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Interview: Enrique Leff's conceptual framework and ecological restoration

The following narrative is as a result of a transcription of an interview.

DP: Do you think there are links or a relationship between ER with the concepts of rational and environmental knowledge?

EL: Let's say that by contrasting the concept of ER with rational and environmental knowledge, you are promoting a reflection on a question that has to do with the meaning that these concepts can adopt when it comes to intervening in nature, environments and ecosystems. Rather than forcing a tune through the metaphors that can be established between these concepts, phrases or terms, it is necessary to reflect on ways of thinking that go toward the reconstruction of a more sustainable process in the metabolism of the planet's life, so that they may converge, but they do not necessarily go in parallel to or in perfect harmony. First of all, the derivations and consequences of these concepts have to do with the rationality and intervention processes on nature. Environmental knowledge opens up to thinking about other methods of understanding outside of the traditional paradigms which are built around the logocentrism of science. But environmental knowledge is sensitive to certain terminology with which science builds its ecological such as regionalism, deep ecology, political ecology, environmentalism and other derivations and responses that science itself has generated. Environmental knowledge is "a call", "a welcome" to a diversity of knowledge that has long been buried, to open up to new ways of thinking in the understanding of life and ways of intervening in life. Environmental rationality also in that sense, seeks ways of understanding, ways of taking action, which generally go against the flow of "normal" rationality and modernity; it is a starting point, as a key word, and as the master key in understanding what we can do with regard to the reconstructive task of the ecological and vital processes of the planet. From this concept, I would problematize, for example, ecological restoration.

DP: In this problematization that you mention, what questions should we ask ourselves about ecological restoration?

EL: The expression "Ecological Restoration" refers to, first of all, a sense of recovering some sort of form, a sense of meaning, a somewhat primal process in the organization of life in the biosphere. Archaeologists, in this sense talk about the restoration of archaeological monuments, restoration in this sense, refers to the process of restoring them to their original form, back into their cultural context in which they were built. This is similar to what happens with the restoration of pictorial works. In these cases the aim is to restore a work of art to its original historical moment, and the later evolutionary process is then forgotten or, is of no interest. The aim of the restoration process of pictorial art in archeology is to return an artefact, to its original form which has been affected, altered or modified by time. The application of this concept of restoration to an original state in ecological systems seems to me, antithetical, and does not correspond to the nature of an ecosystem, which is an entity in evolution, in transformation. That is the first point. The following is: when the goal is to restore nature, is it about restoring it to what point in its evolution? This question also has to do with establishing the rights of nature at a constitutional level, what are The Rights of Nature? What is the intrinsic right of nature in the face of human intervention? Let's not forget that where we go to restore the energies of our bodies is called "restaurant". I would like to point out this fundamental point, because what our dialogue leads us to question the way of understanding the manners of intervening in nature and above all, intervening in the degree of its deterioration and degradation. What matters most is something that I would refer to as, the loss of the productive balance of the biosphere which concern us and are interesting in restoring. I think then, we humans would not have any reason to worry about restoring the state of the terrestrial ecosystems of thousands or millions of years ago. So, what do you want to restore? It seems to me that what we want to restore is the ecosystem's own capacity to not continue deteriorating once it is intervened, if it has already lost its conditions of evolution, productivity and resilience. The goals also depends on the techno-economic viability of a restoration process. A country like Israel has been able to make the desert bloom again. Let us consider the viability of restoring the vast territories of Argentina that have been degraded by the planting of transgenic soybean. Let us imagine the fantasy

of the re-foundation of the Mayan Civilization, which is founded on the restoration of the potentials and ecological wealth of Mesoamerica.

I propose that we extend the conversation about the concept of restoration from these ecological concepts and perspectives.

DP: I find your proposal very interesting. The objective of the ER is to "assist in the regeneration of degraded, damaged or destroyed ecosystems", in other words, this implies assisting ecological resilience (greater or lesser capacity of an ecosystem to return to its initial state after a disturbance). However, this task of restoring resilience can also become a technological and economical objective, rather than a way of creating new links with nature.

EL: Indeed, the concept of ER may be, or is presented as being "too plastic" perhaps too adaptable to be appropriated by the sustainable development strategies of the dominant rationality, because it is precisely from that dominant paradigm that they intend to solve the problems of the environmental crisis. They propose to restore thousands of hectares in the Amazon jungle with exotic forest crops, or to undertake programs called "cultivating life" with monocultures of any species, and it is then claimed already to be an ecological restoration, when it does not correspond to the diversity of the ecosystem. Either the concept of ecological restoration is being falsified, or those of us who are uncritically proposing it, are being poorly served, believing that, we are on the real path to solving the environmental crisis. I cannot adopt the concept of restoration in this sense. Instead, it makes sense as a process of restoring the ecosystem's own capacity for self-organization, and its own capacity in productivity, which leads to another conceptual device. If you try to insert ecological restoration into the conceptual architecture of an environmental rationality, you will find that it is not so suitable. Ecological restoration is very easy to forge towards projects that are a way of capitalizing on nature.

DP: I have never heard that restoration is very easy to "forge". Can you expand on this idea?

EL: The concept of restoration is easy to forge in the sense that it is easy to use it to simulate a restoration process by planting anything, including exotic species, on a piece of land. Many claim that, with these plantations they are restoring what was the dynamic

complexity of an ecosystem which is always evolving within the framework of its own capacity of evolution, within its own complexity. This cannot occur from a pre-designed plan with hidden economic interests that have the capacity to transform merchandise through technology, into goods. So, by putting into play this technological and economical potential of shaping it into a model for techno-economic appropriation, we "cannot let nature be" as it is. From this techno-economic point of view, ER is not giving back to nature its capacity of expression, but it is exposing it to be appropriated by the dominant economic system as has happened with so many other concepts, such as sustainability.

DP: From several forms of agriculture and livestock production even on a small scale, utilitarian rationalities of nature predominate, so, from what models or references can we advance towards a new environmental rationality?

EL. From the place of indigenous peoples in nature, from those who have been displaced by the process of modernization, with all that this means and entails both as a process of economic and technological intervention of their ecosystems, and who are subjugated along with their traditional knowledge that is formed in the experience of inhabiting nature. I believe that this is where there is the greatest capacity for recovery. I would not say for "restoration", but rather of the "reconstitution" of traditional knowledge and modes of production.

This is not to restore the ecosystem of the past, but to reconstitute modes of intervention, of interaction, of production with nature and not against nature. By this process the reinvention of new identities is possible and is acquired through the recognition of the potentialities and conditionalitys of the territories inhabited by these populations. Environmental rationality fosters the most possible creative game between nature and culture. From the reconstitution of these identities and practices, it is possible to induce processes of restoration of their territories, as opposed to the co-optation of the concept of ecological restoration within the techno-economic rationality.

DP: One last question. For many philosophers, science has been an important component of this environmental crisis, and was promoted by the same dominant economic model. Still, do you think that science contributes to the construction of environmental knowledge or of a new environmental rationality?

EL: Of course it does. I do not think the "Manichean" ideas about science should be used. Unquestionably, without a doubt, science has also been driven by the destructive rationality of nature. Science is armed from the human logo that is in the dark about the conditions of life. This is where science comes from, its supposedly objective knowledge of nature and things that it is at the service of and can be appropriated by capital. But that does not mean that we should put an absolute dividing line there, between the world of capitalist rationality with science on the one hand and environmental rationality with traditional knowledge on the other.

There are many concepts, much knowledge of science, without which, I think it would be impossible, absurd to be able to rebuild the world. For example, the concept of life from the Darwinian understanding of life as an emergent complexity, the concept of "negentropy," which is a concept derived from science, from the thermodynamics of life. But in fact, with science we reach the limit of the objectivism of life, of things, of nature and a pathway that deviates from the search of the deeper understanding of the meaning of life, which is something we have to restore. Life far exceeds the objective knowledge of life.