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Consumers as actors in Transition Management: the de-commoditization and sufficiency strategies[1]

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Abstract

Transition management is concerned with fostering and steering socio-technical innovations so as to achieve (more) sustainable modes of provision for important societal functions such as energy, transportation, food. It relies on a multi-level model of the social realm as the interplay between regimes, niches and landscape and conceives of social innovations as transformations in dominant modes of provision by incumbents of the regime incorporating innovations initiated in niches or being crowded out by them. Hitherto, the approach has concentrated mainly on technology niches and the supply side of the economy leaving not much for the consumers as plain actors of the transition. We maintain through a decomposition analysis of a measurement model of sustainable development that sustainable consumption depends not only on eco-efficiency and ecological modernization but also on de-commoditization and sufficiency and that de-commoditization in particular is indispensable for controlling rebound effects. Contrary to the eco-efficiency strategy in which markets and firms play the main role, the consumer and the citizen are the principal if not the only actors of the de-commoditization and sufficiency transition. There already exists "niches" of de-commoditization and sufficiency, which are grassroots initiatives but their scaling up and spreading is hindered by important barriers coming from the economic and social context. We argue that the introduction of an innovation such as a basic income scheme would help removing these barriers and foster the transformation of our consumption regimes.

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Introduction

The Transition Management (and system innovation) approaches have greatly contributed to our understanding of the way technical innovations originate, are adopted and eventually pervade society. They equip us with a rich framework not just for conceptualizing socio-technical change but more importantly for steering it in the desired direction of sustainability. It offers a multi-actor multi-level governance model that might represent the only workable avenue to genuine sustainable development. However, the system innovation and transition management approaches have, so far, concentrated mainly on innovations in technological and organizational infrastructures of provision and supply. Though it would be unfair to write that the user and the consumer is totally absent from the system innovation and transition management concerns, it is true that until now the emphasis has been put on changes in the large technological clusters of agriculture, industry and services viewed mainly from the producer point of view. Most historical examples of transitions referred to in the literature focus on the changes that take place on the production and supply side more than in the demand, consumption patterns and lifestyle side of the economy. McMeekin and Southerton (2007) confirm the point:"In the innovation literature as a whole, there has been a significant imbalance between understanding innovation from the production side compared to considerations of final consumption, the ultimate destination of a significant proportion of productive activity (…). Apart from studies of innovation diffusion and social shaping approaches (….) the main emphasis has been stacked in favor of supply relative to demand or production relative to consumption." It is no surprise therefore if the move towards sustainability has been generally defined as a matter of resources management, of higher efficiency in the use of energy and material resources at the production and uses stages of commercial products and services, in a word, as ecological modernization

However, it is more and more obvious that efficiency alone will not suffice to insure sustainability and that innovation and breakthroughs will have to take place not only in the design and use of commodities but also at the more fundamental level of our conceptions of the importance and role of commodities and consumption in a flourishing and satisfying life. This stems out clearly form a decomposition analysis of the concept and measurement of sustainable development from a consumption perspective.

Sustainable development: a decomposition analysis

The point of departure is sustainable development conceived of as the ratio between an input, the consumption of scarce resources (principally, but not exclusively, natural ones), and an output: human welfare and well-being. This is the road taken by M. Common (2007) for measuring national economic performance without using prices. Restricting the scope to environmental resources, his discussion leads to the following formula as synthetic expression of sustainable development:

S = WB/EF (1)

Where:

- S = sustainable development
- WB = human well-being
- EF = Ecological footprint[3]

This formulation can be put in parallel with Nørgärd's (2006) decomposition of what he calls the "overall efficiency" of the production and consumption patterns. He demonstrates that "overall-efficiency" is the interplay of 4 "local" efficiencies: satisfaction efficiency, service efficiency, maintenance efficiency and throughput efficiency. The overall efficiency ratio between the final output (satisfaction) and the primary input ("eco-sacrifice") is thus disaggregated in a succession of interrelated intermediary ratios, as follows:

Overall-Efficiency

= **Satisfaction/ Eco-sacrifice**

= **Satisfaction/Service * Service/Stock * Stock/Throughput * Throughput/Eco-sacrifice**

The formula is best understood by starting from the last ratio, the **Throughput/Eco-sacrifice** ratio or throughput efficiency which expresses the productivity of the production process with respect to environmental resources. Then comes what Nørgärd calls the "maintenance efficiency" which refers to the durability, reparability, etc., of the stock of goods. The **Stock/Throughput** ratio is the converse of the goods replacement rate, i.e. the number of new

[3] Note that Common prefers GHG (Greenhouse Gases Emissions) as indicator of environmental load. While being uncomfortable with the methodological options underlying the ecological footprint indicator and cautious about its use, we prefer the concept of ecological footprint because its scope is wider than the sole emissions of greenhouse gases.

goods entering the stock with respect to the size of the existing stock. The service efficiency refers to the number of services provided by a given stock of goods. This has mainly to do with the way the goods are appropriated and used. For instance, the **Service/Stock** ratio is higher for a taxi than for an individual car, because the former is used the whole day long by many customers, while the latter is most often used only twice a day by one customer only. Finally, the satisfaction efficiency refers to the satisfaction brought by the service. For instance, in the current traffic conditions in town, the mobility service brought by the individual car is less and less satisfying. As Nørgärd (2006, 18) observes:

"The reason for adding satisfaction efficiency … is that in the affluent part of the world, *marginal* satisfaction of increasing services from the market seems to be very low and declining, maybe even below zero."

Nørgärd's analysis of consumption efficiency shows how limited and partial are public and business policies that focus exclusively on the throughput efficiency ratio by aiming only at *decreasing the mass of materials in products*. This is only one part, and perhaps not the most important one, of the answer to the issue of sustainability of our production and consumption patterns. However it is probably the easiest to put at work in a capitalist and technology-driven economy (and culture) because it doesn't challenge their fundamental growth and production orientation. Actually, the more you go from the right of the formula to the left, the more you move away from what is taken-for-granted in our industrial societies and bring into question their deepest and unconscious cultural underpinnings. Indeed, going one step further than the eco-efficiency or "decoupling" policy, a more demanding ecological modernization approach would act also upon the "Stock/Throughput" ratio by encouraging more durable goods and struggling against the "planned obsolescence" of many so-called "durable" goods. This means (Geiser 2001) extending the useful life of multi-uses products[4], designing products for upgrading and adaptation but also for reconditioning and remanufacture and for repair and reuse.

Service efficiency expresses the rate of service acquired from the consumer's stock of goods (durable and non-durable). One effective way to increase service efficiency is to substitute services for products, like in the above mentioned example of the taxi vs. the individual car. Another strategy in this respect is to foster the sharing of products, as for instance in car

[4] On the contrary, one-use products are those that are totally exhausted (except for wastes and pollutions) in the act of consuming, like food, fuel, drugs, etc.

sharing. More generally, where the use pattern of a product involves long periods of disuse or the acquisition costs are high, products may be shared among multiple users. Examples are numerous (Geiser 2001, 324): ladders, lawnmowers, washing and drying machines in residential areas; tool and equipment rental stores allowing customers to share the services of hardware and avoid individual purchases; video rental stores giving customers a wide choice of films by sharing the services provided by the individual DVD machines, etc.

Finally, the satisfaction/service ratio expresses the fact that the ultimate goal of consumption is well-being, happiness or needs satisfaction. Clearly, some satisfiers are more efficient than others in bringing satisfaction, or well-being. Bringing together Common's and Nørgård's analysis, we propose to decompose formula 1 in:

S= (WB/C) * (C/EF) (2)

Where **C** = Commodities. Thus **(WB/C)** refers to the productivity of commodities in terms of well-being and **(C/EF)** to the intensity of commodities in natural resources.

Formula (2) shows that sustainability can be improved by increasing **(WB/C),** by increasing **(C/EF)** or both, or, putting things the other way round, by decreasing the intensity[5] in commodities of well-being, by decreasing the intensity in resources of commodities or both.

Things can be disaggregated further. The term **(WB/C)** can be expressed as:

(**WB/Se) * (Se/C)**

"Se" refers to the notion of service as used by Nørgärd (like in the context of energy and not as used in the national accounting context). Indeed, what matters for the energy consumer is not energy as such (Kw/h) but the lighting, mechanical power, etc. brought by energy. Likewise, what matters for the user of a TV-set is not the TV-set as a thing but the services it provides in terms of TV-programs, etc. One way to define the notion of service in a need-satisfier framework advocated by Max-Neef (1992) is to define it as the interface between the satisfier and the need or as the "satisfying virtue" of the satisfier. **WB/Se** stands for the productivity of the services in terms of well-being and (Se/C) for "consumption efficiency", the productivity of commodities in producing services**.** The full formula then becomes:

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5 The intensity in resource R of a production P is the inverse of the productivity of the resource R in production P. In others words, productivity is measured by the ratio P/R and intensity by the ratio R/P. The more productivity, the less intensity and vice versa.

S = (WB/Se) * (Se/C) * (C/EF)   (3)

Formula 3 shows that there are three "pure" strategies to enhance sustainability:

1. Increasing the (WB/Se) ratio by decreasing **Se** while maintaining or increasing **WB**. This amounts to partly disconnecting well-being from services. It could be called the *sufficiency* strategy.
2. Increasing the ratio (**Se/C**) by decreasing **C**. It could be called the *de-commoditization* of services strategy.
3. Increasing the (**C/EF**) ratio by decreasing **EF**[6]. This strategy aims at minimizing the energy and materials content of commodities consumption. It is the well-known *eco-efficiency* strategy, the one privileged in transition management and system innovation.

Actually, formula 3 is incomplete. It leaves aside the ecological footprint of the consumption of non-commercial satisfiers. Indeed, the proposed decomposition makes a partition between two kinds of satisfiers, commodities and non-commodities, but takes only into account the environmental load of commodities, as if non-commodities were necessarily environmentally neutral. Of course this is an oversimplification and it must be stressed that in the future, if non-commodities consumption should gain in importance, one should certainly scrutinize the tacit assumption that it is in fact as eco-efficient as required. However, there are indications that "community-based" goods and services are indeed more environment-friendly than their commodity counterparts (Seyfang 2001).

The eco-efficiency strategy has been at the forefront long enough for needing no more explanation or discussion, even if the last word has still not been said on eco-efficiency in consumption as such. The de-commoditization and sufficiency strategy have received less attention.

The de-commoditization and sufficiency strategies

De-commoditization of consumption consists in substituting non-commercial goods for commercial ones and non-commercial services for commercial ones, i.e. briefly, in

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6 Note that Nørgård's last two ratios are aggregated in our (C/EF) formulation. This means that we don't make a distinction between Nørgård's maintenance efficiency and throughput efficiency.

substituting where possible non-commodity satisfiers for commodities, defined as: “goods, services and experiences which have been produced solely in order to be sold on the market to consumers…(and) produced by institutions which are not interested in need or cultural values but in profit and economic values.” (Slater, 1997, p. 25).

De-commoditization is the reverse of the “commoditization” process described by Manno (2002:70) as the “tendency to preferentially develop things most suited to functioning as commodities – things with qualities that facilitates buying and selling – as the answer to each and every type of human want and need”. It is also slightly equivalent to what Hirsch called the “commercial bias” or “commercialization effect” characterized by the fact that “an excessive proportion of individual activity is channelled through the market so that the commercialized sector of our lives is unduly large.”(Hirsch1977,p.84). Therefore, de-commoditization is synonymous of de-marketisation, a partial decoupling of consumption from effective demand. According to Harvey and al. (2001, p.4):

“… a useful distinction (is) to be made between demand and consumption, process now too frequently conflated. Demand signifies the concerns of suppliers in markets and thereby focuses upon the possibilities and terms of commodity exchange. Consumption refers to a much broader set of social practices whereby people utilise services and products which are only sometimes acquired by purchase in a market and which are deployed in the context of social values which transcend the confines of instrumental and rational calculation”.

Decoupling consumption from demand and limiting the influence of markets amounts to increasing the influence of others systems or organisations through which we satisfy our needs and aspirations, that is, others “modes of provision”. Table 2 shows what distinguishes these different “modes of provision”.

***Table 2. A typology of modes of provision**. Source: Harvey and al. (2001)*				
Mode of provision	*Manner of obtaining service*	*Who does work*	*Who pays (if anyone)*	*Principle over which service is obtained*
Market	Commercial purchase	Paid employees	Consumer	Market exchange
State	Claim to entitlement	Paid employees	State (tax payer)	Citizenship right
Communal (cooperatives LET)	Personal interconnections	Neighbours or acquaintances	No money involved	Reciprocal obligations
Domestic	Household Do-it-yourself	Members if household	No money involved	Family obligation

If we group together the domestic and the communal modes of provision under the general heading of “communal sphere”, we may illustrate the de-marketisation (or de-commoditization) strategy with the help of an equilateral triangle as in figure 2. Let us call “consumption pattern” the proportion of energy and materials services consumed by households (shares of households’ budget) respectively in the form of commercial commodities, public services and goods and communal goods and services. Every consumption pattern could be symbolized by a point in an equilateral triangle, the distances between each point and the three sides of the triangle expressing the proportions of consumption occurring under the market, the state and the communal mode of provision[7]. Points situated at the angles are pure state, market or communal consumption patterns, all others involve, though in very different proportions market, state and a community components.

[7] The idea of using equilateral triangle for this kind of display comes from Kolm (1984) but has been mostly developed by Van Parijs (1990).

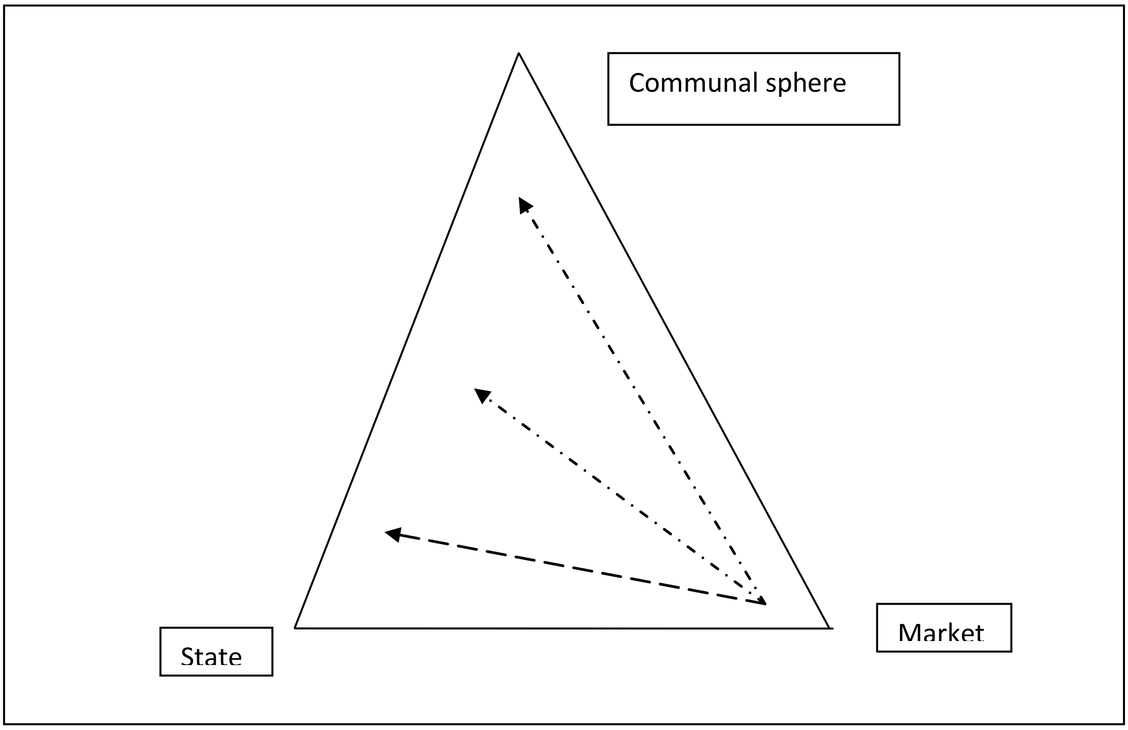

Figure 2. The modes of provision triangle

One calls "modal split" the most frequent consumption pattern in a given society (Gershuny 1983). In consumer societies, the great majority of consumption (hence the modal split) concentrates in the right bottom area. Indeed, the consumer society resulted from an historical trend (still ongoing at a global level since the disruption of European communist regimes) of commoditization, i.e. of transferring the provision of services or goods from non-market systems of provisions to commercial ones. As Warde puts it:

"The history of consumption might be written as a process whereby activities shift between spheres – from the household to the market, and sometimes back again, from the market to the state, and sometimes back again." (Warde, 1997, p154).

De-commoditization consists in bringing some activities back to the non-market sphere, the public and communal sectors. Needless to say, this is not an easy strategy to follow in an age of almost religious faith in the virtues of the market and of distrust in those of the state and perhaps still more, of the community. Recently, much of the business of the European commission has consisted in taking goods and services away from the public sector and committing them to the market. Not such a long time ago, an important proportion of households' consumption was provided by public services, or by state-owned or partly state-owned firms. It was the case for electricity, water, telephone, broadcasting, television, etc.

Before the reign of the individual car, most if not all, travelling by train, bus, ship and airplane was provided by public enterprises. Many public services in Western societies have been dismantled under the pretext that they were less efficient than private, commercial services. However, there is nothing definitive in this and sustainable development might make necessary to reverse the trend, notably because it entails a redefinition of efficiency which takes into account environmental concerns. On the other hand, many goods and services which cannot be efficiently provided or managed at the state government level could be so at a lower institutional level. Generally, the public services used to be organised and managed at the highest institutional level. But local authorities can also be providers of goods and services to their populations. For instance, it is often the case in cities big enough to need and afford an urban transportation system. The risk of bureaucratisation and of corporatism is more easily controlled when working at the local level. Indeed, there is a tendency to revisit the notion of public service in the perspective of a "new municipalism." (Manski and Peck 2006):

The sufficiency strategy consists in two attitudes:

- Minimising the role of material services in the definition and production of our well-being. (cultural-dematerialization)
- Striving to get the maximum well-being from each unit of material service consumed (sufficiency properly said).

This leads necessarily to "downsizing" one's consumption and living standard. Sufficiency can be pursued for various reasons, not all of them necessarily altruistic. Obviously, the sober lifestyle adopted by many environmental and de-growth activists is first of all a manifestation of their concern for the great majority of non-consumers in the world and for the well-being of future generations so that their consumption pattern can be truly characterised as "responsible" if not purely "altruistic". But downsizing or relocating consumers can also be motivated by purely selfish reasons such as improving one's health, avoiding stress, the nostalgia of a "good old time" and so on. In between, we find the "alternative hedonism" advocated by Elizabeth Soper (2007) as a kind of republicanism in consumption:
"...what is here shared across the distinction being drawn between more or less self-interested motives is a distinctively moral form of self-pleasuring or a self-interested form of altruism: that which takes pleasure in committing to a more socially accountable mode of consuming". (Soper, 2007:213).

The function of de-commoditization in the transition to sustainable consumption

There is nothing new in the distinction between efficiency and sufficiency as strategies of sustainable development. In some way, it is as old as Barry Commoner and Holdren and Ehrlich's I = PAT model which shows how environmental load results from the interplay of demographical (P for population), socio-economic (A for affluence) and technological (T) factors. The equation leads naturally at distinguishing policies that act on technology (efficiency policies) from policies that act on population and affluence (sufficiency policies). However, de-commoditization is less often considered an environmental sustainability strategy in its own. When it is advocated, it is usually more for cultural, social or philosophical reasons than for the sake of the environment. However, it is justified in a dematerialization and environmental perspective by the threat of rebound-effects as consequences of efficiency and sufficiency improvements. It is well-known (since Jevons 1865) that eco-efficiency can in some circumstances trigger an increase in overall consumption of energy or raw material instead of the expected diminution if it leads to lower market prices for the concerned goods making the corresponding income available for more consumption of these goods and services or the consumption of others one, equally or even less environment-friendly. Recently, Blake Alcott (2008) argued that the sufficiency strategy could also lead to significant rebound effects by lowering prices of some commodities and therefore opening the market for new customers hitherto unable to afford the concerned goods or services. For instance, it is likely that a significant reduction in meat consumption by affluent populations (from the South as well as from the North) would lead to a decrease in meat and crop prices making these products affordable now for customers from underdeveloped and emerging countries. Even if such a result is felicitous from a global justice point of view, nothing will be gained for the environment if additional measures are not taken. It can be argued that de-commoditization is the right weapon against these rebound effects because, by de-linking the consumption of some goods and services from markets and monetary income, it cuts down the price and income effects responsible for the rebound phenomenon. It follows that, if sustainable consumption is to become reality it will necessarily be a mix of eco-efficiency, de-commoditization and sufficiency, admittedly in varying proportions according to the consumption domain (housing, mobility, food, leisure, health care...), the current level of material well-being, technological efficiency potential and of course, the prospects in terms of likelihood and importance of rebound effects. In these strategies, the consumer and the citizen have an important role to play. Indeed, because it gives the priority to the eco-efficiency strategy, the ecological modernization approach focuses on firms, technology and markets, leaving not much room for the consumer in sustainability transition. However, insofar as eco-efficiency only will not do, notably because of rebound effects, and as de-commoditization and sufficiency will be needed, the consumer and the citizen come back in the forefront as the main (if not the sole) actor of these alternatives strategies.

De-commoditization and sufficiency niches

The transition management and system innovation approaches highlights the importance of "niches" – as opposed to the incumbent regime – in nurturing innovations and triggering transitions to a new regime. Niches acts as "incubation rooms" where "small networks of dedicated actors, often outsiders or fringe actors" (Geels & Schot 2007:400) can originate and experience innovations, i.e. new system of rules. As already argued the rules usually referred to in the literature are mostly engineering and production rules, but nothing prevents us from considering that innovations can concern other kinds of rules, be they cognitive, behavioural or organizational (social). Therefore, we can, following Seyfang and Smith (2007), consider "grassroots innovations" as niches where new rules of practices and of consumption are experienced. By "grassroots innovations", or "green niches" Seyfang and Smith refer to experiences as diverse as LETS (Local Exchange Trading Systems) and Time Banks (community-building projects quite close to LETS where participants give and receive services in exchange for time credits), Community-Based Agriculture, co-housing, and so on.

These grassroots initiatives can be considered as the de-commoditization and/or sufficiency equivalent of production-technology niches in transition management because they "…represent collective, collaborative efforts to transform not simply the market choices available, but sometimes the entire market system itself. They are collaborative efforts to offer new solutions to the sustainable production and consumption imperative, which overcome the principle problem with an individualized approach to greening the market, namely that acting individually, consumers are powerless to change the rule of the game, they are stuck within current socio-technological regimes." (Seyfang & Smith 2007, 11).

According to our typology of sustainable consumption strategies, it is possible to make a distinction between de-commoditization niches and sufficiency niches. In the former, we would classify all systems which intend to satisfy people needs with non-commodity goods and services and without using money as a medium of interchange, keeping in mind that, as figure 1 makes clear there is a whole continuum between pure market-based and pure community or public-based satisfiers. In the latter, we would classify all communities, groups or social movements that advocate and practice “de-growth”, “voluntary simplicity”, “alternative hedonism”, etc. In practice, it happens most often that grassroots initiatives combine sufficiency and de-commoditization, in varying proportions.

Despite the noted similitude with niches of technological innovation niches analysed in the system innovation and Transition Management literature, the de-commoditization and sufficiency ones differ from them in (at least) one fundamental aspect: their objectives, cultural underpinnings, organizational rules, etc., can hardly be considered as innovations. As Robert Nisbet (1973, 323) remarked: “Periodically in the history of the West since the fall of the Roman Empire, we find groups turning their backs upon the established social order and withdrawing to more or less remote places in order to seek renewal of what they believe to be man’s natural tendency toward genuine community and morality”.

What is common to human experiences and intellectual tradition characteristic of what Nisbet called the “ecological community” that he opposed to the “military”, “political”, “religious”, “revolutionary” and “plural” communities and in which he puts pell-mell the monastic order of Saint Benedict of Nurcia, the Utopian tradition opened with Thomas More’s Utopia, Proudhon’s mutualism, industrial communities launched by Thomas Owen, Saint-Simon and others and even Kropotkine’s anarchism? The answer is:

“...the close, cohesive interdependencies symbolized by the small household economy; the interdependencies among organisms and between organisms and environment which are natural in contrast to those which are contrived and artificial; and the profound sense of a web of life existing between man and the rest of nature than man endangers only at his own peril”. (324).

Though not being new in their objectives and philosophical underpinnings, current grassroots initiatives can be considered as innovations considering the context in which they take place today. There is a dramatic difference between the grassroots experiences of nascent capitalism, industrialization and globalization which Marx and Engels castigated as “utopic socialism” and the same experiences in a globalised, mature capitalism and nearly post-industrial world obsessed by science and technology but threatened by their very successes.

The problem from a system innovation and transition management perspective is to weight (and enhance) the probabilities for these niches to scale up and/or spread and disseminate enough for engaging a real transition to sustainable development. Currently, as Seyfang and Smith (2007, 13) show, grassroots innovations are facing several challenges in technology, finances and human resources from their very inception and all over their development (if any):.

"The set of challenges faced by grassroots innovations begin with their inception: establishing an initiative requires a particular combination of skills, key individuals and champions, resources and supportive contextual factors. After the start-up phase, the challenge is to survive and keep going, which requires additional skills and people, and which demands that initiatives develop resilience and a resource base. As a result, grassroots innovations spend about 90% of their time simply surviving, and only 10% developing the activity (...). This has major implications for the survival of niches for the following reasons. First, there can be a failure to develop robustness and resilience to shocks. Secondly, if grassroots innovations are short-lived – for any of these reasons and more there is frequently no formally documented institutional learning."

Had alternative modes of provision benefitted from only a tiny, microscopic part of what has been spent in research, thought and creativity by states, corporations, universities, business schools, think tanks etc., during at least a century, to make markets and capitalism – in particular capitalist companies – function more or less, we can be quite confident that they would be less vulnerable, more durable and more efficient than they are now. The history of the capitalist firm has been paved with innumerable failures and bankruptcies without the fundamental viability of its model being seriously questioned, except by radical leftists. Simply, there was a political and social willingness to make it function. In comparison, every pitfall or failure of an alternative production or consumption model, whatever the institutional setting (communal or public) and whatever the reason for failing is taken as an evidence that it must be intrinsically flawed and therefore doomed to failure. One of the greatest weakness of grassroots innovations lies in the fragility of their financial basis linked also to their difficulty (if not plain impossibility) to get bank loans. Furthermore, managing and even participating in grassroots initiatives is time-consuming and rightly so because in many cases their very objective is precisely to substitute time for money. However, only the people who don't need to allocate all of their working time in paid labour to earn the minimum monetary income indispensable for satisfying basic needs have the real freedom to choose the de-commoditization or sufficiency option. It follows that, without some durable, sustained financial support from society, it is very unlikely that green niches scale up and spread enough for inducing changes at the regime level.

Basic income: a social innovation for sustainable consumption transition

It is probable that the simplest and more effective way to support green niches would be by the introduction of a basic income, that is the payment on a regular basis (on a monthly or yearly basis) by the political community of a (monetary or not[8]) income to all its members on an individual basis, without any means test nor working requirements. As apparent, a basic income is not to be confused with the systems of minimum income guarantee already existing – principally – in Europe that are generally household based (or modulated according to family status), conditioned on some means test and/or depending on present or past labour performance or the willingness to accept a job. On the contrary, a basic income would be totally individual and (almost – because of some citizenship requirements) totally unconditional.

Introducing such a reform would certainly be a major social innovation and yet, as for grassroots initiative, the idea as such is far from new. It appeared probably for the first time as early as 1516, the year of publication of "Utopia" by Thomas More, in which Raphael the traveller, recommend it warmly to the bishop of Canterbury. Since then, it has been repeatedly advocated through history notably by Charles Fourier, Thomas Paine, John Stuart Mill, Bertrand Russell, etc. but has really began to burgeon around the nineteen seventies and eighties in several European under different names ("Bürgergeld", "allocation universelle", "renta básica", "reddito di cittadinanza", "basisinkomen", or "borgerlon") as the founding and development of the "Basic Income European Network" – recently renamed "Basic Income Earth Network" to account for its globalising membership – testifies.

The ethical justification and economic soundness of such a system have been thoroughly demonstrated notably by P. Van Parijs (1992, 1995), James Mead (1989), Tony Atkinson (1995), G. Standing (2004) amongst many. Its main strength as weapon against poverty and involuntary unemployment is that, contrary to existing conditional social allowances, it doesn't generate the fiscal or social traps that lock the claimants in poverty and unemployment. Furthermore, a basic income scheme would foster more flexible working patterns helping those willing to devote more time to the informal economy and de-commoditized systems of provision for needs satisfaction. Philippe Van Parijs, after having balanced between confidence and scepticism concerning the necessity of a link between basic

[8] In its most frequent acceptations, the basic income is a payment in cash. However, for sustainability reasons, for example, it can be interesting to consider other forms of payment, including non-monetary numeraires.

income and the development of what he called, after André Gorz the “autonomous sphere” is now convinced that there is indeed a intimate connection between them and Gorz himself, who was first hostile to the idea eventually endorsed it, making it a central piece of his “socio-ecological policy” (Gorz, 2008 (1992), 67-68):

“A socio-ecological policy consists mainly in guaranteeing a sufficient income independently of working time and, at last, of work itself; in redistributing the socially necessary labour so that everyone could have a job and work less and better; in creating spheres of autonomy in which the time made available could be spent in activities freely chosen by individuals, including the self-production of goods and services making them less dependent on market and administrative and professional structures and enabling them to reconstruct a fabric of solidarity and vivid sociability made from networks of reciprocal support, bartering of services and informal cooperatives.”[9]

Big societal transitions result from changes occurring simultaneously and in many (if not all) societal domains and reinforcing themselves. Basic income is such an innovation taking place at the level of the taxation, social security and the labour market that would most probably make possible the blossoming of de-commoditization and sufficiency niches and, at last, the transition to sustainable development.

Conclusions

We have tried to show that sustainable development will not result only from technology-driven transitions but also from changes in daily life practices and behaviours. Alongside eco-efficiency improvements in production and consumption patterns, some move in direction of partial de-commoditization of practices and sufficiency-driven lifestyles will have to be made. This can be dealt with in the transition management framework with minor adaptations. As for technological innovations, there already exist niches of ‘de-commoditization’ and sufficiency that would be scaled up and multiplied in a transition process to a sustainable consumption regime. Unfortunately, these “green consumption niches” are facing many obstacles which will not be removed without changes taking place in the organization of production, income distribution and social security. The setting of a basic income scheme

[9] My translation.

would bring about the suitable changes at these levels and as such should be taken in consideration as part of the transition management kit in the consumption domain.

References

Alcott, B. (2008). "The sufficiency strategy: Would rich-world frugality lower environmental impact?", *Ecological Economics*, **64**: 770-786.

Atkinson, A. (1995). *Public Economics in Action. The Basic Income/Flat Tax Proposal*. Oxford: Clarendon Press.

Common, M. (2007) "Measuring national economic performance without using prices", *Ecological Economics*, **64** (1): 92-102.

Geels, F.W. and J. Schot (2007). "Typology of sociotechnical transition pathways". *Research Policy*, **36**:399-417.

Geiser, K. (2001). *Materials Matter. Toward a Sustainable Materials Policy*. Cambridge, Mass. : The MIT Press.

Gershuny, J. (1983). *Social Innovation and the Division of Labour*. Oxford: Oxford University Press.

Gorz, A. (1992). "L'écologie politique entre expertocratie et autolimitation" in A. Gorz (2008) *Ecologica*. Paris : Galilée.

Harvey, M. A. McMeekin, S. Randles, D. Southerton, B. Tether & A. Warde (2001). "Between Demand & Consumption: A Framework for Research." CRIC Discussion paper N°40. University of Manchester.

Hirsch, F. (1976). *Social Limits to Growth.* London and Henley: Routledge and Kegan.

Manno, J. (2002). Commoditization: Consumption Efficiency and an Economy of Care and Connection" in Prinzen, T. M. Maniates and K. Conca (eds), *Confronting Consumption*. Cambridge, Mass.: the MIT Press., pp. 67-101.

Manski,B. and J.E. Peck (2006). "Corporatisation: an internal clash of civilisations", in Chavez, D. ed., (2006), *Beyond the Market:The Future of Public Services*. TNI Public Services Yearbook 2005/6, Trans National Institute (TNI) / Public Services International Research Unit (PSIRU), February 2006, pp. 159-169.

McMeekin, A. and D. Southerton (2007). Innovation and final consumption: social practices, institutional modes of provision and intermediation. CRIC Discussion paper, N°97, University of Manchester.

Meade, J.E. (1989) *Agathotopia: The Economics of Partnership*. Aberdeen: Aberdeen University Press.

Nisbet, R. (1974). *The Social Philosophers*. London: Paladin.

Nørgärd, J.S. (2006) "Consumer Efficiency in conflict with GDP growth", *Ecological Economics*, **57** 15-29.

Seyfang, G. (2001). "Community Currencies: Small Change for a Green Economy", *Environment and Planning* **A 33** (6), 975-996.

Seyfang, G. And A. Smith (2007). Community action: A neglected site of innovation for sustainable development? CSERGE Working paper EDM 06-10.

Slater, D. (1997). *Consumer Culture & Modernity*. Cambridge: Polity Press.

Soper, K. (2007). "Re-thinking the 'Good Life': The citizenship dimension of consumer dissatisfaction with consumption", *Journal of Consumer Culture*, 7(2): 205-229.

Standing, G. (1999). *Global Labour Flexibility. Seeking Distributive Justice*. London/Basingstoke : Macmillan.

Van Parijs, P. (1990). « Impasses et promesses de l'écologie politique », *La Revue nouvelle*, n° 92-2, Bruxelles, février 1990.

Van Parijs, P., dir. (1992). *Arguing for Basic Income*. London:Verso.

Van Parijs, P. (1995). *Real Freedom for All. What (if anything) Can Justify Capitalism*. Oxford: Oxford University Press.

Warde, A. (1997). *Consumption, Food & Taste*. London, Thousand Oaks, New-Delhi: Sage Pub.