

¿Is Biodiversity a Resource?

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ABSTRACT

The prevailing opinion among politicians and government officials is that the whole world –including its biota- *is economy*. This is an idea so widely spread as to make us believe than any discussion on biodiversity protection has to be validated on utilitarian criteria. Even researchers on biodiversity refer to their study object – mostly against their will- as *biotic resources*. The purpose of the paper that follows is to put at the stake this point of view. By the end of the XVIIIth century English economists considered that welfare was a result of capital accumulation and, as such, capital itself became a *parameter* of wellbeing. This vision was so convincing that it drove Western intellectuals to believe that the whole world *is economy*. Economy then became the ideal metaphor for the explanation of everything. Physicists employed it when developing Thermodynamics, where energy is considered as an exchange good, and even Darwin used it as a pedagogic tool for explaining the evolution of species. On the other hand, Descartes had defined matter in terms of extension and it was based on this materialism that modernity and science focused on their study of corporeal entities. The use of economic metaphors mixed up conceptual elements thus *idealizing* matter, giving rise to which I will call “matter-idea”. This is a chimaera which has resulted in disastrous effects on ethical, epistemic and practical grounds, because it boasts not only of being able to *control* the world, but also to *explain* it. The answer to the original question that was asked -concerning if biodiversity is a resource- regarding the correct meaning of this term in Spanish, perhaps it is. It is a sanctuary for our survival as a species, a return to the dynamic harmony which was destroyed by market.

Key words: biodiversity, biotic resources, idealism, matter-idea, materialism, resource

INTRODUCTION

Some years ago Ignacio Loyola, who was at that time the governor of Queretaro,

spurred out what he believed to be the ultimate argument against a number of claims demanding the protection of a natural sanctuary area that he esteemed as unnecessary: “*But it is no more than a lizard’s pit!*” His confidence on this plain statement points out what at this moment has become a fact: any discussion on biodiversity protection must be validated on utilitarian grounds. This trend has grown as strong as to determine that biodiversity is frequently referred to as “natural resources”. For this reason many researchers on biodiversity often find themselves compelled to refer to their matter of study, mostly against their will, as “biotic resources”. Along the following lines I will not only try to explain which are the reasons for this grieving, but also to put at the stake the prevailing view among politicians and administrators in the sense that “the world (including all of its biota) is economy”.

As I formerly referred to biodiversity as a resource, I should clarify the meaning of this latter term. Up to the mid XXth century there was an argument involving the proper use of this word. One of its most frequent meanings, considered as a *galicism*¹, was thus considered

¹ Espasa-Calpe’s Encyclopedia in its 1923 edition, under the title *recurso*, has the following entry: “every time that *recurso* holds the meaning of a sanctuary or of a return it is well employed but, in the case that *recurso* is taken to mean a remedy, an accumulation of stock or material goods, it is a galicism which should be strictly avoided”. It is a galicism because it was driven out from *ressource*, a term that has nothing to do with *recours*, which is the French word with the same meaning as *recurso* in correct Spanish.

as departing from the correct Spanish. Nowadays the argument is over and “resource” is taken as a material good, something pertaining to economy. The ample acceptance of this neologism has driven unto oblivion its former meaning in correct Spanish: a sanctuary, an action undertaken to prevent some harm. This event is diagnostic of a most important emergent cultural trend: in this new millennium every world view is to be based on the production and merchandizing of consumption “goods”.

The invention of “matter-idea”

When Adam Smith undertook the task of explaining the bases upon which emerged the wealth of nations, at the same time he somehow managed to identify the slippery concept of *welfare*. Individual welfare (which according to Locke was the underlying reason beneath the human trend to live within a society) was supported by the accumulation of capital. Capital thus became a *parameter* upon which welfare should be measured, as well as the criterion dictating the rules among the members of a society that would drive them to attain equity in the most correct way. From English capitalists, such as David Ricardo and his kin, to those following a rather superficial Marxism (even considering their apparent differences and even contradictions), all share a common world conception: *the world is economy*.

Among Western intellectuality this point of view became so convincing that economy was to be taken as the ideal metaphor for the explanation of everything. Darwin himself employed it as a pedagogic analogy when explaining the enigmatic process of species evolution, as had formerly occurred with physicists who used it for the explanation of

energy exchanges², thus giving rise to a new field of basic science: Thermodynamics.

As regarding to matter, I hope the reader will allow me a brief philosophic digression. Descartes had already defined matter in extension terms, identifying its nature with that of the bodies in general. All modernity, and thus science, has focused since then into the study of corporeal properties, which is the same as to say of the matter, in its extensive meaning. Its spatial attributes amenable to measurement and thus to be understood, will thus bring the Universe within the grasp of reason. If on one hand the concept of matter as that which is extensive is true, on the other hand it I also true that the use of economic metaphors in the explanation of Nature supplied concepts which mingled up, idealizing matter: this was the birth of what I will call “matter-idea”. The results of this chimeric combination will be disastrous. By calling it a chimera I want to point out the forced mixture of the incompatible. Hegelian system, idealistic par excellence and science, materialistic by definition, are located at radically different places. Speaking in ontological terms, science departs from the being, it departs from phenomenology. Hegel cannot be placed into any lot, he places himself at the absolute and considers nature as “a denial (...), a decay of its own idea” (Hegel, 1990). In Hegel’s idealism the *idea* was a referent of his metaphysics of absolute; the idea was thus not placed in the limited terrain of *representation*. On the contrary, for Newtonian science, phenomenological nature (considered by Hegel as only a *representation*) possesses an absolute character. English empiricists, in this certainty, drew from it the explanation of classical economy by going deeper into the mechanical aspects of social structure and by, apparently, leaving to a side metaphysical reflection.

² Energy is thus considered as a coin, a money exchange rate

According to their language the *idea* is a mere representation

What exists and what does not? (Being and nothingness?)

While for physics the existence of an object is expressed through its extensive dimensions, for economy existence is expressed through its *parameters*, as capital. Capital is the *general abstraction* of a parameter, and this should be emphasized. The objects of economy would be those that could enter the market and therefore those that could bear a price. Anything than cannot be amenable to measurement within the knit of capital, does not exist for economy.

I expect that the reader will forgive me for this brief philosophical digression which, on the other hand, allowed me to point out that matter was conceived in two ways: as that which is merely extensive and as *the symbol* of the extensive. As a symbol, capital allowed extensive matter (grossly perceived by senses) to attain its reality by becoming an idea: this is precisely the *matter-idea*. The *idea as a representation* of the empirical tradition achieved its unthinkable transmutation into the *absolute idea* of the Hegelian system, giving thus rise to a weird and plagued by fallacies metaphysics, under the tone of an overlitened and degraded Platonism.

Within his story “The Golden Scarab” Allan Poe draws an essay on the just invented “virtual reality” of economy. In it the material wealth that will become available to his characters after a mysterious plot, is summarized in a tale ironist on the absurdness of drawing gold from an scarab or from the picture of a scarab, something that is even more weird (for a further reading see: Shell, 1988). By the mid XIXth century the interest on these topics was so intense that, in the United States, Clinton Rossvelt, a member of the *Association*

for the Advancement of Science proposed the creation of an *Ontological Department for the Analysis and Establishment of the General Principles of Political Economics* (Shell, 1988).

It would be highly illustrative to draw out a story of the last 200 years based on the “real” objects which have been appearing in Economy. Considering the living beings, which is the case that interests us, if it is true that there already existed a considerable inventory of them by the XIXth century, it was until the early XXth century when numerous plant species entered the market. Barbasco (*Discorea composita*) a plant traditionally employed by Mayas throughout thousands of years, remained unknown to the economic world until the ‘60’s decade of the last century, when its contraceptive properties were “discovered” and thus became amenable to value allocation in terms of capital.

Here we reach a turning point: for the market only exists that what can be measured within the economic web, this is to say, under capital’s rationality. Our senses do not suffice to attain closeness to what is real: seeing a living being, or even touching it is not enough to confirm its existence. For example, prior to protecting a species a price must be assigned to it. Prior to taking into account some human group, their impact to global economy must be assessed. Anything that is not amenable to price allocation *does not exist*. In other words, existence is subordinated to *functionality* within the market web. On the other hand, anything that can be represented within the economic web attains an *absolute existence* character. Here again we perceive the shadow of an oversimplified and tainted with fallacy metaphysics. It suffices if something can be expressed according to capital’s rationality in order to guarantee its existence. The movement of capitals in the stock market exemplifies the peculiar nature of the virtual entities dwelling in

the economic reality. They appear from nowhere and vanish in the same way. It constitutes a paradox that the economic view of the world, reputed as materialistic, moves within such mist of fantasy. Considering the “matter-idea” concept it should not surprise us if such a frail building collapses as easily as it does at the present moment.

Biodiversity as an alternative to think the world

When Darwin wrote “The Origin of Species” he started from a fact: variation in Nature. Living beings multiplicity, as made evident by our senses, was explained by considering life as a *process* instead of as a thing. To the traditional view of matter as extensive, Darwin added two variables: time and movement. The concept of existence became complex, reminding us of Heraclitus’ river. In spite of having employed the economic metaphor as a didactic technique, the world vision which Darwin opened in no way was limited to such a poor metaphysics. How was life conceived before “Darwin’s revolution”? When confronted with diversity, ancient cultures chose a supernatural explanation: everything had been created by God. Given the divine almighty will, nobody doubted the scholars who, from tales and chronicles gathered from voyagers, described fantastic flora and fauna from faraway and unknown places. On their part naturalists humbly assembled, with the highest detail and veracity, testimonies of the immense even if unchanging panorama of Creation. Linneus built his system in an attempt to discover the fixed structure of the living world, but as he did so structural relationships emerged which suggested a “family air”. Quite unexpectedly he planted suspicion. Even though he was openly a creacionist, Buffon perceived extraordinary similarities in biological diversity for different

groups that either dwelled in contiguous areas or could have reached distant places through migrations that isolated them; inspired in an early transformationism he declares in his Natural History that biological species may have certain possibility to change.

Even Kant (2007) in his “Criticism to Judgment” comments on the “real kinship” of living beings, postulating that all of them might have originated from a “common mother”. It was Darwin, finally who achieved the synthesis which allowed him to construct a coherent theory on species transformation. Since then evolution theory makes the Aristotelic conception of substance unsupportable within the context of biological species, it definitively departs from metaphysical grounds and considers diversity in its own terms, the merely phenomenological. The most significant of these latter considers how biotic multiplicity establishes interaction webs. Existence began to be explained as the emergent result of forces: variation, competition, selection and cooperation. Species could not be fixed entities, as they were part of a *flux*, a continuum of ancestors and descendants that changed, interacted, persevered or died. Within the interaction web no single element was disposable; the species could not be conceived as the replaceable cogwheels of a machine simply because they are not things but processes. This vectorial scope has driven us to modern systems theory and according to this, in order to be understood, life has to be thought of as a system. Biodiversity would be the structural result of the system and, as such, its richness or degradation would be indicative of the degree of stability or persistence of the whole system. In a system diversity and singularity harmonize; neither is removable from each other.

And humanity?

As living beings we the humans also form part of the great biosphere system. Our gregarious peculiarities are no more than that and with respect to the historical manifestations of our social organization we should accept that they are only the chance results of a process that could have derived into innumerable possible courses. Certainly our present civilization, founded on the precepts of economy and market, is a vector altering the biosphere, but it is a childish thought to believe that economic structure is not only capable of *controlling* the whole system, but also capable of *explaining* it. If the sum of parts does not suffice to decipher the whole, it is even less able for deciphering the peculiarities of a tiny fraction of it. We are not dealing with a merely ethical or epistemic problem, but with a survival issue. Our civilization *utilizes* the systemic stability of the biosphere, *totally depending* on it. Not the whole web but merely a part of it, just the portion closest to it. The paradox is that at the time that it is being used it decays and is modified. Biosphere possesses innumerable routes, pathways and webs and because of this property the diversity that is being eroded by human activities is precisely that on which we, humans, depend as biotic entities. The apocalyptic panorama envisioned for the future as a result of our predatory actions are not affecting biosphere at a scale never seen: really we are not that important. Along Earth's history – a story that spans billions of years- biodiversity has been changing, suffering such extreme transformations as that which brought glaciers to the equator some 600 million years ago, covering the whole ocean with an ice cap of nearly 1 km in thickness. Nevertheless life went on and the proof is that we are here at this moment.

The terrible thing about diversity loss at the present moment is that we are the ones that

will be most affected. The part of life's fabric that is being torn is that on which we depend for our survival. By entering species as "resources" within the market we have overexploited them but, by believing that they are resources because they are material goods, we fall into an arrogant shortsightedness which dares to despise all the knowledge compiled by science along the last 200 years. Is there a way to heal this shortsightedness? From a historical perspective world's economic vision is pathetic. Life on Earth is some four billion years old, while our species has existed only for about 200 thousand years. Of this latter brief period, merchantilistic civilization appeared just a few thousand years ago and the economic explanation describing it has existed for just a little more than 200 years. Economy is not only very much limited in space, but also in time. From a biodiversity perspective it is not even worthy to be take into account, as it is unable to explain the human species but only a peculiar branch of its social structure which is very recent and is currently on its course to extinction -capitalism.

Is biodiversity a resource? Perhaps it is, if we consider the original meaning of this term in pure Spanish. It is a sanctuary and a return. A sanctuary for our existence as a species and a return to the harmonic dynamics which were destroyed by the market.

BIBLIOGRAPHY

- Darwin, C. 1973. The Origin of Species. (Facsímil de la sexta edición original) Chicago, William Benton Publisher. Enciclopedia Britannica Inc.
- Locke, J. 1960. Two Treatises of Government, Cambridge, Cambridge University Press.
- Hegel, GWF. 1971. Enciclopedia de las ciencias filosóficas. México, Editorial Porrúa. [ISBN 968-432-587-8](#).
- Kant, M. 1977. Crítica del Juicio. México, Colección Austral. Espasa-Calpe. [ISBN 9780192806178](#)
- Poe, EA. 1959. El Escarabajo de Oro y otros cuentos. Buenos Aires, Clásicos Juveniles Alba.

Shell, M. 1988. Dinero, lenguaje, pensamiento. México, FCE. 17-48 p.

Smith, A., *An Inquiry Into the Nature and Causes of the Wealth of Nations*. William Benton, Publisher, Enciclopædia Britannica Inc. 1952.