



Growth and democracy: Trade-offs and paradoxes

Mauro Bonaiuti

University of Turin, Via Verdi, 8, 10124 Torino, Italy

ARTICLE INFO

Article history:

Available online 30 March 2012

ABSTRACT

The present paper attempts to reveal the relationships between some long-run systemic processes (on the economic, ecological, social and symbolic levels) and the theme of democracy. Starting from the distinction between democracy and autonomy, the paper focusses on its main issue: the trade-off between growth and autonomy. Continual growth can be produced, and indeed has been produced throughout history, only if accompanied by a loss of autonomy, even, beyond a certain scale threshold, to the detriment of representative democracy. While this conflict has never been rejected by political theorists, it has, in actual fact, been removed from all political debate.

The second part of the paper seeks to individuate some of the long-run basic dynamics that characterise the global system: the analysis starts from the growth/accumulation/innovation process which characterized industrial capitalism, first, and financial capitalism, later, pointing out its self-pursuing, multi-scale, emergent nature with its main consequences for both *ecological* and *social sustainability*. The outcome of these processes, such as the loss of well-being, the increasing social and ecological costs and the growing fragmentation of the collective imaginary, in the long run leads the global system towards a condition of *non equilibrium*, from which either scenarios of greater autonomy or fatal risks for democracy itself, may emerge.

© 2012 Elsevier Ltd. All rights reserved.

“Utopia is something that does not and cannot exist.
What I call the revolutionary project,
the project for individual and collective autonomy,
is not a utopia but a concrete historical-social project
that can be carried out.”
Cornelius Castoriadis (1992) [1,p. 17]

1. Introduction democracy and autonomy

For Castoriadis, as for supporters of degrowth, the project for an autonomous, convivial society is not a utopia. Should men and women consciously seek and desire it, a society in which people share and participate in fundamental decisions can be brought about. Yet perhaps there has never been a time in the history of modern western societies when the decisions on which the lives of each of us depend, particularly those concerning the methods of the re-production of common goods and wealth, have lain so far beyond citizens' control.

Although the project for autonomy is undoubtedly the offspring of Western thought, of the Greek tradition in particular, at first sight one might well say that it is a promise that has not been kept. According to one of the greatest contemporary

E-mail address: mauro.bonaiuti@unibo.it.

historians, no century produced so much violence and heteronomy as the *Short Twentieth Century* [2]. However, the history of the last twenty years, starting with the no-global movements and ending with the Arab spring, has witnessed the re-emergence, like an underground river, of various forms of social reaction that despite everything express a desire for greater autonomy and participation. As we shall see this thus opens up new opportunities, in point of fact a very narrow doorway, for the project of an autonomous and convivial society or, if one wishes, for a radical “rethinking of democracy” (cf. Deriu, in this issue).

2. Vous avez dit autonomie?

Our argumentation necessitates some preliminary definitions and distinctions, particularly as far as the concepts of democracy and autonomy are concerned.

By democracy we mean, as Schumpeter said [3], a political system in which élites or minorities alternate in the government of a country, opposed, in this sense, to autocracy as the government of a single minority. This definition seems to reflect fairly well what democracy has been in its true historical determinations, and for our ends may suffice for the moment.

Autonomy, on the other hand, according to Castoriadis is “the project for a society in which all citizens have an equal, effective chance to participate in the legislation, government, jurisdiction and, finally, institution of society,” that is to say in defining the fundamental rules that govern it [1, p. 18]. This is exactly what the Greek origin of the word meant. Taking this definition as a starting point, the concept of autonomy may at first sight appear to be similar to that of democracy, in particular to what is usually intended by “direct democracy”. However, on closer analysis one realises that the difference between autonomy and democracy is not one of “degree” but of a qualitative nature, which, as we shall see, refers not only to different institutional forms/scales but even to a different anthropological foundation.

In order to comprehend fully the force and importance of the idea of autonomy, it is first of all necessary to free the field of all eventual misconceptions, since the meaning of the concept is often taken negatively, especially by its detractors, even going so far as to signify two extremes, “unconditioned freedom”, on the one hand, and what we may call “autarky”, on the other. In order to see how autonomy differs from unconditioned freedom, let us look at what it means on the individual level.

For Castoriadis, who bases his thought on Freudian psychoanalysis, the autonomous individual is essentially the individual who has managed to recuperate part of his own subconscious dimension in favour of the conscious ego. He is obviously well aware that he will not be able either to suppress his impulses or to reabsorb them fully, yet autonomy presupposes a recuperation, however incomplete, on the part of the conscious will, of the “dark” forces that dominate “within me” and act for me, in other words “drive me”. This passage is important if one is to understand the role of the imaginary in the difference between “autonomy” and “freedom”: admitting the subconscious aspect means introducing the concept of other because the subconscious aspect is the distillation of the expectations, desires and investments to which the individual has been subjected from birth on the part of those who have generated him, brought him up and educated him. In this sense, we can say that being governed by the subconscious entails respecting the laws “of the other”. It is now important to understand how, according to Castoriadis, the imaginary is profoundly interwoven with these subconscious determinants.¹

The search for autonomy, as a path that is continually new and never arrives at a destination, is, therefore, in its deepest sense, a search for awareness, an exercise of the transformation of the self, an attempt to capture the subconscious dimensions of our imaginary and realise how far the risk of being controlled by the ‘other’ is continually hidden in them. For example, the role in today’s society that the mass media play in this conditioning is obvious. All things considered, since the individual finds himself in a state of being “penetrated on all sides by the world and by others”, any “unconditioned freedom” is, in this sense, unthinkable.

In this way we also come to understand better its social dimension. If autonomy presupposes a web of relationships in which the other is always present, then it is clear that it can only be conceived as a social relationship. In other words, autonomy can only be sought “for everyone”, and its plan for the future can only be conceived as a “collective” undertaking that is in all cases open and inspired by a “plurality of values”, so that it is, obviously, very different from any plan for the defence of self-identity or “autarky”.

Moreover, for Castoriadis, as for Ivan Illich,² the tension towards autonomy is seen to be in conflict with the oppression brought about by institutions. Such oppression is revealed as: “a mass of states of privation and oppression, as a consolidated global, material and institutional structure of the economy, power and ideology, as mystification, manipulation and violence” [4, p. 174]. The oppression brought about by institutions, therefore, lies at the root of the lack of autonomy, both

¹ This is what he says: “The subject is dominated by an imaginary, which is experienced as more real than reality, even if it is not recognised as such, indeed, precisely because it is not experienced as such. It ends up assuming the function of defining for the subject both reality and his desires” [4, pp. 165–166].

² The latter aspect has been pointed out very effectively by Ivan Illich, who favoured the term “conviviality”. For Illich, a society is convivial when “the tool” (economists would say technology) “can be used by any person who is integrated into collectivity, not restricted to a body of specialists who have control over it”. Further: “A convivial society is one in which the chance for everyone to use the tool to carry out his own aims predominates”. It is, therefore, important to stress that an autonomous, or convivial, society reserves for itself the possibility of a direct and efficient control over the “how” of production, that is to say, over the economic and social conditions of the production of wealth [5].

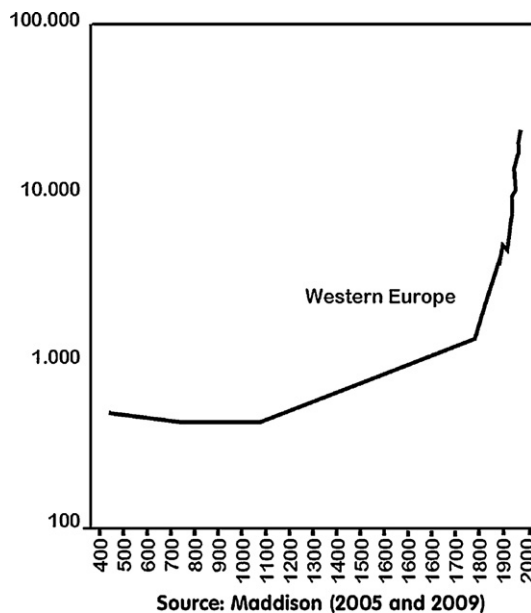


Fig. 1. GDP Growth in the very long run.

because institutions justify these effects and permit a certain social group to maintain its power over others, and because these institutions once they have become established then generally end up by becoming self-sufficient. We shall return to this point later.

3. Growth, accumulation and innovation as a self-increasing emergent process

The following part attempts to identify a few fundamental long-term processes (on the economic, ecological, social and cultural levels), in which growth is the common denominator, and which may explain the reasons for the multidimensional crisis we are now facing.³ This analysis will help to understand why today's society presents increasing economic, social and ecological costs and why the long-term effects might favour the opening-up of new opportunities for autonomy. At the same time, this analysis serves as an introduction to what we may consider the three pillars of degrowth.

Fig. 1 shows Angus Maddison's data [7,8] on economic growth in the very long term. Although calculation of GDP prior to 1870 must be taken very cautiously, Maddison's calculations reveal how the European economy was basically in a steady state (or in slight degrowth) from the fall of the Roman Empire until the tenth century; this was followed by a slow, gradual growth until 1820, which amounts to about 30% in eight centuries. However, from the Industrial Revolution the curve clearly presents a discontinuity, revealing a decidedly exponential trend, with a 50-fold increase in production in less than two centuries. More precisely, the European economy has grown 47 times from the start of the industrial process (1820) until today (2001), Northern American even 678 times in real terms and global economy 53 times. The population's history follows the same trend.

The fact that part of the profit made by enterprises should be reinvested, thus increasing their endowment of capital, which then becomes the basis on which to make new products and hence new profit, is the fundamental trait of the modern, capitalist economy. However, very little attention has been paid to the nature of this relationship in cybernetic terms: we are undoubtedly faced here with a process of positive feedback. It is this dynamic, with its persistence throughout the extraordinary transformations that have taken place in these centuries, that explains, we believe, the exponential economic growth that has characterised these economies since the Industrial Revolution, a growth that was unknown to all the previous forms of economic and social organisation.

Classical economists, in particular Adam Smith and Marx, understood very well that this circular, recursive process of increase in profit, new investments and new profits (in Marxian terms the Money–Commodities–Money cycle) is the fundamental trait of the modern/capitalist economic system. The neo-classical interpretation, on the contrary, while devoting hundreds of pages to praising the self-regulatory nature of markets, has said very little to underline the evolutionary nature of the process of accumulation, supporting a view of general equilibrium that is basically unhistorical.

³ This part will make extensive use of concepts and methods deriving from the theory of complex systems (feedback, emergence, scale, etc.). For a brief introduction to the conceptual tools used here, see M. Bonaiuti [6].

Obviously growth cannot be denied but, in neoclassical models (à la Solow), it is essentially attributed to increases in productivity, that is to say to technological progress, which is considered to be exogenous.

More recent models on endogenous growth [9] have tried to remedy this major drawback, taking into consideration the role human capital and knowledge play in explaining growth. However, these models, too, avoid considering the structural change that arises from the fact that neither human beings nor artefacts are “homogeneous substances” (in Georgescu-Roegen’s sense) and their interaction, therefore, is frequently the cause of discontinuous changes and the emergence of new properties [6].

Nowadays the sciences of complexity permit us to interpret the relationships among growth, accumulation and innovation in a far more promising light. First of all, innovation, as Schumpeter had already intuited, consists in a process of “discontinuous change”, transforming both the goods produced and the productive processes. In other words, growth implies the emergence of qualitative transformations that, as Georgescu-Roegen claimed, depend significantly on the initial states of the process (path dependence). Furthermore, in this perspective, particularly in competitive situations, growth, accumulation and innovation are part of the very same self-increasing process, where not only does technological progress sustain growth, but growth also becomes the source of further innovations, in a recursive, self-expanding spiral.

To put it very briefly, following the sciences of complexity, we can state that the exponential trend of the growth curve reveals the presence of two fundamental processes:

1. a long-term positive feedback among growth, accumulation and innovation, and
2. the emergence of new structures/institutions connected to the multi-scale, path-dependent process of growth.

The presence of a long-term positive feedback is confirmed, as we have seen, by the exponential trend of the growth curve. As far as the second point is concerned, there have been various processes of structural change connected to economic growth in modern times. The following three brief examples give some idea of what types of processes of change are connected to increases in scale.

The first has been memorably described by Karl Polanyi in *The Great Transformation* [10]. It concerns in particular the phase that characterises the passage from an economic system based on agriculture to an industrial one. Polanyi describes how some processes of structural change – from enclosures to the creation of a labour market – are necessary for the process of accumulation to begin. The simple fact that labour could be bought and sold like any other goods, something practically unknown in any previous form of social organisation, was not a chance occurrence. Making labour (and nature) a commodity, subject to the rules of the self regulating market, involves such a deep social change that, quite comprehensibly, the outcome of this process was the emergence of not only another economy but also of another society. Since the consequences of this “great transformation” affect above all social matters, we shall return to this point later when speaking of the social limits to growth.

A second great process of structural change is what we may call, along with Baran and Sweezy [11], the emergence of *monopolistic capitalism*. The dynamic of growth has involved a profound change in productive structures, that is to say in enterprises. This process reached its first full maturity at the beginning of the 20th century, when the American economy reached a powerful concentration of production. Profiting from the scale economies connected to the mass production of the Fordist type, enterprises capable of making the most profit incorporated the weaker ones, moving towards the concentration of production within a few large companies. This growth in size strengthened their scale economies, permitting, by means of cost reduction, further increases in profit. In this way, too, a process of positive feedback was set in motion.

At a later stage, the profound transformation in the organisation of labour within the Fordist context, thanks to the increased strength of the trade union movement, particularly in Europe, raised the cost of labour, reducing profit (and savings) with a consequent reduction in growth rates in the more advanced countries, inducing the enterprises to transfer significant parts of their production to those countries where labour costs were lower (outsourcing). This process has caused the large transnational groups to renounce their direct management of the productive process, yet at the same time increase their control over financial activities, which have thus become strategic. This process has led financial organisations to play a leading role and increase their dominance over the real economy [12]. The emergence of this new kind of economic structure permitted financial organizations to bypass the regulatory mechanisms instituted by national states (*globalization*).

We can conclude from this that although the process of growth/accumulation/innovation cannot be reduced to a process of a uniform quantitative growth, as in standard theory, it does, however, constitute the fundamental process that characterises the modern age, both because it gives rise to the major changes occurring inside the economic system, and because, as we shall see, the other most significant self-destructive processes, from the spiral of the ecological crisis to the various forms of social crisis, are closely connected to it.

4. Growth, innovation and the ecological crisis

The entry of new enterprises in competing markets, together with the natural exhaustion of the life cycle of products in mature sectors, leads in the long run to declining profit rates. This phenomenon, of which Ricardo was already aware and which neoclassical economists also acknowledge, in a certain sense constitutes the basic homeostatic process to which any competitive market economy is subject. The effect of this negative feedback would end up by dampening economic growth since it would cancel out the essential process of accumulation of capital. If, therefore, a society wishes to encourage a

process of continual growth, which is to last over several generations, it is necessary to find ways in which this process of compensation may be rendered ineffective.

There are two basic ways in which enterprises can ensure lasting extraprofits. The first consists in creating some sort of barrier to other firms entering the market, usually thanks to exercising some type of monopolistic power. As we have seen, this is exactly what happened in America at the beginning of 20th century (concentration processes) and later on in other capitalistic economies. The second consists in addressing their production towards continually renewed goods and new markets. The continual differentiation of products and, finally, the creation of truly new goods/services/markets (what, in other words, is generally meant by the term innovation) represent the second basic process by which the productive system has avoided the principle of decreasing marginal returns, with a consequent drop in the profit rate, for more than a century.

However, this continual racing ahead does not escape the laws of thermodynamics: a new product is nothing but a “new” combination of matter/energy/information and thus its production involves not only the irreversible degradation of a certain amount of energy but also the “loss” of a certain amount of available matter, which, in actual fact, cannot be recycled at the end of the process, as Georgescu-Roegen points out [13]. We can sum up the underlying causes of the ecological crisis, concerning both the inputs (resource exhaustion) and the outputs of the system (global warming, loss of biodiversity, etc.), in these dynamics. Moreover, the empirical evidence accumulated over the last thirty years has basically confirmed this view. We can consider the “ecological criticism” underling this analysis as the first pillar of degrowth.

5. Social Sustainability

The analysis of the consequences of economic growth on social systems (what we might call social sustainability) is certainly more complex and controversial than that which concerns ecosystems. It must be admitted that our understanding of the dynamics of social systems is still extremely limited. Yet if we do not intend to renounce any chance of imagining eventual, however uncertain, scenarios of future un/sustainability, the questions that arise concerning this level of complexity are, in many aspects, unavoidable. Considered as a whole, the different processes which lead to social un/sustainability represent the second pillar of degrowth.

5.1. *Inequality and the criticism of development*

Very generally speaking, we could say that until today the problem of social sustainability has basically been faced in terms of equity [14]. The widely shared belief is that greater inequality is considered to be a cause of conflict, social instability and loss of well-being [15].

The first question underlying this dynamic is whether growth and development may be considered, as the neoclassical theory of convergence maintains, the bearers of a more equitable distribution of wealth among different countries or rather its contrary. The empirical evidence in this regard reveals, at a first glance, contradictory results: if, on the one hand, from the end of the Second World war European countries (and Japan) have been very alert and drawn close to the income levels of the USA, recently followed by some Asian countries, on the other, some poor countries, particularly in sub-Saharan Africa, have remained unaffected or even witnessed, at least in relative terms, a drop in their income rates [16]. It is enough to recall that the annual income of the richest 1% of the people on earth is more than the annual income of 57% of the world's poorest populations. The difference in incomes between the richest 20% and the poorest 20% increased from a ratio of 30:1 in 1960 to 74:1 in 1997 [17].

According to the orthodox approach, as is known, poverty and exclusion are explained as the effect of the delay (underdevelopment) of some countries throughout the process of growth and development, which are seen as basically progressive and universal.

What, on the contrary, characterises the “criticism of development” – a thread of thought, presented by Ivan Illich [5], Partant [18], Rist [19], and Latouche [20], that lies at the roots of the prospect of degrowth – is its overturning of the former interpretation of the phenomenon of poverty and exclusion. According to “critics of development”, on the basis of evidence of a prevalently historical-social and anthropological nature, the main factor to be held responsible for poverty and exclusion must be sought precisely where it was claimed that the solution was to be found, that is to say in the process of growth and development. This paradox, however, in our opinion, is consonant with a systemic approach for two reasons: on the one hand, as we have seen, the process of growth and accumulation has a self-increasing nature. Given the competitive framework of international markets, it follows that those areas which have not succeeded in keeping pace with innovations and technological progress find themselves facing a technological gap that is increasingly difficult to bridge. In other words, the process of growth has led in the more advanced countries to a series of cumulative transformations in the productive, educational and financial systems, whose complexity is far beyond the reach of the poorest economies.⁴

On the other hand, what is interesting to underline in a systemic perspective is that “positive” results (such as the improvement in the life standards of the western middle-upper classes) and negative ones (such as poverty and exclusion in poorest areas) are, according to Latouche and the other “critics” – seen to be the offspring of related processes where

⁴ At the same time, the advanced countries are capable of controlling the strategic markets in which these structures operate, in conditions that are far from perfect competition. This increased the inequality of the exchange [21].

different actors/territories reach different results (starting from different initial conditions), not as different “stages” in the same convergent process.

This does not mean that the principle of “declining marginal returns” (that is basic to the theory of convergence) is incompatible with complex system theory [22].⁵ It seems rather that it is the disparities in the initial conditions of the different countries (in the cultural, institutional, educational, financial structures, etc.) together with temporary cumulative processes (positive feedback) that explain the extraordinary diversity of the results reached by different countries. In point of fact, although they use different analytical tools, even the theory of endogenous growth recognises that – in the presence of increasing returns – growth may favour those territories/countries that are already more advantaged [9].

However, a complex approach cannot fail to recognise that alongside this self-reinforcing dynamic we also have to consider processes of a self-correcting nature: on a national scale, first of all, the process of the redistribution of wages (often connected to the efficacy of trade-union struggles) and, to a lesser extent, the spread of welfare-state services; on the international level, we have to consider the re-equilibrating effects of foreign investments; and, finally, in peripheral areas, the processes of imitation and learning. On the whole, while inequalities in income were gradually reduced in western countries from the beginning of the twentieth century to the 1970s, the chronic weakness of foreign investments, together with the lack of welfare institutes on an international level, explain why the inequalities on a global level are far more acute than they are within the single countries. The opening of national economies to globalisation from the 1980s may thus explain why the “magnificent and progressive destinies” associated with Kuznet’s *U* curve have gradually been disregarded: greater competitiveness has indeed had the effect that the great inequalities on an international level have now streamed into the “advanced” national economies, lowering salaries and standards of living [23].

5.2. Growth and the dissolution of social ties

If the problem of social unsustainability finds its first basic anchorage in the question of poverty and exclusion, we believe that a trans-disciplinary analysis must bear in mind at least other two processes: the first concerns what we call the “dissolution of social ties”, the second the transformation in shared social meanings, that is to say in questions pertaining to the social imaginary.

For Karl Polanyi [10] the capitalist process, the great transformation which accompanied the industrial revolution, implies a dual process of mercantilization: factors of production, human beings and nature must be reduced to commodities. It is the “mega-machine” that demands this: a continuous supply of work and natural resources is in fact essential if the productive process is to be carried out regularly and, above all, for huge invested capital to find adequate, relatively safe returns. Thus, in the eighteenth and nineteenth centuries, the conditions were created for the exploitation of natural resources and labour markets.

This process resembles a social metamorphosis, that is to say, in systemic terms, the emergence of a new form of social organisation, rather than a gradual process of natural development, something that Polanyi himself stressed: never before, in earlier economic-social organisations, had labour been bought and sold as it was in England at the beginning of the nineteenth century. A series of institutional mechanisms, of rules strongly enforced by laws and customs, acted as negative feedback systems, preventing labour, with all the importance of social and symbolic relationships it involved, from being bought and sold in the market. This process of reorganisation meant that the reciprocal relationships on which traditional socio-economic systems were based, were disbanded and replaced by the exchange of goods. To use the words of the great economist, the economy advances on the desertification of society.

According to Polanyi, this transformation involved the emergence not only of a new type of economy but also of a new type of society. In the first phase it required the disbandment of the rules and relationships that characterised the previous type of social organisation and of the homoeostatic processes that ensured its stability. This was accompanied by the rise of an almost autonomous sphere of economic relationships, together with a successive increase in the complexity of this sphere (specialisation of labour, etc.) which ended up by dominating and shaping them.

It is important to understand, as the process of transformation gradually reached full maturity and the market economy spread throughout new countries and towards new societies, how this process involved a progressive dissolution of social ties.

As has been shown by the pioneering work of Marcel Mauss [24], and by the studies of the *Mouvement anti-utilitariste dans les sciences sociales* (MAUSS) which he inspired, (in particular of Caillé, Godbout and Latouche) what characterizes traditional societies is the threefold obligation of giving, receiving and reciprocating [25,26]. In other words, it is through the multiplication of giving and taking that social ties are maintained and strengthened.

In contrast, what characterizes market relations is their impersonal nature. Market relationships are based on what economists call “exchange of equivalents”. The equivalence of what is exchanged makes it possible for market relationships to cease at the same time as the exchange takes place, therefore without any personal ties being formed as a result. As Milton

⁵ On the contrary, it seems to be valid in both the short and the very long terms. In general, in fact, it is reasonable to hypothesise that the simplest and safest investment projects, hence of high expected returns, will be tackled first, followed at a later stage by those that are more complex and risky, hence of low expected returns. On the very long run it can be explained also by the limitation of “natural capital”. This fundamental point would need further extensive researches.

Friedman, the Chicago school ideologist of neoliberalism, cleverly said: “In the great global market it is not necessary to know, let alone to sympathise with, one another.” This fundamental characteristic of the market offers significant advantages. First of all, it has permitted an extraordinary multiplication of the number and types of goods exchanged: it has been calculated that in the city of New York the consumer can choose among a 10^{10} different types of goods [27]. Together with the break-up of traditional social ties, this has meant for many people an increase in personal freedom. However, what is not normally mentioned is that there is another side to the coin: the spread of market relations is accompanied by a progressive dissolution of social ties.

This process further increased in speed from the early 1980s along with neoliberalism and the globalisation of the markets, as many sociological studies have recognised. In Bauman’s interpretation [28] and [29], the disintegration of social ties today can be seen in the form of social liquidity. It is not merely by chance that modern, liquid society is “a consumer society”, that is to say, a society in which all things, goods and people are treated as consumer objects, hence as objects that lose their usefulness, appeal and, finally, their value very quickly. Liquid society is thus a mobile, transient, precarious society where anything of worth soon changes into its contrary, human beings and their relationships included. All in all, according to Bauman’s description, modern society has reached levels of the disintegration of social ties that were hitherto unknown.

This is not to deny that even modern, liquid societies, alongside this fundamental, long-term process, present compensatory dynamics (negative feedbacks). Even liquid societies present new forms of socialisation but in this case, too, we believe that the “primary” process, linked to the all-pervasive nature of the market, is moving towards a greater social liquidity.

In conclusion, the process we have described permits us to formulate a few hypotheses about the relationship that it has with other social processes of some significance to us. First of all, the process of the progressive dissolution of social ties may be seen as a common framework for different kinds of social malaise: a loss of satisfying human relationships, a loss of security [30,31], increased abstention from political elections or political activity, precarious conditions of life and work, problems connected to migration and drug abuse, are just a few examples of problems that social scientists split into different categories but which can be tied to the same long-term historical process.

To summarize the dynamic of the progressive dissolution of social relationships may in its turn:

1. be significantly responsible for the loss of well-being that contemporary societies show [32–34]
2. lead to a loss of resilience of social organization when faced with external stress (such as economic or ecological crises);
3. lead to the spread of individualistic behaviour and hence to positional competition in consumption, with consequent wide-spread frustration and the emergence of a self-increasing process that leads to greater consumption and an increased impact on the biosphere [35,6],
4. offer us a clue to comprehending why contemporary “richer” societies seem to show little reaction when confronted with the multidimensional crisis we are facing. This type of explanation, which undoubtedly requires further research, can be considered complementary to the traditional explanation based on the improved material conditions of the population of these countries.

The degrowth perspective owes much of its concern to the possibility of inverting the tendency towards the “dissolution of social ties” by re-thinking and downscaling the organization of production and strengthening all non-market forms of exchange (reciprocity, solidarity economy, etc.) besides, and above all, lending a new meaning to citizens’ direct participation in politics. In this regard, symbolic aspects become fundamental.

6. The imaginary in a post-modern society

Following the science of complexity, what characterises biological and social systems, and distinguishes them from physical systems, is their capacity to form “representations” of the universe in which they live. In particular what characterises human socio-cultural organisations is their ability to “negotiate” such representations, giving rise to *shared representation* [27]. In other words, *the formation of a shared imaginary is the premise necessary for any common action*.

However, according to Lyotard [36], with the end of great narratives and the advent of post-modern society, any possibility of shared meaning has been lost. As long as religious tradition (Christianity in the western world) and, above all, Marxism, offered a common horizon of meaning, with their heroes and myths with which one could identify, it was not difficult for people to take up a standpoint and see a sense in what they did. All this, at least from the 1970s, has disappeared, or somehow lost its influence on the social imaginary.

The post-modern imaginary is polymorphic and fragmented, something in which quotations have replaced the great narratives; the multiplicity of codes and forms have substituted the universalism that characterised the great emancipatory project of modernity. Let us try to sketch an outline of some of the dynamics that may be held responsible for this process of transformation.

With respect to the long-term processes mentioned above, we might suggest that the fragmentation of the imaginary is first of all connected to the dissolution of the social ties that characterises the passage from traditional society to that of the market. In other words, it is feasible that the dissolution of the social ties of a traditional nature, and of the symbolic mechanism they possess, constitutes the indispensable ground for the progress of modernity and its symbols.

According to David Harvey [37] *the post-modern condition* does not appear to be a break with modernity but rather an “internal revolution” within modernity itself, and ends up by accentuating its deepest and most characteristic traits. What marks common experience in all modernity if not uncertainty and fragmentation, transience and a sense of chaotic change? In the words of one of its greatest exponents, “Being modern means finding ourselves in an environment that promises adventure, power, joy, growth and the transformation of ourselves and the world, and yet at the same time threatens to destroy everything we have” [38,p. 25]. Basically, the passage to post-modernity has done nothing but accentuate this tendency.

We have here, at least in neo-Marxist interpretations, a close tie between the common experience of being modern and the transformations in the underlying economic and social structures. Marx did not just happen to underline how the fundamental trait of capitalist economy was its condemnation to ceaseless innovation. For Harvey the transformation that marks the post-modern imaginary is linked to the transition from the Fordist socio-economic organisation to the post-Fordist one. It is a foregone conclusion that post-Fordism, like Fordism, does not simply mean a system of labour organisation but a new system of economic and social organisation where public institutions and civilian society adapt to the changed conditions proper to “flexible accumulation”. The disappearance of the large factory, the financialization of economic processes, flexibility on the labour market (part-time, temporary or subcontract work), the central role assumed by services (for marketing, insurance, landed property, informatics), the extraordinary differentiation among products and the acceleration in the rotation of consumer goods are inseparable from the specific way of thinking, feeling and living in what we call post-modern society.

If anything, the most surprising fact is the total acceptance of the liquidity and fragmentation that characterises post-modernism, its “floating and splashing about in the chaotic currents of change as if there were nothing else”. We should not, therefore, be surprised that what characterises, for example, post-modern architecture is its “deliberate superficiality”, and it would not be difficult to extend this judgement to many other fields, in particular to fashion, entertainment and the industry of cultural events [39,40]. Hence, the fragmentation of the imaginary is (recursively) linked to the multiplication of the artefacts characterising consumer society. We must realise that the objects we surround ourselves with, thanks to the time we spend *with* them, and *for* them, become for each of us a source of meaning and identity, however restricted and fragmentary.

There can be no doubt, without going into this question in detail, that enterprises employ many resources in order to feed this process. The budget relative to “global entertainment and media market” (advertising included) is close to that of military expenses (about 1.2 billion dollars in 2008)⁶ and, as experts in this field are well aware, the might of the media system is such that the efficacy of a “campaign” is never questioned. Contrary to what many post-modern intellectuals claim, the capacity of the media system to colonise the imaginary is boundless [41]. Must all this, therefore, lead us to the conclusion that there is no shared imaginary in a liquid society? As Serge Latouche warns us, this would be a thoughtless mistake [42,43].

In the society of the end of the great narrative, the consumer imaginary is the *only* shared imaginary. This apparent paradox can, however, be understood if we think that the lack of sense and the dissolution of great narratives is precisely the ground on which the spread of the dominant imaginary is based. The criticism of the dominant imaginary can be considered the third pillar of degrowth.

Of course, some compensatory processes are possible, as some scholars of complex systems also remind us, attributing new functions to the artefacts that issue from the capitalist cornucopia: It is possible, for instance, using information technology, originally planned for military purposes, to promote the formation of social or solidarity networks, or, just to give two extreme examples, to use advertising against advertising (i.e. *Adbuster*, *Casseur de Pub*). Yet, these reactions are not able to counteract the power of the “colonization process.”

There can be no doubt that *homo consumens* has an unbelievable freedom of choice at his disposal, yet the consumer-citizen can make his choices only within predefined *frames* [44,45] and cannot determine *ex ante* the set of things from which to choose [29]. Technology undoubtedly is to be found within this set. This means that decisions relating to “how” and “what” to produce and, above all, to what “ends” (which also implies under what social and ecological conditions), lie beyond the control of individuals, communities, territories and even states. In other words, the market system promises freedom (on a micro scale) but spreads dependence (on global scale).

We now come to one fundamental aspect: the question of the imaginary is clearly closely linked to that of autonomy, and autonomy to that of scale. Unfortunately, very little attention has been paid, within both the mainstream and the Marxist traditions, on the fact that dependence and autonomy are closely linked to the scale of the processes.

7. Democracy, scale and emergence

It goes without saying that the main differences among the various economic agents are a matter of scale; however, in economic science this question of scale has been enveloped in almost total silence. While in the economic world there are micro firms composed of one person and macro corporations capable of making profits that exceed the GDP of various

⁶ Sources: Global Entertainment and Media Outlook 2010, Pricewaterhouse Coopers, Wilkofsky Gruen Associates and SIPRI 2009 Yearbook, Stockholm International Peace Research Institute.

countries, in economic textbooks the process of production is described as if its scale were irrelevant. For standard economics, this matter poses no problem: “In order to double production, it is enough to double the quantity of the inputs” [46, pp. 105–107].

Biologists were the first to recognize the fundamental fact that a variation in size involves a change in the *form* of the organism [47]. The great biologist and geneticist Haldane is to be credited with the intuition that growth in size may involve alterations in the form of the organism and that this principle can also be transferred to the level of social organizations. In a short essay written in the years between the wars, Haldane [48] reached the lucid conclusion that in nature every animal is the *right size*, and he also intuited that, just as whales do not have the same structure as herrings, similarly it is not possible to reconcile the socialist ideals of equity and emancipation with the scale of the Soviet or British empires of the time.

It is, however, only with the development of the sciences of complexity [49] that this idea, more generally defined as the *principle of emergence*, is given a more rigorous formulation, along with the recognition of its vast hermeneutic consequences in many different research fields (e.g. [50]).

Bearing this in mind, the situation in social and political sciences is not very different from that which characterises economics. Since they are both still dominated by the paradigm of methodological individualism, according to which the behaviour of societies can basically be reduced to the behaviour of single individuals, they generally remain blind to questions concerning the scale of processes. Yet even a cursory glance clearly reveals that today's economic and institutional structures have nothing in common with those that characterised early industrialised society. At the beginning of this paper we spoke about transformations in the economic structures, so let us now briefly concentrate on the changes in institutional ones.

7.1. *The trade-off between growth and autonomy: the paradoxes of democracy*

Although political scientists have never denied that the more electors there are, the less chance each single one has to influence political decisions, the evolution in the economic and institutional structure throughout the twentieth century strongly aggravated this phenomenon. If one further thinks that the growth in the size of the institutional framework seemed to be the inevitable outcome of economic growth and thus of consensus, it is clear why this issue was removed from public debate. In other words, since it was neither possible nor desirable to solve the problem, it was simply ignored.

Yet, even if one dismisses the radical criticism of authors such as Cornelius Castoriadis [51], Murray Bookchin [52], or Takis Fotopoulos [53], the critical eye of the political scientist should have pointed out this paradox. In this regard, one of the few examples is to be found in Norberto Bobbio [54, pp. 45–52], who in the mid-1970s had already very lucidly pointed out four paradoxes that characterise modern democracies.

The first paradox concerns precisely the very size of the organisations that characterise modern democracies, as opposed to those of the ancients. What Bobbio basically saw is that the scale of these organisations, starting from those of the state, is too large to permit every citizen to express his/her own wishes about matters that concern him/her personally, in other words, to exercise direct democracy. To tell the truth, he recognised very pragmatically that the growth of state institutions underwent in the course of the 20th century was so great that the very institutes of representative democracy became questionable. Behind these elephantine national and supernational organisations, lie not only nations' ambitions for expansion, imperial and colonial ventures, but above all the growth and economic development of the post-war period. The economic growth, which was particularly intense in the period from 1955 to 1975, was accompanied not only by a gradual increase in the size of the state apparatus, but also, and above all, by a proliferation of the functions of bureaucracy linked to the extension of the welfare state, and this is the second paradox. Since bureaucracy is a hierarchical, non-democratic structure, with its power extending downwards, not upwards, the dimensional and functional development of bureaucratic institutions involves, along with the increase in services and material living conditions, a loss of democracy.

Connected to the latter paradox, Bobbio identifies a third one, which in actual fact is merely a variation of the previous one. Industrial societies, whether capitalist or socialist, are societies that have developed an enormous technical system. This gives rise to the continual temptation to entrust competent individuals (technocrats) with decisions that concern society and politics. How many individuals are capable, one may ask, of grasping the economic problems of a large state and are able to propose suitable solutions to the problems, for example, of energy or the infrastructures on a national scale? Yet, it is quite clear just how radically incompatible democracy and technocracy are.

Finally, there is the fourth paradox: industrial societies are mass societies. What kind of culture, values and imaginary is instated in this type of society? The effect of massification, we might say, is a generalised conformity. The indoctrination of advertising, first, and the gradual identification with the system, second, tends to dissolve any sense of awareness and responsibility, in other words, the individual and collective autonomy that, according to Castoriadis [1], is the very essence of democracy. To conclude, all four paradoxes of democracy are positively correlated to the scale of institutional structures and, hence, to economic growth. In general, in this case, too, we can notice that once a certain threshold in the scale growth has been passed, *new properties emerge because the relationships among the agents in the process have been modified*.

Along with this, it becomes clear in which sense the idea of autonomy may present not a quantitative but a qualitative difference compared to the true determinations of contemporary democracies. By autonomy, we do not mean the simple (and impossible) extension of the government of the élite to the whole social body, even less an extension of the institutes of representative democracy to a global level, but rather an “active awareness”, which at the same time refers to a radical transformation of both the “form” and “scale” of institutions and, above all, of the social imaginary.

As Murray Bookchin has stated [55], the affirmation of strong, autonomous personalities is possible only within a social and institutional context that guides individuals towards self-determination, since personality itself, and certainly the capacity for political action, is formed within the profound interaction between the individual and the community. As is easily seen, the cultural and anthropological foundations of an autonomous society could not be further from that principle of delegation that characterised the golden age of market democracies and which, not merely by chance, lies at the roots of the self-referentiality and of the various degenerate forms of which the political class is at present accused. Future perspectives: The world's system is entering a state of non-equilibrium. The long-term processes we have pointed out involve a gradual increase in the social and ecological costs and a loss of the marginal benefits of growth (Tainter, 1988). This perspective is essential if we are to understand future dynamics, and it requires further research [22]. Since material growth is no longer accompanied by an increase in well-being, the loss of meaning that had already characterised post-modernity has become increasingly evident. If we superimpose on these long-term processes the effects of a cyclical crisis of particular intensity (the first serious recession after the collapse of the bi-polar system following the cold war), we can understand the reactions, at times even violent, of outsiders and of those who in general see no future prospects for themselves. Active minorities, on the contrary, have the chance to organise alternative experiences and express their wish to participate. All this might open up new scenarios for the autonomy project. While it is obviously impossible to make any forecasts about the outcome of the current processes, we can attempt to outline some basic tendencies. If the analysis proposed here is correct, it is quite likely that the institutional framework will undergo significant changes in the future. It is reasonable to imagine that in the face of increased inputs costs (peak oil, climate change, social conflicts on natural resources, etc.), the impending picture of *declining marginal returns* in many crucial organizations (such as states, public and private companies, local administrations, health and educational institutions), not to mention the increasing public and private debt, the system will not be able to relaunch another long-term phase of growth and global expansion [22,56,57]. In this critical context, it is important to understand that the institutions that have hitherto been perfectly well suited to the context of long-term growth will find themselves having to face an increasingly critical situation. More precisely, if the economic structure grounded on competitiveness and on large scale economic processes (multinational companies, global institutions based on free trade, etc.), has proved to work "very well" in an expanding economic context, whose dominant, shared aim was the growth of material production, when this framework changes, as the sciences of complexity teach us, there will be other forms of economic and social organisation more suited to the new situation. In particular, in a context of global crisis, or even of declining growth rates, cooperation among decentralized, smaller scale, even informal organisations, will offer greater chances of success. These organizations can lead the system towards conditions of ecological sustainability, more social equity and, by involving citizens and territories, even increase the level of autonomy. It is quite clear that the aim of ecological sustainability can also be reached from a diametrically opposed process: centralization, increasing social polarization and a loss of autonomy. In neither case will the present institutional framework remain the same. In conclusion, although relationships between economic growth and the ecosystems that we have recalled will constitute the material framework within which future choices will be made, it is likely that social dynamics, and above all imaginary representations, will play a crucial role in determining which path, among the various possible scenarios, humankind will follow. What is by now certain is that any bland reforms tied to policies of sustainable development will not be enough to overcome the crisis because such policies do not involve any questioning of the dominant imaginary. Rather, it will be necessary to imagine a profound revision of the economic, social and cultural conditions of the production of wealth in the direction of a decentralized/cooperative network of economic and institutional organizations, in particular in the richest countries. This is what we basically mean by a transition towards a *degrowth society*.

References

- [1] C. Castoriadis, *Une société à la Dérive*, Ed. du Seuil, Paris, 2005, p. 17 (English edition: C. Castoriadis, in: E. Escobar, M. Gondicas, P. Vernay (Eds.), *A Society Adrift – Interviews and Debates 1974–1997*, Fordham University Press, New York, 2005).
- [2] E. Hobsbawm, *The Age of Extremes: The Short Twentieth Century, 1914–1991*, Vintage Books, US, 1994.
- [3] J. Schumpeter, *Capitalism, Socialism and Democracy*, 1st ed., Harper and Brothers/George Allen and Unwin, New York/London, 1976, [1942].
- [4] C. Castoriadis, *L'enigma del soggetto*, Dedalo, Bari, 1987 (Original edition: *L'institution imaginaire de la société*, Paris, 1975).
- [5] I. Illich, *Tools for Conviviality*, Harper & Row, New York, 1973.
- [6] M. Bonaiuti (Ed.), *From Bioeconomics to Degrowth*, N. Georgescu-Roegen *New Economics in Eight Essays*, Routledge/London/New York, 2011.
- [7] A. Maddison, *Growth and Interaction in the World Economy*, The AEI Press, Washington D.C, 2005.
- [8] A. Maddison, *Statistics on World Population, GDP and GDP Per Capita 1–2006*, 2009 www.ggdc.net/maddison.
- [9] P.M. Romer, *Increasing returns and long run growth*, *Journal of Political Economy* (1986).
- [10] K. Polanyi, *The Great Transformation*, Holt, Rinehart & Winston Inc, New York, 1944.
- [11] P.A. Baran, P.M. Sweezy, *Monopoly Capital*, Penguin, Harmondsworth, 1968.
- [12] R. Dore, *Financialisation of the global economy*, *Industrial and Corporate Change* 17 (2008).
- [13] N. Georgescu-Roegen, *The Entropy Law and the Economic Problem*, in: M. Bonaiuti [6].
- [14] W. Sachs, S. Tilman, et al., *Fair Future. Resource Conflicts, Security and Global Justice*, Zed Books, London, 2007.
- [15] R. Wilkinson, K. Pickett, *The Spirit Level: Why More Equal Societies Almost Always Do Better*, Allen Lane, 2009.
- [16] T. Picketty, *L'Economie des inégalités*, Ed. la Découverte, Paris, 1997.
- [17] UNDP, *Human Development Report 2002, Deepening Democracy in a Fragmented World*, 2002 <http://hdr.undp.org/en/reports/global/hdr2002>.
- [18] F. Partant, *La fin du développement*, La Découverte, Paris, 1982.
- [19] G. Rist, *Le développement. Histoire d'une croyance occidentale*, Presses de la Fondation nationale des sciences politique, 1996.
- [20] S. Latouche, *Survivre au développement*, Fayard, Paris, 2004.
- [21] S. Amin, *Au-delà du capitalisme sénile*, PUF, Paris, 2002.
- [22] J. Tainter, *The Collapse of Complex Societies*, Cambridge University Press, 1988.

- [23] T. Piketty, E. Sáez, Income inequality in the United States, 1913–1998, *Quarterly Journal of Economics* 118 (1) (2003) 1–39.
- [24] M. Mauss, *The Gift: Forms and Functions of Exchange in Archaic Societies*, Routledge, London, 1990 (original edition 1922).
- [25] A. Caillé, *Anthropologie du don. Le tiers paradigme*, La Découverte, Paris, 1998.
- [26] J.T. Godbout, A. Caillé, *The World of the Gift*, McGill-Queen's University Press, 1998.
- [27] D. Lane, D. Pumain, S. van der Leeuw, G. West (Eds.), *Complexity Perspectives in Innovation and Social Change*, Springer-Verlag, Berlin, 2009.
- [28] Z. Bauman, *Liquid Life*, Polity Press, Cambridge, 2005.
- [29] Z. Bauman, *Consuming Life*, Polity Press, Cambridge, 2007.
- [30] U. Beck, *Risk Society, Towards a New Modernity*, Sage, London, 1988.
- [31] U. Beck, *World at risk*, Polity Press, Cambridge UK, 2009.
- [32] D. Kahneman, A. Tversky, *Choices Values and Frames*, Cambridge University Press, New York, 2000.
- [33] C. Kenny, Does growth cause happiness or does happiness cause growth? *Kyklos* 52 (1) (1999) 3–25.
- [34] E. Diener, E.M. Suh, Measuring quality of life: economic, social and subjective indicators, *Social Indicators Research* 40 (1997) 187–216.
- [35] F. Hirsch, *Social Limits to Growth*, Routledge, London, 1976.
- [36] J.F. Lyotard, *La condition postmoderne: rapport sur le savoir*, Minuit, Paris, 1979.
- [37] D. Harvey, *The Condition of Post-modernity*, Blackwell, New York, 1990.
- [38] M. Berman, *All That is Solid Melts in the Air: The Experience of Modernity*, Simon & Schuster, 1981.
- [39] F. Jameson, The politics of theory: ideological positions in the postmodernism, *New German Critique* 33 (1984) 53–65.
- [40] F. Jameson, *Postmodernism Or the Cultural Logic of Late Capitalism*, Duke University Press, Durham NC, 1991.
- [41] F. Brune, *De l'idéologie, aujourd'hui*, Parangon, Lyon, 2005.
- [42] S. Latouche, *Le pari de la décroissance*, Fayard, Paris, 2006.
- [43] S. Latouche, *Farewell to Growth*, Wiley, New York, 2009.
- [44] E. Goffman, *Frame Analysis, An Essay on the Organization of Experience*, Northeastern University Press, 1974.
- [45] G. Lakoff, *The Political Mind*, Viking Penguin, New York, 2008.
- [46] N. Georgescu-Roegen, *The Entropy Law and the Economic Process*, Harvard University Press, Cambridge MA, 1971.
- [47] W. D'Arcy Thompson, *On Growth and Form*, Cambridge University Press, Cambridge UK, 1961.
- [48] J.B.S. Haldane, *The Causes of Evolution*, Cornell University Press, Ithaca, NY, 1935.
- [49] P.W. Anderson, More is different, *Science Magazine* 117 (1972) 393–396.
- [50] J.H. Holland, *Emergence From Chaos to Order*, Oxford University Press, 1998.
- [51] C. Castoriadis, *The Imaginary Institution of Society*, Polity Press, Cambridge MA, et Blackwell, Oxford, 1987.
- [52] M. Bookchin, *The Ecology of Freedom*, AK Press, 2005.
- [53] T. Fotopoulos, *Towards An Inclusive Democracy*, Cassell/Continuum, London/New York, 1997.
- [54] N. Bobbio, *Quale socialismo? Discussione di un'alternativa*, Einaudi, Torino, 1976 (English ed. *Which Socialism? Marxism, Socialism and Democracy*, 1987).
- [55] M. Bookchin, *Pour un municipalisme libertaire*, in: *Atelier de creation libertaire*, Lione, 2003.
- [56] I. Wallerstein, *Capitalism's demise*, *The Asia-Pacific Journal* (February) (2009).
- [57] J. Beinstein, *El largo crepúsculo del capitalismo*, Cartago Ediciones, 2009.