

We all know that this new century won't be an ordinary century: the future of the terrestrial ecosystem and of humanity is now threatened, and the human being is itself (himself or herself) the very source of the danger. More precisely, modern globalisation and its more recent or contemporary techno-capitalistic process of production and consumption are what threaten and already alter the health of both nature and culture : global warming, air and ocean pollution, "psychosocial risks"[1], the extension of phenomena like professional burn out, the extinction of many species, the suffering of other species in intensive and industrial 'breeding', the disappearance of the last cultures of harmony with nature[2], the aggravation of the distance between rich people and poor people in the world, etc.

I said: the health of *both nature and culture*. Maybe what is happening needs a deep theoretical change which would make us able to understand that such a situation reveals the non-duality of nature/culture. Transhumanism and many other new ways of thought are still - implicitly but undoubtedly - submitted to the paradigm of the duality nature/culture, since their position needs in the last instance a discontinuity between nature and culture. For example, transhumanists can't claim without contradiction that they are *evolutionary* 'thinkers'. Indeed, the transhumanist claim to an evolutionary thought is incompatible with their conceptual design of a human being which would be able to reconstruct himself to such an extent that he would no longer be human but post-human and potentially immortal. The fact that human being is a historical process of self-construction doesn't mean that human being would cease to be human once reconstructed: transhumanists need here a discontinuity named 'Singularity' (Kurzweil), which would be also a becoming-absolute of the evolution/history difference. I know that they would refuse my interpretation, and they could argue that post-human being would be a new species in human evolution. But the contradiction lies in such an evolution which would not build post-human being since human being would be the builder. The only way to stay evolutionary while thinking human self-construction is to admit the finitude of human being as historicity or self-construction which prolongs evolution and reveals the fact that biological life itself has no essence.

That is what I try to do in my book *La Société de l'invention*[3], where paleoanthropology and neurosciences converge to assert that cumulative historicity is based neither on language nor on technology, but results from a very progressive interpenetration of these two phenomena which are already present but not interpenetrating in other species. Such an interpenetration, which goes beyond Leroi-Gourhan's 'coordination'[4], makes language

capable of becoming a grammaticalized or technicized language - what French people call 'langue' rather than 'langage' -, and reciprocally technology becomes a system of objects which 'refer' to each other, that is to say a symbolic system. Now, this interpenetration is what leads to a cumulative historicity which is only the full revelation of the fact that biological life itself has no essence, since each of its properties results from the interpenetration of properties which were present but not interpenetrating in chemical and non-vital phenomena[5].

Such an anti-substantialist emergentism as evolutionary ontology also integrates Frans de Waal's lessons on what he calls "motivational autonomy": while some drives of complex animals have been selected by evolution, their psychic motivation is only pleasure and not the reproduction of the species, since animals don't know that copulation means reproduction. One should notice that this psychic dimension of complex animals is not seriously taken into account, neither by reductionist naturalism nor by technicist transhumanism. Here, 'naturalism' means "reduction of both human being and non-human animal to their physico-chemical substratum", and the very strange fact is that naturalists do not even consider the non-human animal when they assert that 'consciousness' is reducible to its physico-chemical substratum: in their minds, the "problem of consciousness" is a problem which concerns human being only. For its part, transhumanism inherits from technicist cybernetics, which theorized animals on the basis of the double question of retroaction and information in the machine. But the new and supreme ambition of transhumanists is to build an immortal post-human which would be able to feel emotions inside its technological brain. Such an ambition violates the conditions by which thought is not calculation : a/ first condition, the biological character of the sensitive brain ; b/ second condition, the double "constitutive transcendence" that is the interface formed by our grammaticalized-technicized language and our system of « symbolized » - they refer to each other - artefacts.

(Re)thinking sense(-making) as multidimensionality in crisis beyond Husserl's noematic thought

Let's come to the central and fundamental problem raised by *La Société de l'invention* : the

problem of what I call the multidimensional crisis of sense(-making) - I will soon explain why I use the word 'sense(-making)' rather than the word 'meaning'. First, one may say that transhumanists are not philosophers but ideologists who take advantage of speculative techno-capitalism to dream of a post-human era instead of worrying about the future of the planet. Now, some of their opponents share with them the old, powerful and tendentiously anthropocentric conviction that human being occupies a central position in our Universe. In such a theoretical debate, therefore, the Anthropocene is considered by one and the other as the confirmation of our central position. I assert, on the contrary, that what is called the 'Anthropocene', instead of confirming the anthropocentric thesis through the power of human being, is, at least through its ultimate and dramatic consequences which reveal it, the indirect index of the crisis of sense(-making) which results from the misunderstanding of human finitude - that is to say: human non-originaryity (or being-derived) and therefore human mortality. I know that the Anthropocene doesn't begin with the 20th century. But its ultimate and dramatic consequences are not old, and what I call the "crisis of sense(-making)" is also a process which began three centuries ago but became only recently global, therefore actual and no longer potential.

Here, the most important point lies in the words "global, therefore actual". Indeed, I assert that in virtue of the multidimensionality of sense(-making), its crisis can't be actual without being itself multidimensional. We know that Husserl was seeing a crisis of sense(-making) in his own time, and that in his opinion such a crisis was the result of the mathematization of the scientific knowledge of nature, which obscures the intentional source of its own noematic sense-giving. But such a noematic and therefore one-dimensional 'crisis' is not a crisis of sense(-making) *as* multidimensional. Certainly, Husserl had understood that the crisis of sense(-making) would be a crisis of reflexivity. But what we must understand today is that the knowledge referred to by Husserl as well as by science is in any case related to the noematic dimension of a sense(-making) that is irreducible to this dimension, because it is multidimensional, and whose crisis itself is multidimensional only today. It is precisely because Husserl didn't see this multidimensionality of sense(-making) that he believed in the 'originaryity' (being non-derived) of his own intentionality as noematic 'sense-giving'. This crucial point will be now explained.

Our time is a time of multidimensional crisis, and *La Société de l'invention* is dedicated to the invention of the method which will make us capable of thinking this multidimensional

crisis as a crisis of sense(-making) and of reflexivity. It means that:

a/ Far from being noematic and therefore one-dimensional, the sense(-making) of each meaning is always multidimensional and, more precisely, tridimensional - we will see why. By the words "each meaning" I mean what Post-Kantian philosophy named 'representations', and the reason for this substitution is that the word 'representation' doesn't say express the multidimensionality of each object of thought: this word is too tied to the noematic dimension - the dimension of *ob*-ject. One can understand at the same time why I didn't use the expression "crisis of meaning": if meanings are in my vocabulary what was called 'representations', the so-called « crisis of meaning » is rather a crisis of the sense(-making) of each meaning;

b/ If we want to understand the multidimensional crisis as a crisis of sense(-making), we must invent a philosophical reflexivity which reveals each object of thought and each meaning - or 'representation' - as multidimensional, that is to say as non-*ob*-ject - the *ob*-ject is noematic and one-dimensional. We know that Antonio Damasio's work shares with Simondon's ontology - but without the former knowing the latter's work - the idea that animal action, perception and emotion participate in each other[6]. Now, dimensions of human existence are directly linked to this tridimensional constitution that they complicate:

- human beings act to produce what will satisfy their needs;
- human beings perceive to validate their conceptions of the world;
- human beings have emotions to direct their behavior by values.

Human existence is therefore economic-ontological-axiological;

c/ The question raised by the tridimensionality of human existence is this: are human meanings or 'representations' also tridimensional? As much as the ideas of the multidimensionality of human existence and of the inter-constitutivity of these dimensions are now common, the idea of the multidimensionality of each meaning or 'representation' is not. We are still dominated by two ideas that come to us from Saussure and Wittgenstein : meanings supposedly make sense either by their relation to each other within language as a "system of differences", or by their use in the quite 'pragmatic' and more or less wide context of "language games" and "forms of life". But the sense(-making) of each meaning or

'representation' is not reducible to these two conditions, because the sense-making of the denotations themselves imposes on meanings or 'representations' another condition : each noematic denotation - 'tree', 'table', "human being", 'concept', etc. - makes sense not only as noematic denotation or *ob*-ject of knowledge, that is to say as what answers the question "What is it and how does it works ?", but also as what answers the two questions "How can it be useful to satisfy my needs ?" and "What values to pass on will I find there ?". In other words, the sense(-making) of each meaning or 'representation' is tridimensional and therefore irreducible to the single noematic dimension of the *ob*-ject of knowledge.

Solving the multidimensional crisis of sense(-making) as a crisis of reflexivity is first of all giving oneself the means to think each object of thought as non-*ob*-ject, because it is tridimensional and not one-dimensional. As I explain in Chapter V of *La Société de l'invention*, philosophy, in its difference from science, has for role to no longer *ob*-jectivate the meanings as equated and reduced to their noematic denotation of "there in front" : the philosophizing individual must invent a very paradoxical archi-reflexivity by which he or she could think himself or herself as made by the multidimensional sense(-making) of his or her non-*ob*-jects, rather than originary (non-derived). But there is immediately an obstacle to our quest: human intentionality is structured as representational and noetic. Indeed, how could we think that we don't speak *about* something?

There is a law of human intentionality, and this law is a law of *ob*-jectivation of the meanings - the 'representations' - which are handled or used by the subject : by using the word '*ob*-jectivation', I mean that these meanings are "equated to" their noematic denotation. One would ask: is there really a problem in such a universal and inexorable structure of human intentionality? The problem is that, by *ob*-jectivating the meanings which are handled or used, human intentionality reduces the multidimensional sense(-making) of each meaning to the noematic dimension of the *ob*-ject. That's why human intentionality has never dared to think seriously that the sense(-making) of the object of thought constructs the subject itself as much as it constructs the object.

Certainly, there have been a few philosophers who speculated about sense(-making) as constituting both the object and the subject : for example Heidegger in *Sein und Zeit*, where the paragraph 13 asserts that knowledge of *ob*-jects must be put back in a 'multimodal' or multidimensional "being-in-the-world" which is constitutive of *Dasein*. But here, the

question I want to ask is the question of philosophical methodology. Indeed, it is not enough to claim that the subject itself - or *Dasein* - is constituted by the sense(-making) of its objects : the philosophizing individual must be aware that his or her own intentionality, like any human intentionality, is structured as noematic and unable to avoid making him-or-herself their own origin - and without him or her knowing this fact. By *ob*-jectivating the meanings - or 'representations' - as "equated to" their noematic denotation, the philosophizing individual reduces the multidimensional sense-making of each meaning to the noematic dimension of the *ob*-ject, and therefore he or she makes himself or herself - and without him or her knowing the fact - originary, that is: not constituted by this sense-making of his or her *ob*-jects of thought. This fundamental trap is what I call the "structure of oblivion of its own non-originary (or being-derived)": human intentionality *is* such a structure.

However, the fundamental paradox is that while science is an objective knowledge, it has managed to ensure that the knowing subject doesn't make itself originary - or not constituted by the sense(-making) of its *ob*-jects. The reason for this fundamental paradox - and its solution too - is that in science it is not the individual himself or herself who *ob*-jectivates the meanings or 'representations': the knowing subject of science is a decentered and reconstructed subject, as we can see first in mathematical-instrumental physics. Bachelard is the first thinker who enabled us to think this scientific decentering, whose virtue is therefore not only to transform the human *ob*-jection of meanings into an objectivity, but also to prevent the unthought effects of this *ob*-jection of meanings by human intentionality. What will the philosophizing individual do, if he or she can't for his or her part decenter himself or herself and therefore prevent the effects of his or her *ob*-jection of meanings?

He or she will continue to make himself or herself originary or not constituted by the sense(-making) of his or her *ob*-jects, but he or she has the possibility to thwart the fundamental trap called the "structure of oblivion of its own non-originary (being-derived)". The only way for that is to identify the dimensions of sense(-making) through meanings or 'representations' whose denotations are modes of action, because these special meanings or representations, even *ob*-jectivated, designate what, in the object, participates in the subject. This is the only way, for the philosophizing individual, to think himself or herself as non-originary or constituted by the sense(-making) of his or her own meanings or

representations.

What are these modes of action which are the general dimensions of the sense(-making) of each meaning or 'representation'? These modes of action correspond to the three questions answered above by each object of thought: "What is it and how does it work?", "How can it be useful to satisfy my needs?" and "What values to transmit will I find there?". In other words, the three general dimensions of the sense(-making) which constitutes me as non-originary (derived) philozophizing individual are *ontological information*, *economic production* and *axiological education*: each meaning or 'representation' I use makes sense through - and is constituted by - these dimensions which constitute me also as non-originary (derived) subject. Such an *archi-reflexive semantics*, which provides an unprecedented modality of the self-'knowledge' that philosophy must be, can be considered as a *fundamental ecology of sense(-making)* - and of its crisis -, because sense(-making) is the "milieu of all milieux" which make sense within it.

(Re)thinking political ecology as ECO-logy and NON-ethical refounding of Law

Now, on this new semantic and archi-reflexive basis, philosophy as non-ob-jectivating self-'knowledge' - by the philozophizing individual as non-originary or constituted by the tridimensional sense(-making) which is irreducible to the dimension of ob-ject of knowledge - can and must then translate itself in each dimension of the sense(-making), engendering in this way a *philosophy of ontological information*, a *philosophy of economic production* and a *philosophy of axiological education*.

The first, that is to say ontology, will be very modest, because knowledge is the hallmark of science, and not of philosophy as self-'knowledge'. Chapter VI of *La Société de l'invention* explains that this philosophy of ontological information rebuilds Simondon's genetic and anti-substantialist ontology by suppressing the methodological and architectonic contradiction in this ontology, which can not be the "first philosophy" it wanted to be[7]. The ontological problematic is now called "epistemo-ontological", and it is a simple translation among others of the new first archi-reflexive and semantic problematic. The peculiarity of this ontological translation is to translate the principle of the semantic non-

originarity (being-derived) of the philosophizing individual into a principle of non-substantiality of beings. Indeed, the semantic Difference between the multidimensional sense(-making) and its object dimension is reflected, *in* this same dimension, by the difference between object and substance. Exactly as sense(-making) is irreducible to the object of knowledge, the object is irreducible to the substance which would be its own origin. Here, the global reconstruction of philosophy needs a new legitimacy and a new use of analogy as constitutive of the new philosophical operation that is called 'translation'. My book in progress *La Philosophie du paradoxe. Prolégomènes à la Relativité philosophique* deepens this strictly methodological aspect, while denouncing the contemporary confusion between analogy and metaphor - just as it denounces the other contemporary confusion between paradox and contradiction. This ontological translation of the new first semantic problematic is also completely subject to scientific knowledge, which is epistemologically sovereign and methodologically autonomous.

In the same way, the second translation of the archi-reflexive semantics is called "political-economic", and the third, "pedagogical-axiological". Here, I want to address the second, that is to say political economy, in its difference from the third, that is to say philosophy of values - which are incarnated and transmitted. At this point, the reorganization of philosophical fields really upsets our habits. Indeed, and as I explain in the chapter VII of *La Société de l'invention*, in the dimension of economic production, the semantic non-originarity (being-derived) of the philosophizing individual translates itself into a principle of "being-in-debt" with respect to the universal ecosystem as ensemble of beings which are required to satisfy his or her needs. The encounter between his or her debt and the economic normativity of the needs of the ensemble of beings, which are capable of suffering, is the foundation of their rights. That is why the Law is not the system of compatibility between the 'free-wills' of "moral persons", but the system of compatibility between the *needs* of all the human *and non-human* subjects that might suffer from not satisfying their needs. Here is the political *eco-logy* which must propose to go beyond the debate between the post-Rousseau "political philosophies" of the "social contract" and the post-Marxist "political economies" of "suspicion", and in this new theoretical context, freedom and justice are needs because needs are what ensures health - against suffering - and not just survival.

Before clarifying this idea of a political *eco-logy* making freedom and justice themselves

needs to be satisfied with a view to health, I would like to insist on the fact that the political normativity of needs is, by definition, an economic normativity, which is not the axiological normativity because these two normativities belong to two different dimensions of sense(-making). This does not mean that these two dimensions of sense(-making) are not at the same time constitutive of each other. But this inter-constitutivity is accompanied by their irreducibility to one another, because each translates in its own way the semantic principle of the non-originary of the philosophizing individual. Indeed, and as I explain in Chapter VIII of *La Société de l'invention*, in the pedagogical-axiological dimension of sense(-making), the semantic principle of the non-originary of the philosophizing individual does not translate itself into being-in-debt with respect to the universal ecosystem which satisfies my needs, but it translates itself into a principle of contingency of the being and values that are mine : not being my own origin, I could have been someone else, with a different education and values. Therefore, my values must be questioned on the basis of their ability to open up to this other being I could have been. But on the other hand, this notion of openness cannot be properly understood without being articulated with that of education, understood as the transmission of values, and in its difference from what the Law legislates on. Indeed, properly axiological problems arise only where the Law, with its own normativity, has not already constrained my relations with other subjects - human or non-human. This is the reason why axiological problems are educational problems: they concern the values that I want to transmit by embodying them through my exemplarity, which is a condition of all educational credibility. We all educate each other, by transmitting values through openness within exemplarity as the conformity of our actions to our statements.

But let us return to the political-economic problematic and to the idea that it must today offer a political *eco-logy* refounding the Law as a system of the compatibility of the needs of all beings capable of suffering. Here is the reconciliation of political economy, political ecology and political philosophy, the heart of which is the philosophy of Law, and this reconciliation is inseparable from the non-ethical refounding of Law. As I said, if the philosophy of axiological education intervenes where the Law cannot legislate, it is because the inter-constitutivity of the dimensions of sense(-making) is associated with their irreducibility to one another, values not being the needs to be satisfied to avoid suffering. The economic normativity of the needs capable of producing suffering meets my being-in-debt and generates the right-making (*faire-droit*) of these needs. Now, another upheaval introduced by this new logic lies in the fact that freedom and justice are no longer values

here, but are needs related to the political-economic problematic. Indeed, in their simplest form, freedom and justice are needs experienced by many species, some of which see their health deteriorate sharply if freedom of movement or equity in treatment, for example, are not granted. A gorilla in a cage falls into depression, a chimpanzee inequitably treated will suffer the same fate if inequity - compared to its peers - sets in over time. The sphere of needs cannot be reduced to vital needs, and this sphere is organized around the self-normative need for health, whose normativity is revealed when the organism suffers.

At this point, another clarification matters, which no longer concerns the notion of needs but that of health. Because just as Western thought has too easily distinguished the human species from other species by reducing the needs of the latter to only vital needs, so has it tended to elevate health to the status of “complete well-being”[8], thus preparing the confusion between health and happiness. Here, the definition of health by the World Health Organization is an accomplice of the American elevation of happiness to the status of “right” - which is a serious conceptual confusion. At the same time, the notion of “interest” came to nourish legal thought, thus drawing needs and their normativity, the source of true Law, towards desires, which have no normativity but are the real reasons for the invention of a Law for “moral persons endowed with free will”.

But the idea of political *eco*-logy is not reducible to the reconciliation of political ecology and political economy through the non-ethical refounding of Law. Indeed, and as I explain in Chapter VII of *La Société de l'invention*, this idea also involves the further idea that a new and non-ethical notion of *responsibility* is now possible: my being-in-debt towards the universal ecosystem means that my semantic non-originary translates itself into a responsibility within the political-economic problematic - exactly as it translated itself into a non-substantiality of beings within the epistemological-ontological problematic, and into a contingency of our being and values within the pedagogical-axiological problematic. This responsibility is synonymous with the idea of duty, the basis of which is my being-in-debt to all beings that participate in the satisfaction of my needs and that themselves have needs capable of producing suffering. Their rights, as I said, result from the encounter between my being-in-debt and the economical normativity of their needs, which is revealed by their suffering.

Last but not least, the Law thus refounded in a non-ethical way does not break with Nature

where the question of Law does not arise. That is to say, the Law, at the very moment when the consequences of human Desires prove fatal for the planetary ecosystem, can and must become the new foundation (the condition of possibility) for the planetary ecosystem's balance. Rather than being a Law which protects "interests" to the detriment of human and non-human needs, the entirely refounded Law has for vocation to become what will allow the planetary ecosystem's balance to be maintained beyond the anthropocenic ruin of the forces which have founded it so far as equilibrium.

I thank Terence Blake for his proofreading and the corrections he made to this English version.

Endnotes

[1] See Philippe Zawieja & Franck Guarnieri (coord.), *Dictionnaire des risques psychosociaux*, Paris: Seuil, 2014. Psychosocial risks are now the object of multidisciplinary and international studies.

[2] See the documentary "Nous sommes l'Humanité" (*We Are Humanity*) on the Jarawas people, by Alexandre Dereims.

[3] Jean-Hugues Barthélémy, *La Société de l'invention. Pour une architectonique philosophique de l'âge écologique*, Paris: Éditions Matériologiques, 2018.

[4] See André Leroi-Gourhan, *Le Geste et la Parole*, Paris: Albin Michel, 1964 (Vol. 1) & 1965 (Vol. 2), and Barthélémy, *La Société de l'invention, op. cit.*, §9.

[5] See Michel Morange, *La Vie expliquée?*, Paris : Odile Jacob, 2010 [2003], and my comment in *La Société de l'invention, op. cit.*, §38.

[6] See Gilbert Simondon, *Cours sur la perception (1964-1965)*, Chatou: Les Éditions de la Transparence, 2006, and Antonio Damasio, *Descartes'Error: Emotion, Reason, and the Human Brain*, Putnam, 1994; revised Penguin edition, 2005.

[7] On this contradiction in Simondon, see Barthélémy, *La Société de l'invention, op. cit.*, §35, and my paper "From Genetic Encyclopaedism to Human Ecology", *Philosophy Today*, Issue 63, Vol. 3.

[8] Preamble to the Constitution of the World Health Organization, 1946, p 21.