

## The Sustainable Development Labyrinth

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Rivers of ink have flooded the world since the environment Conference in Stockholm (1972),<sup>2</sup> and followed up with the Cocoyoc, Mexico in October 1974 Declaration on the sustainability and ecological consequences of the current productive logic around the globe. Lets not forget the Dag Hammarskjold report for the seventh extraordinary period of meeting of the General Assembly of the United Nations, on *Development and International Cooperation* in September 1975, and the World Commission on *Environment and Development* in 1987, and *The Brundtland Report*, 1987 or the *Summit of the Earth* in Rio de Janeiro, 1992. Paradoxically, in Latin America, its own particular answer to the "limits of the growth" thesis in 1976 was firstly coined in the English language:

*Catastrophe or New Society. The World Model?* Also, two have decades lapsed since the second Intergovernmental Panel on Climate Change (IPCC) assessment, and 9 years since it received the Nobel Peace award jointly with AL Gore.

Instead of trying to give an account or definition of what sustainable development might mean to different schools of thought<sup>3</sup> in what follows I describe the evolution undergone by the discourse on "sustainable development" or the "environmentalist" problematic in Latin America in the last decades examining the work of Enrique Leff. This first part of the introduction offers a brief exposition of the theoretical "scaffoldings" (Leff, 2010th: 272) which span over "two" nothing's, following the famous tango verse rhymes ("twenty years is nothing"), that is forty years of Leff's work. (Leff, 2010th: 256), followed by a section ("**Disciplines, knowledge and theoretical ruptures**") where we examine some of the conceptual vocabulary concerning the sustainable development program and the environmental problematic, and in

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<sup>2</sup> "Environmental deficiencies generated by the conditions of under-development and natural disasters pose grave problems and can best be remedied by accelerated development through the transfer of substantial quantities of financial and technological assistance as a supplement to the domestic effort of the developing countries and such timely assistance as may be required", runs the 9th principle of its declaration.

<sup>3</sup> Sharachchandra (1991).

the final part ("**The surpluses of power**") we include a critique of some of his positions and provide theoretical support for his new "environmental and productive rationality" formulated by conveying some aspects of the center-periphery perspective or the Latin American structuralist notion of the economy. We will first observe the various theoretical phases of Leff work; starting with its adoption and critique of the ecological tradition through a multidisciplinary approach under the aegis of a specific Marxist strand, which in turn was renovated by prioritizing the social movements as the transformative agency in the process of the reorganization of the working conditions and its environment. To this effect, we find that the evolution of the discourse required a reconstruction, and more specifically the concept of the "environment". The object or entity in question becomes a boundless space, displacing traditional notions with pre-constituted limits or boundaries, between and among regions/spaces. The approach articulates the struggle and defense by regional social movements in defense of their conditions of existence and the diverse forms of possession in separation of the productive resources. On the other hand, the void left by Leff's displacement of Marxism was countered by retrieving some form of agency to explain the social forces of change, and it is here where we find Leff bringing in M. Heidegger's notion of "being" as the explanation of the driving process. My intervention in this paper argues that the theoretical and political labyrinth into which the "sustainable" development perspective founds itself can in turn be resolved if we reintroduce the Latin America structuralist perspective on development and the economy, which in the Anglo-Saxon academy is associated with the so called Prebisch-Singer thesis on the deterioration of the terms of trade of the "underdeveloped countries" ("periphery") vis a vis the "industrial countries" ("center"), and the import substitution policies.

The changes and conceptual transitions in Leff's work account for a struggle for hegemony and the construction of a practice on the issue of the distribution and use of the productive resources. The expositions of the work of Leff depart initially from the disciplinary field of the "ecology" and its diverse currents, which originally derive from the dominant European and Anglo-Saxon vocabulary, subsequently "superseded" (in the Hegelian sense) and culminating in a specific and Latin-American theorization. However, despite its important

achievements and theoretical transformations, in the last years (Leff [2006] 2011) the explanation and evolution of the ideas, summons, once again, some current exponents of western continental thought and a specifically M. Heidegger. My contention is that these last aspects call for some caution and should be counteracted to prevent the theoretical fruits from being overturned, which ultimately suppose alternative practical and political strategies of the productive organization recognizing its diverse logics and constitutive mechanisms.

The theoretical transition of thinking the logic of capital in *general*, and its "environmental" destructive effects on the productive resources and its correlative asymmetric distribution of rewards, close with a conceptual and policy effort that proposes recovering the plural perspectives articulated to specific analyses, which displaces, a unitary logic or vision, which is to observe specific social configurations, or "regional" ones, engaging alternative transformations of the productive sphere, by rescuing the local theoretical-political elements.

The work of Leff, presents an outstanding case of a regional -Latin American- autochthonous creation, in which its theoretical efforts already encompass almost half a century of thought reflecting on the area of sustainable development problematic or of the environment: that is ideas to think the alternatives for the organization of production and development. In Latin America, the initial discussion was posed in terms of contrasting "development" and "sustainable development", or what in Anglo-Saxon discourse is appears as "soft" and "hard" sustainability.

To facilitate the task of the presentation we must take into consideration that we cannot avoid the plurality of vocabularies in question, the differing starting points, on the issue of sustainable development.

Initially, Ecology, the original disciplinary field, receives Leff's criticism and conceptual transformation. Eco-Marxism and historical materialism, are offered as the solution to explain the relation of the nature / culture couple and knowledge on the "integrated management of the natural resources"; the primary trophic chain,<sup>4</sup> and secondary productivity; the recovery of the

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<sup>4</sup> "In ecosystems, it is well known that autotrophs (primary producers) need heterotrophs (herbivores, carnivores and detritus feeders) to degrade their by-products (e.g. preventing

indigenous botanic and pre-Hispanic knowledge-science cultures to think alternative forms of regenerating the productive substratum and use of its resources.

Its a very illuminating vision on the history and theorization of the limitations of the disciplines and the differing compartment levels; the roles of the inter and intra-disciplinary aspects that required its theoretical supersession, with the expectation of new perspectives or objects of knowledge, which resulted finally in a *sui generis* conception of the "environment".<sup>5</sup>

The recovery of the social, indigenous, ethnic and rural movements for the transformation of the sustainable development approach, and its visions of "re-appropriation" of "nature" and reconfiguration of the productive process, attempts to dissolve two opposite logics: the mercantile value and the community bio-ethic's practices, which forces Leff to develop an alternative theoretical perspective.

My concern is that during the theoretical transition an increasing distance appears in the proposal away from the examination of the "productive logic", or "productive rationality".<sup>6</sup> While Leff prepares the criticism over Eco-Marxism, "holistic" and "systemic" accounts of the existent environmental rationality, under the imperative postulate of constructing a "*new economy*" or alternative "*environmental rationality*", which describes the negative effects of capital's hegemony from a Marxist perspective, simultaneously he initiates a search for a new perspective. The plurality of logics of capital in the organization of the

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accumulation of oxygen in the atmosphere) and to recycle nutrients such as nitrogen. The rate and the pattern of primary production in ecosystems are controlled not only by the activity of primary producers, but also by the activity of consumers and decomposers. So, there is a direct biophysical relation between autotrophs and heterotrophs in ecosystems. Actually, the more developed is the ecosystem, the more consumers and decomposers play a key role in the regulation of the overall flow of solar energy (Odum 1971). In order to produce more, autotrophs must be 'eaten' at a higher rate by heterotrophs." (Mayumi, 2001:121).

<sup>5</sup> See for example, the first two chapters, Leff (2007). Many years, after having initiated the project, he says: "The interdisciplinary project that is founded on ecology - as the science of interrelations par excellence- which is inspired in complex thought based on an a generalized ecology to articulate the different disciplines and knowledge fields, maintains a unified will, without investigating the paradigmatic obstacles and the disciplinary interests that resist and prevent such a route of holistic re-totalization of knowledge. This interdisciplinary project fails in its object of creating an integrated environmental science, in offering a method for understanding the interrelations, interactions and interferences between heterogeneous systems, and in producing a trans-disciplinary science that supersedes the isolated disciplines" (Leff, 2010th: 177).

<sup>6</sup> Leff insists that since "1975 we have been proposing the idea that another economy is imperative and possible" (Leff, 2010th: 83).

production process, the forms of "property" or what I would call the diverse "forms of possession in separation" of the conditions of existence of the productive units, opened the ground for a different explanation. Once the notion of Marx's theory of value<sup>7</sup> and of capitalism in *general*, is displaced, the route is open for the possibility of organizing or of "managing" the ("natural") productive resources, and the productive units by means of the theory of "eco-development" and/or "eco-technodevelopment". Therefore, dichotomies such as society / nature, can be theoretically incorporated into the ecological discipline. It's in the course of this theoretical reflection that we can observe the importance of taking into consideration the cultures and specific practices of rural life, and indigenous communities, and yet this scheme whose object was the clarification of the specificities of those social relations that account for the asymmetries of power and the destructive practices of capital, unconsciously banishes precisely those aspects which it was trying to underline: the political and organizationally adverse effects.

His critique to some of the "eco-development" models, underlined the fact that they did not necessarily require an alternative or counterpoised logic to capitalism; this brought about a new conception on the environment, and the importance of thinking the struggles of the communities as the "re-appropriation of nature".

It is this "absence", "lack" or "incompleteness" (notice the play on Lacan's terms) of the explanation, of those power aspects and its transformation, the forms of possession in separation of the conditions of existence of the productive units, which will ultimately climax in the new approach in process. Those interstices, gaps, spaces, within and between certain units of production are the sustenance of the power asymmetries that enforce certain productive logics. Undoubtedly, while searching for alternatives across the environmental movement, or under what seemed steered by similar ideological overtones, Leff does not overlook the importance of the new movements and struggles by the

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<sup>7</sup> In 1980 Marx's theory of value presents one of its first criticism by Leff, but it still finds a foot inside, it has not managed to displace the notion since its questioning relates to the theoretical consequences of the technological robotics revolution and the introduction of the chip in the labor processes. But it is known that although the proportion of the "living" labor force may form a minimal part of the organic composition of capital, what is at issue is the rate of exploitation or extraction of the surplus value (Leff,1980). The evolution and the displacement of an "objective" theory of value can be seen in the first chapter in Leff, (2013 [2004]).

communities resisting local and national politics under the logic of certain forms of capital. And yet, the theoretical representation of the environmental question tends to forget aspects that demand a more specific explanation of the asymmetric power conditions among and between productive units and regions. Its in this setting of the social relations, that we will propose an explanation that does not require necessarily a *general* theory of the value or prices (Marxist or neoclassic), but a theory of the power developed by the Latin-American structuralist school, where the asymmetries of power are central to explain the cultural and economic heterogeneity: as a consequence of the forms possession and separation of certain conditions of existence of the productive units.

### **Disciplines, knowledge and theoretical ruptures**

A little "ecology" comes in handy to understand the route taken by the evolution of Leff's reflections. The "environment" crisis gets theoretically displaced from within the guidance of the "environmental complexity" discourse.

From the basic standard thesis of the birth of ecology, we can read that in the middle of the nineteenth century, E. Haeckel, defines ecology as the "knowledge that studies the relations between the organism and the environment, inorganic and organic, the economy of the nature" (Gallopín: 2000-1986: 88):

the key concept that underlines all of them is their interrelation; ecology concentrates primarily not on the organisms in themselves nor in the environment of the organisms for its own sake, but on the interrelations between the organisms and its environments, and its central objective is to describe the principles that govern these interrelations (...) it is in the characterization of the ecological system as an object of study where the differences lie. Organisms, populations, communities, ecosystems, nature, are proposed as candidates to circumscribe the unit of ecological study (...) An ecological system does not have a dimension or unique scale; we can distinguish ecological systems of all levels from the organism up to the ecosphere. Rather, what characterizes a system as ecological is not its dimension or level of aggregation, but its nature (...)

A *system* in general can be defined as a coherent set of interdependent interactions of elements. All biological systems are open systems, characterized by a continuous exchange (Gallopín, 2000-1986: 89-90 author's underline).<sup>8</sup>

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<sup>8</sup> "An *ecological system* consists of one or more organisms, together with several component of the environment to which they are related functionally. The components of the ecological systems are therefore elements (organisms, groups of organisms - including human beings -

Its instructive to remember, for what is to be discussed later on, the notion of "environment" and "system" and boundaries made by the above definition, because its precisely these categories that would be transfigured into very specific "concepts" in the work of Leff.

Although the Leff's vocabulary has ecological roots concerning the practice on "management" or "integrated management of the natural resources", his initial criticism's of the discourse departs by trying to subsume its "object" into the Marxist "historical materialism" tradition, within the logic of the "capitalist mode of production".<sup>9</sup>

He rejects that "ecology" can conceptualize the problems of the environment and the management of the productive resources, that is to say, its administration or organization, since it does not take into consideration the social relations under which this activity takes place. However, he points to the existent regions / territories which present certain "environmental potential" and "eco-systemic" structure on which its productive processes depend, based on practices of the communities and its cultural values. This problematic engenders the society - nature dichotomy, a "dynamic" relation which the "environmental development management" is compelled to analyze: an articulated set of technological and cultural elements: "integrated management of the resources", that is the environmental rationality in question.

The environmental complexity of the socio-ecosystem entails of several new theoretical objects, which leads to the reconstruction of the current ecology or its knowledge. Objects of one or more sciences cannot be assimilated. The historical and economic conditions of the ecologist's object, supposes its internalization across the social sciences but not by means of incorporating "social processes" into the ecology (Leff, 2007: 95).

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abiotic components, etc.) and the relations (feeding interactions, competition, regulation, reactions to environmental variables, etc.)" (Gallopín, 2000-1986: 90, emphasis by author).

<sup>9</sup> There is no place here to elaborate on the adequacy of Leff's reading on the above mentioned problems, but the theoretical strategy is "marked" by the discussion undertaken by L. Althusser (2004 [1967] work and "disciples"; it dominates Leff's, conceptions in that epoch, not only on the notion of the "mode of production", but most importantly in aspects that have to do with the so called "knowledge process"; theoretical transformations and the distinction between the "object of the knowledge" and the "real object", which in turn gives supports to the evaluation, relevancy and scope "intra" and "interdisciplinary" knowledge generation and projects on the environment; in particular, see chapter 2 (Leff, 2013 [2004]) and the first three chapters in Leff (2007 [1986]).

In turn regional territories determines social practices of the communities, and therefore the "conformation of the environment shapes the constitution and evolution of the cultures and its technical developments" (Leff, 2007: 95), that rest on its "ethnic style of use of the environment by a culture" which "is overdetermined by its state of dependence and domination" (Leff, 2007: 95). Therefore, the "environmental management of the development, founded on the ecological potential and the conservation of the diversity of cultural styles" (Leff, 2007: 95-96) presume explaining a social formation, which is articulated under a diverse ecological, cultural and historical process.

Eco-Marxism does not offer the pertinent theoretical-practical solutions to generate an alternative social rationality, which means that it's necessary to reconstruct the "concept of environmental rationality". Marxism is too "schematic" to understand the "ecological, technological and cultural" processes (Leff, 2007: 277). According to Leff, for Marxism, the "environment" is much more than a "cost" element. The Eco-Marxism theory pointed beyond the unification of ecology and Marxism, and its project included the incorporation of the "natural" environment into its discourse. The debate on the destruction of its conditions of existence as a consequence of capital's predatory rationality, or, of the "natural resources", brought about the so called, the *second contradiction of the capital*: "self-destruction and the increasing cost of the conditions of production of capital" (Leff, 2007: 341).<sup>10</sup>

Nevertheless, environmentalism shows a sufficient potent social force with the corresponding aptitude to put a brake on the "eco-destructive" processes, but "Eco-Marxism" concentrated only on those aspects that conceptualize "the social determinants of the praxis" (Leff, 2007: 363) instead of on the strategy for "social change":

steers the reflection of the movement towards its own practice, from which strategies will arise to generate a real power of social transformation (...) [and] it would unblock the disabling orthodoxy and unleash strategies of action organization, capable of concretizing the innovative potential of the

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<sup>10</sup> It is necessary to mention that Leff is no Marxist "novice", it knows and offers all the displeasures of having read Marx texts published in life and the subsequent manuscripts, as well as the debates on the theory of the value related to the "rent" question in agriculture; he reminds us of Marx's famous phrase where he declares that perhaps value notions are inoperative in an economy under a high technological process: "labor time will stop being the measure of the work, just as exchange value will stop being the measure of use value" (quoted in Leff, 2007: 342; see also, G. Foladori, 1996; Mir and Gorostiza, 2000).

environmentalism by means of the opportunities that the arena of the changing offers (Leff, 2007: 363).

The fact is that by then Leff thinks that the theoretical and political struggle had moved towards the "conflictive field of the nature-society relations" (Leff, 2007: 363), which presents itself as a confrontation between "ecological capitalism" and a socialist ecological and democratic project. There has arisen the defense and construction of an environmental rationality in terms of the concept of "eco-technological productivity" which presumes the analysis of the "ecological, technological, economic and cultural conditions":

Environmentalism poses the possibility of constructing a *new productive rationality*. Based on the conception of the environment as a *potential system* and a *productive potential*, from the activation of the principles of the eco-technological productivity generated by the articulation of the ecological productivity of the natural resources, the technological productivity of its processes of transformation and the social productivity of the organization of the communities productivity (Leff, 2007: 397 emphasis by the author).

That makes possible an alternative productive paradigm, based on the "eco-technological productivity concept", which "articulates the ecological, technological and cultural levels of productivity in the integrated management of the productive resources" (Leff, 2007: 104). Obviously this productive logic is not evaluated in terms of market prices, and values positively certain resources instead of others. In this manner it tries to preserve certain "potential resources" that have been ignored given its low exchange value" (Leff, 2007: 105) in monetary terms.

According to Leff, the "complex interrelations" within these social productivity levels supposes a "synchronic and diachronic" conceptualization of the "cultural, ecological and technological processes that constitute it, which serves as the support of the integrated management of the natural and social resources for a sustainable an economic development" (Leff, 2007: 106). There exists a "systemic generation effect of new productive potentials" (Leff, 2007: 107) as a consequence of the new articulation of the "natural resources", "technological process" and "cultural values". Knowledge of the "different levels of articulation of its material processes", generates a "conceptual strategy" to construct an "environmental rationality" whose platform are based on an "alternative social rationality" than the "capitalist" one (Leff, 2007: 107). Thus, the "concept of cultural productivity allows to account for the labor power of a

community, from its own perception and forms of productive use of its resources, of its motivations (and to assimilate new knowledge to its traditional productive practices" (Leff, 2007: 112).

In the above mentioned case, "productivity" cannot be measured or evaluated in terms of a aggregated monetary index. The cultural dimension in the "sustainable process of development" can only be measured in terms of the hegemonic value perception of the communities in question.

Given the case, Leff returns once again to study the interdisciplinary problematic, to confront the exchanges and interrelations of concepts and their the varied connotation. That opens the field to reflect on "different perspectives of analysis of the environmental problem", and the "power relations (real power and the power of knowledge)" (Leff, 2007: 119).

The degradation of the environment, says Leff, and destruction of the natural resources has not generated its "suitable conceptualization" by means of the inscription of the natural processes in "socio-historic" terms (Leff, 2007: 124).

Although the scheme starts by criticizing the weaknesses of the economic discipline in its attempt to "integrate the externalities of the productive processes, socio-biology has not managed to integrate the dichotomy society - nature either", also an aspect unresolved in ecology when it incorporates "society" as a subsystem of the "global ecosystem" (Leff, 2007: 124).

Up to this period, Leff's, reflection could be placed within the context of the "eco-development" school, which then was also showing signs of important limitations to think the new environmental or productive rationality:

Therefore, eco-development strategy is founded on a productive reorganization that integrates the levels of natural and technological productivity. The first one must be founded on the conservation of the basic ecological structures that guarantees sustainable productivity of the natural resources; on the intervention of an ecological technology that should modify the ecosystem, (...) The eco-development productivity must assure an increase in the thermodynamic efficiency of the processes of industrial transformation, adapting the different energy resources to the type of needs, increasing the ecological productivity of the ecosystems and developing new energy sources based on inexhaustible resources as the solar energy (Leff, 2007: 222).

Leff offers an explanation for the conceptual shift:

The concept of *environmental rationality* circumscribes itself, at this moment, to the arena of production. It emerges from a criticism of political economy of the environment and is directed towards a transformation of the

productive rationality. Breaks with the reductionist conception of man as a function of a labor force in the dominant economic rationality, to inscribe the potentials of nature and culture in the productive processes. The environmental rationality combats this way the ideological process that has universalized the labor dimension, the needs and production, opening possibilities to the construction of new "modes of production". Nevertheless, the concept of environmental rationality has a *wider meaning*, which has to do with the values of democracy, the arena of power and to the meaning of the existence of man. With the concept of quality of life, environmentalism points towards an economic and theoretical rationality, that, like its mirror, has been constituted in the culture of modernity, guiding the construction of a *new social rationality* (Leff, 2007: 242, my emphasis).

The theoretical and perspective change is symptomatic, it's incorporating questions that move relatively away properly speaking from those aspects that concern the organization of the labor process and the technology, culminating in aspects that have to do with the asymmetries of the power:

Inside different power structures, with dissimilar distribution patterns of wealth and means to offer a social welfare to the population, the production of satisfiers has been founded on an short term economic rationality (...) however, the primary productivity of the ecosystems -its natural aptitude to generate vegetal matter by means of the photosynthetic process and its potential to produce natural use values- is excluded from the principles of economic productivity, just as the manner by which ecological costs of growth are not considered by the economic accounting. The natural processes that support the stock resources are not integrated in the evaluation of the national product (...) productive process [that] is characterized by the dis-adjustment between the forms and rhythms of extraction, exploitation and transformation of the natural resources and the ecological conditions for its conservation and regeneration (Leff, 2007: 243).

Eco-development emerged during the struggle for a definition of a new world order, in the context of the Club of Rome report in 1972, the "limits of the growth", and the theoretical insufficiencies of the economy's perspective. According to Leff,<sup>11</sup> its possible to see its presence in the Declaration of Cocoyoc, México, in October 1974 and the report for the seventh extraordinary period of meeting of the General Assembly of the United Nations in 1975. Its limitations have to do with the effects "that a specific mode of production imprints, or a culture, on its environment" (Leff, 2007: 318) tending to refunctionalize the economic rationality, incorporating an "environmental dimension" into the development policy" (Leff, 2007: 318-19).

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<sup>11</sup> Meadows, Donella et.al. (1972), *Limits to Growth: To Report for the Club of Rome, Project on the Predicament of Mankind*, New York, Universe Books.

However, the eco-development proposal to promote the cultural autonomy and "technological management of communities" (Leff, 2007: 319), did not questioned that the practical feasibility of its targets could not be realized "within those economic paradigms and prevalent institutional structures" (Leff, *ibid.*). It did not change either when its purpose was defined as the "valorization of the specific resources of every eco-region" (Leff, 2007: 320), which would only promote the diversification of "the technical processes of exploitation of nature" (Leff, 2007: 321).<sup>12</sup>

The then world consensus was looking for a solution to the environmental crisis, which generated basically two currents, one stems from the world Conference on the *Environment and Development*, in Rio de Janeiro 1992 and the *Agenda 21*. According to Leff, they shared the perspective of sustainable development, which then was proposing "the ecological reconversion of the economic rationality by way of the liberation of the commerce" (Leff, 2007: 327) by means of the market. The other insisted on the participation of the management of resources and environmental democracy, and the reconstruction of a new social rationality with the direct participation of the population. The eco-development and the sustainable development struggle to define the very concept of an alternative development: one attempts the "regeneration of natural resources and ecological equilibrium" (Leff, 2007: 331), the other to introduce itself "in the social struggles for the productive self-management of the communities and the construction of an environmental rationality" (Leff, 2007: 331-32).

Leff incorporates the importance of the social movements in the reconstruction of the discourse concerning the development of the sustainable resources:

However, at the same time that the strategies of the eco-development and the objectives of sustainable development can be assimilated to capital's answer for the conditions for global change strategy (it incorporates proposals that, to be undertaken, require a set of institutional, juridical and political transformations) (Leff, 2007: 320).

Which according to Leff they generated movements and anti-capitalist struggles, but in fact:

the absence of a political analysis of the contradictory field in which the strategies of the eco-development are inserted -and the current discourse of sustainable development- has favored the emergence of confusions and suspicions concerning its proposals (Leff, 2007: 321).

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<sup>12</sup> The most recognized author of this school would be I. Sachs, in fact he was Leff's teacher in his university days in Paris during the mid sixties.

It is this strategic political aspect that takes the front in the work of Leff: "the movements of vindication", political and cultural of the natives and rural areas. This perspective goes beyond the logic and criteria of the "economy of the contamination" and protection of the ecosystems and the "environment".

Therefore the:

environmental problematic is an eminently political question. It is reflected in the emergency of the social movements for the defense of the resources, the land and the cultural values of the people (...) The environment movement induces a social force that, like a political pressure, swelled the price of the resources and environmental services, increasing private costs of capital (...) this mechanism of "balance sheet adjustment" by means of the expression of interests is limited to the correlation of forces that are in dispute (...) But, even in case that the environmental movement were to consolidate its forces, its meaning would not exhaust itself as efficient transmitter of the incommensurable environmental values towards the structure of the market prices and capital costs. The further most substance of the environment movement is precisely its orientation towards the construction of new productive and a new social rationality (Leff, 2007: 270-71).<sup>13</sup>

Having reviewed the problems of the Marxism and Eco-Marxism, Leff believes there are reasons for proposing "an alternative productive paradigm to that of the dominant economic rationality" that would depend more on "satisficing" basic needs and "socialized access", "appropriation of the nature", "decentralization" and reordering of the "productive ecological activities" and the "communities in the management of the environmental resources" (Leff, 2007: 358). Its about, Leff says, a "paradigm" in which "nature" and "culture" do not enter only as mediating processes, "as condition or support for production, but as social labor and direct productive forces" (ibid.), in the sense of the "eco-technological" model "for the integrated management, sustainable and supportable of the natural resources, founded on the concept of environmental rationality" (Leff, 2007: 358). Here, culture and nature alike form part of the productive forces.

At this moment Leff undertakes a crucial theoretical turn on the environmental complex and its object. The problems of organizing the productive unit, territories and its regions, by the struggling communities for the "appropriation" of its productive resources or conditions of existence - "nature"- had been paralyzed, in political terms, by the theorization on the "environment".

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<sup>13</sup> See also, chapters 7-8-9 and 10 in (Leff, 2010).

What seem like a transcription of his own theoretical evolution, Leff says, that historical materialism has moved from a critique of the predatory model of accumulation and the degradation of the environment, to the reconstruction of "nature and culture categories, placing them in the center of the productive process (...) to construct a new theory of the production (a new productive rationality), which, more than considering the environment as an externality (...) incorporates the *environment as a potential* to the productive process (Leff, 2007: 335, emphasis by author). Notice must be taken that on this occasion the *environment* forms part of the productive process. Also, categories such as nature and labor do not grasp the

specificity of the relations between a specific social formation and its environment (...) or of translating the organization and the cultural values into principles of productivity and sustainable management of the productive organization of the natural resources (Leff, 2007: 339)<sup>14</sup> Therefore we read Leff undertaking the last theoretical stages toward establishing as inappropriate the systemic and holistic models for thinking the organization of the natural and environmental resources, which as we will, tends to displace the discourse concerned with the forms by which the community or the productive units possess in separation certain of its conditions of existence. The fact that Leff supports the possibility of another productive rationality -in spite of the contrasting logics in question- traditional productive units under specific standards of behavior, and those who are guided by the market (he does not use the "value" notions) gives faith to the prospect of constructing an different policy.

But before that event it was necessary to have disbanded the Marxist holistic contributions of the society - nature couple and consider "society - nature relations within the social relations of production" by politicizing the "environment", which now "appears like a complex and polyvalent object that opens options to transform the dominant economic rationality and construct a

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<sup>14</sup> "Ever since nature gets converted into a set of objects - says Leff - and labor processes, ever since ecological processes participate in the formation of value and in the production of surplus value, nature is absorbed into the object of historical materialism; that is to say the process of reproduction of capital. Nature's resource are not the product of a biological metabolism; the labor force is not the energetic erosion of men (...) they imply the support of the biological laws of the living organisms; but they are not natural entities whose existence is independent of the historical processes. (...) Given the previously, the articulation between nature and society cannot be explained as a simple exchange between the culture and its environment" (Leff, 2007: 139).

productive rationality based on social equity and sustainable ecological base" (Leff, 2007: 356-57).

This turn gives an opportunity for a development of a "complex" approach, that requires overcoming systemic perspectives, which conceive the environment

as external system to the economic system, to study in coevolution the processes between the economic system and the geo-environmental ones. It's not a question of making the environment disappear, subsuming it in the capitalization of nature, nor of keeping it like an external system to the economic sphere, but rather to integrate the environment into production, not solely as a condition, but as potential and productive force; of thinking about the environment as an articulation of cultural, ecological technological and economic processes (Leff, 2007: 357).

The fact is that the notion of the "environment" seems to have taken an "omnipresent" existence, and as a totality, contradicting the postures that require specific and alternative productive strategies, that is in plural. This turn could be seen as unimportant if it were not for the serious impasse, which it generates to delimit and to propose an alternative environmental rationality with its corresponding substantive particular rationality.

Since 1986, Leff shows signs of searching for an alternative vocabulary; he mentions an interest to rethink the environmental problematic:

the environment for Latin American countries, more than a limit for their development or the place of disposition of waste, appears as an ecological and cultural potential of production of natural resources (...) that allow to generate high rates of ecological productivity and to the entirety of the diversity of the ethnic styles of our people for its own benefit. The environment does not imply a cost that must be deducted from the investments for the economic growth, but rather as productive potential to sustain new development alternatives (...) as different disciplines (ecology, geography, anthropology, sociology, economy, architecture, law, etc.), within its disciplinary specificity, they interact with a conception of the environment generating a process of internalization, exchange and production of concepts that produces a reformulation of the contents of the disciplines (2000: [1986] XIV, XIX).

From there on we observe the beginning of a theoretical "*salto mortal*" - paraphrasing Marx - the landing of which ends in another location:

The environment<sup>15</sup> is not simply an empirical reference, the point of convergence of diverse disciplines or the *trait d'union* between society and

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<sup>15</sup> I am translating "ambiente" as environment, although it's making reference to a intermediary field between another entity other wise it makes no sense; its refers to a medium, in between another entity, through which you can reach or divide certain spaces or enclosed them; perhaps "ambiance" might be the other option. Perhaps we can encapsulate our doubts when we think the environment in term of a cross boundary process or the flow-fund model developed by Georgescu-Roegen: "The boundary of such a process must have two analytical components,

nature. The environment is the externality space of the sciences that from the force of its denial produces a wisdom that problematizes knowledge, generating theoretical conditions to think the articulation of processes of diverse levels of materiality and spheres of rationality (Leff, 2000: XXX, my emphasis).

The notion of the "environment" tends to expand<sup>16</sup> to such an extent that it has banished the idea of some aspect of "boundary" or limits between or within entities, or the idea of an "inside" or an "outside" space conforming its neighborhood:

Leff 's own brief history is as follows:

the environment concept it's implicit in the object of evolutionary biology, structural anthropology and political economy. This concept arose explicitly from the field of the biological organization that characterizes the vital phenomenon having been imported by Lamarck from the Newtonian mechanics. The notion of environment there appears as the ether or the *intermediary* fluid between two bodies, later on it was transformed in the surroundings or environment conformed as a system of connections that surround and enclose the organizing centers of certain material processes (biological, economic, cultural). It is this mechanistic sense of the environment, which has been assimilated by the holistic approaches of current environmental thought (Leff, 2007: 87, my emphasis).<sup>17</sup>

But on the other hand, doubts about the its notion arise, since the concept of "environment":

treats more than one dimension, one variable or a space of the integrated constituted knowledge, which is a process of transformation of knowledge impelled by the crisis of economic and instrumental rationality of modernity. More than an all-inclusive paradigm of knowledge, or the ecology of knowledge, or a general method for the development for the sciences (...) The environmental knowledge is a process in gestation, (...) emerges from a process trans-disciplinary problematization and transformation of the dominant paradigms of knowledge; it transcends the ecological theories,

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one being the frontier of the process which sets the process against its environment at any point of time, and the other the duration of the process. The boundary is a void by which there is a partial process and another partial process, i.e. its environment." (Mayumi, 2001: 93).

<sup>16</sup> According to Leff, "environmental democracy" needs a process of "transition" "to constitute a new economy founded on the integration of self-management spaces and integrated management of integrated resources at the local and provincial levels: this would allow, both the articulation of regional and intercommunity markets, as well as the canalization of surpluses to the national and world markets" (Leff, 2007: 400). But then Leff seems to forget the law of the value when he puts forward the articulation of diverse spaces and productive units, across "complex negotiation of interests" (Leff, 2007: 400), where the State, market and autonomous decisions of authorities and local groups bond together in the self-management of the "urban and rural communities" (Leff, 2007: 400); "The environmental management is not the return of an ecological contemplation, or a postmodern utopia disconnected from the conflict between classes and their material bases of the production" (ibid).

<sup>17</sup> "The environment - says Leff - can be reabsorbed in the system and the system can turn into a generalised ecosystem. It is in this manner that 'human environment' has been conceived as the interdisciplinary space of the "environmental sciences" in which the ecological and social externalities would be internalized in the field of planning practices" (Leff, 2007: 92).

energetic approaches and the holistic methods in the study of the social processes (Leff, 2010: 183)<sup>18</sup> It seems that environmental knowledge occupies a "space" and an evasive transcendental perspective.<sup>19</sup> They are "categories that work like *conceptual strategies*, which are constructed and materialize across multiple interrelations" (Leff, 2010: 195 emphasis by the author). It is assumed also that if the "environment" can be thought, - says Leff - as an articulated space of "differing orders of materiality and rationality" (Leff, 2010: 194), this leads to the recovery of the importance of the "concept of eco-technological productivity that articulates ecological, technological and cultural productivity processes (Leff, 2010: 194).

Other aspects, nevertheless, of the above mentioned political strategy get lost when he insists that it is about a discourse that deconstructs "the simple, unitary, disciplinary knowledge," (Leff, 2010th: 191), and yet forgets to indicate specific means by which we can guide the organization of the productive units or its territories.

More recently, Leff has reconstructed Latin-American environmental discourse as a theoretical production which is essentially of his own doing, but he ties its logic to a return to the "question of the being: the being of the entity, of the things, of the world, of the human being" (Leff, 2009: 42),<sup>20</sup> that is to a vocabulary that seems to proceed from M. Heidegger. Insisting that the "environment" is not

only the world "out there", the milieu of being and entity, or what stays outside of the system of a system. The environment is knowledge on an externalized nature, on deterritorialized identities (Leff, 2010th: 190). And yet, Leff, tries to think "being" and the gestation of the identities without references which allude to the asymmetries of power, the place where certain patterns of power are exercised on the organization of the "integrated management of resources"; he specifies the importance of the dialogue of knowledge (Leff, 2010th: 117), which suppose a world between being and

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<sup>18</sup> "The environment is neither an object lost in the process of differentiation and specification of the sciences, nor a reincorporated space by the disciplinary exchanges of the existent knowledge. The environment is the unbridgeable gap of knowledge; this gap in which the knowing desire shelters, generating an endless tendency towards the development of the sciences, the ecological equilibrium and social justice" (Leff, 2007: 90).

<sup>19</sup> "It searches - says Leff - the recovery of meaning" (Leff, 2010: 183); "it subverts logo-centrism and deconstructs the closed circle of the sciences" (Leff, 2007: 184).

<sup>20</sup> See for example, (Leff, 2011:94).

knowledge, that is the place where the existence of a political and territorial environment implies the struggle for a certain hegemony, precisely as his examples demonstrate: the *Zapatistas* (Mexico) and the *Seringueiros* (Brazil). Yet, in the last instance eco-technological strategies and sustainable development suppose diverse and asymmetric ways of articulating and possessing in separation certain conditions of existence of the units of production or territorial spaces. Which as some of Leff's work reveals we must find through specification of the pluralities of the world, from the productive and identity side, since the environmental rationality is ruled by a series of diverse and opposite logics.

Although Leff started with notions of power and "distribution" and exploitation inherited from the Marxism, having overcome the perspective given the inconsistencies in the form it posits prices and profit, as well the explanations on the forms of possession in separation of the conditions of existence that make the productive organization feasible,<sup>21</sup> his criticism opens the possibility to question alternative notions of "value" and the organization of productive resources. The organizing, or management of the productive resources can no longer be thought in terms of a *singular* or general strategy. He even denies the relevancy of the *analogy* which Martinez-Alier (2005) makes between Marxist notions of *distribution* or neoclassic thought, with the idea of the "ecological costs" derived from the examination of the struggle of local communities:

The category of ecological distribution turns out to be too unspecific to understand the environmental and ecological conflicts generated by the impact of the economy on the environment and the quality of life of the people (...) The environmental conflict (is) posed in a heterogeneous strategic and political field where social interests are mixed (...) where the "ecological" can remain subordinated (...) to demands of cultural autonomy (Leff, 2010: 65).

But sometimes it is precisely this aspect of the political theorization that tends to get lost under the veil of Heidegger's "being there" and not least when some of Lacan's categories are recovered such as "lack" or incompleteness of being (Leff, 2011: 130).<sup>22</sup>

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<sup>21</sup> "It is not a question of ending with commerce", not unless that is "the exchange of surpluses are guided by human and political values" (Leff, 2010:85).

<sup>22</sup> For example, chapters 16-17-18-19, in (Leff, 2010) and chapter 2 in (Leff, 2013); third chapter in (Leff 2011).

Equally, we must not forget that the "arrow of the time" shows "entropy" as its evolutionary logic, in spite of some "negentropy"<sup>23</sup> tendencies; the life as we understand it (anthropomorphically speaking) will banish, sooner it seems, rather than later, given the dominant productive tendencies and organization. Given the asymmetric powers, between the "center and periphery", the rhythms and time disparities, have no inherent logic for synchronizing; the biotic and financial cycles do not have means of balancing their diverse logics, least of all in a world where "deregulation" is the name of the game. Unless the idea is to impose - on the peoples and communities of the "south" - the growth strategies thought out in "North", in accordance with some "green" design policy and "clean" technology generated by the "colossus of the north" (Marti's term for the USA), the "south" or the "periphery" must undertake its specific local strategy of sustainable development.

### **The surpluses of power**

In this section, although the idea emphasizing the importance of the emergence of various struggles by diverse indigenous communities and their respective identities in its defense of its conditions of existence, I want to suggest some concepts that might reinforce the theoretical assumptions for an alternative productive and environmental strategy.

Sometimes Leff's own logic and arguments assumes that communities' object during their struggle look "to appropriate nature" (Leff, 2010: 64; 2007: 358; 2010a: 85). But this aspect can actually hinder the idea that it is a question on the transformation and reorganization of the productive and regional space, or as Leff says: "a new theory of the production to be put into practice in alternative development projects" (Leff, 2010: 194), "internalizing" (Leff, 2010: 273) the "ecological" conditions of "sustainable development". A series of indications concerning the asymmetric aspects of power between different units or productive agents, aspects that forge identities and forms the basis of the struggle for the defense of its conditions of existence, makes feasible a different perspective for the generation of certain productive resources.

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<sup>23</sup> "It implies taking the economy towards an entropy - negentropy balanced state. (...) The only possibility of stopping the ecological collapse induced by the economic process is the construction of a new productive rationality, founded on the increase of the productivity negentropy based on the photosynthesis - the only process negentropy of the planet - that depends on the conservation and restoration of the organization ecosystem based on the potentials of the nature and of the culture" (Leff, 2010th: 75).

It is necessary to take seriously that the "local scene is the meeting point of synchronous diachronic processes", where "differentiated moments" and "times" as well as cultural and "ecological potentialities are articulated" (Leff, 2010:85), which compels us to reflect on the relation, articulation, and productive circuits between diverse productive units or its agents.

In reference to Martinez-Alier proposal and notion of the "distribution of ecological conflicts", Leff says that what is at issue are "strategies of power - resistance and negotiation - (...) of social and political interests that do not allow to settle environmental conflicts in strictly economic terms" (Leff, 2010: 64). The absence of a "mechanism which internalizes the ecological costs converting them into a fair value" (Leff, 2010: 64) requires that we generate a conceptual alternative to think the way productive units and its agents are articulated, since neither the "economy" nor "ecology" can "settle the question of "environmental justice", since the values in question, are not "strictly economic nor exclusively ecological" although they define "the 'costs' and the meaning that mobilizes the defense of the nature" (ibid).

In this context Latin American structuralism advances theoretical-political options.<sup>24</sup>

The "center-periphery" in perspective Latin America is an autochthonous theoretical conception related with the work of Raúl Prebisch during the 1940 and post Second World War. In Anglo-Saxon countries his name is tied to Hans Singer (1950) in the so called "deterioration terms of trade" of primary producing countries (periphery) vis a vis the industrial products elaborated in developed countries (center). There is no space here to describe the transformation of the vocabulary and its evolution, but the perspective assumed as irrelevant and skewed the idea that countries should follow comparative resource endowments policies established by the existent international division of labor. It rather assumed regions and countries trading under specific asymmetric power relations. The social transformation of the economy implied, as one of its element an industrialist policy sponsored by the State. Today it could be named

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<sup>24</sup> See the most recent reiteration of the Latin-American structuralism in the work of Armando Di Filippo (Di Filippo: 2013; 2009; and the examination in Mallorquin, 2013a). Texts in English by Pérez Caldentey E. and Matías Vernengo (2014, 2013) give a general clear view of Prebisch although I would distance myself from their interpretation of Prebisch's reading and assessment of Keynes.

as the "south" viewpoint on the issues of development, aspects of which first emerged of its own critique and reconstruction of classical Anglo-Saxon discourses on the economy or social sciences in general.

It theorizes the prices, costs and exchanges examining the power asymmetries between the diverse agents and units of productive: it denies that the explanatory relevancy of the labor theory of the value as well as the subjective utility version of the neoclassic school ("marginal").<sup>25</sup> Also discards the notion of the "market" is a "unitary" entity under a general logic; where in fact we perceive different effects of the asymmetries of power between the productive agents and their diverse organizational nature.

It certainly shares a "family resemblance", to use Wittgenstein terms, with Marxism, given the prominence it gives to examination of the historical social relations and the forms by which the social productive units are organized, also the articulation and processes which are not predetermined technologically. The heterogeneous aspects ("center" and "periphery" alike) of the economy are the consequence of the asymmetries and diverse shades of power among and between the units of production and the corresponding antagonism of the agents in question, which generate specific vocabularies for its "defense" or challenge its conditions of existence. Therefore, the "economy" is not an independent entity from agents or anything "external" (or "outside them"). The central aspects of the theorization in the Latin American structuralism conception the "economy" are the social relations,<sup>26</sup> agents are not pre-constituted entities and therefore in the so called "holism-individualism" are much nearer to the "holistic" side of the argument, compounded by the fact that among the great diverse and heterogeneous categories of agents not all of them are "human beings" per se.

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<sup>25</sup> Ian Steedman, ideas on price and profit are in a certain way similar to the perspective examined: "From a formal standpoint, Marx's error lay in trying to determine first the rate of profit and then the normal prices of commodities (or 'prices of production' as Marx called them); the fact is that the profit rate and prices of production have to be treated *simultaneously* within the theory" (Steedman, 1981: 14-15), for Prebisch notions see Mallorquin, 2006.

<sup>26</sup> Latin American structuralism has very little to do with the "structuralist" perspective that occupied continental thought during the sixties and seventies and originally perhaps coined from Claude Lévi-Strauss work. See Mallorquin, 1998a and 1998b; Mallorquin, (1998b), "América Latina y el pensamiento estructuralista"), for a different interpretation see (Mauro Boianovsky, 2015) "Between Lévi-Strauss and Braudel: Furtado and the historical-structural method in Latin American political economy.

It's a multidimensional perspective explaining alternative forms of productive organization and its transformation to overcome the asymmetries of power. Which implies that sometimes the Latin American perspective proposes "market" "construction / constitution" instead of "collective" and/or state forms of organization. Since the target is overcoming / transforming the asymmetries of power between and among diverse and heterogeneous agents and the injustices and inequalities involved calculating ways to "empower" certain agents and sectors.

Di Filippo, says:

Marx's reflections on the economic structure are extensively applicable to the general notion of positions of power sustained here. Nevertheless, we have replaced the Marxist notion of exploitation with the broader notion of domination. Both suppose asymmetric social structures, but not all forms of asymmetry are unjust (Di Filippo, 2013: 99).

The displacement and overcoming (supersession in Hegelian terms) of Marx's theory of exploitation and power, is made possible once it has been demonstrated the theoretical ineffectiveness of the labor theory of value in Marx. Keeping to Di Filippo, exposition but moving a little away from its critical strategy, it is sufficient to say that the aspect of "exploitation" in Marx is realized by means of "extraction" of surplus labor during the labor process (D-M-D'). If products on the market<sup>27</sup> are exchanged by its equivalent values, or proportionally equivalent necessary abstract social labor for its elaboration, then "profit" is an entity internal to the labor process in general. Money is only a "representative" of a proportional unit of abstract social labor, which mediates buying and selling in the market, where profit cannot arise (M-D-M). And yet its possible to argue that the prices obey diverse and antagonistic power asymmetries, between the productive units: access to credit; "quality" of the goods, or the presence of certain competition, and the short or long term price strategy calculations of the productive units that in turn depend on aspects of credit access. Obviously the "family resemblance" to "post-keynesian" economics is canny (Lavoie, 2009). The establishment of prices is a

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<sup>27</sup> "If the aggregated demand is made to depend on the distribution of personal-family income and its made independent of the law of the value as the foundation of the prices of market in Marx's sense, it makes viable the consideration that the phenomena of domination - exploitation are verified in the market (...) In this manner, the market can be the effective source of the asymmetries of power that do not respond nor are they detected by Marxist categories, on whose foundations was constructed the notion of class exploitation." Di Filippo, 2013: 186-7).

conventional technique – among others - of exercising power on the part of certain productive units, of commanding certain resources, things and men:

the exercise of the power is always a *relational* category, whether projected on things (in case when we speak about possession, production, consumption, etc.), or projected on the persons in which case we speak about domination (Di Filippo, 2013: 85,).

I underline "relational" because what are at issue are contingent social power configurations under a process of transition, of change. For the same reason, no general theory of the profit can be generated: the organizational differences and power asymmetries between and among the productive units present diverse "conditions of existence", which make possible differing price strategies which in turn generates certain effects which have been constructed theoretically as "heterogeneity". In different terms, there exist no general mechanism or process of "selection"<sup>28</sup> between winners and losers in the "market": power asymmetry among and between the units of production belies the idea that we can pre-establish with anticipation the result of the antagonisms in question (Mallorquin, 2011).

It is not a question of denying the coexistence of a cluster of monetary signs, referred as "demand" (negative or downward slope,), nor the agglutination of resources - goods, called the "supply" (up ward or positive slope). What is denied is the necessary and *unique* intersection between them at a point that supposedly represents an ideal "efficient one", which in turn is replicated independently of the social relations (power).<sup>29</sup> The notion of productive heterogeneity, points out several possible intersections of the curves, which are

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<sup>28</sup> See Hodgson (1994) for the discussion of a "selection" mechanism; for although its very tempting to appropriate certain Darwinian terms or metaphors once the notion of "heterogeneous" its being wielded, I prefer to sustain that a specific historical situation explains the predominance and domination of certain regions/sectors/ units of production, which cannot be enclosed in *general* evolutionary categories. Hodgson's recent work lies in the contrary direction, he passes from "analogy" to "ontology" and yet institutionalism in some of his work shares various theoretical aspects with Latin American structuralism; but my argument in the last instance is to experiment with the idea that perhaps we can reconfigure our nineteenth century categories in a way in which it liberates us from the nature/society, nature/culture, division, which involves a series of anthropomorphisms that need to be displaced.

<sup>29</sup> Recently, from a different theoretical coordinates, than Latin American Structuralism, Ackerman et. al. (2004) have demonstrated that equilibrium in the "market" is impossible to prove, even when allowance is made for the fact that the mathematical modeling makes "no sense" of the productive process of "economy", The existent consensus and certainty in the Anglo-Saxon economic discipline on the demand gradient in question was not given, nor necessarily pre-established in advance, the theoretical struggle on the generation of the hegemony in question, from another historical narrative, can be seen of (Mirowski and Wade, 2006).

finally a consequence of the asymmetries of power among and between the productive units. In other words, it's the existence of an "equilibrium" that is questioned, or in terms of Di Filippo, the myth of the capitalism as an "auto-regulated market".<sup>30</sup> The relative stability of "prices" and "income" in diverse periods is a consequence of the hegemony of the institutionalized accounting practices, of some productive units, over certain sectors of the economic universe and productive branches; or what in Anglo-Saxon discourse is mentioned as price maker and price taker sectors.

Therefore, in the absence of a general theory of the value the remuneration between the production agents turns into a reflection on the negotiation and the antagonism involved. Following Di Filippo, not all the asymmetries of power are "unjust"; certain minimal salary base can be constructed on which a "basic needs" approach can be calculated as well as levels of tax revenue and appropriation. The evaluation and comparisons are possible given the repertoire of the national income accounts. Certain "comparable" ratios or "equivalences" can be undertaken, among diverse classes and social sectors, using the "family" as the center of attention. Equally the role of the patrimony and "value" of the renewable and non-renewable productive resources will always share aspects of antagonism and struggle as Leff has insisted.

The relations in question represent the existence of a social universe, which portrays diverse forms of possession in separation of the conditions of existence of the productive units and those of labor, articulated to them:

These forms of exploitation cross transversely all the grouped social classes, not by the source from which its income is derived but from the relative magnitude of its family and personal income. Especially in the contemporary peripheral societies (and of Latin America in particular), in the average and low revenue strata we find micro and small businessmen or small rural owners, together with independent professionals of their own for account, whose respective personal income for consumption, personal or familiar, does not differ substantially between themselves and those perceived by wage earners who sell its labor force. All of them considered persons or family groups, are located in similar strata on the subject of personal distribution / family income (Di Filippo, 2013: 87).

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<sup>30</sup> The reality of the economy its cyclical nature, Prebisch says, is "undulatory" , it obeys different time disparities between productive and financial circuits, Center and periphery, (Prebisch, 1949a in 1993: 416); Di Filippo uses the term systematic asynchrony (Di Filippo, 1981a: 54).

Doubts as to the pertinence and use of the notion of “exploitation“ and its conditions of existence have to be given an answer. Differences between incomes and family groups, or unjust functional distribution of income can be a consequence of belonging to the "proprietary owner" category. Although, “every capitalist is an owner, not every owner is a capitalist” (Di Filippo, 2013: 242);<sup>31</sup> "only the owners of some goods (including money) can participate on their own right on the markets" (Di Filippo, 2013: 74).

The inequality and injustice couple require reflection. Let's remember that we cannot rely anymore on the notion of “extraction“ of surplus labor during the labor process. Therefore, the transformation of the social relations constitutive of a society under an order of "distributive" justice must return to consider the conditions of existence of the asymmetries of power to be able to establish the differing shades of empowerments among and between the agents and productive units. One aspect is the defense of a minimum wage and basic consumer baskets, the other refers to an element, which is not properly speaking "accountable" in monetary terms, but rather the foundational conditions which are the sources of inequalities and therefore of the asymmetries: the forms of possession in separation of the conditions of existence of the productive units and the labor force. The possession in question is said "in separation" in the sense that solely certain of the conditions of existence of the production units are possessed by other productive units, generating the mechanism by which power asymmetries arise: both the productive units and the labor force, possess in separation certain aspects of the conditions of its reproduction: this "lack" is solved by means of an exchange, in the process of circulation, in other words by means of the "market". The commodity relations obey their existence to the above mentioned gap, spaces that need to be enclosed through exchanges, that is for elements that cannot be generated by the same productive unit, thus its necessity to articulate itself to alternative productive units by means of a system of

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<sup>31</sup> “The basic values of the democracy are seen in a different manner, whether they are seen by the proprietors or those of citizens. The first ones can be defined as holders of rights and obligations of patrimonial hereditary nature; the second ones, title holders of rights and obligations of civil nature (political or cultural)" (...) “In practice, the theme of the proprietor’s condition is imposed and displaces the citizen's condition. This displacement implies a displacement of the human and civil rights of those lacking ones in property. The relation between freedom and property is therefore also a relation between the political concept of citizen and the economic concept of owner” (Di Filippo, 2013: 71 and 72).

negotiated "equivalences-ratios", or establishment of prices, investment strategies and indebtedness, and wage negotiations: all under diverse conditions of existence to cover those aspects of the production process, features which generate the intrinsic heterogeneity and instability of the social configuration called capitalism (center and periphery alike).

This implies that the relations of power, the forms of possession in separation between the productive units and the labor force are in fact the "market". Using an expression of Di Filippo I want to highlight an important difference to think the main bedrock of the generation of the asymmetries of power. Di Filippo says that

the theme of distributive justice lies *behind* the market and has a relation with the nature of the institutions that determine this distribution and with the moral content of the decisions of each claimant. (Di Filippo, 2013: my emphasis).

I suggest as a more appropriate term, that the "market" is not "outside", nor "behind",<sup>32</sup> productive agents as it might be the case of those crowds represented around a geographical "locality" where people visit to buy some products, rather the power asymmetries and therefore exploitation is the consequence of the disarticulation between and among the productive units and the respective labor force, that is to say: "the market". It implies this potential disarticulated social configuration, which is superseded by the selling and buying of labor and products. In other words: by commodity circulation, but not necessarily so, given that there is the possibility of undertaking exchanges with units whose calculating ratios are not solely monetary in nature. The political strategy of transformation of the asymmetries of power relapses in the first moment, in granting and creating an institutionalization in the use of a unit account, or "money account" as Di Filippo says, but reducing or limiting its radio of action and alternative uses outside the "productive" environment properly speaking: health, education, mobility-transport, etcetera.

Additionally to constituting the basic consumer baskets, its necessary some alternative unit account through which the labor force is articulated o the productive units. Also the currency value has to be negotiated to a certain wage

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<sup>32</sup> "To me the market is neither good nor is bad, nor is it just or unjust, there are the forces that lie *behind* the market those which print its character. If there is an unequal distribution from which emerges an unequal demand that favors certain social groups against others, naturally that market works badly; but it is not the market in itself, its the forces that lie *behind* (Prebisch, 1982: 105-6, my emphasis).

unit level to establish some form "competition" and equivalencies vis a vis other currencies, which forms part of the inherent antagonism among and between national and international corporations in question.<sup>33</sup>

Nevertheless, even in the most Utopian and extreme case of complete "socialization" of the conditions of existence of the productive units between and among themselves, through a "plan" (Bettleheim, 1975) as during the Soviet Union period, the use of a "species" similar to the wage relation was necessary to establish some form of comparable equivalences or ratios (Di Filippo, 1981a), which assumes certain presence of mercantile practices in the social horizon. Overpowering forms of possession of the conditions of existence dominated by their separation, by means of a "plan" as in the Soviet Union was perhaps one of the more absurd utopias of recent date. Total unification of those conditions of existence are impossible simple because -even without considering the social relations in question-, of the presence of diverse geographical and technical characteristics among producers.

In a sense "we" are the "markets", the productive agents, and they came to stay if by that we mean our participation in the process of product or choice strategy; nothing exists behind the "market" from which to deduce the "power" and its asymmetries; it is the specific forms that possession takes, through the separation of the conditions of existence in possession by certain units among and between themselves and the labor that constitutes the source of the exploitation and thus the asymmetries of power. Which means that classes as "economic categories" -"humans" or legal entities-, will never disappear, which are defined by the specific possession in separation of "some" of the conditions of existence for the reproduction of those units of production. Some units may "monopolize" certain conditions immersed in a sea of small productive units which legally might be constituted as "cooperatives" or "petite bourgeoisie capital", depending on the scale of the "possession in separation" (the heterogeneity aspects on which Latin-American structuralism is founded).

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<sup>33</sup> The present difficulties are challenging given the international financial environment, which sometimes seems lawless, the "regulation" in process has not concluded, in a few years we went from Basel I to Basel III; the disorder in the importance of the use of derivatives to "strengthen" the financial "portfolios" of certain productive units is just one aspect in question. (Soto: 2010).

The environmental problematic, the so called "integrated management of renewable natural resources", is compounded by the heterogeneous characteristics of the horizon described above, which is not merely a technological phenomenon, or diverse "productivity levels", given that its measurement depends in turn by the calculations and equivalences-ratios we construct, short and long term. In this sense, forms of separation will always exist, generating asymmetries thus the importance of the existence of certain rules - agreements- due to the type of access to the generation of money - credit, with the respective aptitudes to negotiate wages - prices. The establishment of equivalences-ratios, of prices, becomes a process of reflection and political calculation; theoretical aspects that previously were supposedly have been solved by the labor value theory and/or utilities.

The regional or "sectorial" problematic (Leff, 2007: 301; 2010th: 131) mentioned by Leff, conforms the antagonism between the diverse agents and the units of production. It will not be free of the political struggles unless we grant, without discussion, an extraterritorial privilege of non "intervention" to certain communities vis to vis other peoples or to the State: a sort of enclosed "apartheid" from other communities. But in fact certain regions and its people, have generated specific "trade technologies"<sup>34</sup> or hybrid forms of exchange, establishing certain equivalences-ratios, between traditional exchange reciprocities and monetary calculations defending its productive resources and a way to limit the effects of the commodity circuits or the "market". The theoretical emphasis on the asymmetric aspects of power between the agents and the productive units to calculate micro and macroeconomic aspects, are necessary because these logics will over-determine "eco-technological" the project in spite of the innate entropy in question, and yet only those countries of the "North" can give themselves the luxury of something called "zero growth", not those of the periphery.<sup>35</sup>

We cannot deny recognition to Leff's exceptional theoretical hybrid developed by his reflections, underlining the tropics and its biodiversity, and the construction of a Latin-American perspective for the environmental praxis. The theoretical crossbreeding reflect the way into which the "North's" vocabulary

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<sup>34</sup> See the notion of "trade technology" developed by De Vroey (2004).

<sup>35</sup> Mallorquin (2013b), develops this issue.

was transformed while demarcating "Latin-American" environmentalist thought; nevertheless, he reminds us routes and vocabularies that it had to unravel (Leff, 2010th: 244; 2006), that initially originate from several theoretical strands during his Parisian epoch, but also he underlines and emphasizes the distance taken (Leff, 2010th: 242).<sup>36</sup> Leff offers us several alternatives itineraries to escape from the sustainable development labyrinth and the environmental complexity, but in any of the options cases it will not stem from the vocabulary on "being in time", but from the antagonism generated by projects of "being" and its specific power-knowledge strategies. In the course of the struggle and the organization, disparate strategies and forms of productive reconstruction locally and regionally will arise, where the logic of the strategies are "un-decidable". The difficult decisions, product of democratic discussions, will not be able to defend themselves in terms "ecological balances" real or imaginary aspects of nature, whether "joules" or "monetary units" as reference. It's impossible to avoid the moment of decision<sup>37</sup> and the consequences that a development policy in terms of the people and nations of the "south", suppose "growth" and therefore "destruction" of renewable and not renewable natural resources.<sup>38</sup> It is not therefore a question that can be sustained or be solved by "epistemologies" of nature, as if the substantive theoretical vocabularies were products of a unique sacred and privileged perspective (Rorty, 1979; Davidson, 2001; Lander, 2000). Its also not the case of returning to the classical debate of the opposition between market and/or the State policies, but that of reconstructing, of transforming, the power asymmetries between the communities and productive agents, departing from the symbolic diversity and productive heterogeneity; in

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<sup>36</sup> "These new epistemological perspectives emerged in Latin America; they where not produced in Europe as a development of French rationalism critique (...) In spite of its undoubtable harmony with the rise of complex thought during those days with the work of Edgar Morin, the production of the concept of the environment acquired its own identity" (Leff, 2010th: 242).

<sup>37</sup> See Critchley's (1998) discussion on the issue of the "decision", although I cannot hide my inclination for Laclau's position.

<sup>38</sup> Unfortunately the power/knowledge institutional complex, today and past alike, generate certain negative effects which require some sort of creative choice and discussion on the destruction that it entails; for example during the spread of Darwinian thought, as indicated by A. Ashwell: "the planet and the animals were tormented and chased by the interrogative arrogance of the evolutionists, (...) With the scientific explanation of the human presence in the long evolutionary history - as explained by some philosophers - not only man's place in nature was distorted but also the rights that he assigned to himself over the other animal world. The enquiry on birds -the persistence expansion and extermination of the biodiversity and the torture and maltreatment of the animals increased in the name of the science- points to an evolution in which the humanity of man gets hidden." (Ashwell, 2009: 12).

fact in the region some communities exchanges and trade with the "outside" are the product of a series of ratios or equivalences established by ancient practices and customs - criteria which subordinates the logic of the monetary categories.

Sometimes it is a question of the attributions or prerogative that the State holds, to articulate the diverse units, communities and municipalities among themselves the redistribution of certain resources, in others, the local community association between the local peoples themselves, establish its actions and relations with the State. In other words, the issue of transformation requires the reconstitution of a series of bonds and "trade technologies ". Let's remember that the hegemony of the neoliberalism was reestablished calling for the "de-regularization" of the "economic" and social environment.

The text presents a synthesis of the evolution of the theoretical vocabulary of Enrique Leff concerning the "environmental" question, underlining the transition and discursive evolution that culminated in a regional, Latin-American theoretical hybrid. Nevertheless, as the Marxist notion of the economy is displaced, important conceptual "absences" are generated: expositions related to alternative forms of reorganization of the productive resources, and the asymmetries of power among and between agents and communities in question. We try to rectify this perspective by subsuming it into another regional original theoretical development on the "economy": the "Latin-American structuralism"; theorization of the productive organization in terms of the power asymmetries among and between agents, perspective that goes beyond the common usage which relates it with a theory of "industrialization" in the region. On the contrary the conception of development implies thinking the social peculiarities that sustain the asymmetries of power of the agents, regions and nations. For the same reason it always refused the distinction and/or opposition "nature" / "culture" to think production alternatives distinguishing the economic process historically. Nevertheless, it is necessary to underline that the theoretical imperatives that come from the perspective to reflect the heterogeneity of the social relations, does not suppose, necessarily an ethical or political imperative for community or socialized forms of production, that is the result of a personal decision, which explains in turn the political and

ideological diversity of many of the authors who called themselves "structuralists" pointing to the work of Raúl Prebisch.

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