

An ecological political proposal

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Summary | If you consider 1987 (the Brundtland Report) as the official beginning of the idea of sustainability, the term has made a brilliant journey of almost three decades and is still alive. In its evolution, it has become at the same time a concept, paradigm, theoretical framework, technical instrument, utopia, pretext, ideology and many other things, but above all it has become the word that contains a vague desire of the educated and privileged masses of the planet for a better world in which the human race rediscovers itself ideally with nature and with social justice. Beyond the ideological dimension, and its multiple and ungraspable interpretations, this essay focuses on sustainability as a scientific concept that springs from an interdisciplinary vision of reality, and that for many authors achieves the status of a new paradigm. The essay attempts to show how the scientific concept of sustainability in the vast majority of its versions, is not but a techno-economic expression that explicitly or implicitly is aimed at convincing the "decision makers", and that seeks to apply solutions merely technical. Using a political ecological approach, based on the theory of the three powers, the essay identifies and develops a definition of sustainability as a social power, which turns the concept into a promising political instrument of social and environmental emancipation, in a legitimate version of a "science with conscience".

#### Introduction

The world is in crisis, and the search for alternatives has become an obsessive task among the most conscientious sectors. The offer includes proposals as varied as the degrowth (Europe), good living (Ecuador and Bolivia), eco-socialism (France), endogenous development, reflective modernity (Beck 1999) and, especially sustainability (environmentalism). The latter was conceived in its most elementary form as the maintenance of a vital clover formed by the ecological balance in all its scales, an adequate level of life or social welfare and economic efficiency. The term sustainability (and its relatives sustainable development and sustainable society) has multiplied to such an extent that a look up on the web reaches stratospheric figures of millions of responses.

These three terms, and their equivalents in each language, have been used with such frequency and intensity by governmental spokesmen, scientists, media, technocrats, companies, corporations, pedagogues and philosophers, that their proliferation and overuse have turned them into concepts that are abstract, vague, unviable, incongruous, cosmetic, superficial and even perverse. In the name of sustainability, demagogic or fraudulent government programs or imagewashing campaigns have been set up by a majority of the large corporations that now dominate the world's economy.

From the myth of development we have passed to the myth of sustainability. It is then urgent and necessary to unthinksustainability (Wallerstein 1998, 3); that is, to attempt a de-mystification of the concept.

#### The Science for sustainability: a new interdisciplinary field

In the various fields of science, sustainability has also become a central concept, and even for many authors it is a new scientific paradigm (Betancourt and Kaur 2011) or a new stage in the evolution of science (Spangenberg and O'Connor 2010), without there being a theoretical, methodological or conceptual agreement. There are ninety scientific journals explicitly devoted to the subject, and the number of research centres, programs, projects, congresses and academic societies that bear that name is unusually high. As a consequence of this academic blooming, an innovative current within science emerged, grew and multiplied in the last decade under the heading of sustainability science (science for sustainability). This current was initiated by a collective initiative of authors from different fields and countries (see Kates, R. W. 2001), and originated in some way as a response to concerns raised at a meeting in Budapest, Hungary, in the summer of 1999, where delegates from 150 countries called to initiate a "new social contract" between science and society. This congress was sponsored by UNESCO and the International Council for Science (ICSU).

According to the website of the journal PNAS (Proceedings of the National Academy of Sciences of the US), the science for sustainability is: ... an emerging field of research dealing with the



interactions between natural and social systems, and with how those interactions affect the challenge of sustainability: meeting the needs of present and future—generations while reducing the poverty and conserving the planet's life support systems (cited in Kates, R. W. 2011, 19449). It is, therefore, a predominantly applied and practical science. Science for sustainability implies not only rethinking science and its methods, but also integrating natural and social disciplines, and seeking to bring science—closer to people. One of its several features includes the "extended peer community" approach as an essential component (Funtowicz and Ravetz 1993) that is nothing other than what in other areas is known as participatory research.

The sustainability boom is certified by registered publications. The volume of literature produced in this field, despite its diversity, has led to a more unified scientific practice; it is impressive: more than 37.000 authors from 174 countries had produced more than 20.000 documents between 1974 and 2010 (Bettencourt and Kaurc 2011, 19541). According to Kajikawa et al. (2014) every year there are 12.000 articles dedicated to the subject.

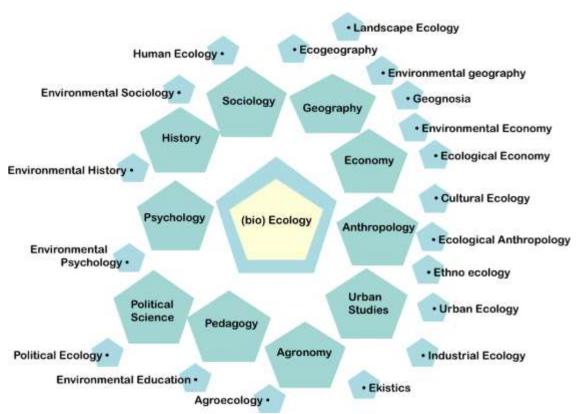


Figure 1. Diagram showing the birth of at least 17 hybrid disciplines resulting from the integration of biological ecology with other areas of knowledge. Modified from Toledo, 1999.

Of enormous epistemological interest is the relationship that exists between science for sustainability and the emergence and development of several hybrid disciplines, a phenomenon that has occurred previously (Toledo 1999). These new hybrid fields operate as particular reactions to the general process of excessive compartmentalisation and specialisation, and as an expression of a kind of "rescue science" (salvage science) in search of information to stop and reverse the environmental crisis. This phenomenon has had Ecology (biological) as its main focus of propagation, which is the discipline that has managed to synthesise knowledge —of life and earth sciences, including geology, physics and chemistry— to identify discontinuities in nature, that is, units-totalities. This synthesis materialised in the proposal and emergence of the ecosystem concept, which is its object of study. The emergence of hybrid disciplines has been a multipolar process in which, on the one hand, the resistance of ecologists has been overcome, Revista Internacional de Salarios Dignos, Vol. 1, No. 2



maintaining their approach based on a supposedly pure, pristine or untouched nature and, on the other hand, overcoming the impermeable barriers of the disciplinary purity of several areas of social and humanistic knowledge. As a result, almost twenty hybrid disciplines have emerged (figure 1), which can be seen as interdisciplinary approaches to reality based on the integration of the synthetic study of nature (biological ecology) and the study of different dimensions of social reality or human. One of these hybrid disciplines is political ecology.

## The science for sustainability in controversy

It is possible that the so-called science for sustainability is today the most advanced current of contemporary science. Not only because it responds to what could be called the central challenge of humanity or of the species, but also because of its theoretical robustness and its ambitious pretension to trace the main problems and limitations identified by the various currents and authors of the epistemology of the complex (see Morin 2001, García 2006, Leff 2000, Funtowicz and Ravetz 1993, among others). Also because it constitutes a decorous call to interdisciplinary, collective and international research and because it has induced different methodologies, indicators and forms of evaluation, at different scales and dimensions. Such is the case, just to mention some, of the proposals on a global scale of the Sustainable Society Foundation (http://www.ssfindex.com) and the Global Footprint Network (Moran et al., 2011); or the so-called MESMIS that analyses local production systems (Masera et al., 1999, Masera and López-Ridaura 2000). And yet, its implementation as a body of interdisciplinary, multi-criteria, transscale, participatory knowledge, etc., weighed in the light of critical thinking, fails to reach the ecological and political context of the main forces, powers and processes that shape the future of the planet.

From the very abundant literature devoted to the epistemological reflection of this new field of science, I have chosen two works that offer clues and signals to support a profound critique of sustainability. It is "Sustainability? disagreements about sustainable development "(Foladori and Pierri 2005) and" Evaluation of Sustainability: a dynamic and multidimensional approach "(Astier et al., 2008). Of the numerous and interesting chapters of these two works, two theses

stand out and allow us to build a critical platform. The first refers to the origin and development of the concept. Given that the idea of sustainability and all of its subsequent formations essentially respond to the need to overcome the ecological crisis or contradiction (the environmental mess), its proposals carry a bias from which they have not been able to escape, a sort of original sin. Although its explicit goals are threefold (ecological, economic and social), its "holy trinity" actually hides a technocratic, engineering or merely cybernetic character, as it conceives the solutions as mere technical and / or economic actions:

In this chapter —Foladori and Tommasino assert (2005, 206)— we begin where most of the sustainability taxonomies end: recognising that the main difference in the concept of sustainability lies in between those—for whom sustainability is exclusively an ecological or physical issue, and those for whom a social perspective must be included in sustainability. Nonetheless, beyond this difference, we argue that both approaches have—in common a technical perspective of environmental problems, a perspective that pays attention to the relationship between human beings and things (abiotic or other living beings). In the first case (ecological sustainability) this is obvious per se, insofar as what is being considered are relations between human beings and the external nature. In the second case (social sustainability) the "social" is mainly reduced to poverty and population increase, and the concern for how these elements can degrade or depredate the world.

In the theoretical formula of sustainability, the "social" is defined by factors such as poverty, population, equity, social justice, market, unemployment, hunger, migration, etc., always depending on their impact on ecosystems or nature; never as social relations that obey their own processes, historically determined. The "social" is then subsumed within the "ecological"; that is, mystified, by reducing to a variable element or one more factors in the pursuit of technical solutions to the negative relationship between human beings and living beings. How relations between human beings, which can be relations of power, competence, collaboration, submission,



exploitation, etc., ie political relations, affect and are affected by relations with nature are never pondered.

Foladori and Tommasino (2005, 201-202) also build a continuum, to put in place the numerous (dozens, hundreds, thousands?) of definitions of sustainability, whose extremes are on one side the "ecological sustainability" and on the other the "social sustainability" (figure 2). This spectrum has also been identified in the literature as "weak sustainability" and "strong sustainability", which expresses the philosophical dichotomy between ecocentrism and anthropocentrism, or the contradiction between growth and degrowth (see Pierri 2005, 71-73, Foladori 2005). Each definition is then located in this spectrum, which goes from the most to the least technical or techno-economic, but given what has been previously seen, it never manages to consider and resolve the issue of social relations, which in the end are relations of power, that is of political relations.

On the other hand, García-Barrios and García-Barrios (2008) carry out an original, audacious and critical account of sustainability ... as the ultimate end-of a socio-environmental-controllable process. After reviewing the meaning of teleomatic, teleonomic and teleological processes, the difficulties in visualising sustainability as an end arise, particularly when an explicit or implicit idea of the researcher as an "expert" who seeks boldly to convince the "decision maker" (the state, but also the company or the corporation) of the benefits of the "sustainable" prevails. Here springs again, as an uncomfortable cascade, the technocratic vision that assumes that all problems are solved through the application of technologies (or in its case the adjustments of the market), that is, through the engineering combination of command and control:

The central proposition of this essay is that this promise is fiction because, starting from the existential basis that modern society provides, it is not possible to establish or build in our collective mind a successful notion of socio-environmental sustainability as the goal and end of society. Briefly stated, the ethical incoherence of modern society prevents it from conceiving that notion, and with it subordinating the entire scale of inferior purposes of the different subprocesses

and give it teleological coherence to his hierarchical structure (García- Barrios and García-Barrios 2008, 176).

Their reflection concludes that: efficiency (and therefore well-being) must be the product of a process of social construction, and not a directed act of government. Governments must abandon all pretense of controlling society (189).

In fact, the two previous discoveries are two exposures of the true character of sustainability as a new field of knowledge that is quite advanced in terms of complex thinking, but limited in terms of critical thinking. If we use the epistemological and political framework of González-Casanova (2004), we would be facing a new techno-science modality, this time aimed at solving the worrying ecological crisis on a global scale that threatens not only

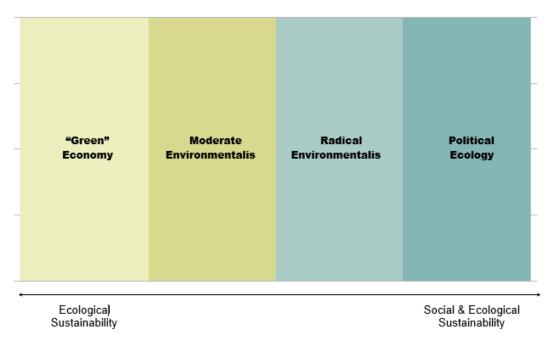


Figure 2. Following Foladori and Tommasino (2005, 202), a spectrum of sustainability can be drawn that shows graphically the different currents that exist around this concept. A spectrum of currents arises from the most techno-economic to the most sociopolitical, or from "very weak sustainability" to "very strong sustainability". The political ecology appears then in one of the extremes. Self elaboration.



the equilibrium of the planetary ecosystem, but the permanence of the human species and the fabric of life as a whole. A proposal that, nevertheless, does not intend to modify, or even put into analysis, the social relations that dominate today, which are basically mercantile relations of subjection, exploitation and alienation. In its dominant version, sustainability serves then to justify the so-called "green economy" that preaches an exit to the environmental crisis via the market dominated by capital and the main values of neoliberalism. Therefore, it is not surprising that large corporations take the term as a fundamental concept in its permanent "image washing" (Toledo 2014), including the main manufacturers of weapons, that is, the corporations of war.

# Sustainability and social metabolism

Is it possible to trace this systemic, cybernetic, engineering version of merely technical solutions, which predominates in a large number of those who embrace this new scientific paradigm? The answer is affirmative and implies, first, the need to build an adequate theoretical framework. We have already pointed out that the emergence of hybrid disciplines, which all pose the pursuit of sustainability, represent praiseworthy, legitimate and completed attempts to overcome the separation between hard sciences and soft sciences in limited fields such as culture, politics, the economy, the production of food, education, history, urban planning and space; but, by devoting and circumscribing themselves to particular "fragments or dimensions" of reality, do not constitute a general theoretical framework. It is because of the aforementioned that we introduce herein the thesis, to be demonstrated in subsequent publications, that an appropriate, rigorous and coherent framework to re-configure the paradigm of sustainability is found in the concept of social metabolism. This offers an adequate method to address in an integrated manner the articulations that are established between ecological relationships (with nature) and social relations (between individuals or groups of society) not only contemporary but historical (see González de Molina and Toledo 2011; 2014). We also add that the theoretical framework of social metabolism enables the transition to action (praxis) in the form of a political ecology that is at the same time emancipatory and counter-hegemonic, deconstructive and alternative. This idea will be taken up and developed in an upcoming essay.

## The political ecology

The term political ecology has been used explicitly by several authors for almost three decades. Among the main authors to be quoted are R. Peet and M. Watts (1996, 2011), R. L Bryant and S. Bailey (2000), F. Garrido-Peña (1996) and some others. Without being a consolidated field of knowledge but rather a new area under construction (Leff 2006), political ecology attempts to analyse conflicts from a perspective that articulates the relationships between nature and human beings with the social relations in themselves. Other authors define it as the political economy of nature or the socio-political analysis of the relations between the environment and society (Nygren 2012). Emerging with great force in the 1990s, a fact corroborated by the appearance of magazines on the subject in England, the United States, Spain, France, Italy, Greece and India, the number of authors who embrace this hybrid discipline has spread and multiplied in recent years, some of which have pondered theoretically over it (Toledo 1983, Escobar 1999, Garrido-Peña 1996,

Delgado, 2013). However, quite often the contributions made explicitly under this heading are confused with environmental and ecological economics, political anthropology, agroecology and other hybrid disciplines (see Durand et al., 2011; 2012; Delgado 2013). As in the rest of the world, in Iberian America political ecology has had an unusual expansion, especially in conflicts over the use of natural resources that are taking place in rural areas (Toledo 1992, Alimonda 2002, 2006).

Two currents of advanced, complex thought and critical thinking converge to give rise to a scientific look at the height of the convoluted processes of the globalised world. This new perspective manages to solve two major limitations of contemporary thought: On the one hand, it adopts an integrating, holistic or interdisciplinary approach, because it deals jointly, not separately, with natural and social processes; on the other, it transcends the dominant vision of a (techno-) science at the service of corporate capital, to adopt a science with conscience

<sup>1</sup> See: Capitalism, Nature, Socialism, Journal of Political Ecology, Ecología Política, Journal de Ecologie Politique, Capitalismo, Natura, Socialismo, The Ecologist, Down to the Earth y Nature and Society.



(environmental and social) that no longer seeks to only interpret the world or transform it but, to be more precise, emancipate it. It is about a definition of political ecology, which turns this new area of human knowledge into a potentially powerful field in humankind's struggle to get out of the increasingly evident global chaos to which modern or industrial civilisation has condemned it.

#### The political ecology is the sum of complex and critical thinking

What does political ecology proclaim? Three theses that are simple but pre-eminent. The first is that the current world and its slide towards chaos or collapse comes from the double exploitation that capital exerts over nature's work and human work. Both phenomena are inextricably linked and emerge the moment human groups generate unequal societies, where one minority sector exploits the rest. The second thesis has to do with the spatial expression of this double exploitation. The scale also determines the current processes, from the global to the local and vice versa. For example, today it is necessary to adopt I. Wallerstein's (1979-1998) World System, but adding the "ecological contradiction" on a global scale. This situation is examined by thousands of scientists in international collaborations (see Hornborg and Crumley 2007). The third thesis derives from the two aforementioned and establishes that the successive crises of the last decades, in reality, responds to a crisis of civilisation. The modern world based on capitalism, techno-science, oil and other fossil fuels, individualism, competition, mock democracy and an ideology of "progress" and "development", far from procreating a world in balance, takes the human species, the living beings and the whole global ecosystem, towards a chaotic state. Three supreme processes that engender disorder appear as a result of the consolidation and expansion of modern civilisation: the dislocation of the planetary ecosystem (whose greatest threat is climate change); social inequality and the erosion, ineffectiveness and dysfunctionality of the major institutions, such as the state, the apparatuses of justice, electoral democracy and the dissemination of knowledge. These are three entropic expressions (generators of disorder) within which the modern world is irremediably trapped (González de Molina and Toledo 2014).

The global chaos that increasingly shakes societies always has two dimensions: environmental and social. In both cases, these are phenomena of extreme fluctuation, which appear in a surprising manner and which consequently increase uncertainty and risk. In stark contradiction to the "systemic illusion" daily advanced by the ideology of modernity, the hard data coming from the natural and social sciences, indicate a displacement of the World-System towards the chaos or collapse that, depending on each country, can be gentle or abrupt. As noted by Wallerstein (2015), unemployment and geopolitical instability have increased in the last four decades, and energy prices have oscillated wildly.

Furthermore, Thomas Piketty's paper (2014) showed how, in the last 250 years, social inequality has increased; a phenomenon confirmed by the reports on the highest concentration of wealth among the richest and among the fifty largest corporations. On the other hand, the sequence of IPCC reports (http://www.ipcc.ch/) offers sufficient scientific evidence of the increase in climatic instability caused by industrial pollution, including modern food production systems, depletion of fishing resources, water, soils, glaciers, forests and jungles, as well as the mechanisms of ecological self-regulation. While the erratic economic, political and institutional phenomena are experienced as hurricanes, floods or droughts; climatic disasters, the transformation of landscapes and the loss of resources immediately remind us of the former. The last part of this essay is dedicated to proposing and arguing a version of sustainability as a social power. That is, one constructed from the perspective of a political ecology defined as the meeting or confluence of complex thinking and critical thinking.

#### Towards a theory of the three powers

In a rudimental manner, using common sense, we can distinguish three main powers in the current world, each of which expands or contracts depending on the other two; that is, a permanent tension of competing powers: the political power represented by the parties and governments that result from the game of a representative or electoral democracy, the economic power represented by companies, corporations and markets, and finally the social or citizen



power that contains or assembles communities, associations, cooperatives, unions, professional organisations, etc. (figure 3). This distinction, called the "three-part model" (Cohen and Arato 1994), has been profusely discussed by political theorists, philosophers and even anthropologists, and it is no new development.

Concrete cases of situations resulting from this game of powers on a national scale can be found, for example, in societies (current or past) statist, neoliberal and social-democratic (figure 4). The three powers are in some way mutually exclusive, which generates particular dynamics over time and through the different spaces of the planet.

In their extreme versions, each of the powers induces totalitarian societies, each one through its own mechanisms but seeking the same objective of manipulation and domination over civil society: Nazism or communism (political power) and neoliberalism (economic power).

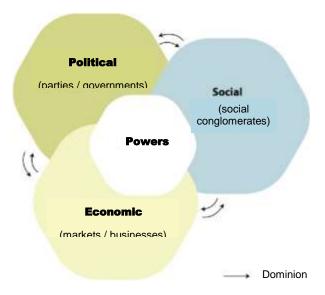


Figure 3. The reality of contemporary society can be visualised as the result of the meeting between three powers, each of which seeks to dominate the other two. See text

Today, the predominant tendency in contemporary societies has been the growing subordination of political power to economic power, that is, the defeat of politics by capital. And this has

happened to such a degree that in many cases it is already impossible to separate commercial interests from those of the public sphere: businessmen have become politicians (Berlusconi, Fox, Bush, Piñera) and politicians have become entrepreneurs, usually once they concluded their terms as state officials. This complicity between the political and economic powers is the result of the evolution of capitalism, which today undergoes its period of maximum concentration, to such an extent that virtually every sphere of the economy is under the control of monopolies or mega-monopolies.

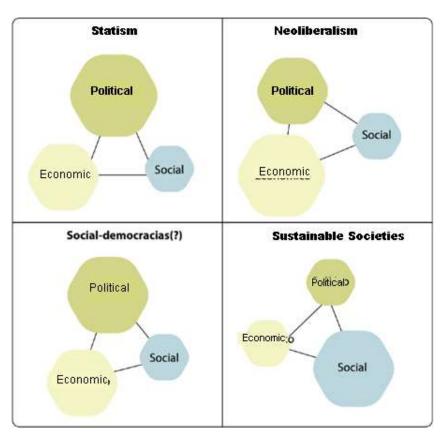


Figure 4. Four schematic configurations that result from the game between the three powers. In statist societies, political power subjugates economic power and social power; in societies where neoliberalism predominates, economic power reduces the other two; in the social-democracies a balance is sought between the political and economic powers; finally, in a society under an alternative modernity, social power controls economic and political power.



History has been fundamentally a history of societies dominated and exploited by political and / or economic power, with the subsequent subjection of civil society or citizens. Citizens have been increasingly adrift, without the ability to mitigate, neutralise or modify the forces generated from the political and economic powers. This has led to a modern world increasingly insecure, unjust, unequal, where economic and political interests are imposed without the citizens having the possibility to decide; this has given rise to a risk society (Beck 2003). The other side of the aging of industrial modernity is the emergence of risk society. This concept refers to a stage of development of modern society in which social, political, ecological and individual risks generated by the same dynamics of renewal, are increasingly subtracted from the institutions of control and assurance of the industrial society (Beck 1998, 32).

The crisis of modernity then has as a primary source a perverse fact: the increasingly important complicity between the state and capital, a situation that is in turn fuelled by two articulated and empowered phenomena of corruption: the unethical policy that neutralises or eliminates the principle of "commanding by obeying" and that turns political actors from servants of society into authorities, directors, leaders or despots; and the voracity without limits of the economic actors, who, spurred by the ideology of competition and infinite power, turn their actions into acts without ethics.

## The meta-power of information

To the three previous powers, whose clarity allows us to define and demarcate them, we must add a fourth power that is diffuse, subtle, ungraspable but not less effective: that of information. Here it is a true meta-power in permanent dispute between the three powers, integrated by mass media (radio, TV, press, etc.), commercial and political propaganda, and doctrines promoted by churches and religious creeds, etc. (figure 5). The meta-power of information takes different forms. It can be knowledge, belief, ideology, aesthetics, didactics, publicity, opinion, propaganda or simply an invitation to consume. It can be explicit or implicit, or open or subliminal information. And this information is generated from scientific, religious, mercantile, academic, supporter institutions, etc., that appear before the common citizen as neutral, impartial and

disconnected from the three powers, but that in reality, once deployed, end up being co-opted by those powers. Cooptation allows to channel and direct the emitting sources and therefore influence the receivers of this information.

In a world of political and / or economic dominance, this meta-power tends to be controlled and used by those two powers to the detriment of civil society. Its objective is the justification and validation of the order that is imposed by the construction of ideologies that have the anesthetisation of the citizenry as the ultimate goal. In a world where new communication technologies have developed to unimaginable levels, the dominance of this meta-computing power is decisive. It is not only about orienting the citizen's vote (a phenomenon that has been demonstrated in many countries), but about keeping the subjugated individuals in a state of ignorance, indifference, helplessness or fear, which makes the recognition of their subjugated situation impossible, that is, incapable of identifying the forces that exploit and dominate it. The meta-power of information then has the supreme objective of keeping the consciences of human beings numbed, through one and a thousand mechanisms, be these biased news, acts of faith, concealment of information, make-up of reality, political promises, diverse satisfactions, eternity offers and / or consumer feasts.

# What is social power?

Dazzled by the impressive growth of state apparatuses and business and corporate organisations, and their enormous power in the modern world, researchers dedicated to studying these phenomena have almost completely forgotten about the existence of this third sphere of power, which is civil society. In some way, the shocks caused by the recurring crises of modernity, and especially the financial crash of 2008, have turned our eyes back to this third domain during the last decade. Likewise, the social reactions towards the crises, increasingly scarier, expressed in protests, resistances and new and old forms of protection, have contributed to the documentation and analysis of this neglected sector (Santos 2011, Zibechi 2010).



The importance of the civil sector not only as an entity different from the "public" and the "private", but as a force for the transformation of society, has begun to be documented and assessed by different currents of science, philosophy and politics. This re-discovery has also been linked to the failure of the main bastion of modernity: democracy. Indeed, the increasingly apparent ineffectiveness of so-called formal, electoral or representative democracy has shifted attention to other forms of democracy linked to everyday life; whether small scale or circumscribed to certain activities or dimensions, they have proven to be more effective than that organised by the modern state. This has re-promoted the old ideas of a democracy that is participatory and radical, especially as formulas to guide the socio-environmental resistance (Calle 2011).

All of the above has contributed to the (re-) identification first of a different and somewhat autonomous space or area of the political and economic powers, the so-called civil society, and then of a force coming from that area that poses a resistance, temporary or permanent, to the processes that, driven by political and economic power, affect the life of communities. The idea of civil society, by the way, is nothing new and the concept contains a rather complex history and set of nuances (see Cohen and Arato 1994, Fernández-Santillan 2012). What does seem novel is the force that derives from organised society, either to resist aggressions or to build lifestyles that permanently achieve resistance. That is to say, a force that exerts a counter-power to the attempts of domination, subjection or exploitation on the part of the state and / or of capital.

Undoubtedly, a work that stimulated analysis and theoretical debate, has been the controversial book by John Holloway (2002), "Change the world without taking power", in which he disdains the idea of social transformation by taking the power of the state (electoral or violent route), at the same time that he magnifies the roads marked by social mobilisation. Its main critics have pointed out, among other limitations, his lack of clarity regarding those who are the "agents of change" (for example, Bartra 2003).

Of enormous importance is also the theoretical path revealed by Zibechi (2013) about the ideas of the historian Fernand Braudel on the great void of history. According to Braudel, the world can be divided into three spheres: material life (subsistence), economic life (exchange) and that which, above these two, maintains capitalism and dominates the mercantile and parasitic relations. The first, the historian calls the ocean of everyday life or the realm of self-consumption and is where, in his opinion, the customary or routine life takes place. Zibechi emphasises the validity of Braudel's vision because it is precisely in material life that the enclaves that resist the predatory actions of political and economic power are found, and from where truly transforming processes are promoted. An idea that seems to coincide with the confrontation of cultures trumpeted by Dussel (1977) in his "Philosophy of liberation".

For his part, sociologist S. Zermeño (2010) makes a careful review of the importance of empowered social groups who on an average scale (municipalities, regions, basins) seem to play new roles of social transformation. Coining the concept of social densification, which overlaps with the idea of the social power formulated here, he asserts ... that the search for a more just society is a process (not a rebuttal rift), a continuous work of densification that must take place in the social level of life, not in the state, or not predominantly in it, nor predominantly in the institutions of the transition to democracy or in the acceleration of the productive forces, sciences or techniques, but neither outside and at a distance, but linked and in tension with them (249).

Finally, I cannot avoid quoting I. Wallerstein's phrase sent as a statement to the Anti-Systemic meeting held in Porto Alegre, Brazil, in January 2010: the emancipatory forces would have to recognise that ... the central issue is not to end capitalism, but to organise a successor system that will be in process of construction during the next two to three decades (cited by Zibechi 2010). Pointing in the same direction, De Sousa-Santos' book (2011) "To Produce to live", compiles and analyses innumerable cases of civic self- management formulated as counter- hegemonic resistances to the dominant or neoliberal globalisation.



In short, social power is the force that emerges independently or autonomously from civil society and seeks to maintain control over the forces coming from state and capital, as well as from the meta-computing power dominated by the latter. Social power exists and is constructed and expressed in concrete territories, whose scale is determined by the level of organisation of those who exercise it, that is, their capacity for self-management, autonomy, self-defence and self-sufficiency.

## Sustainability as a social power

Social power then emerges as an emancipating force capable of overcoming the crisis of civilisation through an organised and conscious action, and directed towards a fourfold redressal: the regeneration of the social fabric; that is, the suppression of social inequality, the restoration of the natural and planetary spheres seriously damaged, the recomposition of the dominated, excluded and exploited cultures of the peripheral worlds and the recovery of the corrupted, ruined or annihilated institutions of society (Dussel 1977). The actions to create an alternative world, for a sustainable society, then go through the construction or broadening of social or citizen power. This new perspective that unveils a force that is neither recognised nor explored, forces us to point out the relations between political power and economic power. From the perspective of the political class (including the "progressive" or "transformative"), the construction of social power becomes useful as a complementary action to the supreme goal of reaching power through the electoral route, and of preserving and increasing it. On the other hand, from a civic or citizen perspective, political power is taken to build social power. In other words, from the citizen's perspective, taking political power by electoral means is not an end but a means. In addition, social movements use organisational models based on little or no hierarchisation of their social networks, with a horizontal transmission of information, knowledge and experience, and that are highly flexible in the face of the changing dynamics of reality (Villasante 1995).

The mobilisation of citizens and their organisations (assemblies of neighbourhoods, communities, cooperatives, trade associations, management organisations, etc.) materialises into

social power when it leaps from demonstrations or the mere resistance to the effective control of spaces: city boroughs, communities, municipalities, basins, regions. However,

the construction of social power begins on the domestic scale. It starts in the family, in the construction of a self-sufficient, safe and healthy home, which shares the same "domestic micropolitics" with many other households. And it is at the scale of the home where the basic principles of sustainability are first put into practice, such as diversity, self-sufficiency, integration, resilience, autonomy and self-management. The implementation of the sustainable then escalates, and thus widens the spaces gained into reaching communities, boroughs, cities and entire regions, which transformed into "liberated islands" (for details see Toledo and Ortíz-Espejel 2014, chapter 1).

#### Final reflection

As a truly emancipatory, counter-hegemonic and alternative proposal, sustainability manages to overcome the double exploitation of the work of nature and human work, through the implementation of actions that concern the different spheres of everyday life, such as ecologically sound systems, a solidary economy that gives rise to fair and organic markets, the use of ecotechnologies, direct and participatory democracy, the exclusive use of solar energy sources (direct or indirect), and the employment of knowledge arising from a liberating science carried out by socially and environmentally conscious researchers. All this aimed at the empowerment of social groups and the control of their territories. As an attainable utopia, sustainability defined as social power exists, grows and expands in many parts of the world. In Mexico, a recollection of experiences brings up over one thousand and reaches almost twenty regions (Toledo and Ortiz-Espejel 2014). All this confirms, as pointed out by Leonardo Tyrtania (2009) that ... sustainability belongs to those who work for it, and not to those who only postulate, proclaim, analyse, promote, pervert or brag about it.



#### References

Alimonda, H. (ed.). Ecología política, naturaleza, sociedad y utopía. Buenos Aires: Consejo Latinoamericano de Ciencias Sociales (CLACSO), 2002. — . Los tormentos de la materia. Aportes para una ecología política latinoamericana. Buenos Aires: Consejo Latinoamericano de Ciencias Sociales (CLACSO), 2006.

Astier, M., O. Masera y Y. Galván-Miyoshi (eds.). Evaluación de Sustentabilidad. Un enfoque dinámico y multidimensional. SEAE/CIGA ECOSUR/CIEco/UNAM/GIRA / Mundiprensa, 2008.

Bartra, A . El Hombre de Hierro. México, DF: UACM, UAM y Editorial Ítaca, 2008. — . «El significado de la revolución según J . Holloway .» Chiapas 15 (2003): 27-33.

Beck, U. La Invención de lo Político. México, DF: FCE, 1999. ———. La Sociedad del Riesgo Global. Madrid: Siglo XXI Editores, 2003.

Bettencourt, L. M. y J. Kaurc. «Evolution and structure of sustainability science.» Proceedings of the National Academy of Sciences 108 (2011): 19540-19545.

Bryant, R. L. y S. Bailey. Third World Political Ecology. Londres: Routledge, 2000. Calle, A. (ed.). Democracia Radical. Icaria Editorial, 2011.

Cohen, J. L. y A. Arato. Sociedad civil y teoría política. México, DF: FCE, 1994.

Delgado, Gian C . «¿Por qué es importante la ecología política?» Nueva Sociedad 244 (2013): 55-70. Dussel, E . Filosofía de la Liberación. México, DF: FCE, 1977.

Escobar, A. «After Nature, steps to an antiessentialist political ecology.» Current Anthropology 40 (1999): 1-30. Fernandez-Santillán, J. El Despertar de la Sociedad Civil. Océano, 2012.

Foladori, G . «Una tipología del pensamiento ambientalista .» Editado por G . Foladori y N . Pierri, 83-134 . 2005 .

— y H . Tommasino . «El enfoque técnico y el enfoque social de la sustentabilidad .» Editado por G . Foladori y N .

Pierri, 197-206 . 2005. — y N . Pierri (eds .) . ¿Sustentabilidad? Desacuerdos sobre el desarrollo sustentable. México, DF: Miguel Ángel Porrúa/UAZ . Cámara de Diputados, LIX Legislatura . México, 2005.

Funtowicz, S. y J. R. Ravetz. «Science for the post-normal age.» Futures 25 (1993): 35-38. García, R. Sistemas Complejos. Barcelona: Gedisa, 2006.

García-Barrios, R. y L. García-Barrios. «La sociedad controlable y la sustentabilidad.» Astier et al., 2008: 173-190. Garrido-Peña, F. La Ecología Política como Política del Tiempo. Granada: Comares, 1996.

González de Molina, M. y V. M. Toledo. The Social Metabolism: A Socio-Ecological Theory of Historical Change. Springer, EEUU, 2014. — y V. M. Toledo. Metabolismos, naturaleza e historia. Barcelona: Icaria Editorial, 2011.

González-Casanova, P. Las Nuevas Ciencias y las Humanidades. De la academia a la política. Madrid: Anthropos, 2004.

Holloway, J. Cambiar el Mundo sin Tomar el Poder. Buenos Aires: Universidad Autónoma de Puebla y Revista Herramientas, 2002.

Hornborg, A. y C. Crumley (eds.). The World System and the Earth System. Left Coast Press, 2007.

Kajikawa, Y., F. Tacoa y K. Yamaguchi. «Sustainability science: the changing landscape of sustainable research.» Sustainability Science 9 (2014): 431-438.



Kates, R. W. et al. «Sustainability science .» Science 292 (2001): 641-642. — . «What kind of science is sustainable science?» Proceedings of the National Academy of Sciences 108, n° 49 (2011): 19449-19450.

Leff, E . La complejidad ambiental. México, DF: PNUMA y Siglo XXI Editores, 2000. ——— . «La ecología política en América Latina: un campo en construcción .» Editado por H . Alimonda, 56-70 . 2006 .

Masera, O., M. Astier y S. López-Ridaura. Sustentabilidad y Manejo de Recursos Naturales: el marco MESMIS. Mundiprensa, 1999. ———— y S. López-Ridaura. Sustentabilidad y Sistemas Campesinos. Mundiprensa, GIRA y UNAM, 2000.

Moran, D., M. Wackernagel, J. A. Kitzes, S. H. Goldfinger y A. Boutaud. «Measuring sustainable development - Nation by nation.» Ecol. Econ 64 (2008): 470-474.

Morin, E. Introducción al pensamiento complejo. Gedisa Editores, 2001.

Nygren, A . «Ecología política, análisis contextualizado sobre el medio ambiente y la sociedad .» Editado por L . Durand et al ., 11-20 . 2012.

Ortiz-Moreno, J. A., O. O. Masera y A. F. Fuentes. La Ecotecnología en México. CIECO, UNAM, 2014. Peet, R., P. Robbins y M. Watts. Global Political Ecology. Londres: Taylor and Francis, 2011.

Peet, R. y M. Watts. Liberation Ecologies: environment, development, social movements. Londres: Routledge, 1996. Pierri, N. «Historia del concepto de desarrollo sustentable.» Editado por G. Foladori y N. Pierri, 27-79. 2005.

Piketty, T. El capital del Siglo XXI. México, DF: FCE, 2014.

Santos, Boaventura de Sousa . Producir para vivir: los caminos de la producción no capitalista. FCE, 2011.

Spangenberg, J. H. y M. O'Connor. «Sustainability science: a new mode of science, another step in the evolution of science paradigms.» Global Responsibility, 2010: 13-16.

Toledo, V . M . «Ecología, ecologismos y ecología política .» Nexos 69 (1983): 15-24. — . El glamoroso encanto de la ecología. México, DF: La Jornada, 14 de septiembre de 2014. — . «Las disciplinas híbridas: 18 enfoques interdisciplinarios sobre naturaleza y sociedad .» Persona y Sociedad 13 (1999): 21-26. — . «Utopía y naturaleza: el nuevo movimiento ecológico de los campesinos e indígenas de América latina .» Nueva Sociedad 122 (1992): 72-85.

— y B . Ortiz-Espejel . Regiones que caminan hacia la Sustentabilidad. CONACyT y Universidad Iberoamericana Puebla, 2014.

Tyrtania, L. Evolución y Sociedad. Termodinámica de la supervivencia para una sociedad a escala humana. México, DF: Universidad Autónoma Metropolitana, Iztapalapa, 2009.

Villasante, T. R. Las democracias participativas. Ediciones Hoac, 1995.

Zermeño, S. Reconstruir a México en el Siglo XXI. Océano, 2010.



Zibechi, R. «Vida material, capitalismo y cambio social.» La Jornada, 31 de mayo de 2013. — . «Los diferentes significados del Otro mundo es posible.» La Jornada, 29 de enero de 2010.

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