

The following is the first half of chapter 1 from Jean-Hugues Barthélémy's book *Penser l'individuation: Simondon et la philosophie de la nature*. Paris: L'Harmattan, 2005. p. 37-48. Original translation by Taylor Adkins on 10/22/07.

Chapter 1

The concept of object and the concept of subject, in the same virtue of their origin, are limits that philosophical thought must overcome. --Gilbert Simondon

1. *Ontology and ontogenesis: from Bergson to Simondon*

The philosophically fundamental watchword of all Simondian thought undoubtedly resides in the idea according to: the process of individuation cannot be *ob*-jectified by knowledge, since the former is produced by the latter if the *knowledge of* individuation is itself the *individuation of* knowledge. This is why the principal introduction of his thesis ends with these lines:

We cannot, in the usual sense of the term, *know the individuation*; we can only individuate, individuate ourselves, and individuate in ourselves; this seizure is thus, in the margin of knowledge properly stated, an analogy between two operations, which is a certain mode of communication. The individuation of the real exterior to the subject is seized by the subject thanks to the analogical individuation of knowledge in the subject; but it is *through the individuation of knowledge* and not by knowledge alone that the individuation of (non-subject) beings is seized. Beings can be known by the knowledge of the subject, but the individuation of beings can be seized only by the individuation of the knowledge of the subject [1].

To know individuation is to individuate knowledge, and this is why there is "analogy" between the two "operations" which are here the object and the subject. The individuation is thus a "field" in which subject and object are no longer opposed. A field which is also not really one, if it is true that it includes the physical as well as the vital or the biological and the psychosocial or the transindividual, as so many *regimes of individuation*. But since with each one of these regimes corresponds a *scientific* regional ontology which solidifies the individuation of the beings in these same beings of which it disengages the *generic structures*, it is appropriate to add to these regional ontologies, to find the movement of individuation hidden by the same beings which result in it, a *philosophical* general ontogenesis which disentangles the *genetic operation* of these beings. This is an ontogenesis to which Simondon grants the statute of "first philosophy:"

According to this prospect, ontogenesis would become the starting point of philosophical thought; it would really be first philosophy, prior to the theory of knowledge and with an ontology that would follow the theory of knowledge. Ontogenesis would be the theory of the phases of being, prior to objective knowledge, which is a relation to be individuated in the milieu, after individuation [2].

Simondon thus clearly distinguishes ontogenesis from an objectifying knowledge that follows scientific regional ontologies, reunited here under the total name of "ontology." This term designates here the whole of scientific regional ontologies rather than traditional philosophical ontology, which comes from the fact that ontogenesis *replaces* traditional philosophical ontology as *preceding* what is however

named "ontology." It will have been understood, "ontogenesis," in Simondon, designates the theory as well as the process of which it is the theory, and this process of ontogenesis which is identified with the individuation, is at the same time becoming of being in general. We will say in the next chapter what justifies the becoming of being in general, then what justifies that the theory, which is also the process itself, is ontogenesis. In this initial chapter we want only to specify a filiation which is revealed by the preceding elements, and whose setting in evidence will in the long run make it possible to better understand that which simultaneously comes from some of the virtues and some of the limits of Simondon's thought. This filiation is of course that which has shown our author as an heir to Bergson, and for which two reasons at least can as of now and already be raised.

The first of these reasons is the assertion that becoming is not *ob*-jectifiable because it is that which precedes the subject itself. The general "ontology" which thinks this becoming is then a genetic "ontology" which makes it possible to refuse a classification of beings in kinds which does not correspond to their genesis, but with a knowledge taken after the genesis. Here Bergson is a source, he who, like the phenomenologists [3], first tried to subvert the traditional alternatives, but while allotting to philosophizing the task to think of becoming as that which constitutes, as "duration," the essence of consciousness itself, and thus makes proceed all "essence" of an other, quite as relative. Initially indeed it is a question for Bergson of subverting the traditional alternatives, and notably that opposing mechanism and finalism [4], by subverting the opposition subject/object which makes their ground by the means of the intuition of the Whole conceived as becoming: "philosophy can only be an effort to be based again in the whole. The intelligence, being re-absorbent in its principle, will incorrectly revive its own genesis." The "Bergsonism" of Simondon is all the more clear here that this last statement will give reason to Bergson against Husserl with regard to the means of carrying out the subversion of the traditional alternatives: this means it is "reduction" with becoming, and not with intentionality.

In a second time Bergson shows how this thought of becoming, this "true evolutionism," proper to philosophy, is necessarily a thought of the continuous sub-jection to all apprehended discontinuity by scientific intelligence. The cutting of reality into genres and species reinstates an essentialism that spatializes duration. Simondon, even if he will complexify the question of the discontinuous—displaces towards microphysics in the view of a subversion of the alternative continuous/discontinuous--, with its manner the Bergsonian thesis will renew however, and it is through it that he condemned the scholastic views mentioned above. The result that is more surprising than every Bergsonian denunciation of the classification of beings according to their generic structures cut out from their genetic operation, or according to their separate being of becoming which founds it, is the assumption according to which the living would be an individuation which, understood either only as a phase or mode, is not based on an achieved physical individuation, but rather constitutes the perpetuation of an inchoate phase of physical individuation.

It is habitual to see in the vital processes a complexity larger than in the not-vital, physicochemical processes. However, to be faithful, even in the hypothetical conjectures, with the intention that animates this research, we should suppose that the vital individuation does not come after the physicochemical individuation, but during this individuation, before its completion, by suspending it at the moment when it has not yet reached its stable equilibrium, and while making it capable of intending and propagating itself [5].

As we will have the occasion to show, "the intention which animates this research" is however less in Simondon a will of elaborating a vitalist cosmogenesis than the requirement of a non-reductionist ontogenesis. *Creative Evolution* is said to subvert the alternative between mechanism and finalism only in favor of a different position which has renovated finalism. However any renovation is also, for its part, conservation. Bergson also acknowledged it as finalism and did not abandon its vitalist form. And when it sometimes happens that Bergson relativizes the expression "élan vital" by anchoring the physical and vital itself in a common source which is neither physical nor properly vital, it is not to qualify this source as simply pre-physical and pre-vital, but to call it spiritual: "it is the consciousness, or better the supra-consciousness, which is at the origin of life [6]." On the contrary Simondon does not renew these oppositions between the order of the modes of individuation and the order of the phases of any individuation, the vital individuation constituting the perpetuation of an inchoate phase of the physical individuation, which avoids the reductionism that threatens any radical ontogenesis as a thought of the superior starting from the inferior. And it is precisely because he thinks genesis in terms of individuation that Simondon veritably subverts the alternative between mechanism and finalism, the latter being simply too vitalist: the pre-physical and pre-vital is what is not individuated, and could not *a fortiori* be spiritual. But because we only want to treat here one filiation between Bergson and Simondon, we need to differentiate the development of such a divergence and to now devote ourselves to the second of the immediate reasons for the filiation that we announced.

This second immediate reason for a filiation between Bergson and Simondon is the repeated opposition to Kant through the assertion of the priority of ontogenesis, as "first philosophy," over criticism. In a fundamental passage from *Psychic and Collective Individuation*, Simondon writes that "philosophical thought before posing the critical question prior to any ontology, must pose the problem of a complete reality, prior to the individuation from which the subject escapes the grasp of critical thought and ontology [7]." There still, Bergson is a source. We already pointed out that for him also "philosophy can only be an effort to be based again in the whole." But what is important to notice here is that this fusion in the whole was already in Bergson as it is in Simondon: a return to becoming "from which the subject escapes the grasp of critical thought and of ontology." This is why Bergsonian criticisms bearing on Kantian reflexivity could not be read as an abandonment of all reflexivity. Consider, for example, the first extraordinary synthesis of his thought that took place at the conference "Consciousness and Life." The passage which interests us is the following here:

Where do we come from? What are we? Where do we go? Here are vital questions, in front of which we would place ourselves immediately if we philosophize without passing through systems. But, between these questions and us, a too systematic philosophy interposes other problems. 'Before seeking the solution, they say, should we not know how we will seek it? Study the mechanism of your thought, discuss your knowledge and criticize your criticism: when you are ensured of the value of the instrument, you will see how it is useful to you.' Alas! This moment will never come. I see only one means of knowing where we can still go: it is to get under way and to go. If the knowledge that we seek is really instructive, if it must expand our thought, any preliminary analysis of the mechanism of thought could only show us the impossibility to also go far, since we would have studied our thought before the expansion which it is a question of obtaining from it. A premature reflection of the spirit on itself will discourage it to advance, whereas while advancing purely and simply it had approached the goal and had realized, in addition, that the announced obstacles were for the majority of them effects of mirages [8].

Looking more closely, it is not because it is reflexive that Kantian reflexivity is for Bergson an error, but only because such "preliminary analysis" is also for the same reason a "premature reflection." True reflexivity can also be in this sense revindicated by Bergson, since Kantian reflexivity is marked as a seal of the illusion, which signifies that the course of knowledge to Bergson only guarantees an authentic knowledge *of itself*. What however distinguishes such a radical reflexivity from what one traditionally names "reflexivity," is the "expansion" preached by Bergson and under the terms of which the knowing subject was recognized in its object: here the reflection does not renew the subject to itself, but at its origin. An origin whose question is posed by Bergson before the same criticism addressed to Kant and as what justifies this criticism: the first of the philosophical questions is the question "from where do we come?" An origin of which any reflection, which is Cartesian or "critical," is only a mask since it produces the "mirage" of a subject out of becoming. The intuition alone, of which Simondon will renew the category but by specifying it and by removing from it what orders it with the Whole of which it shares in a profound nature that is duration. This last concept could certainly not be taken up again by Simondon, the reasons for which it is not yet time to expose. But if it is true that to understand a thought is also to reconsider its origins, it were necessary for us here to attach Simondonian ontogenesis to the Bergsonian thought of becoming [9].

2. Remarks on the specific contribution of Teilhard de Chardin.

Contrary to Bachelard and Merleau-Ponty [10], Bergson benefits Simondon from a living education and a human encounter as Simondon prefers them [11]. And this is here the contemporaneity of Pierre Teilhard de Chardin, quoted by Simondon in his unedited work, which establishes the living link with Bergson, to whom Teilhard was so near. What is thus exactly the impossible relationship to circumvent between Teilhard the "priest" and Simondon the agnostic? Although the Simondonian exegesis is still only being born, we are amazed that these relations have not been evoked by anyone, as they are narrow—with the double sense of located and forts. The Bergsonian ontogenetic prospect, of which we briefly pointed out the still metaphysical character, initially takes in Teilhard de Chardin a cosmogenetic sense suitable to make the transition to the anti-metaphysical character, because Bachelardian, of Simondonian ontogenesis. As one can note while reading the synthesis which is the work *Man's Place in Nature*, the bond with Simondon certainly revives so many simple themes and terms of true theses. But on the one hand, these themes and terms are completely central at the same time in Teilhard and Simondon, and sufficiently rare in the philosophical tradition so that the heritage is undeniable. In addition to the shared theses, sometimes also central, exist at the interior of the framework, already common, of cosmogenetic ontogenesis

We thus begin with the themes and terms. *Man's Place in Nature* thinks "Personalization" as being a "phase" which makes the "synthesis" of "Socialization" and of "Individuation:"

At the end of the 'expansional' phase of Socialization that comes to close itself, we had believed that it was in a gesture of insulation, i.e. by way of Individuation, that we were going to reach the end of ourselves. At this point (i.e. since Hominization is entered into its phase of convergence), it becomes manifest that it is on the contrary only by one effect of synthesis, i.e. by Personalization, that we can save what really hides the sacred at the bottom of our egoism.

In Simondon, "personalization" will enter within the framework of the *regime of individuation* which is the "transindividual" as indissociably psychosocial. Such is *the displacement of the synthesis*,

"individuation" not being simply one "more phase"—another concept which will establish itself as central in Simondon also—but designing the ontogenetic process itself, and personalization coming after the physical individuation and the vital individuation—or "individualization"—,therefore constituting this mode whereby the individuation becomes "psychic and collective" in the same grasp. In Teilhard, Personalization is also unification of the individual and the collective, but Socialization, Individuation and Personalization are succeeded as in speculative dialectics or overcome, and they are only three times of the process of "Hominization," still too essentialized, too cut out from the living through what Simondon will describe as "anthropological" thought. However these differences do not therefore veil the undeniable thematic and linguistic filiation.

The general framework of this filiation is, as we said, ontogenesis as a thought of being as becoming. It is also in the fact that Teilhard, to our knowledge, *invents* the theme—celebrated from now on—of what he names "Complexity [12]," for which Simondon seems to us to have placed in a position of mastery. At least this is what our study should leave apparent, on the one hand through the sources of inspiration of thermodynamic, microphysics, cybernetics, systemics, and into the definitive encyclopedia of Simondon, on the other hand in virtue of the *real complexity* of his thought of individuation as a process of "complexification," to speak with Teilhard. What the latter names the "combination," characteristic of complexity in its difference from "aggregation" and "repetition," will be named "composition" by Simondon, and will be distinguished from simple "transposition." Crystallization will be, in Simondon as in Teilhard, a central paradigm for thinking the ontogenetic process of which this complexity-complexification consists.

Such a general, common ontogenetic framework then introduces us with the shared theses. In *Man's Place in Nature*, Teilhard was known to want to subvert the opposition of "materialism" and "spiritualism," and this intention, even if it is judged as non-realized, is not only Simondonian as it aims at subverting an opposition. It is also undoubtedly what led Simondon to name "materialism" and "spiritualism," obviously rather well concerned in its matter, to which we will come soon, mechanism and vitalism. The "corporealization" in which consists, in Teilhard, the complexification is then what must explain in the long run what Simondon himself will name the "quantum character of consciousness."

We stop ourselves at this delicate expression. In the principal conclusion of his thesis, Simondon says "to suppose" that "individuation operates in a quantum way, by abrupt jumps, each stage of individuation can also be compared to the following as a pre-individual state of being." However the quantum character of consciousness, supposed also in Chapter II of the first part of *Psychic and Collective Individuation*, does not amount to the quantum character of individuation in general: it takes its sense rather as the *particularity* of "psychic" individuation in question in the first part of this work. In addition to the psychic, we will explicitly reveal "transitory path" towards a "transindividual" individuation placed beyond the alternative between immanence and transcendence, and from this difficultly conceptualizable fact, it is possible to see in the "quantum character of consciousness" a resumption and a deepening of the Teilhardian "corporealisation," in the form of the following intuition: the transindividual "personality" would be a psychism whose *cellular* level almost manages to modify the *quantum* level, while the psychism of the living organism as a "transitory path" would remain entirely attached to a cellular level only able to modify the molecular level. The *physical* individual itself would be made up for him on the superior scales through the inferior scales, but without any

reciprocity. The Simondonian thematic of the "orders of magnitude," to which we will come, also encourages Simondon to favor this intuition.

What is then the principal difference, if it is necessary to give only one of them among so many others, between the Teilhardian cosmogenesis and Simondonian ontogenesis? In Teilhard the stress is laid on a *finalized and residually anthropocentric* process:

Man occupies a key position, a position of principal axis, a polar position in the world. So that it would be enough for us to understand Man to have understood the Universe,—as also the Universe remains incomplete if we will only arrive at integrating in a coherent fashion the entirety of Man, without deformation,—all of Man, I say, not only with its members, but with its thought.

In Simondon, this *integration* of human thought in the Universe is translated rather into a necessary *relativity* of any knowledge of individuation as the *individuation* of knowledge.

1. IGPB, p. 34.
2. IPC, p.163.
3. As Françoise Dastur shows in her book *Husserl. Des mathématiques à l'histoire*, Husserl felt very close to the Bergsonian distinction between time and duration, which Ingarden, through his work, had exposed him to Bergson. Several affinities between Husserl and Bergson also explain the interest of Merleau-Ponty then of Simondon for Bergson, even if Simondon were, as for himself, returned to Bergson by this second way which represents "French epistemology" resulting from Bachelard. The priority of a subversion of the traditional alternatives is undoubtedly the common goal from which these affinities proceed. In "Bergson se faisant," Merleau-Ponty writes: "The intuition of my duration is training oneself generally to see the principle of the fact of Bergsonian "reduction," which reconsiders all things *sub specie durationis*, --both what is called subject, and what is called object."
4. Cf. *Creative Evolution*.
5. IGPB, p. 150. For a reciprocally and audaciously Simondonian reading of Bergson, but also of Ravaisson, Tarde, and Nietzsche, see P. Montebello, *L'autre métaphysique*, Paris, Desclé de Brouwer, 2003.
6. *Creative Evolution*.
7. IPC, p. 137.
8. In *L'énergie spirituelle*, Paris, P.U.F., 1966, p.2.
9. In "L'individuation en biologie" (*Gilbert Simondon, une pensée de l'individuation et de la technique*), Anne Fagot-Largeault does not fail to say from the start that Simondon's "ontology of becoming" registers "in the line" of Bergson (p.19). It is this point that we come to develop and specify. She then insists for her part on certain oppositions, which we will also have to evoke but which takes place *inside* the simple *framework* provided by the reasons for the filiation presented here. As for the more secret and implicit encounter" (ibid, p. 20) that she evokes between Simondon and Whitehead, it will greatly interest our examination of criticisms addressed to Simondon by Isabelle Stengers, who prefers Whitehead over him.

10. On readings of Simondon in general, see our Introduction. Bergson, Bachelard and Merleau-Ponty are the three great names to which Simondon owes his more profound philosophical ambition: the subversion of classical alternatives. The fundamental relation of Simondon to Bachelard will be exposed in detail in the second volume of our study.
11. Simondon, who has suffered from not being able to communicate in philosophical fraternity, has without doubt acquiesced to our conviction that the veritable *philo*-sophical profundity, those of the true “grand spirits” of which Bachelard speaks in the exergue to our Introduction, is always human as much as intellectual.
12. On the actual *scientific* thoughts of “complexity,” cf. Réda Benkirane, *La complexité, vertiges et promesses*, Le Pommier, 2002.