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Small streams make big rivers: How local initiatives are helping a new conventional regime emerge

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Abstract

The vast majority of sustainable development initiatives are local. And yet, this “think globally, act locally” approach is criticized in academic circles for the supposed failure of isolated local actions to effect change on a global scale. Using the theoretical framework of conventional regimes, an analysis of six case studies representing a variety of local sustainable development initiatives in both developing and developed nations demonstrates otherwise. While on the surface local initiatives may appear disparate, they do share a set of characteristics that indicate that they could be supporting the emergence of a new, alternative conventional regime on a global scale. And if a new conventional regime is in fact emerging, the role the public sector could play in its development merits further study.

Keywords

Sustainable development, conventional regime, social innovation, institutional innovation

1 Introduction

A great number of sustainable development initiatives, from local farming to local exchange trading and fair trade systems, are implemented at the local level. Although these initiatives are generally well-received—after all, they are going in the right direction—the issue of scale inevitably rears its head. In academic circles (in France, at least), sustainable development initiatives are often criticized for being too small and too local to address major global issues.

I will argue that these criticisms—besides the fact that they contradict the now widely-accepted “think globally, act locally” approach to sustainable development that came out of the 1992 Rio Earth Summit—are merely evidence of resistance to an emerging alternative conventional regime. While many local sustainable development initiatives may appear to be very different from one another in practice, they are in fact based on shared principles. And, taken together, these initiatives and the shared principles that underpin them constitute a major global movement to establish an alternative to the current dominant conventional regime.

To provide insight into this shift, a clear understanding of *conventional regimes*, a concept that emerged from the Economics of Convention movement in France (Godard, 1990; Boltanski and Thévenot, 1991; Orléan, 1994; Favereau, 2010), is required. The first part of this paper will establish this theoretical framework.

The second part of this paper will examine several case studies from a conventional regime perspective. The case studies chosen are diverse—representing initiatives in Europe and in developing nations—and on the surface appear to be disparate. However, a closer look at the conventional principles that underpin them reveals striking similarities.

Finally, I will demonstrate that this **alternative conventional regime**—based on principles like proximity (Colletis et al., 2005), increased capabilities (Sen, 1999), and the use of participatory democracy as outlined by Buclet (2011)—could establish a **new framework for sustainable development initiatives**. In this new framework, grassroots local initiatives would not necessarily need to scale up their operations by creating large top-down organizations that try to duplicate what they are doing, but rather “scale up” their principles and values so that they can more easily spread to increasing numbers of local communities.

2 Conventional regimes: a theoretical framework

The term *conventional regime* is used to describe the principles that orient individuals’ behavior within a given human society at a particular time and in a particular place (Buclet, 2011). These principles, which are *conventional* in nature, are underpinned by a set of values shared by the individuals in that society. The concept of convention is an important one; it means that the principles are neither natural nor inherent to either human behavior or complex societies.

Conventions are social arrangements, either tacit or explicit, that allow members of a society to cooperate with each other (Boyer and Orléan, 1992). They are based on shared beliefs, rules, norms, and behaviors—all factors that regulate interactions within a given society. And the most legitimate forms of coordination, i.e., those that have maximum impact on the group, (Eymard-Duvernay et al., 2005), are based on conventions.

Again, for the purposes of this paper, it is important to emphasize that these beliefs, rules, norms, and behaviors are considered *conventional* insofar as there is no empirical evidence to support the hypothesis that conventions are “natural” choices. Only history—and, more specifically, the history of institutional trajectories of society as developed by Norbert Elias (1975)—could provide some explanation for how conventional reference points are formed. However, it is currently not possible to conclude that conventions are natural.

The most efficient conventional principles share one main characteristic: The individuals that use them to orient their actions and interactions with other individuals within the same society no longer question why they follow the principles. In the strongest conventional regimes, the conventional principles become naturalized through individuals’ own representations of how society *has to be* organized. And principles become naturalized only through the multiplication of reference points and conventional objects (Thévenot, 1986) that reify the principles, making them tangible in individuals’ day-to-day lives.

Individuals use these reference points and conventional objects and analyze the way they are interpreted and used by other individuals to reduce the uncertainty of future interactions. And the benefits are twofold: For individuals, reduced uncertainty about other individuals’ behavior increases the amount of information available and, therefore, the individuals’ capacity to act rationally according to their objectives; and for the society, there is greater chance of pacified interaction.

Over time, conventional principles and the act of using reference points and conventional objects are self-reinforcing (Boyer and Orléan, 1994). They often lead to phenomena that closely resemble self-fulfilling prophecies. Because individuals believe in the efficiency of established or adopted conventions, they follow them. And, by behaving in a way that is consistent with these conventions, individuals validate them. This is precisely what makes shifting from one convention to another so complicated. This is even truer when it comes to shifting to a new conventional regime.

3 Innovative local initiatives

That the world is seeing a wave of new hybrid business practices emerge is widely accepted, and has been for years. And this new trend is not limited to developing nations. In so-called developed countries, it can be seen in “innovative environments” (Aydalot and Keeble, 1988). And the phenomenon is about more than just novel ways of coordinating industrial stakeholders. It also goes beyond the well-founded notion

that the resources in a given local area are what boost business' competitiveness (Gumuchian and Pecqueur, 2007). While studying interactions at the local scale does shed light on how the economy is embedded in society, the broader social and cultural contexts and economic aims are not the only issues. Individuals' motivations are much more complex than those described by the *homo oeconomicus* myth, which are entirely focused on self-interest. Caillé (2009), for instance, points out the importance of factors like empathy, freedom, and the need for social integration.

This paper focuses on **local initiatives based on interactions that go beyond market sphere and self-interest**. And, when looking at sustainable development, it is important to understand what experiments based on alternative principles and values might bring. Therefore, the choice of case studies from both developing and developed nations is intentional, in order to show that, despite a variety of aims, these initiatives share other characteristics, and, in particular, the conventional principles that underpin them. Most of the analyses are based on written material provided by the organizations spearheading these initiatives.¹

3.1 A novel joint venture: Grameen-Danone in Bangladesh

Muhammad Yunus is well-known for his experimental microcredit program in Bangladesh—an action research project that gradually expanded into banking, mobile phone access, education, sustainable agriculture, justice for women, sustainable dwellings, and energy. Yunus' aim was to support the rural poor and, more specifically, poor women, not with assistance, but rather by giving them the means to start their own businesses and to increase their *capabilities* (Sen, 1999).

Grameen Foundation is now a global organization whose activities go far beyond Bangladesh. The Foundation's initiatives use a group-based approach (with groups of around five people), where borrowers are mutually liable for the repayment of loans. The groups function based on common principles like increasing capability, democratic decision-making, and proximity (Buclet, 2011).

Grameen and food-industry giant Danone set up a joint venture to produce yogurt locally to fight childhood malnutrition. In terms of the way in which the project was implemented, there are several aspects that reflect the principles mentioned above (increasing capability and proximity).

Yunus recommended building the smallest production plant possible, a radical departure from the dominant convention of economies of scale, where large organizations are inherently superior to small ones. Danone's head of operations in Asia had trouble accepting the idea at first. However, he soon understood that the proposed project reflected a "local business model." The goal was to build the plant as close as possible to consumers—not only to make and sell yogurt, but also to serve the community in other ways (Yunus, 2007). The milk used to make the yogurt is sourced from local dairy farmers whose businesses are supported by Grameen microloans. According to Yunus, local people are both customers and suppliers. If the plant is small and its products are consumed by people who live nearby, the community will ultimately consider it their plant (Yunus, 2007). Indeed, with the exception of packaging materials,² the yogurt is 100% local. Grameen-Danone also makes long-term pricing agreements with local suppliers to shield them from unpredictable global market fluctuations.

If this type of local model proves to be efficient, the ultimate goal will then be not to build a bigger plant, but rather to build many similar small plants throughout the country—an idea that is quite unusual at Danone. The production plant's lead designer later explained to Yunus that he thought that smaller production plants would result in higher per-unit production costs. But as he began working on the plant's design, he was surprised to discover that small plants could be as efficient as larger ones (Yunus, 2007). For one, smaller production plants—located close to their customers—are more efficient in terms of

¹ The Usinette case study also included interviews with the project stakeholders.

² Made from corn starch, but not locally.

logistics and supply chain management. And when it comes to products like yogurt, this vastly reduces the costly cold chain management issues that must be dealt with for large plants whose markets are spread over a large geographical area. Additional factors that tip the balance in favor of small, local plants are the challenges to maintaining the cold chain in countries like Bangladesh and the fact that the people of Bangladesh are accustomed to storing yogurt in clay pots in naturally-cool places and routinely consume this type of yogurt without any negative effects on health. While small, local plants do generate higher costs for certain steps in the production process, these costs can be offset by eliminating many of the usual middlemen.

This case involves both the market sphere and the reciprocity sphere (Polanyi, 2008). Retail sales of the yogurt are handled by women recipients of Grameen microloans. Their role goes beyond sales; they help build social ties. Here, the “local” approach is more than geographical. It is also organizational and institutional, as put forward by Pecqueur and Zimmermann (2009) in their proximity theory.

3.2 *La Città dell'altra economia*³

In 2007 in Rome, the association *Tavolo dell'altra economia*,⁴ a forum bringing together diverse economic stakeholders, joined forces with several organic food cooperatives to implement an initiative diametrically opposed to the dominant conventional regime. The program covered a wide range of activities including finance, fair trade, open-source systems, renewable energy, organic food, sustainable tourism, and local waste reuse and recycling and was set up in a “shopping mall” based on the core value of solidarity—a far cry from the prevailing mass-consumption model.

The project charter rejects dominant business practices like seeking unlimited expansion and profits and encourages the protection of human rights and the conservation of natural resources. The goals are to promote well-being for all through solidarity and social justice, increase individual and group capabilities, and reduce human impacts on the environment. Businesses must be both environmentally and socially responsible, and must reinvest their profits in other “alternative” businesses—rather than paying out dividends to shareholders. And, for the alternative economy to work, customers must have access to detailed information about businesses’ environmental and social performance.

These principles are more aligned with the “local” economic model (i.e., producing goods locally and adjusting manufacturing technologies and organizations to local conditions and locally-available resources) than they are with the dominant economic model. The initiative functions like a network, facilitating the sharing of knowledge among people and communities. Bridges between different initiatives fuel knowledge sharing and help the movement spread to other geographical areas.

The ultimate goal is to create the largest “alternative” community possible founded on common principles and values, and to effectively lay the foundations for a new conventional regime in which individual and collective actions embedded in a hypertrophic market polity will no longer be legitimate (Boltanski and Thévenot, 1991). As with the Grameen-Danone joint venture described above, the market sphere is not completely eliminated, it just plays a much smaller role.

What makes this initiative so interesting is that it seeks to achieve a “tipping point” by increasing the size of the movement. And, as Boyer and Orléan (1994) pointed out, even if the dominant convention is recognized by many individuals as inefficient, it nevertheless represents an evolutionarily stable strategy (Sugden, 1989) solidly anchored in our day-to-day lives, cognitive reflexes, and relationships with other individuals. As long as a majority of individuals follow the dominant conventional regime, there is little chance that an alternative conventional regime will emerge, even if it is considered more efficient. The dominant conventional regime cannot be invaded by an alternative regime simply because, in our day-to-

³ The city of the alternative economy (author’s translation).

⁴ The alternative economy roundtable.

day lives we have a much greater chance of meeting other individuals that follow the same dominant conventions we do than individuals that follow alternative conventions. On an individual level, this makes it more efficient to behave according to the dominant conventions, which means that even people dissatisfied with the dominant conventional regime tend to conform to it.

The issue is then how to increase the size of the “mutant” population of people following the emerging conventions. In the cases above, the response is to set up an organization that maximizes interactions with other people in the “mutant” population. In other words, to build communities. And these emerging communities’ chances for success are maximized when:

- The community is well-structured and its members share common principles and are able to recognize other members in order to interact with them. In the real world individuals are not isolated *homini oeconomici* whose only concern is to maximize their own usefulness. As Boyer and Orléan (1994) point out, if this were the case, the lack of differentiation between social relationships would keep the emerging conventions from spreading. The authors provide a model for the behavior of isolated individuals; but they also put forward the hypothesis of some localization of interactions in which agents are connected through social networks (Boyer and Orléan, 1994). They conclude that a more efficient conventional regime can invade the population if it is built on a social network that allows local interaction (Boyer and Orléan, 1994).
- Kolm (1984) explained that reciprocity could become a dominant model for economic interaction with the support of information and communication technologies. The *Città dell’altra economia* depends on these technologies. In this sense, Zaoual (2006) was right when he said that proximity is not only physical; it also depends on common values—something that the founders of the *Città dell’altra economia* had figured out. The movement’s charter emphasizes the need to spread the word about their experimentation and analyses. And by spreading the word, small “local” islands could come together to further increase the exchange of ideas and fuel group learning. This attempt at organizational innovation is at a scale far different than the “back to basics” communities that aim to live as in the past.

The *Città dell’altra economia* and Mohammad Yunus’ programs occupy some common ground. Rather than patently rejecting capitalism, they tweak the model by not allowing dividends to be distributed to shareholders. This results in radical changes to companies’ purposes and behaviors. Likewise, small-scale local production is preferred over mass production. This of course, does not prevent trade between different geographical areas, even on a global scale. However, trade relationships are built on a different foundation, and the search for market opportunities to leverage economies of scale are no longer at the center of the equation.

Another similarity between the two initiatives is the importance they give to democracy, dialogue, and cooperation. Competition does exist, but in a system that eschews mass production, the goal is no longer to eliminate competitors. The gradual concentration of market control in fewer and fewer hands subsides, and diversity increases.

3.3 The Slow Food movement

The Slow Food movement was founded in 1986 in Italy by journalist and food critic Carlo Petrini. The purpose of the movement, which went international in 1989, was to counter the disappearance of local food traditions amid the rise of fast food by linking the pleasure of good food—a variety of recipes, seasonal produce, and conviviality—to responsible stewardship of the community and the environment.

The movement’s main means of expansion is education. Its aims are to preserve local traditions, protect biodiversity, and support less intensive and more organic farming. The movement has more than 100,000

members worldwide and some 1,500 *convivia*⁵—local chapters—in around 150 countries and organizes a broad slate of events worldwide to defend biodiversity and people’s right to food sovereignty. Slow Food also founded the world’s first University for Gastronomic Sciences and is active in publishing.

Slow Food projects, called *presidia*, support small producers with a view to maintaining the production of quality food that would otherwise disappear while protecting local areas and their native species. There are around 200 *presidia* in Italy, and 100 in other countries, mainly in Europe and South America.

Even the name “Slow Food” has its importance. It is about more than just opposition to the term “fast food.” It is an expression of increasing numbers of individuals’ fear of a conventional regime whose only means of survival is to grow bigger, faster. If you consider free-market enterprise (if there is such a thing) as people unfettered by physical limitations exercising control over space and time (Buclet, 2009), then to evoke slowness is highly symbolic. Local areas may be linked to each other, but they remain independent and, therefore, multiple. Well-being is achieved through slowness—a capacity to enjoy the present moment.

As in the *Città dell’altra economia* case, the movement’s end goal is not autarky. Separate local areas representing a diverse range of identities continue to exchange with each other in a spirit of reciprocity. This is what drives the movement. Research and education play a major supporting role, as they are used to both sustain and improve upon traditional practices and techniques. The network is fundamental to disseminating the model—by persuasion, not coercion. Each local area maintains its unique features, but rejects the notion of one day becoming the dominant model to which other local areas must conform. Globalization is not rejected; it simply takes a fairer form based on cooperation for mutual benefit.

Pecqueur (2006), Ternaux (2007), and others point out that it would be wrong to consider that globalization has wiped out local production. The literature on competitiveness and innovation identifies local communities—and their unique cultures—as key sources of differentiation, and thus, innovation. Pecqueur (2006) says that many economies focus on product differentiation to drive competitiveness. Local economies are therefore based on specific knowledge enriched by communication with other local cultures. However, knowledge specific to local symbols also plays a role (Zaoual, 2006). While supporters of the dominant conventional regime often cast a condescending eye on movements like Slow Food, such movements could very well be at the cutting edge of the knowledge economy, an economy in which there is a place for local stakeholders.

3.4 Usinette project

Hackerspaces—a type of community workspace where people can use tools and machines to make things—are a bit different from the geographically-defined local areas in the previous cases. And while hackerspaces are built on an atypical business model, their financial viability does depend on a capacity to attract new members, which means spreading the word and developing the network—in other words, building bridges between the knowledge economy and local communities. Colletis, Gianfaldoni, and Richez-Battesti (2005) consider geographical proximity an advantage in that it deepens cognitive processes and strengthens and stabilizes the relationships individuals must form in order to coordinate interactions. Organizational and institutional proximity (i.e. adhering to common representations, rules for behavior, and ways of thinking) also help (Kirat and Lung, 1999).

A *Usinette*⁶ is similar to a hackerspace. Current members help new members open their own labs—community-operated workspaces where people can make things from wood, metal, and plastic and share knowledge across disciplines. For example, someone who needs a particular object can use shared tools

⁵ The backbone of the movement, set up according to local cultural and food traditions.

⁶ In French, *usinette* means “small factory.” See <http://usinette.org/le-projet-usinette/article/c-est-quoi-une-usinette>, consulted the 28/11/2013.

and software (like for 3D printing) to make it. Likewise, the lab can be used to produce or reproduce compact, easy-to-transport, affordable machines (either identical to existing ones or improved by members) for manufacturing other objects. The lab's resources also make it easy to replace damaged machine parts.

The Usinette project also shares some similarities with fab labs (fabrication laboratories), where anyone can come to design and make an object. MIT Professor Neil Gershenfeld initiated the first fab lab in the early 1990s sparking fruitful cross-pollination across disciplines like mechanical engineering, electronics, and IT. More importantly, the Usinette project—like fab labs—challenges mass consumption and is concerned with its consequences for individuals and the environment. The project also looks at the role of technology and its impact on individuals' independence.

The ultimate goal of the Usinette project is to give individuals greater capabilities using open-source tools that are within the financial and technical reach of most people. The idea is for each lab to have tools that correspond to local resources (human resources, raw materials) and needs. The idea of proximity is particularly relevant here, especially in relation to resources:

- Usinette users are potentially both producers and consumers; in the dominant economic system, the links between the production and use of goods are distended, resulting in what Baudrillard (1970) called the “cargo” effect, where consumers lose all understanding of what enabled them to buy a product and the product's environmental and societal impacts. Usinette eliminates these effects by bringing producers and consumers together.
- Geographical proximity between the manufacturer and manufacturing inputs; reclaimed materials are given priority.
- Local project leaders call on a local network to provide additional expertise based on reciprocity.
- Usinette members and local project leaders share an organizational and institutional framework, using Usinette as an organizational platform based on shared values and conventional reference points.

Usinette's founders emphasize the use of local resources; however, the entire cooperation-based system creates resources of two types:

- Within each Usinette, cognitive resources are shared, ultimately creating new resources for members. Therefore, there are built resources in addition to given resources (Gumuchian and Pecqueur, 2007).
- The local areas concerned will bring resources to their Usinettes, however, they will also be enriched by increased local knowledge, contributing to local innovation and its capacity to create differentiated knowledge.

In addition to the principles of capability and proximity, the Usinette project's governance model facilitates the involvement of individuals outside the typical hierarchical model. In this sense, Usinette is also based on the principle of participatory democracy.

4. A multitude of initiatives and means of coordination to promote local diversity

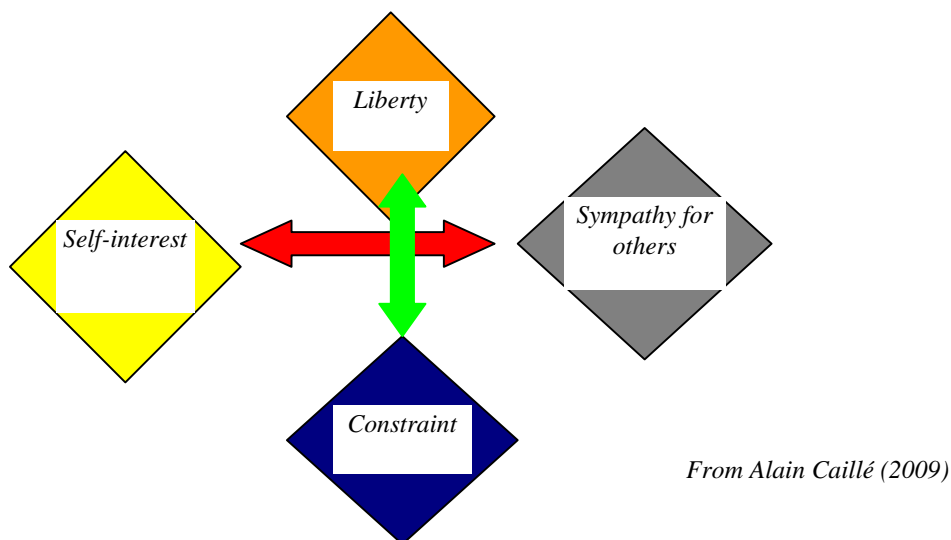
The four cases discussed above share several similarities (see table below). All of them reject the dominance of the market sphere over other mechanisms of coordination. As shown by Polanyi (2008), the market sphere is only one of the three means of exchange between individuals, the others being redistribution and reciprocity. In the four cases discussed above, reciprocity is the leading means of exchange; however market exchange and, to a lesser extent, redistribution, are also present. Another similarity between the four cases is that each is related to at least three principles of action that constitute reference points for the individuals involved: proximity, increasing capability, and participatory democracy (Buclet, 2011).

This section will look at the role played by these principles of action. Any reasoning based on the characteristics of a conventional regime requires examining the capacities of the regime to create stable reference points for the coordination of individuals' actions. As demonstrated by De Munck (2006), the principles should provide individuals with sufficient stability so as to be considered cognitive reference points. In other words, principles, as the fundamental basis for human societies, are the reference points around which conventional regimes are built.

4.1 A multitude of motivations and stable coordination reference points

If we accept the fact that self-interest is not people's only motivation, it is important to consider their motivations within a broader conceptual framework. Caillé (2009) presented the multiple human motivations as follows:

Fig. 1 Diversity of human motivations Freedom Constraints Self-interest Sympathy for others From Alain Caillé (2009)



In this framework, freedom is opposed to the constraints inherent to life in society; self-interest is opposed to sympathy for others. In the framework put forward by Caillé, people always act according to hybrid motivations resulting from trade-offs between opposing motivations.

A stable conventional regime is made up of reference points that facilitate compromises between opposing motivations. These reference points can be objects (e.g., a traffic light) or principles, whose purpose is to guide individuals by showing them the main orientations shared by the majority. This is the context in which the principles of proximity, participatory democracy, and increased capability should be examined.⁷

On the one hand, because they make it easier to express sympathy for others, these principles foster relationships between individuals much more so than in the current dominant regime. On the other hand, these principles tend to give individuals more responsibility by involving them more in the collective

⁷ Buclet (2011) offers a more complete analysis of the potential of these principles of action to promote sustainable development.

process of determining which social constraints are acceptable in creating more sustainable habits and by forcing them to be more creative in order to increase their capabilities and fulfill their own needs.

As de Tocqueville (1835) aptly observed about New England society, how much people care about the common good is directly related to how close citizens feel to policymakers. Involvement in political decision-making and proximity to political power promote more active citizens and facilitate creative problem-solving.

4.2 Alternative regimes and principles of action

The following table aims to demonstrate the link between the cases studied above and the principles of action in order to better understand whether or not these initiatives can effectively be considered part of an

	Grameen-Danone	Città dell'altra economia	Slow Food	Usinette
Increasing capabilities	Increase the capabilities of the rural poor in Bangladesh	Promote everyone's capabilities	Defend people's right to food sovereignty	Anyone can make machines to manufacture what they need
Geographical proximity and local approach	Build the smallest possible production plants to meet local needs; cooperate with local suppliers	Promote local products and economies based on locally-appropriate technologies and organizations	Protect local food and farming traditions; preserve local plant and animal species	Production uses local resources (know-how, materials); network facilitates local interactions
Organizational proximity	Reduce supply-chain management; give "Grameen ladies" a key role	Use of "fair trade" currencies	Local communities share same organization; networking plays major role	Hackerspaces are virtual forums for knowledge sharing; complementary to fab labs;
Institutional proximity	People consider the plant "their" plant; alignment between the initiative and the Grameen charter	Cooperative business model; business relationships based on reciprocity, parity, cooperation, and solidarity; exchanges between non-contiguous communities that share common values	Local areas (of which there are many) share same values but are independent; exchanges are based on parity	Importance of reciprocity-based relationships within hackerspaces

Sharing of created knowledge	N/A	Fundamental knowledge of quality products and real costs to society; importance of sharing experiences	University of Gastronomic Sciences; publishing activities	Use of open-source technologies; resources co-constructed by and for the network
Individuals contribute to goal setting	In the Grameen system, stakeholders are lenders	Individuals participate in discussion of the initiative's goals and practices	Global meeting every two years; discussions of future goals for the movement	Active discussion within hackerspaces; cross-participation; non-hierarchical
Reciprocity sphere is tied to other spheres	Ties with market sphere are strong; however, end goals are modified (no dividends)	Ties with market sphere are strong; however, end goals are modified (no dividends); strong partnership with City of Rome	Ties with market sphere (Slow Food restaurants), but everyone should have access to Slow Food (removal of financial barriers)	No ties; although Fab Lab users are occasionally involved in commercial manufacturing activities
Environmental goals	No established ties, but plant is designed to reduce environmental impacts	Goal is to reduce environmental impacts; consumers are encouraged to consume less	Support for less intensive, more environmentally-friendly farming practices	Most production materials are reclaimed

Table 1: Principles of action behind the four initiatives studied.

Table 1 shows that, in each of the four cases, the principles of action are implemented in very different ways. However, the principles are important to each case, with a few exceptions, such as knowledge sharing, which does not play a role in the Grameen-Danone case. And, although the case does not have clearly-established environmental goals, the very concept of very small, local plants substantially reduces the environmental impacts of cooling and shipping. With regard to the Usinette case, the project does not present strong links between the reciprocity sphere and other spheres; unlike the other initiatives, the Usinette project was designed to take place entirely within the reciprocity sphere. What this shows is that, if we accept such initiatives as being part of an alternative conventional regime, then the Usinette project is first and foremost indicative of a community of principles of action rather than a common political

position in opposition to the market sphere. On the other hand, the project's relationships with the public sphere (redistribution) are very weak. This opens the door to future study of how the public sphere could build relationships with such initiatives and what form these relationships could take.

4.3 Local diversity and collective interest

A conventional regime consistent with the aims of sustainable development presupposes a balance between individuals' quest for freedom and the constraints inherent to living as a member of society. From this perspective, it is relevant to look at how compatible the local initiatives studied above are with responses to global aims.

Local sustainable development initiatives are often perceived as autarkical. In some cases, this criticism is justified (self-built housing communities, energy-independent housing that is totally off-grid, self-sufficient communities that supply their own food and water). Such projects undoubtedly reduce their participants' own carbon footprint.⁸ However, they do raise the issue of how they are embedded in human society. In particular, solidarity often arises because individuals feel that it will help them better face social constraints. Rahnema (2003) explained this as it applies to hunger. In many human societies, community solidarity and food sharing have gradually disappeared as increasing numbers of individuals no longer feel concerned by the issue of hunger. Hunger (to be distinguished from starvation) as a social phenomenon is emerging as the ties that bind members of the same community deteriorate.⁹

How does this apply to the emerging conventional regime discussed here? In terms of the cases examined above, Table 1 shows that proximity is far from just geographical—it is also built on common values and knowledge sharing between communities that share these values. The flow of knowledge between separate geographical areas is substantial, and has the potential to promote solidarity. Each community and the individuals that make it up can hope to achieve higher levels of well-being by sharing knowledge.

For the cases discussed above, there is additional evidence to show that autarky is not the end goal. First of all, these initiatives all aim to expand geographically to other areas where individuals would like to share a common political vision.

However, further analysis and indicators are needed to understand how these local initiatives contribute to global aims (which are difficult to perceive at the local level).

⁸ Even though this type of project often depends on the use of batteries, whose environmental impact is far from negligible. Furthermore, it is unlikely that the metals and minerals required for battery production would be available in sufficient quantities if this type of energy-independent home became truly widespread.

⁹ This same deterioration of social ties is also a characteristic of the dominant conventional regime.

4.4 The issue of scale

Finally, it is crucial to look at the generalization of emerging conventional regimes. For local initiatives with a relatively narrow scope,¹⁰ the issue of scale is often raised as a criticism. After all, how can purely local initiatives meet global sustainability aims? Major global environmental challenges like curbing climate change, protecting biodiversity, and conserving natural resources cannot be solved through a pixelated array of small, local programs. To be effective, these initiatives would have to have the capacity to generalize, with the corresponding institutional frameworks at the regional—and even national—levels.

This reasoning is incomplete, however. Although sustainable development issues are global, there is nothing to indicate that the solutions also have to be global. **The initiatives presented in this paper constitute organizational innovations.** And, while technological innovations do play a role in some of the initiatives, their role is not preponderant. To scale these initiatives up, therefore, would mean maintaining the organizational characteristics of the original projects. The principles of action that underlie the initiatives must also be preserved, as they represent the shared values local individuals can leverage to coordinate their actions in favor of sustainable development.

Scaling up does not mean developing large, centralized organizations. The four cases studied here indicate that it is preferable to develop many separate initiatives that share common principles of action and implement them according to local conditions. The Slow Food case shows that, rather than homogenizing knowledge and action through a top-down approach, information and communication technologies can be used to ensure the circulation of technical and organizational know-how (thus creating proximity even between individuals that are not geographically close). Again, the notion of proximity is not purely geographical; it depends here on a common willingness to reject mass production and the standardization of society. There is also a common political vision. The approach should take into account a multitude of mechanisms for exchange between individuals, with priority given to local conditions—rather than seeking to homogenize organizational mechanisms, erasing local diversity and reducing individuals' creativity and awareness. It would be interesting to examine what role the public sector could play in this emerging regime.

4 Conclusion

Although the local sustainable development initiatives presented in this paper are quite different from one another, they do have some common features:

1. Importance is given to the proximity (not necessarily geographical) of the individuals involved
2. People and communities are independent; they are free to come up with their own solutions to the needs expressed by their members according to local conditions
3. Knowledge sharing strengthens proximity
4. Participatory democracy promotes individuals' buy-in; people are empowered to be agents of change

¹⁰ Although in some cases, such initiatives are in fact developed on a larger scale, as in the case of the initiative rolled out by the Indian NGO TBS in the district of Alwar in Rajasthan (Buclet, 2009): The project covered about 6,000 km², too large to be considered purely “local.”

All of these features increase people's capability and, therefore, encourage social justice (Sen, 2009). And, as principles for action, they create the potential for the emergence of an alternative to the dominant conventional regime, in both developed and developing nations. This could ultimately give rise to a *whole action* (Livet and Thévenot, 1994) in which local sustainable development initiatives are the small streams that converge to form a big river.

References

- Aydalot P., Keeble D. (Eds.), 1988. *High Technology Industry and Innovative Environments: the European Experience*. Routledge, London.
- Baudrillard J., 1970. *La société de consommation*. Editions Denoël, Paris. 2009 edition.
- Boltanski L., Thévenot L., 1991. *De la justification : les économies de la grandeur*, Gallimard, Paris.
- Boyer, R., Orléan, A., 1992. How do conventions evolve? *Journal of Evolutionary Economics*. 2(3), 165–177.
- Boyer R., Orléan A., 1994. *Persistance et changement des conventions. Deux modèles simples et quelques illustrations*, in Orléan A. (Ed.) *Analyse économique des conventions*. Presses Universitaires de France, Paris, pp. 219–247.
- Buclet N., 2009. *Les déclinaisons territoriales des stratégies de développement durable : à la recherche de l'espace-temps perdu*. Mémoire d'Habilitation à Diriger des Recherches, Université de technologie de Compiègne, 15 juillet.
- Buclet N., 2011. *Le territoire entre liberté et durabilité*, Presses Universitaires de France, Collection Développement durable et innovation institutionnelle, Paris.
- Caillé A., 2009. *Théorie anti-utilitariste de l'action : fragments d'une sociologie générale*. Ed. La Découverte, Paris.
- Colletis G., Gianfaldoni P., Richez-Battesti N., 2005. *Économie sociale et solidaire, territoire et proximité*. *Revue Internationale de l'économie sociale* 296, 8–25.
- De Munck J., 2006. *Vers un nouveau paradigme du Droit*, in Eymard-Duvernay (Ed.) *L'économie des conventions : méthodes et résultats. Tome I Débats*. La Découverte, Paris, pp. 249–262.
- Elias, N., 1975. *La dynamique de l'Occident*. Calmann-Lévy, Paris.
- Eymard-Duvernay, F., Favereau, O., Orléan, A., Salais, R., Thévenot, L., 2005. Pluralist integration in the economic and social sciences: The economy of conventions. *post-autistic economics review* 34, 22–40.
- Favereau O., 2010. *La place du marché*, in Hatchuel A., Aggeri F., *L'activité marchande sans le marché*. Presses des Mines, Collection Économie et Gestion, Paris.
- Godard O., 1990. *Environnement, modes de coordination et systèmes de légitimité: analyse de la catégorie de patrimoine naturel*. *Revue Economique* 41(2), 215–241.
- Gumuchian H., Pecqueur B. (Ed.), 2007. *La ressource territoriale*, Economica, Collection Anthropos, Paris.
- Kirat T., Lung Y., 1999. Innovation and proximity territories as loci of collective learning processes. *European Urban and Regional Studies*. 6(1), 27–38.
- Kolm S-C., 1984. *La bonne économie : la réciprocité générale*, Presses Universitaires de France, Collection Politique d'aujourd'hui, Paris.
- Livet P., Thévenot L., 1994, *Les catégories de l'action collective*, in A. Orléan (Ed.), *Analyse économique des conventions*. Presses Universitaires de France, Paris, pp. 139–167.
- Orléan A., 1994. *Analyse Economique des conventions*. Presses Universitaires de France, Paris.
- Pecqueur B., Zimmermann J., 2004. *Economie de proximités*, Editions Hermès-Lavoisier, Paris.
- Pecqueur B., 2006. *Le tournant territorial de l'économie globale. Espaces et sociétés* 124-125, 17–32.
- Polanyi K., 1986. *Fascism, Democracy and Industrial Civilization: Selected Essays of Karl Polanyi*. Gondolat,

Budapest.

Rahnema M., 2003. *Quand la misère chasse la pauvreté*. Actes Sud, Babel, Paris.

Sen A., 1999. *Development as Freedom*. Oxford University Press, Oxford.

Sen A., 2009. *The idea of justice*. Harvard University Press, Boston.

Sugden R., 1989. Spontaneous Order. *Journal of Economic Perspectives* 3(4), 85–97.

Ternaux P., 2007. *Activités de service, choix de localisation et dynamiques territoriales*, in Monnoyer M-C., Ternaux P. (Eds.), *Mondialisation des services : innovation et dynamiques territoriales*. L'Harmattan, Paris, pp. 125–136.

Thévenot L., 1986. *Les investissements de forme*, in Thévenot L. (Ed.), *Conventions économiques, Cahiers de Centre d'Étude de l'emploi*. Presses Universitaires de France, Paris, pp. 21–71.

Tocqueville A. de, 1835. *De la démocratie en Amérique I*, Gallimard, Paris. 1986 edition.

Yunus M., 2007. *Creating a World Without Poverty: Social Business and the Future of Capitalism*. Perseus Books Group, CITY.

Zaoual H., 2006. *Management situé et développement local*. Horizon Pluriel, Rabat.