



The Innovation Society and Social Innovation

David A. Lane, European Center for Living Technology

Deliverable 2.2





1. Overview

INSITE can be viewed as an extended conversation, with a very heterogeneous set of participants. The conversation is about the relationships among innovation, sustainability and ICT. All the threads of this conversation share a common starting point: the conviction that innovation¹ – commonly regarded as the hope for *salvation* from our society's sustainability crises – is in fact complicit in *producing* these crises. In section 2 below, we present an argument supporting this conviction.

When INSITE started in 2011, both *innovation* and *sustainability* were already omnipresent buzzwords in scientific, political and popular discourse. During the period of INSITE's activities, another such buzzword burst into prominence: *social innovation*. The INSITE conversation paid a lot of attention to social innovation: attempting first to understand what people meant when they used the term; and then imagining what social innovation might have to offer as a way out of the innovation-sustainability dilemma. We found that in practice it meant a lot of different things, some of them potentially useful to help our society exit from the dilemma – and some just part of the problem.

The rest of this essay summarizes some of the ideas about social innovation and its policy implications that emerged from the INSITE conversation. In section 3, we present a view about what social innovation *ought* to mean. This view highlights the importance of what we call *dynamic evaluation* in the social innovation context. The concept of dynamic evaluation is explored in section 4. In particular, we underline the role that ICT can – indeed must – play in developing an effective dynamic evaluation methodology, which in turn is a key element in imbuing social innovation with policy significance.

Many threads in the INSITE conversation, including those pertaining to dynamic evaluation, are woven around the concept of *narrative*. To see why this is so, section 5 looks closely at narrative: what it is and why it is important in the social innovation context. Section 6 then introduces a particular narrative structure, which we call The Happy Project. The Happy Project frames

¹ To be more precise: the way in which our society organizes its innovation processes.



stories about “successful” projects, highlighting the role technique plays in “resolving” the social problems these projects set out to address. We believe that stories instantiating The Happy Project are ubiquitous in our society – so much so that people rarely note the narrative logic that make these stories causally compelling.² Indeed, stories work best when their underlying narrative logic remains unnoticed and hence not up for discussion: narrative *compels conviction*, rather than *convinces*. We conclude the essay by identifying some important issues related to social innovation and policy that are implied by the Happy Project’s narrative logic.

2. Innovation cascades and the Innovation Society

What do we mean by *innovation*? In principle, it could refer to any kind of novelty, but currently it is mostly used in reference to new *artifacts* – things made by human beings for the use of (usually other) human beings. Even in this context, the word has two very different meanings: it can refer to the *processes* through which new artifacts are conceived, designed, brought into production, introduced to the market and then integrated into patterns of human social interaction (as in, “The EC needs to do everything it can to encourage innovation.”); or it can refer concretely to a *particular* new kind of thing (as in, “The Ipad was a great innovation!”).

The first of these meanings is obviously related to the second, in the sense that innovation (first sense) processes are necessary for creating an innovation (second sense). In addition, these innovation processes are associated with *other* kinds of transformations as well. In particular, they are nearly always accompanied by changes in how people *think* about things and even themselves and each other (think about Facebook!) – as well as changes in how people *interact* with one another (think about computers or telephones and the effects of their introduction on business organization and activities!). That is, innovation processes entangle the *introduction of new artifacts, transformations of social organization, and changes in attributions* people make about the identity of agents (that is, people and organizations) and artifacts. To put it a bit more succinctly, in the language of Lane et al. (2009), innovations can induce *cascades of changes in*

² It is this narrative logic that gives sense to the words *successful* and *resolving* in the second sentence of this paragraph.



agent-artifact-attribution space. The INSITE conversation started from the presumption that the proper unit of analysis for innovation processes is these cascades – *not* individual innovations.

Innovation cascades have two important features. The first is that they are characterized by *ontological uncertainty*. That is, it is often impossible to predict what kinds of new patterns of social interaction, new attributions and new artifacts (even new agents!) will emerge – or who will be affected by them, and how.

The second important feature of innovation cascades is that they may be driven by a positive feedback dynamic, which we call *exaptive³ bootstrapping* (Lane, 2011). Exaptive bootstrapping features a particular kind of attributional change, the new *attribution of functionality*: that is, a new idea about something that human beings *could* do, if they had an appropriate artifact *with which* to do it.⁴ We can describe the exaptive bootstrapping dynamic as follows:

1. New artifact types are designed to achieve some particular attribution of functionality.
2. Organizational transformations are constructed to proliferate the use of tokens of the new type.
3. Novel patterns of human interaction emerge around these artifacts in use.
4. New attributions of functionality are generated (by participants or observers), which describe what the participants in these interactions are obtaining, or might obtain, from them.
5. New artifacts are conceived and designed to instantiate the new attributed functionality.

Since the fifth stage is identical to the first, we have a bootstrapping dynamic that can produce cascades of changes in agent-artifact-attribution space. These cascades inextricably link

³ For introductions to and references about exaptation, see Gould (2002, chapter 11), in the biological context, where the concept arose, and Villani et al. (2007, plus discussion), in the sociocultural context. Essentially, exaptation refers to the taking on of new functionality by existing structure, an essential element of step 4 of the exaptive bootstrapping dynamic.

⁴ The notion of “doing” here should be interpreted very broadly. For example, the idea that people might value a colorful computer is a new attribution of functionality that at one point was a boon for Apple.



innovations in artifacts, in organizational structure, and in attributions about artifact and organizational functionality.⁵

Over the last century, positive feedback innovation dynamics, and new attributions of functionality, have become ever more important in the organization and collective imagination of Western society. New organizational forms have emerged, whose principal functionality is to implement each step in the exaptive bootstrapping dynamic. For example, over the past 140 years, a plethora of engineering professions have arisen that support the training of, provide collective memory for, and establish communication networks among, people whose work consists of designing artifacts to deliver a specified functionality (step 1 in the exaptive bootstrapping dynamic). Many of these engineers are employed in industrial and state-sponsored R&D laboratories, a 20th century organizational innovation; over the past half-century, and in

⁵ To illustrate the stages described, consider the following example. In this example, stage 1 corresponds to the printed book, and stage 5 to the printed advertisement. The linking stages can be summarized as follows. Before printing, almost all manuscripts were produced in response to orders from a commissioning agent. Not surprisingly, this was initially the case also for the first printing firm, established in Mainz using the printing technology developed by Gutenberg and his co-workers, which was headed by the financier Johann Fust and the printer Peter Schoeffer.⁵ Fust and Schoeffer had one important client, the archdiocese of Mainz, which commissioned many books from them including religious and liturgical works, references in canon law, and texts for the new humanistic school curriculum in which their clerical workers were trained. Fust and Schoeffer realized early on that they could probably find purchasers for additional copies of these books. They faced the problem of how to reach these potential purchasers and convince them to buy the printed books. One organizational solution to this problem that the firm explored was to hire traveling representatives, which constituted stage 2 of the exaptive bootstrapping cycle. These representatives of course visited fairs and festivals, but they also stopped at towns along their route. When they did so, they would have to make known to potential purchasers their whereabouts and their wares – stage 3. One approach that the firm took to this problem was exapted from their primary ongoing activity, in stage 4: they conceived the idea of using printing, the same technology they employed to produce their wares, to enhance distribution. The new artifact type they developed (stage 5) was the printed advertisement. Their earliest surviving printed advertisement dates from 1469. It is a one page broadside, which begins as follows: “Those who wish to purchase for themselves the books listed hereafter, which have been edited with the greatest care and which are set in the same Mainz printing type as this announcement ... are invited to come to the dwelling place written in below” (quoted in Lehmann-Haupt, 1950, p. 86). Thus, the advertisement attests not only to the nature of the wares (the list of books that it provided), but also to their quality (the “same Mainz printing type as this announcement”). Note that the name of the inn where the representative could be found had to be hand-written, as it changed with time and town. The printed advertisement instantiates the new attribution of functionality: the possibility of mass-circulating information about a product to recruit potential purchasers. Other instantiations of this attribution, for other classes of products, followed, and the circulation of printed catalogues soon became an important means of disseminating product information and organizing exchange activities.



particular the last two decades, their work is increasingly enabled by research that derives from new forms of formal and informal industrial-university partnership. Passing to step 2, the advertising industry over the last century has played a key role in translating new attributions of functionality into new needs, which over the last several decades are increasingly centered not on physical or biological requirements for sustenance, shelter or comfort, but on artifact-mediated attributions of individual and social identity. And the marketing profession over the last 50 years or so has developed increasingly sensitive instruments for uncovering new uses for existing artifacts (step 3), converting them into new attributions of functionality, and discovering agents who might conceivably come to engage in patterns of interaction with artifacts and other agents in which these new functionalities will provide them with the satisfaction of new needs (step 4).

By providing organizational scaffolding for the component processes of the positive feedback dynamic, these innovations force the rate at which its cycles are enacted, generating innovation cascades that move with ever-increasing velocity. Moreover, the successive waves of innovation in transportation and communication technologies that have taken place over the last two centuries, and the transformations in economic and political organization to which they have in large measure contributed, have generated a corresponding expansion in the spatial scale over which innovation cascades operate. As a result, Western society has become increasingly dependent on innovation: by the last several decades of the twentieth century, it had become the Innovation Society.

Around the turn of the millennium, the Innovation Society was in an optimistic mood. The Cold War was over, and democracy and capitalism had won. An ideology emerged, which provided an explanation for this victory and a prescription for constructing the future. This ideology takes into account two principal categories of social actors: *consumers* and *entrepreneurs*. According to the ideology,

- Western society's superiority lies in its capacity to *innovate*: that is, for entrepreneurs to bring to market new *artifacts* – products and services – that enrich the lives of their consumers.
- Innovation is the motor of economic *growth*, and economic growth means more *jobs* – and hence more wherewithal for consumers to buy artifacts that enhance the quality of their lives, and profits for entrepreneurs to invest in further innovation.



- The price to pay for not innovating, or for subordinating innovation to other values (like culture or social justice), is prohibitively high: competition, at the level of firms and national economies, dooms dawdlers to failure, which translates into economic decline and social chaos.
- Thus the primary role of public policy is to enhance economic growth, as measured by GNP, by priming the pump of innovation.

This Innovation Society ideology accords the word “innovation” the highest possible moral valence. The ideology has become nearly hegemonic among opinion leaders in Western society over the past decade and a half. In particular, it provides a shared background for almost all participants in Western public policy debates in this period – and hence delimits the terms under which these debates are carried out.

Though the Innovation Society ideology is still very much alive, the optimism that engendered it has eroded badly. Western society has been rocked by a series of crises, from financial collapse through global warming to youth unemployment. Paradoxically, most of these crises are unanticipated consequences of the very innovation cascades that are central to the Innovation Society ideology’s prescription for social transformation. The ideology assumes that innovations (that is, new artifacts) solve social problems – it ignores the fact that every such “solution” has the potential to generate many new problems! As we’ve seen, this cycle of problems-solutions-problems is endogenous to Innovation Society dynamics, which provide no means for collectively determining the direction of social change or for reacting to negative social consequences of the integration of new artifacts into patterns of social interaction, except ... *more* new artifacts to deal with these consequences once detected, artifacts that must prove their value in the marketplace.

It is becoming increasingly obvious that, despite its undeniable creativity in generating novelty, the market is not quick in detecting the negative consequences of innovation cascades, nor is it efficient in responding to them when it does detect them. If the lesson of the climate change crisis is not sufficient to drive this point home, consider the current obesity epidemic, particularly in the U.S., which many in the public health community identify as the principal public health challenge of the 21st century. This epidemic arose from cascading innovations in agriculture, producing a huge surplus in cheap available calories; processed foods and new distribution channels for them, providing higher returns to producers and distributors from the cheap calorie



surplus; and changing patterns of consumption that emerged in response to these innovations. The market indeed responded to these innovations with further cascades of innovations, in the diet and pharmaceutical industries, among others; many of which have produced huge market successes, but no discernible effect in decreasing the epidemic.

The political response to crises, once detected, is very constrained by the Innovation Society ideology. It runs through innovation policy, a high priority for governments at all levels, from the local to the international (including European). For the most part, these policies are designed to prime the pump of invention: that is, create a favorable environment for firms to bring new artifact types to market, leaving to the market itself the task of sorting out which of these have value and which not. To deal with crises, innovation policies try to bias the pump-priming towards the invention of new artifacts whose functionality will ameliorate in some way the crisis' negative consequences. There are in general many possible pathways through which such a strategy could be implemented (think of climate change: policies designed to encourage innovation in alternative energy technologies range from emission regulations, to carbon taxes, to public funding for or incentives for private investment in targeted R&D). Political discourse under the Innovation Society ideology is about which of these strategies to pursue. *It does not address the more fundamental question of how to organize processes that will pro-actively steer innovation cascades in socially positive directions.* Our society needs a find a way to get out from under the Innovation Society ideology, to develop new kinds of processes for guiding the direction of social change.

3. Social Innovation: What it is, what it should be

Ten years ago very few people were talking about social innovation; five years ago, President Barroso put social innovation on the European Commission policy agenda; now social innovation has become a bandwagon, attracting attention from many national and local governments, inspiring many young people to explore new career opportunities that combine entrepreneurialism with the desire for social relevance, challenging traditional patterns of social engagement as practiced by cooperatives and civil society organizations. But “social innovation”



is more a rallying cry than it is a coherent vision or strategy for societal level social transformation. This section puts forward a proposal for such a vision.

The increasing call for social innovation should be seen as a response to the Innovation Society's sustainability dilemma. As a movement, social innovation is currently very heterogeneous, so one must be cautious in making general statements about it. But it is probably safe to say that for most of the people and organizations that are riding its bandwagon, social innovation represents a response from *within* the Innovation Society, in the sense that its proponents – policy-makers, practitioners and academics – share key Innovation Society assumptions about what constitute innovation dynamics, even with the modifier “social”. To begin with, they focus on individual “innovations” – new products or services. In the narratives they tell about social innovation, the key figure in the dynamics of change is the social innovator or entrepreneur – the person (or organization) that conceives of the innovation and organizes the processes through which the innovation will be realized and adopted by its targeted group of users.

What makes the innovation “social” in these narratives is that the social innovators' primary aim is to generate positive social effects through the adoption of their innovations.⁶ As a result, the dynamics of the innovation process will be somewhat different than if the primary aim were just to generate profit, as in the Innovation Society ideology. Three such areas of difference attract the most attention in discussions among social innovation practitioners and academics: (1) some way to obtain financing must be found, which will attract funds from sources that are not just interested in maximizing return; (2) the project needs to be “sustainable” – which generally is taken to mean that at some point it must become self-financing to cover its operating costs; (3) to maximize its social impact, the project must find a way to “scale up” – which generally means to be adopted by the largest possible set of potential users (which, in the case that the initial project is confined to a particular territory, might mean recruiting other social innovators to initiate similar projects in other areas – perhaps with modifications tailored to territorial specificities).

These are all important and interesting issues. However, they do not address what the INSITE conversation has identified as the really crucial question about social innovation. This question is systemic: can social innovation practice contribute to help us move beyond the Innovation

⁶ At least for the intended users of the innovations, perhaps spilling over to some larger social constituency.



Society and its endogenous crises? Or is social innovation destined to be a marginal phenomenon, supporting rather than supplanting the Innovation Society, offering a teacup to bail out the Titanic?

The focus on individual innovations is precisely what makes the Innovation Society's endogenous crises so difficult to detect and address. If we consider the problem instead from the point of view of the ideas sketched in the previous section, two important implications emerge. First, *all* cascading innovation processes are “social,” in the sense that they induce changes in interaction patterns and hence social organization: from this point of view, the modifier “social” in social innovation is either redundant or misleading. Second, the ontological uncertainty that inevitably surrounds innovation cascades imply that the social effects of innovation processes are highly unpredictable: the innovator/entrepreneur's intention to initiate a project that moves in a socially positive direction is no guarantee that the project – even if it manages to obtain financing, becomes sustainable, and “scales up” – will have effects that are socially positive, never mind those that the innovator envisioned!

To address systemic issues like these, we need a concept of social innovation that does not start from the Innovation Society ideology's way of looking at innovation processes and their dynamics. To be useful, such a concept must also provide guidance for building a social innovation practice that can take us beyond the dilemma posed by the Innovation Society.

What might such a concept look like, and what might it imply about the practice of social innovation? Before addressing these questions, we need some terminology. At the micro-level, social innovation consists of *projects*, each initiated by a group of social innovators that we will call the *project team*.⁷ Projects, if they lead to anything, induce an *innovation cascade*. As the cascade evolves, it will induce a series of transformations in social organization – new patterns of interaction among social agents. We will refer to the set of individuals and organizations that are affected by these transformations and enter into the new patterns of interaction as project

⁷ The project team may change its membership during the course of a project – according to rules it itself establishes.



participants. What makes an innovation process “social”⁸ for us is the role that participants play in determining the direction of the change process induced by the project – and in particular, the relationship between the project team and project participants.

We now present four principles that delineate aspects of this relationship and thus provide a foundation for a theory of social innovation.

Principle 1. SOCIAL VALUES, NOT JUST ECONOMIC VALUE, should be the principal drivers of innovation projects.

In the Innovation Society, the social effects of new products and services are essentially a by-product: successful innovation depends on whether consumers buy the new artifacts in sufficient quantities to provide the entrepreneur the profits (or borrowing privileges) that allow his company to continue to churn out more of them. How consumers use the new artifacts is up to them; of course, the company might provide copious hints, embedded in the artifact design and in the advertising it sponsors. What social effects follow on these patterns of use don’t affect the entrepreneur’s next moves – except insofar as they suggest new innovative possibilities. If the social effects are completely different from what the entrepreneur envisioned (and they usually are: just think of internet and wireless telephony!), the responsibility for dealing with any *negative* impact doesn’t fall on either the entrepreneur or the users, but society at large.

In contrast, the participants in social innovation processes must take into account all the effects of their interactions, try to identify those that have socially negative consequences and take remedial actions. This is not easy, for three principal reasons – all of which have their roots in the fact that unlike economic value, social values are plural! The first two reasons have to do with the question, “Which values?” while the third responds to a different question, “Whose values?”

The first difficulty is that, even with respect to the values of a single individual, some consequences may be positive with respect to some valuing principle and negative with respect to

⁸ Whatever the type of change it is intended to bring about, from the production of a new artifact to transformations in public or private governance structures and processes; and whatever relationship the project might develop with the public sector, the market, and civil society



others – and the same may appear to be true for every possible remedial action. The second is that ontological uncertainty makes it impossible to define a priori all the social consequences of the innovation cascade the project induces – and even the key social values that a given individual would bring to bear to evaluate these consequences. Indeed, one of the consequences of an innovation cascade might be that individuals change their values on the basis of their experiences arising from the cascade!

These two difficulties imply that social innovation imposes a much higher requirement for *self-reflexivity* on the part of their participants than does the Innovation Society ideology. Participants must make themselves aware of all the consequences, to themselves, other participants, and even society at large, which the innovation cascade induced by the project is producing. Then they need to reflect on which of their values are affected by these consequences – and what they might do next that might help the cascade move in a positive direction with respect to these values, including introducing trade-offs when different values provide contrasting judgments on the same consequences. This work cannot be reduced to keeping track of the values of some pre-defined social parameters! It requires a dynamic evaluation process, in which participant identities, consequences and values must be continually monitored – and the results of the evaluation fed back into the stream of interactions that constitutes the innovation cascade.

Principle 2. EVERYONE COUNTS: The processes that guide the evolution of innovation projects must take into account the consequences to and values of *all* the participants in the project.

This principle address the second question we posed above, “Whose values?”. It responds by invoking a social value: *democracy*. Here, we invoke democratic principals within the context of individual projects: the values of *everyone* affected by the project must be sought, acknowledged and taken into account in determining appropriate action, by all the participants whose interactions construct the cascade of changes initiated by the project. This principle imposes a further obligation to the dynamic evaluation process: it must seek to make explicit information about consequences and relevant values from all project participants. Moreover, it must not only *elicit* this knowledge, it must enable its *communication* among participants, so that they might all



become aware of how their actions (past and future) affect others and how these others feel about these effects. Only such a process can provide the possibility that *empathy*, rather than *self-interest*, become the basis for interactions among project participants (current and potential) – another social value that the Innovation Society ideology ignores, but which ought to be central to social innovation.

Principle 3. SOCIAL INNOVATION IS DISTRIBUTED POLICY-MAKING (by – DOING).

If we think of policy as the means by which a society tries to guide the transformations that construct its future, then it is very misleading – certainly incomplete – to think of policy-making as a *centralized* activity, with policy-makers located at the decision points of governments, from the local to the European levels. The key processes through which our society transforms itself are distributed among many agents, operating at different levels of organization. For example, in the Innovation Society, the companies that develop and market new products and services have had a much more important role in leading our society’s change processes – for the better as well as for the worse – than any of our political leaders and so-called policy-makers (especially given the limited scope assigned to them by the Innovation Society ideology). Given the omnipresence of ontological uncertainty, it could not be otherwise: centralized policy-makers simply cannot have sufficient knowledge about how change processes will play out to imagine that they can “decide” – and then leave to a host of agents in the public administration, the private sector and throughout civil society to “implement” the resulting policies. The consequences of policy-makers’ decisions (and the actions taken by others to implement them) just aren’t predictable, and all the agents who engage in constructive interactions – whether they be viewed as primarily “economic,” “social,” or “cultural” – play essential roles in making policy by *enacting* it.

From this point of view, every social innovation project is an experiment in policy-making by - doing. To be useful in a policy sense,⁹ the experiences from all these experiments must be collected, interpreted and circulated through the social innovation world and the society of which it is a part. This work cannot be done just by local interactions at the micro-level. Rather, it must

⁹ That is, to help serve as useful guides for future constructive interactions, by other agents in other contexts.



be supported by *meso-level scaffolding structures*. The Innovation Society provides many examples of scaffolding structures, including institutions like trade and professional associations, standards organizations and meetings like the World Economic Forum. Consider Silicon Valley, the mythical heart of the Innovation Society. Silicon Valley is not just a geographically co-located set of innovative firms. Rather, the interactions among Silicon Valley individuals and firms depend heavily on such scaffolding structures as Sand Hill Road venture capitalists, who offer connections and advice as well as financing to Silicon Valley start-ups; area universities, especially Stanford and Santa Clara, who provide research seminars and consultancies to Silicon Valley firms and specialized training for Silicon Valley engineers; the Santa Clara County Manufacturing Group, which offers another important scaffolding functionality – *lobbying* government policy-makers about legislation and regulatory activities that impinge upon the activities of Silicon Valley firms.

If social innovation is to play a key role in moving us beyond the Innovation Society, a set of social innovation meso-level scaffolding structures will have to emerge that can

- collect, and promote reflection about, the experiences of micro-level social innovation projects and organizations;
- feed back the results of these reflections to help guide the interactions among participants in new and on-going social innovation projects;
- mediate between micro-level social innovation projects (and organizations) and macro-level policy-making entities in the public and private sector on issues related to possibilities for and direction of social change.

These functionalities will have to rely on a careful, complete and standardized process for evaluating what happens in individual micro-level social innovation projects – posing further requirements on dynamic evaluation, to be discussed in section 4 below.

Principle 4. THE TASK OF SOCIAL INNOVATION IS TO MOBILIZE ENGAGED CITIZENS TO CONSTRUCT A SOCIALLY SUSTAINABLE FUTURE.



The real promise of social innovation lies in the possibility that it can lead to a change in the way most people in society are regarded – and regard themselves. By their involvement as participants in social innovation projects, their primary identity becomes affirmed as *citizens*, not the role of consumers to which the Innovation Society ideology relegates them. As citizens, they take on the responsibility for participating in the process of constructing their society’s future – a future that, unlike what is offered to them by the Innovation Society, need not be marked by a succession of crises, the brunt of which they will bear. If social innovation really takes on the challenges posed by the first two principles, then participation in social innovation projects is an active, not a passive role, in which the values of each participant count and the obligation for collective self-reflection about the social consequences of interactions in which one engages can produce a sense of self that is not just based on the artifacts one arrays around oneself. With a proliferation of social innovation projects, more and more people will be mobilized as engaged citizens, and this experience will lead them into participating in, even initiating, more social innovation projects that will emerge from the innovation cascades such projects generate. This is the deepest meaning for “scaling up” social innovation – and in it lies the hope for the construction of a socially sustainable future.

These four principles imply three strategic requirements for an action agenda in social innovation:

- **At the *micro-level*, to develop a process for the *dynamic evaluation* of social innovation projects.** To elicit information about consequences and values for all project participants and to use that information to align the participants towards coordinated action, such a process would need to be supported by ICT tools that help participants describe, represent and communicate their individual experiences and use this information in real time to align directedness among participants and generate actions consistent with that directedness. Without such a process and tools, the possibility of learning from social innovation experiments and building a culture of social innovation is much diminished. A series of retrospective “success stories” is a very poor substitute, but it is where the social innovation community seems to be at present! Section 4 below describes some ideas about what an effective dynamic evaluation methodology might be – and about its implications for the policy process.
- **At the *meso-level*, to develop scaffolding structures that allow micro-level projects to learn from one another’s experiences, establish links among them that are likely to**



- lead to generative relationships, and to mediate between the social innovation world and macro-level entities in the public sector, as well as with the corporate world and the world of civil society organizations.** Social innovation projects will in general cut across the (rather porous) boundaries between these worlds, and the issues that arise from this boundary crossing are likely to affect many different projects in similar ways, so that meso-level mediation is likely to be both more efficient and more effective than dealing with these issues project by project.
- **At the *macro-level*, to construct a compelling narrative that makes clear that we must move beyond the Innovation Society – and highlights the role that social innovation must play in bringing about the necessary organizational and cultural changes to make it happen.** The Innovation Society is already developing fissures, and the hold that its ideology has throughout our society is weakening. It is difficult to imagine that we are not near to large-scale changes in the way our society thinks about and organizes its transformation processes. Can we marshal a collective response to the Innovation Society's endogenous crises dilemma that has some chance of leading us towards a socially sustainable future? Certainly the probability that we can do so is much enhanced if we can envision a way out – and if that vision can take the form of a compelling narrative, which provides us with a common directedness, proposes roles we can enact, and in so doing coordinate our actions to lead us towards a socially positive denouement. Such a narrative could serve as a kind of cognitive scaffolding structure to support the construction of a society whose transformation processes are organized through social innovation as described in this document. We currently lack such a narrative – but the experiences we gain as we implement the micro- and meso-level strategies we just described could provide us with material from which such a narrative might be constructed. Section 5 below provides some background on narrative and its uses that make the need for a macro-level social innovation narrative more transparent.

4. Dynamic evaluation

In this section, we sketch an approach to implementing the ideas about dynamic evaluation introduced in section 3 above. This approach is currently under development in the DG Connect research project MD (Emergence by Design), an INSITE spinoff. The approach assumes that one



or more *dynamic evaluators* will be associated with the project team of every social innovation project. We will say more about the identity of dynamic evaluators later in the section, after we have described the *goals* of dynamic evaluation, the *tasks* dynamic evaluators will be asked to perform, and the *tools* they will have available to help them perform these tasks.

To evaluate a project means to document its results and judge their value. The aim of a social innovation project is to bring about socially desirable transformations in the way in which agents (and artifacts) in a society interact. Thus, the *changes* in patterns of interaction induced by the processes set in motion by the project are the *results* that need to be documented in its evaluation. In this sense, the evaluation of a social innovation project is immanent in the project itself (through the change processes it induces)! Consistently with Principle 2 above, the judgments about the social desirability of these changes must reflect the values of all project participants. These considerations lead to the first goal of dynamic evaluation: *to document the changes in the patterns of interaction induced by the project and the judgments of social desirability that project participants make about these changes.*

There is no reason in principle why this first goal should require an on-going evaluation of the project: a snapshot of the zones of agent-artifact-attribution space affected by the project, at the time in which the project is declared concluded¹⁰, compared to a snapshot of the relevant zones at the beginning of the project could suffice.¹¹ In contrast, the second goal requires that the evaluation process follow the project as it unfolds in time: *dynamic evaluation should provide useful feedback to project participants.* That is, the dynamic evaluation should provide the project team and other participants with information (facts and interpretations), which can help these agents follow the formation and development of interaction patterns induced by the project,

¹⁰ Cascades don't have a "natural" conclusion – they may keep on producing ripples in (perhaps unexpected) corners of agent-artifact-attribution space for a long time. But projects do get declared concluded – by the project team, or funders, or whoever has the permissions to ask for an accounting of "what happened" as a result of the project. Here we are referring to one of these declared conclusions (of course there can be more than one!).

¹¹ Obviously this ignores the methodological problems involved in determining just what those zones are. In particular, what count as relevant zones at the beginning of the project depend on what happens during the course of the project: whatever agents or artifacts get recruited as participants during the project will have a history before the time of their recruitment that affects how they will impact and be impacted by the change processes induced by the project. So the "before" snapshot cannot be made until "after", but relevant judgements of social desirability for the status quo ante may be so altered as to be unattainable ex post!



assess the values they assign to consequences of these interactions, and engage in new actions that they believe are likely to move in what they regard as a socially positive direction.

These two goals can be achieved through the following six tasks that dynamic evaluators should accomplish:

1. **Collect *material* that is relevant to the change processes set in motion by the project.**

This material can take a variety of forms, including reports and articles, interview transcripts, measurements on socially relevant variables, meeting notes, even audio and video registrations of project related events. For later use, the material needs to be archived, and some of it inserted into an appropriate database. Collecting the material will require the use of techniques from history, anthropology, and perhaps other social sciences; processing it will require methods from statistics and computer science.

2. **Construct *maps* of the zones of agent-artifact-attribution space on which the project impacts.** Obviously, these maps will change with time, as the relevant zones undergo transformations induced by the processes set in motion by the project. The dynamic evaluation should map these changes through time. Each map should represent the following information for a particular period in the project's history:

- a. WHICH agents and artifacts are playing a role in project-induced interaction streams.
- b. WHAT KINDS of interactions are taking place among these agents and artifacts.
- c. WHICH transformations are these interactions inducing in the structure of agent-artifact space.
- d. WHAT attributions of identity participants assign to other agents and artifacts in the relevant zones of agent artifact space.
- e. WHAT attributions of value participants attach to the transformations that the project is inducing.

These maps help orient the project team and other project participants “spatially” to the project as a cascading transformation process. The next task extends this help with respect to temporal dimensions.



3. Develop *narratives* that describe from different points of view how the processes set in motion by the project are playing out – and in which directions in agent-artifact space they are moving. Relevant points of view include those of members of the project team, other project participants, and the dynamic evaluators themselves. What we mean by “narratives” and why they are important data to collect will be discussed in section 5 below. Suffice it to say here these narratives, even when they are not explicitly formulated, play a key role in generating participants’ actions. By making them explicit, participants can assess the *coherence* (in the sense of connecting present context and contemplated action with desired future directionality) and *completeness* (in the sense of the capacity to incorporate without loss of narrative logic additional information about relevant events and entities from the dynamic evaluation database) of the narratives that guide their project-related interactions.
4. Alert the project team to *divergences* as they arise. Divergences can take a variety of forms. They can be about facts or interpretations discovered by the dynamic evaluation that contradict the expectations of the project team; they can be discrepancies between different participants’ guiding narratives, which are producing or will produce misunderstandings about each others’ actions that can impede the project’s development or even lead the project into socially undesirable pathways; they can be differences in interpretations or values among participants, which if ignored might lead to conflict, but if made explicit might provide the basis for modifications based upon empathetic understanding, providing possibilities for aligned directedness and joint action. Possible remedial actions when divergences emerge in a dynamic evaluation may involve serious risks for a project – from simply wasting a lot of time and energy in fruitless or unnecessary consultations all the way to project-destroying explosions. Evaluating these risks and taking appropriate action is a governance role, procedures for which must be established from the beginning of a project (and successively modified when judged necessary) by the project team.
5. Provide *feedback* to project participants and structure *consultations* among subsets of project participants to determine socially desirable directions for transformations in agent-artifact space and possible interactions that might help lead towards these directions. The project team will determine policy for which type of feedback, in which form, will be provided from the results of tasks 1-4, with what frequency. Obviously,



regular and timely feedback, along with opportunities for discursive interactions by project participants with respect to this feedback, is essential to realize the second goal of dynamic evaluation. ICT tools, as discussed below, are essential for successful completion of this task.

6. Produce *project* narratives, with links to material in the project databases. The narratives in task 3 are the stories that participants enact as they engage in project-related interactions. They are always *in medias res*, serving as they do to bridge the past to a future under construction by present actions, as described in section 5. In contrast, project narratives tell the story of a project, from its beginning through to an end. The aim of a project narrative is to make retrospective sense out of what happened in the project, by providing a coherent and compelling account of how various kinds of participants were recruited into the project, what kinds of interactions they engaged in, and what transformations these interactions produced.¹² Project narratives constitute a “final evaluation” of a project. As such, they communicate a shared vision (or, in some cases, several different visions) to project participants about what they experienced and what it meant. Perhaps more importantly, they can be exported to:
 - micro-level social innovators, who might like to launch projects in some way similar¹³ to the narrated project and who are seeking to construct a guiding narrative for their project team that shares the structure of the exported project narrative¹⁴;
 - meso-level social innovation scaffolding structures, who seek to infer abstract elements of narrative structure from collections of project narratives, which inferences will allow them to provide (both to micro-level and macro-level agents)

¹² Section 6 describes the structure for one particular type of project narrative, which we call The Happy Project, following the logic of Tolstoy’s claim that all happy families are alike, while each unhappy family is unhappy in its own way. Rarely, alas, will any real project narrative conform to The Happy Project narrative structure; but various kinds of narrative structures for less happy projects arise naturally from variants “gone wrong” of one or another scene from The Happy Project.

¹³ Or dissimilar. See the next footnote.

¹⁴ Or deviates from it in some particular way. Negative examples can be as valuable as positive inspirations when assimilating others’ experiences.



ideas about how to bring about particular kinds of social change in particular kinds of social contexts; and

- macro-level policy-makers, to provide motivation to integrate social innovation and distributed policy-making and –doing into their policy repertoires.

Project narratives should have a hierarchic structure, in the sense that each scene in the narrative can be expanded into a narrative of its own, providing in this way ever-more detail about what actually happened in the project. Moreover, the project narratives should be linked to the project database, allowing any interested party to check for narrative completeness – in the same way that an historian provides footnotes to the sources that document the facts she reports or support the interpretation she takes from others. By providing stories at many different levels of granularity, which fit together in a narratively coherent way, different users of project narratives can arrive at the level that is most appropriate for their particular needs. This is particularly important, since no social context is identical to another. Abstracting up to a particularly high level of granularity and boring down to a particularly fine level can *both* be useful as one seeks to understand which relevant lessons might, and which might not, be learned from any particular social experience, about another one.

We now turn to a discussion of *ICT tools* that dynamic evaluators might use to carry out these tasks. These include the following:¹⁵

- **Project archive and database.** The archive stores the project-relevant material collected by the dynamic evaluators. The database is constructed by extracting from the archive quantitative and categorical data about events, agents, artifacts, relationships and attributions. These data can be accessed and processed by the tools described in paragraphs 3 and 4 below. Dynamic evaluators need a lot of skills, but they are unlikely to be skilled programmers. Thus, the methods for entering and cataloguing material in the archive and extracting data from this material to include in the database must be

¹⁵ In the MD project, we are developing prototypes for the some of tools discussed here, in particular points 1 and 2, and some of the tool functionality described in points 3 and 4. Alpha tests of these prototypes are encouraging, but much experience in the field will be necessary before we can be sure that we have versions around which a dynamic evaluation process can be built, which can provide the basis for a distributed policy-making and –doing process consistent with the principles enunciated in section 3.



transparent and simple. Though the quantity and types of material may vary considerably from one project to another – depending on the project’s size and complexity as well as the resources the project team makes available to dynamic evaluation – it is obviously desirable to have a standard form for archive and database that can satisfy the requirements of the most exigent dynamic evaluations, without being overly complicated and unwieldy for the “lightest” ones.

- **Platform for the digital collection and sharing of stories.** In dynamic evaluation, participants will communicate with one another – and with the dynamic evaluators – primarily through the medium of narratives that relate their experiences in and future expectations about the change processes the project sets in motion. In smaller projects, and with targeted key participants in all projects, these stories will be collected through interviews with the dynamic evaluators. Obviously, this method does not scale, and the only possibility for generating and circulating stories for projects in which the number of participants is large is through digital collection and dissemination. A platform that solicits participants’ experiences about particular change processes and helps participants frame those experiences as a coherent story is thus an essential element in the dynamic evaluator’s toolkit. Moreover, certain participants will often need to assimilate the experiences of certain other participants, so it is important that the platform can also be used to communicate stories among groups of participants – and permit commenting and even joint narrative construction among the members of these groups.
- **Analytic tools running on the project database,** including a visualizer for agent-artifact-attribution space maps; statistical tools; and visual and quantitative tools for social network analysis.
- **A language that can express narratives in a standard and easily understandable form,** and tools (which link with the project database and the story-collecting platform) for the rigorous analysis of narratives, as expressed in this language. People tell stories using natural language, and the “same” story can be told in an essentially infinite number of ways, more or less artfully. For rigorous analyses based upon narrative, a formal representation of narrative – with all the “art” of story-telling stripped away – is



required.¹⁶ What kind of analyses would tools based upon such a language support? They could be used, for example, to help the dynamic evaluator check particular stories for narrative coherence and narrative completeness. They might also make it possible to infer an abstract narrative structure from a given story, which would make it possible to classify and compare stories across contexts; conversely, they might also provide the capability of instantiating a given abstract narrative structure in a particular context, thus helping participants in one project to act in accordance with lessons communicated through stories about another project.

- **Platform for digital consultation.** Occasionally, especially when divergences are detected that the project team seek to resolve through a consultation among some set of participants, discussion focusing on a particular issue that requires resolution in the form of an action decision will be required. For such cases, the project team must determine a format for the discussion, which in its opinion is more likely to lead to an empathetic resolution than an explosion, and for its resolution in action. When a face-to-face discussion is impossible, the consultation will have to be handled on-line. A platform for mediating such consultations, which is flexible enough to incorporate whatever format the project team wants to impose, would be a valuable tool to use as part of the dynamic evaluation feedback process. No existing e-consultation tool of which we are aware offers sufficient flexibility for this delicate problem, nor have the researchers in MD addressed this problem. As dynamic evaluation methodology and practice develop, at some point it will probably have to be solved. At present, we merely note that this is a topic for future research. In the interim, we can hope that project narratives will recount the contexts in which such consultations have arisen, the formats adopted to structure them, and the ways in which the issues were resolved. From such material, distributed policy scaffolding structures might develop a set of narrative structures that provide possible ways in which such processes can play out. These structures would help provide guidance for the design of an effective platform for digital consultation for dynamic evaluation.

¹⁶ Such a language, called A4 – for agents, artifacts, attributions and actions – has been developed in the MD project.



Of course, a set of tasks and a wish list of ICT tools do not constitute a methodology! We now turn to two related questions: who are dynamic evaluators, and what do they actually do? We can only answer these questions in a speculative mode, since so far dynamic evaluation as we are describing it does not exist as a social practice, outside the context of several pilot projects developed under the auspices of MD. It is well understood in the current policy world that projects have to be evaluated, and there is a profession dedicated to project evaluation – complete with professional associations, journals, a myriad of approaches and methodologies, and a large number of practitioners. Most – though by no means all – existing evaluation methodologies are retrospective: they evaluate projects after the projects are formally completed, and they express their evaluations via measurements of project accomplishment with respect to the expectations of the policy-makers who determined the policy under which the project in question was authorized and funded. The idea that projects make policy through the cascades of transformations that emerge from the interaction processes the projects construct is not part of the current policy world and hence not relevant to evaluation in this world. Some evaluation professionals see this as a problem and have issued calls for a more flexible, prospective and proactive approach to evaluation;¹⁷ our concept of dynamic evaluation responds to this call by situating itself in a different policy world, the world of distributed policy-making by –doing, in which scaffolding

¹⁷ For example, from Patton (2010): “Traditional **goal-based evaluation** is completely geared to *Ready, aim, fire*. The evaluator determines whether the preconceived target was hit. That's what evaluators have been trained to do and, on the whole, they do it well. What they aren't prepared for and typically don't know how to adjust to is social innovators whose entrepreneurial and creative mode of operating is *Ready, fire, aim*. The **developmental evaluator** still figures out what was hit, if anything, and the systems implications of any hits, that is, watching for and documenting consequences for other things connected to the social innovation effort, but the analysis is not a simple measure of what was hit compared to a preconceived target. In providing feedback about what the innovator has "hit" (what immediate outcomes are *emerging*), the developmental evaluator engages the innovator by asking: What's your reaction to what you've hit so far? And what you've missed? What does this "tell" you? How does what you've done so far align with your values and vision? What does this "hit" (or "miss") tell you about what to do next? Why? This arguments and intensifies the innovators' own intuitive process with pointed questioning and systematic data to interpret progress (and setbacks), and formulate new hypothesis and next steps. (...) The **developmental evaluation** helps identify the dynamics and contextual factors that make the situation complex, then captures decisions made in the face of complexity, tracks their implications, feeds back data about what's emerging, and pushes for analysis and reflection to inform next steps, and then the cycle repeats.” While there are many similarities between dynamic and developmental evaluation, note that Patton’s concept is directed just towards the relationship between the dynamic evaluator and “the innovator”, not towards all project participants.



structures encourage, nurture and build ties among projects initiated by engaged citizens responding to the social problems they perceive in their social worlds. The scaffolding structures, or DIPOs (distributed innovation policy organizations), mediate among projects and between projects and agents in the public and private sectors – and construct narratives that provide directionality to, and express the positivity of, the social change processes with which they interact. In this alternative policy world, the evaluation professionals would perform dynamic evaluations: each project is an experiment, the dynamic evaluation professionals attached to a project develop the project narrative that describes how the experiment turned out, in terms of the social transformations it induced; and then new experiments, in the form of new social innovation projects, incorporate elements of these narratives into their orientation towards transforming the structure of agent-artifact-attribution space. So we situate dynamic evaluators as evaluation professionals for a (possible emerging) distributed policy world. If we can convince existing DIPOs about the validity of this vision as a way of getting us out of the Innovation Society dilemma, we can begin creating this new profession now, recruiting existing evaluation professionals who are frustrated by the current policy world and its indifference to emergent transformations and participatory processes, as well as people who believe in the promise of social innovation and are attracted by this particular role (rather than, say, becoming social innovators themselves) to help realize that promise.

In a distributed policy world, the project team for each new social innovation project would determine from the outset of the project an initial outlay of resources for the project's dynamic evaluation and designate the dynamic evaluator(s) and the scope of the dynamic evaluation. The project team might decide that its dynamic evaluation cannot accomplish all the tasks we described above. To see what this might mean in practice, let's consider a few examples:

1. One INSITE affiliated researcher-practitioner, Alberto Cottica, has organized a DIPO, Edgeryders (<http://edgeryders.eu/page/about-edgeryders-0>), which is structured as a digital network of social innovators. That is, Edgeryders provides an online platform that people can use to create projects, drawing on other members of the network for help ranging from advice to collaboration. All interactions among members of these open networks are – at least initially – digital, and the DIPO owns the project database. As a result, it can use social network analytic methods to follow the structure of interactions among participants, and on the basis of the resulting analyses can identify interaction patterns that seem to generate longer-lasting and fecund (in terms of project initiation)



- relationships. It can then develop strategies for intervening or changing “permission structures” for participants that will tend to produce these generative patterns of interaction. So in this case, the dynamic evaluation is carried out by the project team, and its scope is defined by the online interactions it constantly monitors and the network analyses it does on the changing structure of these interactions. The feedback happens through messages sent through the system, by the project team/dynamic evaluator, which alert groups of users to problems or opportunities signaled by the analysis of their interaction patterns. For Edgeryders, the project narrative is presented implicitly through the project website, where the relevant “cast of characters” and roles are described, and the transformations achieved recounted through the projects that have arisen from interactions among members of the Edgeryders community.
2. The Education Pioneers project was initiated by Knowledgeland (www.kennisland.ne), a Dutch DIPO that worked closely with INSITE. The idea of Education Pioneers was to empower teachers in the Dutch public school system to form working groups to create projects, beyond the official and centrally mandated school curriculum, aiming to make teachers working lives more rewarding and to enrich students’ learning experiences. Knowledgeland recruited a group of funders from the public and private sectors and negotiated permissions with the Ministry of Education to proceed with the Education Pioneers. They then created a competition inviting teachers for submit proposals for innovative projects, the winners of which were promised organizational support from Knowledgeland and a small amount of funding to implement their project proposals. The dynamic evaluator for Education Pioneers (and hence also for the projects that the winning teachers launched) was a Knowledgeland employee trained in anthropology. Given resource constraints, she decided to restrict the dynamic evaluation to teachers: the teachers leading each of the winning projects, and the other teachers in their schools who got involved in implementing the projects. The main task assigned to the dynamic evaluation by the Knowledgeland project team was to elicit stories about experiences in developing the projects. Telling the stories to one another could help teacher participants in each project to become aware of the problems they were confronting in organizing their projects and to construct creative and collective solutions to these problems. In addition, the dynamic evaluator facilitated the sharing of stories among different groups of teachers involved in Education Pioneers projects, so that each group could learn from



- the experiences of the others. Knowledgeland organized a gala event at the end of the school year, with invited guests from the media, leading educators and Education Ministry officials. At this event, each project group presented their project narratives – and Knowledgeland presented a narrative of the Education Pioneers project and the future of “bottom-up” educational innovation in constructing a better system of public instruction, more responsive to the needs of the inhabitants of the Netherlands. The experience gained from this project was incorporated into the design of MD’s platform for digital collecting and sharing stories.
3. Unlike the first two examples, the Green Communities project was organized from within the public sector. The initial project team for Green Communities consisted of a small group of Italian social innovators, academicians and civil servants who were concerned about the problem of sustainability of Italy’s mountain communities and were seeking an opportunity for constructive action to address this problem. Life in the mountains has always been difficult, but over the centuries economically viable and socially rich cultures have emerged throughout Italy’s mountain backbone. The communities sustaining these cultures have been severely stressed over the last fifty years, by problems ranging from conservationist restrictions on land-use imposed by the national government, through a lack of investment in needed transportation and other infrastructures, though new globalized competition to the traditional mountain agricultural and artisanal products. In this period, an unhealthy pattern of subsidization in exchange for political support created an unsustainable dependence of mountain communities on handouts from the national government of funds administered by local politicians that were distributed to their supporters in a developmentally sterile way. Some European structural funds for energy savings measures were earmarked by the Italian Ministry of the Environment for investment in the development of energy use monitoring for public buildings, and the initial Green Communities project team managed to “highjack” these funds for its far more ambitious goal of developing a strategy for sustainable development of mountain communities, starting with pilot projects in four selected mountain regions, all near national parks in the south of Italy. One member of the project team was executive director of the Italian Association of Mountain Communities, which was designated as the organization responsible for the allocated funds. Another was appointed scientific director of the project. The scientific director



then assembled a task force of consultants, several of whom were part of the initial project team, whose task was to draw up “best practice” documents for twelve “axes” of development, including not only energy use and local energy production, but also such fundamental areas as water management, tourism, and social cohesion. In addition, teams of so-called local experts were recruited from each of the four pilot areas. These local experts were supposed to have competences in the various axes determined by the national task force, as well as deep familiarity with the political, economic and social organization of their regions. Thus, the set of project participants included the project referents in Rome from the Ministry of the Environment and the Association of Mountain Communities, the national task force, the local experts, and local political leaders who were supposed to provide an interface for the project with the local populations – in all, something like 75 people (and several organizations), not including the local populations themselves, elements of which would have to be mobilized and channeled into effective actions if the dream of the initial project team were to have a chance to be realized. The scientific director for Green Communities, Paolo Gurisatti, was committed to the idea of dynamic evaluation – even if the idea was still embryonic when the project kicked off in 2011. Since Paolo was associated with the ECLT team in both INSITE and MD, he assigned two MD researchers to serve as dynamic evaluators of Green Communities; as was the case with the Educational Pioneers dynamic evaluator, these two developed the concept of dynamic evaluation as they performed a dynamic evaluation on Green Communities. The dynamic evaluators began by interviewing the initial project participants, and they found that these interviews, along with supporting documents and other material supplied by the interviewees, produced a massive quantity of material relevant to interactions among Green Communities participants and to the socioeconomic and political organization of the four pilot communities. To manage all this data and to interpret its significance was a huge task (still in part incomplete, even though the Green Communities project – but not all the transformation processes it set into motion – is now finished), and led to the design of MD’s archive and database. The dynamic evaluators also came to appreciate the importance of narratives, as the medium of effective elicitation of relevant information from the participants with whom they began to form generative relationships, as well as the medium in which they conveyed feedback to the project team. They were able to develop narratives that provided certain members of the project team, especially Gurisatti, new ways of looking at the development of the project,



which suggested very different interaction pathways than those currently established among project participants. Indeed, the dynamic evaluators' narratives, communicated to members of the project team, led to changes in the narratives guiding the actions of some team members – and were very influential in the emergence of one of the project narratives developed towards the official conclusion of the project. In this case, there was more than one project narrative: the project was characterized by serious divergences among members of the project team and with some other project participants, so much so that different project narratives designated different consequences of project activity as “successes” and implied different values about what constituted “development” and even “sustainability.”¹⁸

These three examples indicate how dynamic evaluations can differ in scope and functionality. Taken together, they also show how each of the tasks and tools described above may contribute to provide a representation of what a project is accomplishing (or has accomplished) and how these representations can be useful for project participants, and other social agents, in evaluating the “success” of a project and possibilities and directions for future actions – and future projects. Associated with each story is a set of methods that the dynamic evaluators forged as their work proceeded.¹⁹ Probably quite soon, enough preliminary work will have been accomplished that it will be possible to begin writing the first draft of a “methods book” for dynamic evaluation. However, some deep methodological problems need to be better understood before we can contemplate writing a final draft of such a book:

1. **Scope restrictions:** Ideally, dynamic evaluators should investigate every nook and cranny of agent-artifact-attribution space that is perturbed by the cascades of changes initiated by project interactions. And they should bring to bear every possible analytic tool to help them make sense of the material that emerges from their investigation. Practically, both these requirements are impossible to satisfy fully. Thus, choices have to

¹⁸ The A4 language was developed in part as a way to provide an efficient communication channel for feedback from the dynamic evaluators to the project team – and to express as rigorously as possible the differences between the various project narratives that the dynamic evaluators encountered – or better uncovered – in the course of their work.

¹⁹ Perhaps it would be more accurate to say that they “welded together” rather than “forged,” since they made use of parts of many existing methodologies, ranging from ethnography to social network analysis.



- be made: boundaries within which the dynamic evaluation will be constrained to remain (like the decision to restrict to the “teacher” zone of agent space in the Education Pioneers case) and limitations on the data to be analyzed and tool set employed in the analysis (like the decision to restrict to online interaction data and social network analysis in the Edgeryders case). Such decisions will be based upon available resources (funds to support the dynamic evaluation, competence sets of the designated dynamic evaluators) and the expectations that the project team has about what dynamic evaluation might accomplish in its particular project context. It would be desirable to develop some guidelines that might help project teams form their expectations and adopt a level of granularity for their dynamic evaluation that would be coherent with these expectations. Obviously, the finer is the level of granularity at which a dynamic evaluation operates, the more levels there will be in the project narrative hierarchy – hence the more difficult it will be to construct the project narrative, but the more useful it will be for teams and participants of other projects who seek to learn from it.
2. **Trust:** Dynamic evaluation presupposes the willingness of participants to provide the information upon which the usefulness of the dynamic evaluation depends – and to use the feedback provided by the dynamic evaluation constructively and empathetically. This willingness depends on the extent to which the participants trust that the dynamic evaluation process is actually operating in their interests – that is, helping to steer the transformation cascades in what they will come to see as socially positive directions. This in turn will depend in large part on how much the participants trust the dynamic evaluators, to whom they will be consigning the desired information and who will have the responsibility of explaining the advantages they will obtain by cooperating with the dynamic evaluation. Gaining that trust is obviously a key component of a successful dynamic evaluation, and we need to develop and codify methods that increase the probability that it will be achieved. The Green Community pilot helped us to discover one such method: open-ended interviews that encourage the participants to talk about their own experiences, and in which the interviewer manifests clear interest in what the participant is saying, with a minimum of interruptions (and then mainly to ask for clarifications) and with non-judgmental language (including body language!). People like to talk about themselves, especially to an interlocutor who is really interested in what they’ve done, what’s been done to do them, and how they feel about it. To understand



- the values and convictions that underlie people's actions it is much better not to query them directly as is done in so much of interview-based sociological research – but to let them tell stories, from which these values and convictions can be inferred by empathetic listeners. This is one reason why we stress the role of narrative in dynamic evaluation; a fuller discussion of this point is provided in section 5 below.
3. **Privacy:** Participants may be willing to say things to a dynamic evaluator with whom they have established a trusting relationship, which they would be very reluctant to have circulated to others in the project community. Thus, techniques to ensure “data privacy” are essential for dynamic evaluation to work – not least to establish a trusting relationship between project participants and dynamic evaluators, as discussed above. On the other hand, the point of gathering information in dynamic evaluation is *not* to do social science research about how projects play out, but to use that information to provide feedback to the project team and ultimately all project participants that can help construct patterns of interaction among participants that move the change process in what participants regard as socially positive directions. Balancing the need for privacy with the need to share the lessons from the information gleaned is a delicate but essential task for dynamic evaluation. For example, the archive cannot be open to all participants – yet some of the material in it must be available to some of them, and some to all of them. Some stories need to be recounted to subsets of participants in a way that disguises the “real” identity of some of their characters, while making clear the action implications for the participants to whom the story is directed.
 4. **Detachment/involvement:** It is inevitable – and also desirable – that dynamic evaluators will want the projects they evaluate to be successful. It is also inevitable that they will come to develop their own stories about what success means and how it might be achieved. These stories will obviously have a lot of effect in determining what they regard as relevant, and hence what information they will seek to obtain, how they interpret that information, and what feedback they provide the project team (with a ripple effect on what feedback the project team decides to provide to other participants). Thus, dynamic evaluators are themselves project participants, but with a special responsibility to ground their interactions in an empathetic understanding of the values and aspirations of all other participants. All the experience that we have observed with dynamic evaluators in action (in particular, all the case studies in which MD has been involved,



- including Education Pioneers and Green Communities) evidences the tensions between detachment and involvement that that special responsibility creates. We need some guidelines for managing these tensions.
5. **Distributing functionality:** As the number of participants in a project increases,²⁰ the task of collecting all the information that dynamic evaluation requires becomes increasingly challenging. An attractive possibility for dealing with this problem is to distribute the data-gathering functionalities of dynamic evaluation among many different project participants. In a way, this is what Edgeryders does, since participants themselves provide the data about their interactions with other participants on which the Edgeryder variety of dynamic evaluation rests. And there is no cost to them in providing that data, given that all these interactions are online (indeed, they may not even be aware that they are providing data to a dynamic evaluation!). The story collection and e-consultation platforms we described earlier are attempts to provide tools through which participants collaborate actively in dynamic evaluation, and we believe there may be many more techniques to develop that could provide “remote sensing”, digital collection and even automated analyses of information to be integrated into dynamic evaluation processes.
 6. **Conflict management:** One of the pillars supporting the concept of social innovation we have been discussing in this essay is the belief that providing people with information about the effects their actions have on others, and how the others feel about those effects, can help create the possibility for generating actions based on empathy for the others, and thus aiming to realize some notion of collective benefit rather than just one’s own individual “interests.” Underlying this belief is the idea that we human beings are essentially social, that we aspire to be members of communities and act in harmony with others in those communities – and that the ideology of individualism, and its presumption that each individual has a fixed set of “interests” the pursuit of which is the wellspring of all his actions, is not a truth about “human nature” but a contingent construction that emerged in Western society over the past several centuries and has contributed heavily to leading Western society into the crises dilemma of the Innovation Society. But even

²⁰ For particularly successful projects, which induce large cascades of social change, it will increase substantially!



with this belief in our essential sociality, it would be just ingenuous to claim that collective self-awareness and –reflection are sufficient to eliminate conflict among people in a particular community and between different communities. Irreducible conflict exists, and it must be addressed; and the usual solution is the imposition of hierarchies of power, based upon legitimacy and (in the last analysis) force. A distributed policy world based upon social innovation projects must be embedded in some such hierarchy of power – hopefully less obtrusive, more open to tolerating divergence, and with a higher level of participation by engaged citizens than our present forms of social organization. The question with which we must grapple here is at a lower level: the problem of irreducible conflict within the participant community of a micro-level social innovation project. Dynamic evaluation seeks to avoid situations of irreducible conflict, and is committed to building a sense of collectivity in the project participant community. Though we have already discussed various ways in which this commitment is realized, clearly we need to develop more guidelines to this effect. But we also need to consider how to recognize as early as possible situations in which conflicts are irreducible: this is a task for dynamic evaluation; the task for the project team is to decide what to do when such a situation exists. “Forking”, as in open-source software projects, may prove a viable option in some cases, with a mutually agreeable division of project resources among the contending participant subgroups. In general, it is hard to imagine general solutions that do not involve recourse to power hierarchies outside the project itself; dynamic evaluation can play a role here by organizing relevant information about the conflict and presenting it to agents of the relevant power hierarchy in a fair and easily understood format.

5. Why narrative?

5.1 - What is narrative (and narrative structure, narrative community, and narrative logic)?

A narrative relates a sequence of events, with, as Aristotle pointed out, a *beginning*, a *middle* and an *end*. More specifically, a narrative consists of a cast of characters, a plot that structures the events temporally, and a denouement in which the fortunes and even identities of some of the



characters change from what they were at the story's beginning. The characters' identities can be crudely but usefully summarized as "what they do and how they do it". Plot development consists of the characters acting out their identities in contexts that are determined by their previous actions, the actions of the other characters, and events from the world outside – including coincidences and catastrophes (wars, market crashes, floods...) that the narrator and listener regard as "normal," that is consistent with some implicitly agreed-upon natural or social "laws", and beyond the control of the story's characters.²¹

Narratives do not just relate, they explain. The key to causality in narratives, the explanatory heart of a story, is character identity. A character's actions make sense to the listener because given who the character is and the situation in which he finds himself, no other actions seem as credible. Of course, the listener learns about characters' identities through their narrated actions, so there is circularity here. We can resolve this circularity through two considerations. First, the listener's realization that a new action has in fact been determined by the actor's identity is retrospective, in the sense that the attribution of actor identity to which the action must cohere is determined after the listener knows about the action. Second, the listener has an implicit set of allowable transformations of identity, and if the narrated action cannot be successfully integrated with a reinterpretation of character identity by allowable transformations of the listener's attributions of character identities, the narrative fails, at least for that listener. So for a narrative to work,

- narrators must be able to present their stories as a succession of events in which their characters act and interact;
- the context of these events must make sense in terms of what actors have done in previous events and with respect to some natural or social "laws" that the narrator shares with his listeners; and
- within these events, each character's actions must be interpretable as a consequence of his identity, as determined by the listener from what he has learned about the character

²¹ The implicit agreement need not go beyond the boundaries of the story-telling itself. Many of us may read novels of science fiction or magical realism, and we are perfectly willing to suspend our disbelief about how the narrator manipulates physical law and contrives coincidental meetings among characters. When the narrator pushes the listener beyond the bounds of suspended disbelief, the listener stops listening.



from the narrator – who in turn must respect his listeners’ ideas about how identities, and hence attributions about identity, may change over time.

We subsume these three aspects of successful narrative under the rubric *narrative logic*.

We seem to be asking a lot from our story-teller: to construct shared laws of physics and society, as well as psychological theories about how identities change, is clearly too much to do while relating a sequence of events. In fact, the story-teller couldn’t possibly do all that work in real time; the work is accomplished, off-line, by a social-level entity, which we can call a *narrative community*. Narratives can only work within particular narrative communities, groups of people who already share a set of *narrative structures*. A narrative structure is a kind of template for narratives. It consists of a set of character types, abstract descriptions of identities; plot elements, which consist of a set of allowable transformations for character identity, as well as the physical and social laws that determine how contexts may change outside of the characters’ control and what kinds of coincidences are “normal”; and a skeletal denouement, in which the character types collect their “just deserts” – that is, rises or falls in fortune, and the achievement of certain kinds of merited relationships with other character types. Particular narratives instantiate one of these narrative structures, and when narrators and listeners are from the same narrative community, the stories can be told in such a way that all recognize early on just which narrative structure serves as their common referent. Narrative structures are cultural facts of narrative communities. They provide narrative with its rules of syntax. Like language’s syntax, these rules aren’t learned as explicit rules, but are abducted from the many stories instantiating them that circulate in the narrative community, to which members of the community begin listening as infants and continue listening, and then telling, throughout their lives.

Within a narrative community, narrative logic implies a plot development that is coherent with rules for character and action from one of the community’s available narrative structures. We have seen that narrative structures specify abstract forms for a story’s “beginning”, in terms of the set of character types whose interactions generate the story’s plot, and its “end”, the denouement – but leave the “middle” open to many possible pathways, constrained just by the rules for allowable transformation. Thus Aristotle’s three narrative categories have causal, not merely sequential, relations among them, which are by no means of equal importance: the “middle” is the bridge that connects the “beginning” to the “end”, but to a large extent the “end” is already immanent in the “beginning”. That is, denouement and characters are linked by narrative logic,



which, as we have said, is a logic of causality by character, mediated through context: we know that Oedipus' hubris will inevitably bring about his fall; that a Jane Austen heroine, separated as she is by social distance and misunderstanding from the hero she loves, will eventually find happiness in his arms; that the saintly martyr will receive her final reward in the other world, after undergoing horrible tribulations in this one. Even though we can foresee in its broad outlines what the denouement of the story will be, once we have recognized the type of narrative structure to which it belongs, the story itself can be full of surprises, maintaining our breathless interest all the way to the end. This is the most important attribute of the narrative form: it combines teleology and indeterminism, leading the listener on a journey through time with a recognized and fitting destination, without providing a detailed route map of all the excitement and complications to be encountered along the way.

Narrative time is not uniform and featureless. In narratives, time is bunched into discrete "events," temporally and spatially circumscribed settings in which some kind of confrontation among the story's characters takes place. Within events, the relevant characters interact, and the consequences of their actions propel them into further events. Thus events become linked together in interaction streams, identified by the subset of characters that interact in them and the causal shaping of successive contexts that the stream flows through. The duration of and between events – and interaction streams – can vary tremendously within a narrative. Longer narratives may consist of many interaction streams, flowing separately, then merging – and perhaps separating once again. In the end, all the remaining interaction streams flow into the denouement, or disappear into the trackless sands of the unresolved.

5.1.1 - Why is narrative important?

There are three principal reasons why narrative is important: in sense-making; in communication; and as the basis for action in the face of ontological uncertainty. The third is the least obvious and will require a somewhat longer explanation than the other two.

Narrative as sense-making and narrative as a medium of communication are rather straightforward and familiar ideas. A rich and growing literature shows how important are narratives for endowing one's own experience with significance and for communicating that experience to



others.²² There are two fundamental reasons why this is so. First, narrative is based upon an ontology of entity interaction, which seems to be concordant with the way in which our minds innately interact with the external world.²³ Second, narrative provides a temporally coherent and causally convincing organization of experience, which builds upon and meshes with innate categories of time and causality. (Of course, this is not to say that narrative logic is always adequate to make meaningful what happens in our lives, no matter which entities are allowed to be in a cast of characters.²⁴ For example, causal explanations that require interactions among a large number of entities, not reducible by higher level abstraction to a small set of single “characters”²⁵ – phenomena like phase transitions and emergence – are simply not narrativizable.)

Narrative can go beyond making sense of and communicating experience: it can be *constitutive* of experience itself. This works through a cognitive process that we call *narrative embedding*. In narrative embedding, actors’ current context are framed in terms of one of the narrative structures of their narrative community, instantiated in remembered narratives from the actors’ own experiences or learned from memory artifacts like books, cinema, and newspapers. The process picks out a cast of characters from the entities in the actors’ world *including the actors themselves*, builds up a plot that interprets prior events involving these characters consistently with the structure’s allowable transformations, and associates a denouement that, in particular, foretells whether the actors come out well “in the end.” Usually, the process works by a direct transfer from the elements of one remembered story to the present context, but it can also operate on the merger of more than one remembered narrative that share a common narrative structure or

²² See in particular Neisser (1994), Bruner (1987 and 1992) and Mishler (1999).

²³ Certainly it is more natural than analysis based upon assumed relationships among quantitative variables, which represents a considerable cultural achievement by no means shared by most human beings!

²⁴ There are narrative communities that admit characters in their narratives that have very different kinds of characters and transformation capabilities than the human beings and artifacts that most of us incorporate into our autobiographical stories; for example, God, electrons, the Market, Lady Luck... In narrative communities that agree on identities for such characters and transformation rules into which their action modalities are incorporated, narrative logic can – and does – provide an adequate basis for coherent, causally convincing stories that members of these communities tell one another (and themselves), providing a sense of understanding their world.

²⁵ Like an army or a nation or an economy or a culture... Such abstractions-as-characters play a huge role in making meaningful our social worlds in narrative terms – by social scientists and journalists as well as the “common man.”



by “extending” a remembered narrative to incorporate additional characters. The process is not conscious, nor even, necessarily, are the narratives that it produces.

Through narrative embedding, actor-narrators make sense of context, find themselves in mid-story, and proceed to act out their assigned role. As the plot rolls on, actor-narrators may be surprised occasionally by what the other characters do. They understand, however, as does any novel reader, that their current attributions of identity to the other characters must have been incomplete. They can then modify these attributions to account for the new plot-twist, perhaps drawing upon other, previously un-narrativized but remembered past events, as long as they do not violate the allowable transformations of the embedding narrative structure.

With respect to their own roles, actor-narrators have a privileged position. Their *own* actions are very unlikely to surprise them with new revelations about their own identity. Thus, their actions tend to be comprehensible in terms of the ongoing plot they are following and their own self-attribution of identity. As a result, actor-narrators enact the story they tell themselves is happening. In this way, as long as the story continues to make narrative sense, its telling-in-action sweeps the actor-narrator along with it. Their actions, we can say, are generated by narrative logic.

Acting thus, actor-narrators are constantly looking backwards, reinterpreting everything that is happening in their extended present, in terms of the emerging story that they tell themselves to account for what is going on. Their own actions follow on and extend this continual reinterpretation, and as long as the story continues to make sense, they need not consider exactly where they are going – the denouement of their story takes care of that – so much as where they have just been. They are, in this sense, *backing into the future*.

Narrative embedding implies a strong downward causation from stories to events. Stories can supply missing events required by the exigencies of plot, which can be as credible to actors as the events they have actually experienced (Neisser, 1994). As a result, narrative logic may permit actors to “know” much more than they can actually observe, and consequently to take action, directed by the logic of their stories, with more confidence than they might have were they to rely only on what “actually” happened, instead of the sense their story made of these events. Arguably, this extra confidence may translate into more effective action. On the other hand, what actors experience as “actually happening” depends on interpretations framed by narrative logic,



so stories tend to produce concordant events – and not just on the part of the actor-narrator. For example, the suspicion that another character in the story is behaving badly to the actor-narrator can induce the actor-narrator to act in such a way that this will indeed turn out to be the case, producing new events that vindicate the judgments the actor-narrator made about previous events, regardless of the other’s real intentions in the past. Thus, narrative logic may *enable* effective action, while it *constrains* action possibilities to those that make narrative sense.

We do not want to argue that *all* action is generated through narrative embedding – there may be many different action-generating modalities. However, we now argue that narrative embedding provides actors with the means to deal, at least in the relatively short-term, with ontological uncertainty. Ontological uncertainty prevents actors from envisioning the possible consequences of their actions, which will be mediated in part by interactions among agents, about and through artifacts, which currently do not exist in the actors’ world – and actors will eventually express, interpret and evaluate these consequences in terms of attributions that they currently cannot even formulate. Thus, actors facing ontological uncertainty should not, and if they are even dimly aware of the ontological uncertainty in which they are immersed, cannot use the value of future consequences to generate appropriate action in the extended present. Narrative logic provides an alternative mode to generate such action, through its immanent link between character and denouement. Of course, this link is an essential element of narrative – not of the world itself. Events may spin out of control of a narrative, and the narrator may be forced to abandon it. But while the narrative is in place, the narrator – equipped with a sense of direction aligning him towards the denouement, and an understanding of his own character and that of the other actors with whom he is enmeshed – can continue to enact it, even if narrative canon forewarns him to expect all sorts of new obstacles in his path that make finding the right route a problem he must resolve moment by moment, “extended present” by “extended present”, without a detailed road map for the future.

Of course, narrative logic is a local, not a global, solution to the problems posed by ontological uncertainty. Sometimes, events outstrip actors’ capacity to interpret them consistently with the story they are currently telling about them. There will be periods in which actors just tread water to save themselves from drowning in an interaction stream, or just drift passively and helplessly with the swirl of events. In this situation, narrative shifting – that is, re-embedding the current situation in a new narrative – can serve as a kind of tugboat to pull the actor out of the eddies and into a new current, fast flowing in what seems to be a desirable direction, and, at least for now,



and as far as the actor can “see,” free of treacherous sand-bars or counter-currents. The capacity to move so quickly and to cancel the need to assimilate the old story with the new is a powerful tool for redirecting action in a world of rapid change. Even if there are no guarantees that the new story will lead actors where they thought they wanted to go, at least it keeps them moving for awhile, and there is no reason to suppose that there won’t be a new story to guide them the next time they round a bend and find something they were totally unprepared to meet.

5.2 - Narrative and social innovation

At the micro-level, social innovation projects create contexts characterized by ontological uncertainty. As described above, one way in which project participants cope with this ontological uncertainty is through narrative embedding. Dynamic evaluation can help participants to make explicit the narratives they are enacting, and thus provide them with the possibility of controlling the coherence and completeness of their project-related narratives. In addition, through the feedback that dynamic evaluators supply, a participant can become aware of others’ narratives. In particular she can discover divergences between these narratives and hers, which may imply that the others with whom she interacts will not act in accordance with the expectations generated by her narrative logic, and so her narrative embedding will unravel. Dynamic evaluation can help deal with such divergences, by structuring consultations that provide an opportunity for bringing different participants’ narratives into alignment, developing common or at least mutually consistent narratives based upon an empathetic incorporation of each others’ ways of experiencing and interpreting what the project is doing and where it is headed. If the dynamic evaluation succeeds in doing this, participants who embed their contexts in aligned narratives will act in mutually comprehensible ways, which can lead to coordinated interaction streams that flow in directions that the interacting participants regard as socially positive.

At the meso-level, project narratives are the most important way in which the experiences gained in one project can be communicated to others. The most highly compressed form of its project narrative can provide rapid signals about the possible relevance of one project to another; the project narratives of those that seem relevant can then be probed at whatever level of granularity seems appropriate to the project teams that seek to make use of them.

It is interesting to contrast this narrative-based notion of communication of experience (nbc) with so-called “evidence-based policy” (ebp). Ebp is based on the idea that the importance of



evaluation is to determine whether a particular social innovation “really” works. To do this, edp follows the lead of evidence-based medicine, according to which the only way to know whether a particular treatment “really” works is to carry out a randomized clinical trial comparing that treatment either to a placebo or to the current standard practice treatment; if the difference in the variable chosen to measure treatment effect in the two arms of the trial are significant (in the statistical sense²⁶), then one can conclude that the treatment “really” works. To fit into the framework of edp, a social innovation project must first define what it intends to do as a well-defined intervention. It must then adopt one or more quantitative measures of “social efficacy,” and it must find fungible “populations,” in one of which the intervention is applied and in the other it is not. At the conclusion of the projects, which of course must adhere rigorously to the pre-established intervention definition for one arm, and maintain conditions of fungibility (except for the application of the intervention) with respect to the other, the resulting measures of social efficacy are compared between the two arms, and the intervention is judged a success with respect to each of the differences that are statistically significant. If the intervention is a success, then the assumption of edp is that it can be applied with confidence in other contexts. From the time in which it was enthusiastically endorsed by Tony Blair’s government in the UK, edp has been taken quite seriously by many policy-making communities, and various databases have been set up listing “certified” interventions, citing the social experiments and statistical evidence that certifies their success.²⁷

At first sight, Ebp seems more “scientific” than nbc. Its Achilles heel, from the point of view of nbc, is that it relies about assumptions about fungibility between social contexts that are anything but scientific: fungibility between the contexts in which the intervention is applied and its control in the social innovation project itself, and then fungibility between a potential context in which the certified intervention might be applied and the context in which the intervention was applied in the “test” project. To make such judgements of fungibility requires the kind of digging into context that dynamic evaluation undertakes in the case of a social innovation project. To

²⁶ Occasionally this is extended also to the vaguer (but in our opinion more important) notion of “clinical significance”. But in evidence-based medicine, this second sense of significance is only brought into play AFTER statistical significance has been verified.

²⁷ It has also attracted strong criticism, in the evaluation community and also in policy-making circles, for reasons that resonate with our argument in the following paragraph. See for example Cartwright and Hardie (2012).



determine the appropriate level of granularity for this excavation, the excavators have to make sense of social contexts and communicate their understandings among themselves. How do they carry out these tasks, without invoking the ideas and methods of nbc? And if they do use these ideas and methods, why would they throw away most of what they have learned by a reduction to judgements of fungibility and to some pre-established set of efficacy measures? From this point of view, ebp appears to be based on a kind of desire for certainty, in situations when certainty is just not possible – that is, in situations characterized by ontological uncertainty. In contrast, nbc focuses on an efficient means to communicate social experience, to provide agents in social change processes the possibility to move from rapid assimilation of the contours of particular experiences to increasingly detailed accounts of those experiences as long as these accounts continue to provide relevant new understandings: this is what project narratives are intended to provide. According to proponents of nbc, like us, these judgments of relevance are not, and cannot be made to be, scientific; but they are nonetheless absolutely essential for agents who seek to act in the face of ontological uncertainty, especially when they need (or desire) to act together with others.

As we have already argued, narrative is also important for the macro-level of social innovation. It is hard to imagine that we could move to a society whose policy world is informed by the distributed and participatory ideas that underlie the vision of social innovation we described in section 3 without the help of a narrative that recounts how such a world could come into being, what it would look like, and how it could provide the possibility for engaged citizens to construct a socially sustainable future. If we cannot imagine a story like this, the narratives that circulate in our society about its future will remain what we have now – narratives whose structure and logic derive from the Innovation Society ideology, or else dystopian narratives that recount ways in which our society might implode or explode...

6. The Happy Project: technique and social change

Tolstoy begins *Anna Karenina* with the memorable line, “All happy families are alike; each unhappy family is unhappy in its own way.” We’ve come to believe that something similar holds for social innovation projects. The way in which project leaders tell the stories of their project – both early in a project’s life, when they are still hopeful that theirs will turn out to be a happy project, and at the end of a project, when they want to convince themselves and others that it



indeed was a success – frequently conforms to a particular narrative structure, which we call the Happy Project. The cast of characters for this narrative structure includes the “team leader”, other members of the “project team”, other project participants, “society”, and a set of artifacts we’ll introduce as we describe the scenes.²⁸ There are six essential scenes in the narrative structure:

1. **Beginning – the Social Problem:** The team leader has an idea about a social problem he would like to do something about. He recruits a group of other potential participants to sound out their interest in working with him to address this problem. Together they begin to discuss the problem.
2. **Definition and alignment:** Out of these discussions, the group refines a common definition of the social problem they seek to address. They align around two attributions about this definition of the target problem: the problem is real, and they can do something towards solving it.
3. **Conversion:** The group constitutes itself as a project team and, together with additional recruits, they develop an approach to solving the social problem. Call this approach the “technical problem.” The members of the project team share the attribution that the technical problem addresses the social problem.
4. **Blueprint solution:** The project team constructs a process (and information and physical artifacts necessary to enact the process) to solve the technical problem. We’ll call this process (and its various parts) the “technical artifact.” The project team shares the attribution that the technical artifact will indeed solve the technical problem.
5. **Enacting the solution:** After recruiting in new members of the project team who are specialists in the techniques that compose the technical artifact, the project team and relevant members of “society” use the technical artifact to solve the technical problem.
6. **Denouement:** “Society” comes to share the attributions that the technical problem addresses the social problem and that the technical artifact solves the technical problem.

²⁸ The “social problem” and the “technical problem”, as objects of communication (instantiated in speech acts or written documents), are information artifacts. The “technical artifact” is a performative artifact, which may have information artifacts (like a “best practice” document or a software platform) and physical artifacts among the entities whose interactions comprise the performance it entails.



It observes the successful use of the technical artifact, in which members of society have indeed participated. QED: the social problem is solved.

The logic underlying this narrative structure depends on three key presuppositions. The first is that social problems can be converted into technical problems. This idea provides scene 3 with narrative coherence. The second key presupposition is that, through the application of technique by relevant experts, technical problems are resolvable. This idea gives narrative coherence to scenes 4 and 5. The third key presupposition is that technique compels conviction; this endows artifacts linked to technique (the technical problem and the technical artifact) with the capacity to drive the society-wide attributional alignments that figure in the denouement.

These three ideas have roots in the Enlightenment and are inextricably entwined with modernity; in particular, they are part of the intellectual subsoil from which the Innovation Society ideology has sprouted. It is this intimate relationship of its narrative logic with modernity and the Innovation Society ideology that accounts for the ubiquity with which the Happy Project narrative structure recurs in the narrative embeddings by project leaders, while their projects are on-going and in their retrospective “success” narratives. And the social innovation world is not the only one in which you can encounter stories based upon the Happy Project: this narrative structure has much to do with the (otherwise hard to explain) central role that economists and their theory-driven techniques play in “official” policy-making processes, not to mention the reduction of “development” to “growth (measured in GNP) and jobs” in Innovation Society political discourse!

There are three serious risks involved when social innovation project leaders (and other policy-makers and –doers) construct their actions on a narrative embedding based upon the Happy Project:

1. **Assuming alignment where it doesn't exist.** In the Happy Project, alignment among members of the project team (scenes 2-4) and within “society” (scene 6) seems almost a consequence of narrative logic based upon the presuppositions we described above. For participants who are enacting a Happy Project-based narrative, this can make it difficult sometimes to see divergences within the project team, or between the project team and other project participants. The dynamic evaluation of the Green Communities project uncovered such a situation, which was almost fatal for the success of the project. At the



time, the project leadership was primarily in the hands of three people. Two of them, responsible for the political and scientific leadership of the project, were members of the original project team and were aligned on the vision of the social problem to be addressed, the problem of social and economic sustainability of Italian mountain communities. The third member of the leadership group was responsible for project administration, in particular maintaining relationships with the local experts and public administrations in the four pilot territories. This member entered the project through his ties with the project's referents in the Ministry of the Environment. After explaining their approach to the project, the two other members of the leadership group just assumed that the newcomer shared their "highjacking" position, which obviously for them was a move in a socially positive direction. They took the newcomer's silence for assent. But as the dynamic evaluators discussed the project's progress over time with the three leaders, they noticed two things. First, the scientific director kept telling them about various "misunderstandings" in which the administrative director hadn't done something (organized supposedly agreed-upon meetings with the local experts, or circulated documents explaining the development of ideas about the additional "axes" that the national experts were working on). The scientific director just ascribed these lapses to administrative overload or disorganization; he simply couldn't see the pattern, because in the story he was enacting, the administrative director was aligned with him about the direction in which the project should be moving and what they had to do to make it happen. Second, the dynamic evaluators noted that in their discussions with the administrative director, issues involving the broader interpretation of the project's mandate that the initial project team had constructed were glossed over – without explicit criticism, but without any enthusiasm either. It required considerable effort to get the scientific director to see that there was a real divergence in the leadership group – they could only do so, in fact, by creating a special "triumvirate narrative," in which the idea that there was such a divergence made considerably more narrative sense of the various interactions among project participants they could document from material in their archive, than a narrative based on the idea that Green Communities was a Happy Project. By the time the members of the leadership group each understood the state and possible consequences of their divergent embedding narratives, it was too late to bring about alignment among them. Everyone abandoned the Happy Project structure at that point, but they failed to find a way to work together successfully – and essentially the project



- split into two factions, each aiming for different transformations and working at cross purposes to prevent the other from succeeding.
2. **Losing sight of the “real” social problem.** The Happy Project works through a series of conversions – from a nebulous “real” social problem, to a “social problem artifact”, to a “technical problem artifact”, to a “technical artifact.” At that point, all the project energies are invested in “building” (or enacting) the technical artifact. It is very hard in the course of these successive conversions to continue to reflect on the backward flow: is the way the technical artifact is developing really solving the technical problem? Does the technical problem as it is redefined through the development of the technical artifact really still addressing the social problem artifact? With the experience gained through project interactions, does it still seem as though the social problem artifact really relates to the “real” social problem? Such reflection (and changes in direction of project interactions on the basis of what the reflections bring to light) are essential if the project is to move in socially positive directions – directions that might be different from those initially envisaged, when the conversions were carried out. The Happy Project doesn’t encourage this kind of reflection, or the re-directions in interaction processes they can bring about. It takes systematic effort to recognize the a project isn’t “happy” – but with this effort, narrative re-embeddings become possible that can restore its “happiness”, by modifying the conversions and controlling that the assumed alignments are really happening. Obviously, dynamic evaluation is critical for both the recognition and the possible re-embedding to happen.
 3. **Over-emphasis on technique.** This is really a particularly insidious special case of the second risk. Often the “full” technical artifact is a process, which requires the construction of one or more informational or physical artifacts that facilitate the agent interactions that the process requires. An example: the software platforms and tools described in section 4, which are critical elements in realizing a dynamic evaluation process for complex social innovation projects. Designing and building such artifacts is in many respects a more congenial task than designing processes: once you’ve specified their component functionality, you can develop specific tests that will let you know if you have succeeded or not. Processes, especially complex ones like dynamic evaluation, are less well-defined and highly context specific, and it’s quite difficult even to know what it means to say that they “work”, and even more difficult to determine how well they are



working and how they would need to be modified to work better.²⁹ It is easy to derail a project by concentrating too much on the development of particular techniques – and not giving adequate play to how these techniques might be used. Again, the Green Communities project provides an example of this risk. Even after the split into factions described in the previous paragraph, the “highjack” faction, who wanted to use the project to generate processes through which Italian mountain territories could construct sustainable futures, developed their own Happy Project story. Their technical artifact would be a set of guidelines for “best-practices” with respect to the twelve axes the national experts had developed, and these guidelines would be made available to the inhabitants of mountain territories, as a basis for strategies of socio-economic development that were coherent with the identity and values of each territory to which they would be applied. And indeed the national experts, with some cooperation from the local experts in the four pilot territories, did develop such guidelines. What they failed to do is figure out a process that could identify groups of champions in a territory to work together with local public and private sector agents to mobilize the citizens in a territory to design and implement a strategy for local development based upon creative applications of the best-practice guidelines. In the end, they created some very interesting technical tools – but no process for developing patterns of social interactions in which those tools could perform their desired functions. The dynamic evaluators, who spent considerable time meeting inhabitants not involved with the project but very interested in the possibility of working to construct sustainable communities, developed a Magic Artifact narrative to make the project team aware of the need to bring these people into the project interactions. This Magic Artifact narrative was just a particular instantiation of the Happy Project, in which the suite of best-practice guidelines played the role of the technical artifact – and the last line of the story was “and they waved their Magic Artifact and the community became economically and socially sustainable, for ever and ever.” The highjack faction members got the message. The Green Communities project is over, but some members of the highjack faction (and some of the national and local experts that aligned with their narrative during the project) are working

²⁹ This is of course why we claim that social innovation projects, a kind of transformation process, needs a dynamic evaluation – and why dynamic evaluation can play a role in how a social innovation plays out, different from the prospective narrative that expresses the project team’s expectations



with some of the inhabitants in some of the pilot territories to figure out how to integrate the guidelines into a process that might “really” achieve the solution to the social problem they have collectively identified.



References

- Bruner, J. (1987), *Actual Minds, Possible Worlds* (Harvard U. Press)
- Bruner, J. (1992), *Acts of Meaning* (Harvard U. Press)
- Cartwright, N. and J. Hardie (2012), *Evidence Based Policy: A Practical Guide to Doing it Better* (Oxford U. Press)
- Gould, S. (2002), *The Structure of Evolutionary Theory* (Harvard U. Press)
- Lane, D. (2011), Complexity and innovation dynamics, in C. Antonelli, ed., *Handbook on the Economic Complexity of Technological Change* (Edward Elgar)
- Lane, D., R. Maxfield, D. Read and S. van der Leeuw (2009), From population to organization thinking, in *Complexity Perspectives in Innovation and Social Change*, 11-43 (Springer)
- Lehmann-Haupt, H. (1950), *Peter Schoeffer of Gersheim and Mainz* (Leo Hart)
- Mishler, E. (1999), *Storylines* (Harvard U. Press)
- Neisser, U. (1994), Self-narratives, true and false, in U. Neisser and R. Fivush (eds.) *The Remembering Self*, 1-19 (Cambridge U. Press)
- Patton, M. (2010), *Developmental Evaluation: Applying Complexity Concepts to Enhance Innovation and Use* (Guildford Press)
- Villani, M., S. Bonacini, D. Ferrari, D. Lane and R. Serra (2007), An agent-based model of exaptive processes, *European Management Review*, **4**, 141-151