employees to eliminate the exploitation of child labor in third world countries (Waddock, Bodwell & Graves, 2002). Communities throughout the world have been impacted (positively and negatively) by business activity. Companies create jobs, grow local economies, and enhance the quality of lives. However, they also can have detrimental impacts on communities by displacing local businesses, sourcing outside their communities, and impacting the culture and way of life for residents in their communities. Increasingly, companies are expected to become good citizens in their own communities by donating to local charities, maintaining and growing their local employment base, and sourcing locally (Burke, 1999).

The growing awareness of the challenges brought by environmental and social degradation have, in turn, contributed to functional, political, and social pressures placed on institutionally held

beliefs regarding business and society. From a functional perspective, the most critical problem has been the reliance on a “take-make-waste” system whereby firms extract materials from the earth, make products and then discard the waste. One reason this approach has predominated since the beginning of the industrial age is that it has been based on the relatively unchallenged/ ignored assumption that the earth has infinite resources. Furthermore, globally, we have yet to incorporate the true environmental and social costs of making products into accounting systems. A recent study found that we use \$33 trillion worth of unaccounted for ecosystems services to support our global economy (Costanza et al. 1997). Another functional challenge has been the prevailing approach to sourcing and production at the lowest cost location. We have seen a migration of production to third world and developing countries due to the lower costs of production in those countries. This practice has often had a significant detrimental impact on social and environmental systems in those countries. In many cases, firms and industries have just shifted their environmental harm to these countries that choose to seek economic development at all costs, often ignoring the subsequent environmental and health impacts of these polluting industries. Furthermore, the labor practices of suppliers in these countries have been incomprehensible, as we have all heard the stories of 12 year old children working essentially as slave laborers for suppliers of products coming back into the industrialized world.

Another pressure source for institutional change has come from political and regulatory forces. Europe has established itself as the global leader in pushing environmental and social pressures on new and existing businesses. Partially as a result of its advanced regulatory framework regarding social and environmental issues, Europe has witnessed significant innovations. For example, Germany was the first country in the world to place broad requirements for firms to engage in extended product responsibility (EPR), which requires firms to take responsibility for its products throughout their lifetimes (not just until they are bought by a

consumer). Much advancement in product design, sourcing, and recycling across many industries such as automotive and consumer electronics have resulted as a response to the regulation.

Furthermore the acceptance of KYOTO accord protocols by many countries, including Canada, will also serve to put political pressure on firms operating in these countries to de-institutionalize the take-make-waste processes in search of a lifecycle view of the production process, particularly as it relates to emissions.

Cohen and Winn (2003) posit that the current trend of global environmental degradation is associated with four types of market imperfections (i.e., inefficient firms, externalities and misappropriation of value, information asymmetries, and flawed pricing mechanisms), which create entrepreneurial opportunities for the introduction of innovative technologies and business models in sectors as diverse as extractive, manufacturing, retail and service industries. Current pressures on institutional norms and practices thus do give rise to replacement institutions: new norms and beliefs that are developed and popularized by new actors serving as institutional entrepreneurs.

Actors of Institutional Change

We believe there are several actors who hold the potential to help drive institutional change towards sustainable entrepreneurship. Herein we focus on three distinct actors: environmental and social activists, visionary entrepreneurs, and university educators of entrepreneurship.

Environmental and social activists have long been a catalyst for change in society. While these groups often represent more extreme, leftist views, they are often an indicator for future mainstream thought. Ten years ago, who would have believed that a state in the U.S. would pass a ban on all public indoor smoking (California in 1998) or that more than 180 countries around the world would agree to an accord which commits them to reducing their green house gas emissions below their 1990 levels (KYOTO)? These and many other accomplishments would not have been

possible without the efforts of social and environmental activists. We expect these groups to continue their pressure on governments and businesses to be more sustainable.

Entrepreneurial firms may have an advantage if they do not have to address as many institutionalized constraints as publicly traded multinational corporations (MNC). MNC's typically have investors concerned about short-term financial performance (neither social nor environmental), and they often have strong cultures which may need to be changed to embrace the triple bottom line. Entrepreneurial firms, on the other hand, have the benefit of starting with a clean slate. If these entrepreneurs can identify opportunities to create economic, social and environmental value, they may obtain first mover advantages in many emerging markets. Many examples of these visionary entrepreneurial firms already exist. Canada is home to one of the leading forces of the sustainability revolution, Ballard Power Systems, which develops zero emission fuel cells for transportation and power generation. Ballard, a Vancouver based company, was founded in 1979 by Dr. Geoffrey Ballard. In 1999, Dr. Ballard started another fuel cell venture in Canada, General Hydrogen Corporation. He is a visionary entrepreneur, considered to be the father of the fuel cell industry, and is changing institutionally held beliefs by leading a movement towards a hydrogen based, "carbon-free" economy.

Finally, we believe that university-based entrepreneurship educators can play a significant role in the process of moving entrepreneurship towards a triple bottom line, sustainable, institution. Educators at research institutions have the capacity to influence change on a large scale through their teaching, research, and outreach activities. Entrepreneurship educators still have challenges overcoming a general misconception in society that entrepreneurs are born with entrepreneurial personality traits, and that accordingly, entrepreneurship cannot be taught. Thankfully, entrepreneurship research has long passed the personality "traits" approach (Gartner, 1988) and moved on to more promising approaches such as entrepreneurial cognitions (Mitchell,

Busenitz, Lant, McDougall, Morse, E. A., & Smith, 2002) and evolutionary “rates” approach (Aldrich, 1990). However as previously noted, entrepreneurship scholars remain too focused on firm performance as the appropriate dependent variable (Venkataraman, 1997).

From the teaching perspective, entrepreneurship faculty can have an undeniably significant impact on the belief systems of our students. As educators, we can take the responsibility to help them appreciate the impact entrepreneurs can have on economic, social and environmental systems. For example, sustainable entrepreneurship content was integrated into the entrepreneurship curriculum at the University of Victoria (UVIC) in the summer of 2003. The UVIC program leverages a cognition model to illustrate how entrepreneurs identify and exploit opportunities using specialized entrepreneurial cognitions: planning cognitions, promise cognitions, and competition cognitions (Mitchell, 2001). The UVIC program therefore has a more-balanced focus on the business plan than some entrepreneurship programs, but nevertheless utilizes business planning as a core element, as it is a way to develop and demonstrate planning cognitions. As an early indicator: of the 11 business plans created in the summer program, six of them were oriented to sustainability. This result was a direct outcome of having integrated sustainability concepts into the entrepreneurship program.

Outreach activities may enable entrepreneurship educators to have a real impact on our local and global communities. A sustainable entrepreneurship approach to outreach could lead to private public partnerships with government and non government organizations (NGO’s) and of course the entrepreneurs themselves to enable them to consider sustainable solutions to social and environmental problems.

Summary

And thus we see illustrated, the possibilities associated with the principles of the dynamic institutional logic: that institutions change, that they change bi-directionally (they both come and

go), that institutions respond to certain pressures (e.g., discipline creation, and the exercise of influence), that institutional imperfections often invoke such pressures, and that the specific actions of relatively few socioeconomic actors can shape the nature of the emerging discipline, and can influence institutional legitimacy. The principles of the dynamic institutional logic so identified provide a useful pattern for institutional entrepreneurs to follow.

Discussion and Conclusion

In this paper we set out to explore the process of creating new institutions in Canadian entrepreneurship. We utilized institutional theory (traditional and dynamic) to highlight the processes of institutionalization and to argue that through their effect upon institutions, relatively few economic actors can organize exchange relationships (Mitchell, 2001) to create value (an effective socioeconomic interface). The focus of our analysis has been the prospective case of initiating new institutions in Canadian entrepreneurship: specifically, a sustainable entrepreneurship environment. In this final subsection of the article we first discuss the boundary conditions necessary for such an argument that qualify our analysis, and then proceed to draw our conclusions about the possible impact that the development of a sustainable entrepreneurship institutional environment might have in the Canadian case.

Boundary Conditions

There is a specific context within which thinking shapes our economic possibilities, and it is important that this context be specified as a boundary condition to theoretical development (Dubin, 1969). The reader has doubtless discerned that the context within which our arguments apply concerns only circumstances that involve the interplay between socioeconomic tools (transactions, organizations, economies) and institutions (individual beliefs, group norms, and societal values), as each of these elements is influenced by institutional entrepreneurship.

Within the context of institutional entrepreneurship, a working definition of a socioeconomic interface as the term is used herein, is possible. Simply defined, a socioeconomic interface is a point of contact between three socially constructed binary pairs: transactions, and individual beliefs; organizations, and group norms; economies, and societal values. An “effective” socioeconomic interface occurs where this contact minimizes transaction costs (Mitchell, 2001).

However, while being simply definable, this interface is not yet well understood. We do not fully understand how institutions shape and constrain the tools that humankind creates to engage them. And conversely, there is much yet to learn about how our socioeconomic tools (transactions, organizations, economies) shape and constrain institutions. Recent research has shed light on these problems (Dacin et al., 2002).

But in addition, we must also take into account the likelihood that the socioeconomic interface is a good deal more complex than described in the simple articulation offered above. For example, there are cross-level phenomena that must be taken into account. And the rates of changeability and levels of permeability (for example, how fast organizations change, or how easily influenced organizations are) of the various socioeconomic tools are likely to vary within the tool set (transactions, organizations and economies), as well as in a comparison of the elements within that set, to the various elements within the set of institutions (individual beliefs, group norms, societal values). It is likely that the rise and fall of organizations, for example, occurs at a different rate than the rise and fall of the institutions that support or threaten them.

Conclusion

Herein we assert that the introduction of sustainable entrepreneurship into the Canadian economic transactional setting would be of benefit to the triple bottom line: the creation of economic value, social value, and environmental value. In an introductory article to a recent *Academy of Management Journal* Special Research Forum (SRF) on Institutional Theory and

Institutional Change, the special issue editors suggest that the full power of institutional theory has remained untapped. Notions that “. . . institutions change over time, are not uniformly taken-for-granted, have effects that are particularistic, and are challenged as well as hotly contested” (Dacin et al., 2002: 45) open the theory to productive new uses. It is our hope that herein, using the new dynamic institutional logic, we have articulated at least one of these uses, and that in doing so, that the birth of a nascent institution—sustainable entrepreneurship in Canada—will be enabled . . . hopefully with the support of our many colleagues within the Canadian entrepreneurship and Small Business community.

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TABLE 1: Critical Global Ecosystems (Cohen & Winn, 2003)

Ecosystem	General description	Challenges
Agricultural	Land surfaces devoted to agricultural purposes which account for \$1.3 trillion in output of food, feed, and fiber, 99% of calories consumed by humans	Since 1950, 40% of agricultural land worldwide has been severely degraded through erosion, salinization, nutrient depletion, biological degradation, and pollution.. The diminishing supply of quality water also continues to provide challenges.
Coastal	Land surfaces adjacent to continental and island boundaries, which are home to 39% of the world's population and account for 95% of the marine fish caught for consumption.	Over fishing, destructive trawling techniques, and destruction of nursery habitats have diminished by 20% the stock of fish and shellfish. The use of synthetic chemicals and fertilizers in neighboring regions lead to pollution problems for coastal lands. Global warming also impacts coastal ecosystems through warming of ocean temperatures, changing storm frequency, and rising sea levels.
Forest	Land areas accounting for the largest source of wood products and millions of unique plant species, many used for medicinal purposes. Forests cover 25% of the earth's land surface.	Since 1989, more than 20% of global forest cover has been removed due to conversion to other land uses and logging. Deforestation has significant impacts on biodiversity in the form of loss of unique plant and animal species. Forests act as carbon sinks.
Freshwater	Water sources covering less than 1% of the earth's surface but are a primary source of water for drinking, domestic use, agriculture and industry, as well as an alternative source for fish.	Humans currently use more than 50% of all accessible fresh water runoff; by 2025 demand will reach 70%. Dams cause the loss of fisheries and biodiversity.
Grassland	Grasslands cover 40% of the earth's land surfaces and provide critical sources of protein and fiber from livestock. Primarily located in developing countries.	Road building, land conversion, and human induced fires have caused significant loss of grasslands and thus a loss of biodiversity.