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Toward Systemic Societal Entrepreneurship:
Opportunities, Theories, and Methods

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Abstract

Systemic societal entrepreneurship will engage populations across public, private, nonprofit, and development sectors' boundaries, including everyday citizens. Systemic change addresses roots of complex social problems, implicating structural, social, and individual behaviors and decisions. Proactive efforts toward systemic change require new concepts, theories, and methods. In this analysis, hierarchical complexity science is vital for new measures and methods for fostering dynamics essential to systemic societal change: 1) generating systemically-necessary ideas; 2) creating informed social capital, and 3) increasing the complexity of individual and social performance. A systemic social change theory rooted in the Model of Hierarchical Complexity is implemented in *The Integral Process for Working on Complex Issues*, facilitating systems thinking and increased complexity in the work of individuals and groups. Transportable across issues and contexts, the process helps people analyze social complexity, frame and deliberate complex decisions, resolve disputes, and identify entrepreneurial and other innovations needed to address complex problems.

Keywords: deliberate, decisions, increased complexity, informed social capital, Model of Hierarchical Complexity, societal entrepreneurship, systemically-necessary ideas, The Integral Process for Working on Complex Issues, theory of systemic social change

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Introduction

This paper aims at looking around the bend of the road ahead for societal entrepreneurship in conceptual, theoretical, and methodological terms. Notice, that I used the term "societal" and not "social" intentionally. Thus, a fair first question asks: What is the difference between "social" and "societal" entrepreneurship? Elsewhere, the terms seem to be used interchangeably, especially without a coherent or universal theory for either (Goldstein & Hazy, 2008; Morris, 1998, respectively). In such a case, their spectrum of underlying assumptions may be more instructive than the terms themselves. Hence, I begin by sketching the spectrum others have created, using their terms, to situate my contribution and its particular meaning for societal entrepreneurship.

In the beginning, "'societal entrepreneurship' was a concept that sprung from the economic discourse, an (attempted) translation of the economic discourse into another context" (Grit & Dolfsma, 2002: 392). The economic entrepreneur is an innovative individual confronting the problem of generating profits. Using economic ventures in the private sector, the social entrepreneur who wants to confront social problems "generates profits by alleviating that social problem…the more profits made, the more the problem is alleviated" (MacMillan, 2006: 1; *cf.*, Sheehan, 2008). The private sector, the entrepreneurial individual, and a specific social problem characterize one side of the spectrum. Moving from that beginning side of the spectrum, non-governmental organizations (NGOs, sometimes called civil society) assume that complex social needs cannot be adequately addressed by the private and public sectors. With their unique social missions and methods going underfunded, some NGOs support their nonprofit work by earning entrepreneurial profit (Rhodes & Donnelly-Cox, 2008). The civil society sector, the entrepreneurial nonprofit organization, and multiple complex social problems characterize this location on the social entrepreneur spectrum.

Blurring the categorical lines among type of entrepreneur, sector of operation, one or many social problems, and driving motivation, new assumptions are indicating a further location on the spectrum that is showing up in the philanthropic sector, where "the most important contribution any of us can make now is not to solve any particular problem, no matter how urgent…what we must do now is increase the proportion of humans *who know that they can cause change*," and, to that end Ashoka, one of the premier funders of social entrepreneurial programs, seeks "patternchangers" to usher in an era of "everyone a changemaker" (Drayton, 2006: 82-83, emphasis added). The automatic pairing of economic methods with entrepreneurial meanings is giving way to broader ways and means. Key assumptions diverge.

Entrepreneurial meanings involve a sense-making process and stem from diverse values and frames of reference, with vocabularies adapted to gain support for initiatives (Cramer *et al.,* 2006). This sketch began with the vocabulary of concrete types of actors in well-defined sectors with specified objectives, then shifted to the abstract level of everyone, with abstract roles of patternchangers and changemakers. Rather than solving concrete problems, the priority became how to raise personal awareness, a "can do" empowerment involving as many people as possible. Here, the assumption is "social change begins as an individual undertaking" (Schultz, 2008: 113), and social change means changing patterns.

Yet, the vocabulary shifts still further on the other side of the spectrum. The Swedish Knowledge Foundation (2008: n.p.) seems least oriented to specifying individual activity, equally committed to changing societal patterns, and most bent on articulating the nature of systemic social change. For it, "societal entrepreneurship" refers to societal initiatives to fill existing gaps, or "that which is missing," and to introduce new levels of effectiveness to "that which is…not working in the social structure: new solutions that create a sustainable society – economically, socially and ecologically." It presumes citizen engagement as much as sector inclusion of all branches of entrepreneurism that have emerged in the business, public, non-profit, and local/regional development sectors. Thus, the Knowledge Foundation takes a systemic approach: it seeks a broadly-based societal entrepreneurship that effects systemic change across major domains of society and its environment.

That systemic approach is a big tent for entrepreneurialism and social change. It not only has room for the entire spectrum of entrepreneurial approaches above, but upon analysis, actually requires all of them, and more, to realize its pragmatic vision. The pragmatism seems to reflect the assumption that social challenges across many domains must be met by a perhaps-eclectic inventory of different agents and approaches tailored to fill specific gaps, strategically designed to shift structural inertia, and dispersed to change the patterns of society and undertake long-term sustainable solutions. In a way, pragmatism turns the tables such that the *nature* of each challenge will be the node that attracts and uses the appropriate networks of agents and methods to discover and maximize opportunities. It is this kind of pragmatic, systemic, societal entrepreneurship that I assume in this paper. The vision is compelling, 21st century challenges are great, and the road ahead is new. What actions do we take to start the journey in earnest?

Questions for an Action Agenda

An action agenda for societal entrepreneurship requires a first round of essential questions. They go beyond who entrepreneurs are, what they do, and sectors of operation to include: What does systemic social change look like? How might purposeful systemic change happen in the real, not ideal world?

To take on this agenda means recognizing some characteristics of the concrete challenges entailed in systemic social change. Originally compiled from experience in the public sector, Kernick's (2005: 23) boundary-spanning inventory indicates such characteristics:

- A wider range of decision criteria that includes appropriateness, efficacy, effectiveness, efficiency, equity, and affordability;

- System goals which are often in conflict, e.g., efficiency and equity;

- An uncertain relationship between cause and effect;

- Stakeholders with different perspectives and specialized knowledge;

- A mix of motivations within the system which makes it difficult to align incentives that can in some cases have dysfunctional consequences;

- Difficulties in engaging the public -- often what the public think, say, and do are very different.

These characteristics describe the territory of challenging issues at the heart of societal entrepreneurship, and evoke another key question: How do we deal with such pervasive, specific challenges? And can we do so in time to head off more serious problems? Historically, we have been mostly passive: change "did us" more than we intentionally "did change." Social evolution's natural pace may be too slow while the warnings facing us in the 21st century impose pressure to speed up proactively.

The chief thesis of this paper is that we need to be proactive and use social processes designed to take "capacity building" and action to new societal levels. Thus, theory-based social change processes should be intentionally designed and broadly deployed to increase our capacity to recognize our social complexity and meet its challenges. This is good news for societal entrepreneurship, because the *more social complexity* that entrepreneurs and investors and institutions across sectors, as well as citizens at large, are equipped to recognize, the *more opportunities* they are likely to recognize. Further, this may reduce situations where ideas hatched in isolation and ad hoc ventures to implement them miss opportunities, when they can instead leverage their impacts more broadly under a pragmatic societal strategy and integrated methods.

A Way Forward

Like social change itself, it will take time to determine the most useful compasses for direction on this untraveled road. To move ahead, our understandings of our challenges, of our social complexity, and of systemic change require (1) new concepts, (2) new theories, and (3) new methods. This paper offers some responses to each part of this three-fold demand, with an emphasis on the societal entrepreneurial opportunities they represent.

I begin with a brief introduction to four key concepts and their interrelationships. Those concepts are developed throughout the remainder of the paper, where I discuss a number of ways to understand and address social complexity. To bring the key concepts to life in terms of that social complexity, I weave a case example through an introductory mixture of analysis, complexity and social change theories, and practical methods to highlight some of the "how, why, and where" of opportunities I see embedded in systemically-approached societal entrepreneurialism.

To Meet a Three-Fold Demand

A three-fold demand for new concepts, theory, and methods needs appropriate currency to negotiate it. There are four coins that comprise a currency without which we will not only miss opportunities but also will be hard pressed to purchase new understandings and sustain meaningful social change: (1) systemically-necessary ideas, (2) informed social capital, (3) increases in the complexity of individual and social performance, and (4) complexity-based methods (Figure 1). The first three are renewable and sustainable resources, while the fourth can be replicable, transportable, and customizable resources that foster and support the first three.
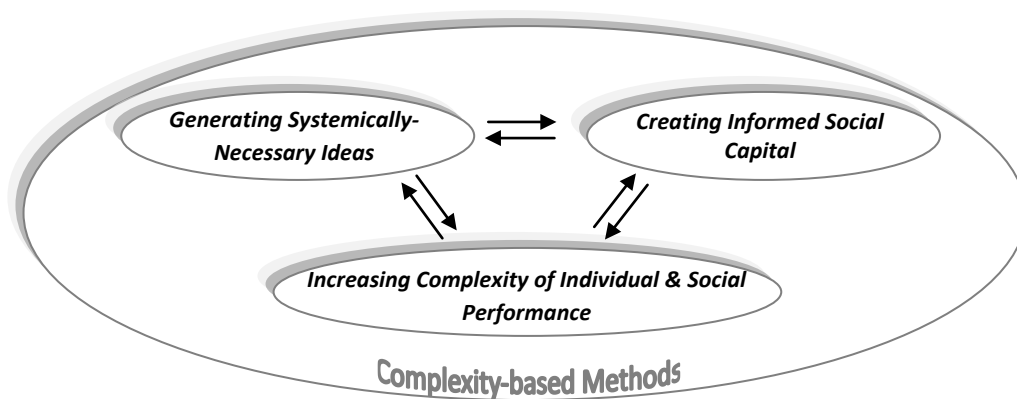
Figure 1. Four Coins of Systemic Social Change Currency

This perspective on a strong currency is rooted in my many years of analyzing complex public issues and researching the kinds of understandings and activities needed to address them at their roots. I propose that these four coins are necessary for *societal* entrepreneurship, that they are the currency to develop understandings and purchase social change at *systemically pervasive societal scales* to penetrate and transform serious challenges, large and small alike. After the meanings of each of these four key concepts are developed in the main discussion below, a final analysis in the conclusion reinforces the currency metaphor in stronger terms.

Systemic Social Complexity: A Case in Point

Systemic societal entrepreneurship will be under-girded by solid understandings of social complexity. The notion of systemic social change—and the complexity it involves—is likely to invoke different mental models, especially in an interdisciplinary audience. Therefore, I include a small-scale case for several purposes. First, it portrays a basic layer of social complexity. Second, it indicates the four-coin currency in play to, third, support the mixture of analyses, methods, and theories discussed below.

At the time of this 2001 case, I had previously developed and separately field-tested the initial core modules of *The Integral Process for Working on Complex Issues* (TIP) (Ross, 2006c). This case was the first field test of running the core modules together as one overall process. I conducted TIP in a village with a group of residents who volunteered to participate in a series of five evening sessions. Living in a small rural village in the U.S., these people had a long list of complaints, concerns, and judgments about how things were going in the community. These concerns were not unanimously shared: for example, one comfortably retired gentleman initially asserted everything was fine just the way it was. However, one of the complaints others targeted was the chronic presence of loiterers on the corner of the village's main intersection. People were inconvenienced by their leeriness of going near the corner when walking to a destination, and nearby business owners were accordingly distressed. Drivers were alarmed or angered when loiterers played "chicken" games, darting into the road. Older people with poor night vision were particularly upset by such games because there were no street lights in town. People worried about children who were sometimes with the loiterers. Discussion surfaced a shared concern about the village's public image. Business and non-business people deplored how loiterers exacerbated the deprecating image of the village widely-held throughout the county. In and near the village, lower rents in trailer parks and federally-subsidized housing heightened perceptions of stigma as those factors led welfare agencies to recommend the village and its surrounding area to low income populations. The village's poor public image made it difficult to attract new customers and businesses and to raise the number of owner-

occupied properties. Offenders of myriad laws were difficult to get out of community life—and presumably off the street corner—when the county criminal justice system regularly turned loose those arrested by local law enforcement, a revolving door of both offenders and tax dollars. Loitering in the center of the small downtown was a blight that people in the diverse group I worked with wanted to see the end of.

Their early discussions resulted in their looking more closely at the members of the loiterer class of people. Disrupting their quick-glance assumptions that it was uniformly comprised of male high school dropouts, the group recognized a broader age and gender range: loiterers included early high school aged through older men, and at times young women of high school age and older. As group participants became self-informed, they also became interested to understand the loitering phenomenon and its causes.

Over the course of two more sessions, participants drew upon their local history, talked with other residents between sessions, pooled information from their individual knowledge-areas, walked in the shoes of diverse loiterers' possible life experiences, examined attitudes, behaviors, and social structures' supports of the problem, and identified additional conditions that seemed to account for the loitering. These were gradually more complex analyses to perform and then to fit the results thereof together: that is, they were more complex tasks to perform than describing problems and voicing complaints during the first session. The tasks represented *increased complexity of individual and group performance,* one of the coins of social change currency.

Using the TIP methods to arrive at systems-driven priorities, the group did not want to entertain the legalistic solution of lobbying for a local ordinance against loitering. To do so would target a symptom rather than its underlying causes, leaving the symptom to relocate, not dissipate. Instead, for its work during the remaining scheduled sessions and for reasons explained below, the group prioritized working on the problematic systems in the domain of rental property, thus generating a *systemically-necessary idea,* another one of the four coins. From its work on that idea, the group generated more such ideas in its last two sessions.

The group's motivation to address loitering turned *from making social judgments to addressing complex causation*: people became well informed about a chunk of their local social complexity in specific rather than general terms, and wanted to address it actively with others in the community. I call this phenomenon *informed social capital*, a third coin of social change currency. In these ways, the group began to resolve one of the dilemmas cited by Kernick above: it unpacked the issue, identified the complex causation in concrete terms, and thus removed the "uncertain relationship between cause and effect." It recognized there was no single cause to blame for loitering, enabling the move from uninformed judgment to addressing complex causation.

Through this briefly sketched case, I introduced a basic layer of social complexity—that of complex causation in social problems—and indicated that a group produced its own three coins of practical social change while using complexity-based group methods, a fourth coin supporting production of the other three. The systemically-necessary ideas, increased complexity of performance, and informed social capital developed *while* people used the methods and *by* using the methods; the *while and by* relations are important nonlinear dynamics to note in this metaphor of social change currency. They are also integral to my theory of social change introduced below.

Building on this section, next I offer some additional social complexity analysis using case material and selected TIP processes. These treatments shed more light on the key concepts represented as coins above. In the course of the discussion, I also indicate where TIP processes can illuminate opportunities for societal entrepreneurship.

Social Complexity and the Genesis of Informed Social Capital

Springing from my action research, I have found it useful to use the term *social capital* with two modifiers: one is *motivated* social capital, and the other, introduced above, is *informed* social capital. Because motivated social capital seems to be a precondition for developing informed social capital, I discuss it first. In observing a wide range of public meetings and programs conducted as leadership events, focus groups and other input-gathering mechanisms, community visioning, and other kinds of public forums, my observations over the years were that generally citizens attended, talked, and went

home again, with no discernible change in, or action on, issues that they talked about. This could suggest one explanation for Kernick's observation that often what the public think, say, and do are very different: without planned processes to take things further, perhaps expectations and intentions are abandoned after people leave certain events. Enduring motivation seems absent.

From the initial tests of TIP's first process step through its most recent uses, I was surprised to discover what I now call "the 100% rule." At least thus far, that rule is that regardless of the facilitator, 100% of the time, 100% of the people in groups finish that first step with expressions of high degrees of motivation to actively work on the topics they mapped and began to analyze. I call this motivated social capital.

The significance of motivated social capital is that once people start to recognize—and have productive ways to articulate—relevant social complexity, they do not want to just go home after one meeting and allow conditions to remain unchanged. A theoretical explanation for this involves the same kind of complexity dynamics that underlie the development of informed social capital. The primary difference is time and experience; in my work, that has meant participation in subsequent steps of TIP. These steps involve continuing increases of complexity—both of the amounts of social complexity recognized, as indicated in the village case, and of more complex tasks to engage it, introduced next.

The sketch of the village case suggested how that group developed informed social capital. Here, I offer a closer look. In this and as needed in the paper's remaining discussions, I use the Model of Hierarchical Complexity (MHC) to measure tasks by indicating their different orders of complexity (Commons, Goodheart, Pekker *et al.,* 2008; Commons, Trudeau, *et al.,* 1998). The MHC accounts for the differences in task complexity that are involved to organize information. Information has different levels of complexity, and thus the tasks to handle it may be more and less complex, too. In humans, these may be tasks of reasoning or other behaviors. Tasks discussed in this paper fall into the category of reasoning, and Table 1 describes the orders of complexity to which I will refer.

Table 1.

Orders of Hierarchical Complexity and Structures of Tasks

Order and Name	General Descriptions and Structures of Tasks Performed
9 Abstract	Discriminate variables such as stereotypes; use logical quantification; form variables out of finite classes based on an abstract feature. Make and quantify propositions; use variable time, place, act, actor, state, type; uses quantifiers (all, none, some); make categorical assertions (e.g., "We all breathe."). Task example: All the forms of five in the five rows in the example are equivalent in value, x = 5. * * * * *　　□ □ □ □ □　　O O O O O　　□ / "} Q
10 Formal	Argue using empirical or logical evidence; logic is linear, one-dimensional; use Boolean logic's connectives (not, and, or, if, if and only if); solve problems with one unknown using algebra, logic, and empiricism; form relationships out of variables; use terms such as if…then, thus, therefore, because; favor correct scientific solutions. Task example: The general left hand distributive relation is $x * (y + z) = (x * y) + (x * z)$
11 Systematic	Construct multivariate systems and matrices, coordinate more than one variable as input; situate events and ideas in a larger context, i.e., considers relationships in contexts; form or conceive systems out of relations: legal, societal, corporate, economic, national. Task example: The right hand distribution law is not true for numbers but is true for proportions and sets. $x + (y * z) = (x * y) + (x * z); x \cup (y \cap z) = (x \cap y) \cup (x \cap z)$ *Symbols:* $\cup$ = union (total elements); $\cap$ = intersection (elements in common)
12 Meta-systematic	Integrate systems to construct multisystems or metasystems out of disparate systems; compare systems and perspectives in a systematic way (across multiple domains); reflect on systems, i.e., is metalogical, meta-analytic; name properties of systems (e.g., homomorphic, isomorphic, complete, consistent, commensurable). Task example: The system of propositional logic and elementary set theory are isomorphic. $x \& (y \text{ or } z) = (x \& y) \text{ or } (x \& z)$ Logic; $x \cap (y \cup z) = (x \cap y) \cup (x \cap z)$ Sets $T(\text{False}) \Leftrightarrow \varphi$ Empty set; $T(\text{True}) \Leftrightarrow \Omega$ Universal set *Symbols:* $\&$ = and; $\Leftrightarrow$ = is equivalent to; T = Transformation of

Note: From "Applying the Model of Hierarchical Complexity" (p. 65), by Commons, Rodriguez, Miller, Ross, LoCicero, Goodheart, & Danaher-Gilpin. 2007.Cambridge, MA: Dare Association, Inc. Copyright 1991-2007 by Dare Association, Inc. Adapted and reprinted with permission.

In the examples below, both the quantitative increase in complexity and the related qualitative change in the individuals' perspectives indicate important differences. Although I do not include an analysis of those individuals' changes here (but see Ross, 2006b, 2007), their development toward informed social capital is evident from their statements.

Abstract 9 (Reasoning structure: General assertions without logic)

1. Person A *(at the beginning of the 1ˢᵗ session)*: "The community is just fine the way it is."

2. Person B *(during the 1ˢᵗ session)*: "They shouldn't be allowed to loiter."

Formal 10 (Reasoning structure: Linear logic)

1. Person A *(2ⁿᵈ session):* "I can see by what we've done here [the group's analysis], that we as a community have created these problems, and therefore we as a community are responsible to fix them."

2. Person B *(3ʳᵈ session):* "If only I, if we, had treated them [some of the loiterers] better when we were in high school, maybe they wouldn't be out there now."

What was the "added value" the individuals gained from the sessions? More motivation, and more information. Information they co-constructed with others in the group, which revealed more social complexity than they began with in the first session. This meant more information to organize and make sense of. The changes in these two individuals foreshadow the relationship between budding opportunities for societal entrepreneurship in the processes of starting to address complex issues. Both changes indicated in these individuals represent new logical connections they were able to make, and new logical connections can open up new possibilities for behaviors that are *novel to those involved.* Increased motivation seems to attend novelty. Anecdotally, the man who began by asserting everything was fine and no changes were needed in the community, demonstrated his new level of motivation, as he described it to the group, by driving 14 hours straight to get back from a trip in time to get to the third session.

In the next section, which gives the village group's analysis of the loitering phenomenon's complex causation, I introduce another order of complexity with its relation to informed social capital. In both of these sections' examples, the increased complexity of performance by individuals and the group

accompanied the development of informed social capital: these two concepts represent interactive dynamics.

Systems Thinking and Complex Causation

When social processes to examine complex issues enable people to identify multiple, often-interrelated factors that contribute to problems that concern them, three things become possible. One is that they recognize complex causation, as in the village group. Another is that systems thinking can develop. A third is that the information created enables systems to be analyzed and their complex relationships identified. The progression is from identifying factors and seeing how they logically relate (MHC Formal 10 order), which paves the way to identify the systems generated by those relationships (MHC Systematic 11 order). When the process builds in this progression, it shows up naturally: developing systems thinking is not an educational chore but a way for people to keep their motivations directed productively while and by creating knowledge and working on issues. It does not matter if individuals in a group do not themselves demonstrate systems thinking because the group's collective work products demonstrate the results of the process-guided systems thinking. The process supports the social change coin of increased complexity of individual and group performance.

As a quantitative theory and method, the MHC can be used to analyze if a system is conceptualized. In those terms, this kind of systems thinking is first possible at the Systematic 11 order of complexity. To have efforts to work on complex issues identify social systems is a fertile resource for entrepreneurial efforts: the systems indicate where change is needed. More importantly, identifying the multiple social systems connected to a problem—its complex causation—reveals more social complexity, generates systemically-necessary actionable ideas, and thus identifies even more opportunities for societal entrepreneurship.

To demonstrate conceiving social systems using this approach, I show the analysis of the village group's outcomes from examining the loitering phenomenon. In addition to the chronic conditions in the village mentioned when introducing the case, the group's continued work identified the social systems shown in Table 2.

Table 2.

Social Systems Contributing to Complex Causation of Loitering

Logical Relationship (1)	Logical Relationship (2)	Social System Resulting from Sets of Logical Relations
Because the village was small, it was not served by public transportation.	Some of the poor people living in the village had no cars.	(1) Poor people without cars were virtually confined to the village to get their needs met.
Because the village was small, there were few businesses and thus few job opportunities.	Some poor residents had neither private nor public transportation.	(2) Some poor residents were dependent on local jobs availability yet because not enough jobs existed, they were in effect in forced unemployment.
Because the village was small, it had only one tiny park, which was located at the edge of the village.	There were no other recreational facilities or entertainments beyond one evening-dining restaurant.	(3) The downtown corner location became a social club without walls for certain members of the village.
For various reasons, some youth were truant and some dropped out of school.	Truant students and dropouts lost contact with former peers and access to after-school activities.	(4) Without alternative places or activities, certain school-aged youth joined the social club of the downtown corner.
Because of local interest, the high school had previously offered open community gym nights.	Some people took advantage of open gym nights and vandalized the school when they got inside.	(5) Without funds to hire building security, the school board set policy to close its buildings to non-school use, leaving the village no indoor sports venue.
Squalor and structural disrepair characterized the majority of rental properties.	Tenants were seemingly ignorant of State law on tenant rights or did not know how to enforce their rights to get repairs made.	(6) Unpleasant housing conditions made it desirable for some tenants to spend the least time possible at home.
A high proportion of local rental properties were owned by absentee landlords who did not oversee their buildings.	Recurring tenant-caused damage and property theft went unaddressed by landlords.	(7) Rental properties suffered from the common cycle of landlord disinterest and resistance to investing in repair and capital costs only to have tenants cause further damage.
One month's rent was higher than many low income-earning adults could afford.	Some tenants managed to meet their rent obligations by having more income-earners live with them.	(8) Overcrowded living quarters made it desirable for some tenants to spend the least time possible at home.

These social systems are in apparently stable equilibrium, albeit undesirably so because in each one, some people's needs are going unmet. Each undesirable system could be targeted for change in its own right. However, it is obvious that these systems are related, not only by their myriad contributions to the loitering problem, but also by co-causal relationships among some of them. Unless other local conditions and these systems' interrelationships were to change, the community problems would endure

unchanged. The general implication is that unless enough interrelated systems are targeted, systemic change efforts will be ineffective at best and impossible at worst.

The beneficial implication of systems thinking and understanding complex causation for informed social capital is that it should begin to lessen the difficulty of the public thinking, saying, and doing contradictory things (Kernick, 2005). More systems-thinking coherence supports knowledge that solutions are not easy wish lists to fulfill but rather involve tradeoffs and can impact individual and organizational conditions as well as other systems. At least theoretically, publics that are systemically better informed would have fewer negative reactions toward certain social changes, an hypothesis worth testing.

As the case demonstrates, even one irritating condition like loitering can implicate many systems, the existence and/or relations among which may otherwise go unnoticed without methods to surface them. Another implication of identifying social systems this way is underscoring that a village (or suburb or city) is not just a system; that broad-brush label masks social complexity. Rather, any geopolitically- or organizationally-defined entity can be analyzed as a complex metasystem, that is, as comprised of numerous interacting social systems, visible and invisible. To do so requires a theory such as the MHC that is robust enough to identify and make analytical sense of the complexity.

Increases in Complexity as the Core of Innovation

The sometimes-heard notion that an innovation is the result of a creative synthesis is explained by the MHC's steps of transition from one order of complexity to a higher order of complexity. The nonlinear dynamics of the transition steps are the "how" of individual development and social evolution (Commons & Richards, 2002; Ross, 2008b). In the context of entrepreneurial innovation, a synthesis represents the result of processing disparate ideas, information, and other factors successfully to create a new approach to deal with something. The synthesis that completes the transition sequence is a performance at a higher order of complexity (Figure 2).

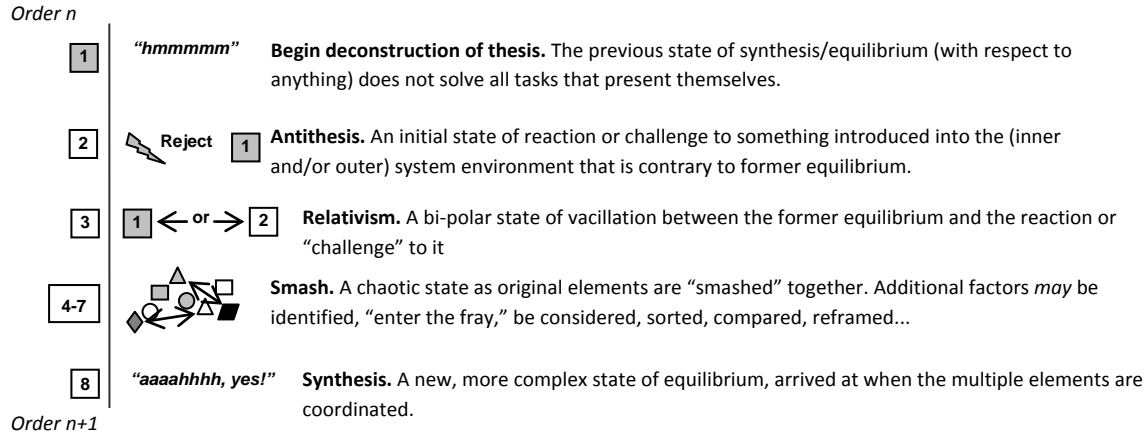|		
1	*"hmmmmm"*	**Begin deconstruction of thesis.** The previous state of synthesis/equilibrium (with respect to anything) does not solve all tasks that present themselves.
2	Reject **1**	**Antithesis.** An initial state of reaction or challenge to something introduced into the (inner and/or outer) system environment that is contrary to former equilibrium.
3	**1** ← or → **2**	**Relativism.** A bi-polar state of vacillation between the former equilibrium and the reaction or "challenge" to it
4-7		**Smash.** A chaotic state as original elements are "smashed" together. Additional factors *may* be identified, "enter the fray," be considered, sorted, compared, reframed...
8	*"aaaahhhh, yes!"*	**Synthesis.** A new, more complex state of equilibrium, arrived at when the multiple elements are coordinated.

Figure 2. Anthropomorphized Rendition of the MHC Transition Step Sequence

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A simple example from the village case demonstrates how such transitions occur naturally in decisions when people are motivated to address an issue (Table 3). It is simple because there are no disputes about the direction to take, which would make it a complex decision. However, like the required outcome in complex decisions, it indicates the MHC Metasystematic 12 order of complexity, at which multiple systems are dealt with. In this case, the process began with one of the problematic social systems shown earlier in Table 2.

Table 3.

Metasystematic Innovation Arrived at through Transition Steps

Script	MHC Transition Step
The local school board had previously passed a policy to keep school buildings closed to non-school use after it offered open community gym nights for a while but suffered from accompanying vandalism and insufficient funds to hire building security to prevent it.	Systematic 11 starting point
The community will not have open gym nights even though it needs them.	Step 1: Thesis does not solve all tasks
But our tax dollars pay for that building and it sits there empty while we have some basic needs in this village that the school could help us meet. Surely we're creative enough to come up with a way to open the gym that doesn't cost the school more money; this isn't rocket science.	Step 2: Antithesis

But to use it *will* cost more money, just to turn the lights on and run the HVAC, and then there's the security issue. It isn't like the community would pass a levy just to pay for this, so we're back to square one: no open gym nights.	Step 3: Relativism: alternation toward thesis
But the school belongs to the community, we already pay for it, so it's not a unilateral decision for the school board to make for us.	Step 3: Relativism-alternation toward antithesis
Well, then, we need to figure out how to do both: open the gym at night and not cost the school's budget more money.	Step 4: Smash begins [Steps 5-7 smash sequence not shown]
Brief summary of metasystem generated, a conceptual system of actionable systems: • System of generating money before and during open gym: nine different kinds of revenue from a spectrum of activity, populations, relationships • System to provide security without hiring it: Productive activity (information, goods, and services) of community members to populate or block hallways. • System to attract labor to support foregoing activity and benefit larger community (multiple methods). • System to support school board policy deliberation including methods to address insurance liability and other legal issues.	Step 8: Synthesis at Metasystematic Order 12

The village group saw using the school for community recreation and other innovative purposes as one among many changes required to address the systemic roots of the loitering problem. Although there would be technical challenges in accomplishing the goal, it represents a relatively unchallenging proposition. Thus far, then, the illustrative purposes for which I have used the village case do not indicate the far more complex individual and social dynamics of *deciding how* to address interrelated complex problems with all the challenges they entail (Kernick, 2005).

When informed social capital is created, people's will to take informed action is strong (Andersson, in press; Inglis, 2006; Ross, 2001b, 2002, 2007). Yet, as my earliest one-at-a-time field testing of TIP modules indicated, people are frustrated if a process supported them to recognize complex causation about an issue of concern but did not continue on and thus support them to address it. Issues are hard to address when there is no single party to blame for a problem (e.g., a specific loiterer or landlord) and no single party's actions can fix the problem. To deal with social complexity, some kind of theory-driven, coordinated, collective effort is clearly necessary, one that includes sufficient structure to

anticipate and help people grapple with the inherent and predictable challenges they will face and have to make decisions about. I now leave the village case behind to introduce a social change theory and the role, general approaches, and opportunities in those next steps of complex decision making.

A Theory of Systemic Social Change

Motivated by recognizing the same set of perennial challenges as Kernick identified and the absence of methods to deal with them, at the time of the village case the TIP methods I had developed were derived from years of issue analysis and action research. Developmental psychology and my prior experience with the practice of public deliberation also informed two of the modules' designs. Further research combined with learning the MHC resulted in forming my own theories. My general working theory is that *there is a general, evolutionary nonlinear dynamics of increasing hierarchical complexity of performance in people, institutions, and societies (Commons, 2008; Commons & Goodheart, 2008; Commons & Ross, 2008; Ross, 2008b),* and that *we can design those very dynamics into our social change efforts.* In other words, we can intentionally operationalize evolutionary processes because we can embed their natural steps in designing our social processes (Ross, 2008a). When we do, I hypothesize the acceleration of our social evolution—with new performance capacities to create new forms of social good—*while,* and *by,* addressing our complex challenges (Ross, 2007). This is a general theory of systemic social change. In basic terms, it proposes that certain kinds of complexity-based approaches for working on complex issues will better serve our individual and collective efforts to create meaningful, cumulative and therefore systemic social change sooner than if the approaches were not used. Examples from the village case were anecdotal indicators of the effects of using a few such approaches.

Although at an earlier stage, my theory's origins lay in such anecdotal evidence collected over the years of developing and testing the methods that came to comprise the TIP process, this theory now has suggestive empirical support (Ross, 2007). In a small, pre-experimental study designed as a preliminary test of my hypothesis for increasing individual and group performance complexity, the binomial test results were significant at $p = .0039$, and the average effect size of related measures (Cohen's $d = 1.189$, $r = 1.499$) was considerably above the $d = .8$ large effect, closer to the $d = 1.33$ effect that "is generally too

large to require an experiment" (Cohen, 2001: 219). While the study design and sample size do not enable generalizations, these were robust results.

To be viable as well as testable, I believe a theory of systemic social change and methods to implement it should recognize the perennial challenges of decision making in the face of social complexity, and the vital role of decision making in bringing about systemic social change. In my theory of change, decision making dynamics of various kinds play the most instrumental roles of all. Although it is beyond my scope here to elaborate on that part of my theory, the remaining discussions introduce how I approach that idea in general terms.

The Role of Decision Making in Societal Entrepreneurship

To relate decision making to the first side of the earlier-sketched social entrepreneurship spectrum, we might say that three classes of agents would be making decisions: entrepreneurs, investors, and potential customers or clients who decide whether they will benefit from entrepreneurial products and services. On the other side of the spectrum, to relate decision making to notions of systemic change wrought by societal entrepreneurship requires a different framework and assumptions. Systemic issues invariably implicate social structures, policies, and many kinds of behaviors. Thus, to address them demands activity on the part of many different agents. Based on my analyses, the work needed to address a complex issue falls into three broad categories: voluntary (which includes entrepreneurial efforts), policy change and development, and deliberation (deliberation is a process of carefully weighing multiple approaches in order to make informed decisions, and occurs in both voluntary and policy efforts). Even the simple example given in Table 3 about using the school for community use indicated the role of these three categories in its proposed action systems. Each of these categories of activity involves a systemic array of agents that defies easy description and varies by the issue. This suggests a large number of people and institutions may need to make both decisions and behavioral changes before systemic change comes about.

None of us changes our behavior without a reason that makes sense and is doable. The first role of decisions in systemic change, then, is agents changing their behavior, sometimes including their

priorities, once they recognize how their actions or institutions may have helped construct or support an undesirable social condition, or once they learn how they could prevent worsening of the condition or help dissolve it. This is an important aspect of developing informed social capital. The second role of decisions in systemic change is to address problematic social, political, economic, and ecological issues. Kernick's inventory of characteristics basic to such issues was given earlier. The connection between decisions and such issues becomes clearer when issues are understood as disputes over ways of relating (S. Chilton, pers. comm., July 22, 2006) that must be resolved if issues are to be worked on at all. This is true whether the disputes seem latent, covert, or overt. Another role of decisions is in policy making at levels from local to national and international. Both complicating and improving that process, more and more, government agencies are required to engage the public for direction on policy.

All systemic change efforts should anticipate disputes and engage them proactively in decision-making processes because otherwise they are solid obstacles to change making. And because changes affect different individuals and institutions differently, in both beneficial and destructive ways, agents should deliberate about what those changes should look like and must then decide how to behave toward changes. Finally, analyses and decision-making processes can, and should, generate innovative ideas to address complex issues, and as indicated earlier, these involve increasing the complexity of individual and social performance. I posit all these reasons for decision-making activity as foundational for societal entrepreneurship. They motivate the methods described next.

Complexity Science-Based Decision-Making Methods

As a methodological response to take to new levels our capacities to analyze and grapple effectively with social complexity (Andersson, in press; Inglis, 2007, 2008a, b; Inglis & Steele, 2005; Ross, 2008c), TIP supplies a number of generic, content-free process-templates to help people address any issues of concern. The focus here is on the template for deliberative decision making. By introducing a few of its features, I aim to briefly indicate how new entrepreneurial opportunities should become evident in using this approach to deliberation and how it anticipates Kernick's challenges.

This template is a sophisticated theory-based method for framing issues. Here, framing means identifying viable, distinct approaches and the pros and cons of each. Although not widespread, this idea is not new: Kettering Foundation's National Issues Forum Institute (www.nifi.org) pioneered the practice 25 years ago, and a few other organizations use it, as well (e.g., Public Agenda, Everyday Democracy). That original form of issue framing is still unsupported by theory and continues to reflect material weaknesses I have previously critiqued (Ross, 2000; Ross, 2001a; Ross 2006a). In TIP, many more conditional tensions and perspectives are framed to reveal social complexity.

Further, in TIP it is recognized that to meet the demands of that complexity, each approach describes some kind of necessary but not sufficient types of action needed to address the issue. Thus, even this process of framing an issue surfaces new, systemically-necessary ideas. Although they will be contested in the course of later deliberation, that is where their necessary functions are honed more clearly and their value collectively recognized. That process helps create informed social capital—and a market for the new ideas. Later, as the outcome of their work, deliberators can integrate the disparate approaches into a new, comprehensive metasystematic approach they design. As in the earlier school building example, that metasystem will usually include voluntary and policy actions and some of them may require deliberation before they are undertaken.

To develop balanced resource material to support decision making, the TIP template walks users through a process of juxtaposing multiple perspectives and information to surface the advantages, consequences, and foreseeable tensions and disputes among them. This framing process, further described in Ross (2006a, c), prevents polarized debates that reduce complexity by pitting one solution against another, and produces a resource booklet to inform and structure deliberative decision making on the issue.

The list below of brief labels clustered together represents a generic pool of disparate types of preferences, perspectives, interests, and/or needs, further described in TIP materials. Issue framers draw from each cluster to develop issue-related content, that is, these underlie the various perspectives that are juxtaposed in the template to reveal tensions among them. They play legitimate roles in most issues and

require decision makers to take the perspectives of other stakeholders; for example, those who are impacted by an issue differently than others because they operate in different contexts and have different needs, interests, resources, or value systems.

- Survival, security, protection

- Attachment to place, group, or ideology and opposition to threats or "the other"

- Immediacy, opportunism, gratification

- Stability, norms, roles, legislation, regulation, enforcement

- Market-driven, strategic incentives, deregulation

- Health of "the system," collaboration, equity, network effects

This list derives from the combination of analyzing numerous issues and applying the Model of Hierarchical Complexity and social science research. The Model of Hierarchical Complexity measures and thus defines perspectives as systems (Commons, Rodriguez, *et al*., 2007). As a result, in MHC analytical terms, the listed clusters represent predictable *perspective metasystems* involved in and triggered by addressing complex issues. Expressions of each of them in real life have different orders of complexity, which theoretically informs their juxtapositions in the template. Although I do not develop the point here, this approach results in deliberators moving through transitions steps in their reasoning at higher orders of complexity. In the context of actual decision making these perspective metasystems indicate the existence of both needs and opportunities that exist to some extent within virtually every complex social issue. Therefore they are indicators for societal entrepreneurs to generate systemically-necessary ideas to fill "that which is missing" (Knowledge Foundation, 2008, n.p.) when implementing meta-approaches to work on the issue.

In earlier parts of this paper, I lightly addressed two of Kernick's universal challenges of social complexity. His remaining points are that decisions need to deal with (1) system goals that are in conflict, (2) a wide range of criteria to meet, (3) stakeholders with different perspectives and specialized knowledge, and (4) a mixture of motivations that make one-size-fits-all incentive systems ineffective. In the limited space remaining, it is not possible to include fulsome explanations and examples of how TIP's

design and use of these perspective metasystems anticipates and addresses Kernick's remaining points, but I offer a summary statement that may be augmented by referring to Ross (2006a, b, c) as well as by firsthand TIP experience.

Because of its grounding in analyses of complex issues, TIP's steps enable people to tease apart social complexity such that goals, per se, are treated as actionable issues unto themselves and thus are not placed in needless conflict with other goals. Instead of goals being in conflict, different approaches to achieving goals are deliberately positioned to surface their naturally conflicting tensions (via the perspective metasystems). Although it is not possible to demonstrate the correlation here, the perspective metasystems encompass decision criteria such as Kernick mentions, and many others as tailored to specific issues (e.g., appropriateness, efficacy, effectiveness, efficiency, equity, and affordability). Similarly, they anticipate stakeholders' diverse perspectives as well as motivations, and the issue framing and deliberative processes incorporate specialized knowledge to inform decisions. TIP's action system design materials, the perspective metasystems, and the meta-approaches developed out of deliberation facilitate recognizing where interventions and policy solutions need tailoring to agents' different and often-predictable motivations in different contexts. Thus, the integration of complexity-based and social change theories and methods introduced here appear to offer meaningful potentials to tackle the perennial decision making challenges Kernick so effectively summarized.

Conclusion

To look around the bend of the road ahead for societal entrepreneurship in this chapter meant covering a lot of territory. Sketching a spectrum of social entrepreneurship meanings at the beginning served to situate this contribution in the realm of systemic societal entrepreneurship in the Knowledge Foundation's sense. That provided the context to introduce concepts, theories, and methods that assume a broad range of societal agents, many kinds of activity, and social and behavioral complexity.

Using the metaphor of a systemic social change currency, I advocated for the framework of four coins to show each of their essential roles in purchasing meaningful and sustained social change: generating systemically-necessary ideas, creating informed social capital, increasing the complexity of

individual and social performance, and using complexity-based methods. With the backdrop of earlier discussions behind us, this framework's logic has more context, as follows. The generation of systemically-necessary ideas is both product and agent of *informed social capital.* Informed social capital is both product and agent of *increases in the complexity of individual and social performance.* In addition to their natural occurrence over time, more complex performances can be products of sophisticated complexity science-based methods that generate systems thinking, complex understandings, and systemic action. Thus, coming full circle, there is also a product-agent relationship between increased individual and social complexity and generating *systemically-necessary ideas*. These three product-agent relationships were illustrated earlier in Figure 1 and represent a metasystem. Its component systems are *functional social processes—*those of generating, creating, and increasing—each of which produces outcomes *in interaction* with the others. These are *systemically-connected means and ends* as indicated not only by parallel arrows in the figure but throughout the foregoing discussions. I hope such a framework proves useful in theory- and practice-building in the field of societal entrepreneurship.

Case examples illustrated social complexity as well as my theory and methods of systemic social change: that with complexity science-based methods, interactively improving and changing *while and by* working on complex social issues are potentials we can accelerate and thus take capacity building and systemic action to new levels.

I hope a major implication of this chapter is that it becomes even more apparent that societal entrepreneurship "has complexity science written all over it." Specifically, I hope it is apparent that there are useful concepts and scientific and practical theories and methods that should prove helpful in advancing the field and its effectiveness.

Afterword

As I was finalizing this chapter, I received word that Sweden's Knowledge Foundation announced the results of its societal entrepreneurship grant competition for three-year pilot programs. One of the several winning proposals was submitted by an interdisciplinary team of Swedish researchers that designed its program around using *The Integral Process for Working on Complex Issues.*

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