



HAL
open science

On Gilbert Simondon's Inheritance from Merleau-Ponty

Diego Viana

► **To cite this version:**

Diego Viana. On Gilbert Simondon's Inheritance from Merleau-Ponty. *Epoché: A Journal for the History of Philosophy*, 2023, 27 (2), pp.247-271. <10.5840/epoche202338223>. <hal-04610289>

HAL Id: hal-04610289

<https://hal.science/hal-04610289v1>

Submitted on 12 Jun 2024

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire HAL, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Copyright - All rights reserved

This is the next to last version of the paper published in *Epoché*, Volume 27, Issue 2, Spring 2023, Pages 247-271, <https://doi.org/10.5840/epoche202338223>. Please resort to the published version for any quotes.

On Gilbert Simondon's inheritance from Merleau-Ponty

Diego Viana

Abstract: The article explores the proximity between Simondon's philosophical project and phenomenology through his relation to Merleau-Ponty. Three concepts that link the two philosophers are examined: genesis, relation, and Simondon's preindividual, which are shown to constitute an attempt to answer questions Merleau-Ponty was addressing in his later work. The article shows how Simondon's argument for ontogenesis rather than ontology is related to Merleau-Ponty's ontological project, which in turn originates in the latter's reading of Husserl, particularly the interest in genetic phenomenology expressed as early as the *Phenomenology of Perception*. It then shows that the radical notion of relation employed by Simondon responds to problems Merleau-Ponty had encountered in thinking the *corps propre* and the chiasm. The paper then discusses the link between Merleau-Ponty's thinking of the flesh and Simondon's concept of preindividual. By confronting these two bodies of work, the article suggests that phenomenology is an important starting point for Simondon.

Keywords: Genesis, transduction, relationality, preindividual, flesh, chiasm

Introduction

In this article I contend that Gilbert Simondon develops his philosophy with a phenomenological background, in such a way that the relation between his anti-substantialist thought and Merleau-Ponty's ontology should be understood under the light of the latter's trajectory between the period of the *Phenomenology of Perception* (henceforth PP) and the unfinished *The Visible and The Invisible* (henceforth VI). While Merleau-Ponty reflects from an early stage on the possibilities opened by a phenomenology that emphasizes genesis and perception, and develops towards an inner ontology that ultimately turns to the concept of Nature, Simondon's thinking is anchored from the outset on the problem of nature, by conceiving of ontogenesis as, more than the origin of entities, an alternative to an ontology of substantial being. Though his philosophy of process and becoming is not a phenomenology, it takes root on phenomenological influences, to the extent that Deleuze (1969) identifies in it "a new conception of the transcendental." I present the continuity between these two projects through three concepts that Simondon explores and correspond to concerns Merleau-Ponty expresses in his work, namely genesis, relation, and the preindividual. These concepts do not exhaust the connections between the authors, but they address one of its core elements: the problem of becoming – more precisely, *coming to be*. Simondon's project is a philosophy of individuation not only because he interrogates the origin of individual beings, but because this origin is their very nature; being is thought through and as becoming. Genesis, relation and the preindividual account for three moments of and perspectives on individuation: the process itself (genesis); where it originates (preindividual); what it brings about (relation). These elements acquired growing centrality for Merleau-Ponty from the 1940s up to his posthumous works; this is suggestive of a common

intellectual environment and a shared understanding of the philosophical problems of the time.

Simondon wrote his doctoral theses, *Individuation in Light of Notions of Form and Information* (henceforth ILFI) and *On the Mode of Existence of Technical Objects* (MEOT) during the 1950s, while studying with among others Merleau-Ponty, who was by then developing his own philosophy and his reading of Husserl, with emphasis on the unpublished texts consulted in Louvain in 1939 (Van Breda 1962),¹ and that sustain the arguments presented in the essay *The Philosopher and His Shadow* (henceforth PO).² An extended debate has followed on whether Merleau-Ponty's reading of Husserl finds more in the texts than is actually there (Dillon 1997, Madison 1981) or if indeed Husserl's work contains the shift to an emphasis on embodiment, affect and intersubjectivity that Merleau-Ponty reads in it (Zahavi 2002). What is certain is that a movement from a still mostly Kantian conception of the transcendental ego to Merleau-Ponty's embodied ontology was taking place in that period, and the young Simondon witnessed this process.

In the Preface to PP, Merleau-Ponty rehashes Husserl's arguments from *The Crisis of the European Sciences and Transcendental Phenomenology* (henceforth K), claiming that phenomenology is grounded on a rupture with the tradition of representation. He argues that perception is not a "science of the world," but "the background against which all acts stand out;" specifying that this is not a matter of the objective world; moreover, the world is no object, constituted by consciousness or subjectivity, but a "natural milieu and the field of all my thoughts and of all my explicit perceptions." (PP lxxiv) This definition contains the seeds of a philosophical project progressively detached from its Husserlian roots. In the early works, this detachment means downplaying the noetic-noematic structures, i.e. the conditions of the relation between the act of thinking and the content of what is thought, while exploring the difficulties presented by the notion of life-world (*Lebenswelt*), that Husserl introduced in order to account for intersubjectivity and historicity in the constitution of the ego, as well as the persistence of a non-theorized, non-objectified content in thought (particularly scientific), as its basis and condition.

In the later works, this exploration will lead Merleau-Ponty to a phenomenology leaning out halfway towards ontology, where the problem of the external world gives way to the flesh, i.e. the paradoxical coincidence of a body both sensitive and sensed, and a world both surface and depth. Hence the drive to reconstitute a thought of Nature. In hindsight, one can argue that the evolution of Merleau-Ponty's thinking as sketched above foreshadows Simondon's self-imposed task of thinking through individuation and of thinking individuation without a principle on which genesis would be founded. This is what he aims for in coining an unusual philosophical vocabulary, with a term for what grounds individuation (the preindividual), one for the process that relates the apprehensible surface to an excessive environment (transduction), and another for the interdependence of structure and process (allagmatic). A similar terminological effort populates Merleau-Ponty's posthumous

notes: the aforementioned flesh; the chiasm that accounts for the articulation of interior and exterior, as well as other identities of difference; dehiscence, that names the opening to this being of articulated dualities. The Simondonian addition to this track of thought is the processual take on ontogenesis, in an effort to do away with substance altogether, turning Merleau-Ponty's phenomenological concern with the prethetical (what precedes intentionality, though, perception, language) into an ontological theory based on the preindividual, the being that precedes form or determination.

The link between Simondon and Merleau-Ponty is addressed from two major angles in the scholarship. The first is the dialogue with and critique of Gestalt psychology and the nascent fields of ethology and evolutionary biology, which largely grounds the development of their theories of perception, action and emotion. This trend is particularly relevant within the Latin American Network of Simondon Studies (Reles), as represented in such papers as Marin & Pietsch Lima (2009) and Viana (2019).³ Ramos (2019) focuses on how these philosophers conceive of life, resorting to Simondon's short course *Two Lessons on Animal and Man*, and exploring the three orders of organization Merleau-Ponty discusses in the last part of SC: the physical (that obeys laws), the vital (that has norms), and the human (that creates values). Simondon appropriates these orders and turns them into three regimes of individuation. Heredia (2021) examines Uexküll's theory of the *Umwelt* as common root of Simondon's and Merleau-Ponty's takes on environments. Dereclenne (2014, 2015) highlights the differences between Simondon's realist and Merleau-Ponty's phenomenological approach to life in the *Structure of Behavior*, arguing that they are incompatible. Dereclenne (2019) foregrounds Simondon's proximity to more recent phenomenological research, namely John Stewart's theories of enaction and sense-giving.

The second angle concerns the more direct influence Simondon receives from Merleau-Ponty, to whose memory he dedicates his thesis. These concerns have mostly methodological traits. Regarding the theory of knowledge, while Simondon was more influenced by Canguilhem (director of his secondary thesis, dedicated to the technical object) and Bergson (Barthélémy 2005, Bardin 2009, Bardin 2015), several works have identified elements of a Merleau-Ponty-like language in Simondon. Beistegui (2005) concentrates on how both authors draw insights from science that are important for their emphasis on genesis, and argues that in his later years, Merleau-Ponty's ontological perspective had moved him to a very different position from that of his first two books; this movement brings him closer to Simondon's realist and ontogenetic point of view. Guchet (2001) identifies an unsuspected Merleau-Pontian influence on Simondon's theory of the transindividual (or the social bond), and the role technics plays in performing said bond. Later, Guchet (2005) is one of the earliest works to show that Merleau-Ponty's interest in Simondon's theses on animal behavior and freedom stem from the latter's interpretation of cybernetics.

These works often raise the question of whether Simondon breaks with his predecessor or

follows his lead; if his philosophy of transduction and ontogenesis is a rejection or a development of Merleau-Ponty's somatic brand of phenomenology. For example, Landes (2013) follows the leads left in the Introduction to ILFI by Jacques Garelli and brings together not their concepts or concerns, but their modes of expression, which ultimately means their posture in the face of philosophy. Vargas Guillén (2014) goes as far as to claim that Simondon's philosophy is itself a phenomenology, even though Simondon writes in a working note that once a given philosophy defines itself by a formula "such as 'Christian', 'marxist', 'phenomenological'", it relinquishes its philosophical nature (Simondon, 2016, p. 19); the point being that in the same note Simondon founds reflexive thought on the present (as opposed to an *a priori* or an *a posteriori*) of non-reflexivity once it begins to think itself (*idem*, p. 20), so that his own project takes root on concrete activity.

Like Landes, I follow Garelli's suggestion that Simondon is "faithful" to Merleau-Ponty's thinking of the link between what is individual and what precedes it, as well as his critique of Form and his "invitation to meditate on the Presocratic thought of 'the element'" (ILFI, xv), in order to show that albeit Simondon's trajectory is not a mere *continuation* of Merleau-Ponty's, their projects overlap, in the sense that the latter's efforts to overcome a set of difficulties inherited from Husserl open the way for the former to bypass limitations he identified in the strands of philosophy and science that influenced him most, such as cybernetics, information theory and Gestalt psychology. In sum, they share a set of concerns and expectations from philosophy and science; and both sought to escape traditional dichotomies of Western philosophy (subject/object, being/becoming etc.), and introduce in thinking what lies beyond the actual, as conditions thereof.

In the first section, I extract elements of Merleau-Ponty's philosophy that influenced Simondon beyond the problems of perception or psychology, and that reappear in his work, albeit often in a modified form. Sections 2, 3 and 4 deal with the connection between the two philosophers through, respectively, genesis, relation, and the preindividual. In the concluding section, I present a brief discussion of the permanence of phenomenological themes in Simondon, and conclude by pointing to further elements of connection between these two thinkers.

1. General themes

I would like to begin by highlighting how Merleau-Ponty presents his link to phenomenology at different stages (PP, PO, VI) by stressing certain movements already present in Husserl, particularly *Ideas II*, which he strives to advance further. A significant share of Merleau-Ponty's project is rooted on concerns that Husserl lays out in the *Krisis* and other posthumous texts. For Husserl, modern philosophy has stretched to dangerous extremes the scission between the rationalized and mathematical nature of what we now name "the hard sciences" and the corresponding effect on modern psychology: a nearly solipsistic conception of consciousness and subjectivity (K, §56 *et seq.*).

He traces the consequences of this scission from Galileo and Descartes to Locke and Hume; after criticizing Kant's psychology, he introduces the concept of life-world (*Lebenswelt*), which accounts for the fact that reflection, any science or any philosophy, is rooted on a field of the experienced.

Merleau-Ponty expands the problem of the life-world by problematizing embodiment; in PP this entails the development of the concept of *corps propre*, that foregrounds the duplicity of the body as both perceptive and perceived object. The later concept of *flesh* has the same goal, but widened so as to include the overlapping of what is perceived, and expressed, to the depths from which they emerge, in nature. He considers that Husserl did not go far enough in interrogating the "pretheoretical" and "prethematic" that pertain to the lived world, and their role in constituting our objects of thought, the noema (intentionality as content) and noesis (intentionality as act) themselves, which therefore remains "unthought." (PO 160) His solution is to apply the same logic of the subject's dual existence to the relation between said subject and the world; hence the double crossing of Merleau-Ponty's chiasm, a term which originally designates a figure of speech that articulates two sets of contraries (e.g. "a bright night and a dark day").

The task Husserl leaves to posterity is thus to bridge the gap created by modernity and recover the embodiment of knowledge in general, philosophy in particular. Merleau-Ponty argues in PP that even the transcendental logic leading from Kant to Husserl's earlier works reproduces this scission. Hence the first movement Merleau-Ponty attributes to Husserl, cited as a gesture to be followed: one by which reduction, at first a process whereby consciousness steps back from the natural attitude and examines the structures of intentionality, loses its transcendental character and its origin in idealism, so as to be grounded on the intersubjective and historical experience of life (PP lxxv).⁴ It is not enough for phenomenology to return to the I, which does not carry the principle of constitution of the world and cannot be solved simply with the recognition of other egotic poles of intersubjectivity. The reason is that the reflection on the milieu (Alloa 2008) and otherness reveals more than simply the presence of other subjects and bodies; it shows the "I" cannot be absolute or complete, "absolutely individual" (PP lxxvi): "for 'Other' to be more than an empty word, it is necessary not to reduce my existence to the consciousness I have of existing (*idem*)," which entails that such consciousness must be "incarnated in a Nature" and possibly also a history, Merleau-Ponty writes. Consciousness discovers itself in the exterior and the other. It is emptied as soon as it abstracts from this populated world.

Hence the emergence of the problem of the environment, or *milieu*, which will progressively take up more space in Merleau-Ponty's thinking and is central in Simondon. For Merleau-Ponty, in phenomenology the subject is first and foremost situated, embodied, to the extent that even language will be pulled from its pedestal and envisaged as gesture (Alloa 2008, 31), particularly as expression (Landes, 2013).⁵ These are conditions of the transcendental field, an opening to the constitution of a world, with subjectivity and meaning. The problem lies in the opening: if not consciousness, what is

it that opens? Merleau-Ponty reflects upon this question throughout his work, and examines it from the perspectives of perception, language, and flesh; the subject, once central to phenomenology, is progressively dissolved and comes to resemble a contact surface where subjectivity is generated. In PO, he writes that "[p]henomenology is ultimately neither a materialism nor a philosophy of mind. Its proper work is to unveil the pre-theoretical layer on which both of these idealizations find their relative justification and are gone beyond;" (PO 165) in VI (159-160), he adds:

[w]e do not have to choose between a philosophy that installs itself in the world itself or in the other and a philosophy that installs itself "in us", between a philosophy that takes our experience "from within" and a philosophy (...) that would judge it from without, in the name of logical criteria, for example: these alternatives are not imperative, since perhaps the self and the non-self are like the obverse and the reverse and since perhaps our own experience *is* this turning round that installs us far indeed from "ourselves," in the other, in the things. Like the natural man, we situate ourselves in ourselves *and* in the things, in ourselves *and* in the other, at the point where, by a sort of chiasm, we become the others and we become world.

This passage expresses firstly the refusal to place the philosophical reflection either outside experience or within it, which denotes the refusal to be caught in an objectification of subjectivity (Alloa 2008, 17 *et seq.*). It is worthwhile to notice that this text was written in the same period as Simondon's two theses, where the younger philosopher sought to give form to a similar refusal, expressed in the aforementioned posthumously published preparatory note, where he declares that reflection cannot follow previous rules and must develop according to its own process.

More importantly for the purpose of this article, Merleau-Ponty lays out the problem of experience as the contact surface, with an obverse and a reverse, from which the inside and the outside are determined. Moreover, he suggests a genetic role for experience, which will appear in an expanded form in Simondon's transduction, as the self-constitution of subjectivity as it situates itself in the world. These reflections contain a call upon an enhanced form of relationality that could not be limited to the Cogito or intentionality. It also suggests the centrality of genesis later expanded by Simondon, with a stronger import than merely that of the constitution of the noema or the objects of perception. The following sections will develop from this point, focusing on genesis and relationality, in order to show how Simondon inherits from Merleau-Ponty and how his concept of preindividual attempts an answer to problems that his forerunner shared.

2. Genesis

When Merleau-Ponty undertakes to think beyond the actual, the present, the given (VI 146-150), he is led to emphasize the role of genesis. This is not the case only in his late philosophy. It was already among his concerns in PP, where he takes note of both Husserl's genetic phenomenology (Husserl 2001) and Fink's constructive phenomenology (Fink 1995).⁶ It is worthwhile to notice that in Husserl's text, genetic phenomenology, aimed at accounting for the emergence and flow of the

phenomena of apperception and apprehension, is to be undertaken *after* static phenomenology, the study of the intentional structure of the object as already present (Steinbock 1995). In Husserl, genetic phenomenology remains linked to consciousness and is oriented to the objective structure, i.e. the noema. Merleau-Ponty severs this link between the static and the genetic, elevating the question of genesis to more than a stage in the explanation of perception or the structure of the given.

In PP, Merleau-Ponty stresses the separation between two kinds of intentionality in Husserl: active and operating intentionality (lxxxii), the first relating to judgment and the second to our living relation with the world, i.e. desire, affectivity, inhabiting. He will undertake to show that the first comes *after* the second, and the intentionality underlying objective judgement can only be explained through the situated reality where intentionality operates. This is the first moment that "perceptual faith" becomes more than an obscure presupposition and more than a barrier to philosophy, to the extent that philosophy can be seen as "perceptual faith questioning itself about itself (VI 103)." The intimation of a genetic phenomenology, rephrased as "phenomenology of genesis," (PP lxxxii) stems from this extension of intentionality: what is needed is a comprehension wider than the "classical intellection" of "true and unchanging natures (*idem*)." The same concern is expressed in *PO*, where he stresses the natural attitude as *necessary* starting point for transcendental phenomenology, since "there is a preparation for phenomenology in the natural attitude (PO 164)."

Thus he begins to depart from the Husserlian framework by invoking an embeddedness of intentionality and consciousness in a sensibility for which the object is not the whole question. The question of sense does not lie in the relation to the object or the structures of intentionality as object (noema) and thought (noesis), but in the situation, which in turn, more than a lived world, is one of embodiment and, further on, of nature. The field of analysis is widened once the lived world and the incarnated body are co-implicated, and this co-implication becomes progressively central in Merleau-Ponty as he goes from *The Structure of Behavior* (1942)⁷ and PP to VI. The *opening* to the world becomes a more robust problem, leading not only to the question of history (generative problem), but ultimately of nature (ontological problem), a more dynamic and less determined concept, in that it incorporates unboundedness, genesis and infinity.⁸

Simondon's philosophy of individuation is centered on genesis, as the name makes explicit. As Ramos (2019) suggests, in turning Merleau-Ponty's physical, vital and human *orders* into *regimes of individuation*,⁹ the accrued role of genesis is made explicit: the difference between objects of physical analysis, biology or humanities (that Simondon addresses as *transindividual*) is not that they express different levels of reality, but different manners by which reality translates into determined entities. For Bardin (2015), Simondon departs from Merleau-Ponty in that ontogenesis precedes any angle of analysis; the question one should ask when facing an object of any kind is what sort of genesis sustains the persistence of this object, as in Merleau-Ponty's call to think beyond "unchanging

natures". As Bardin points out, this is the case even for the constitution of sense: the genesis of sense is itself ontogenesis; sense comes about with the individuation of emotions, thought, knowledge, as a mode of resonance between what is sensed or known and the sensibility or intellect. Yet what takes place between the two philosophers should not be treated as a rupture, as Guchet (2001) suggests; particularly in the Merleau-Ponty was taking a similar direction. The prethematic he sought through Husserl were not simply a new formulation of the transcendental; he underscores the prethematic as he looks into the question of our insertion in history and nature. This is why is reading of the concept of reduction, for example, leads to the new terminology of dehiscence, the initial opening of the embodied subject to its own insertion in being; and of the chiasm, the articulation of difference in perception and expression envisaged as contact surfaces. This vocabulary gives form to a concern with genesis and relation, that Simondon addresses with an entire edifice built around the notions of individuation broadly understood (as the acquisition of structure, form or regularity) and transduction (see item 2.1). These terms are examined more closely below; for now, what can be said is that in Merleau-Ponty's unfinished work, this movement results in the claim that *the visible*, under the form of the perceived, felt and thought (VI 112), invites one to explore its conditions that remain invisible, the excess of itself from which it is detached and beneath which it flows; this includes space and temporality; and it includes the subject. Any object supposes this excess, which in PP is treated from a strictly subjective, phenomenological angle, but in VI is amplified to incorporate Nature.

As we shall see, this is the starting point for Simondon: being itself *must* exceed unity if it is to individuate; grasping being (through perception, thought, affect, technicity etc.) means reaching out to a relation that envelops both subject and object taken as individual entities. But Simondon is not indifferent to the problems of apprehension or the situated character of knowledge; on the contrary, it is precisely because genesis is emphasized that knowledge is shown to be situated and indissociable from the technical, social or historical context; Simondon's call for "a theory of being anterior to all logic" (ILFI 17) is soon followed by a call to "pluralize logic" according to the several ways in which being can individuate. Only then can knowledge individuate, organized according to a certain logic and form, *thematized* as Merleau-Ponty would have it. In other words, as we shall see in the subsection on transduction, the genesis of knowledge is paired with that of being; it is not only a matter of access to being; it is also a certain kind of becoming.

For Beistegui (2005), the move between Merleau-Ponty and Simondon "takes us away from the 'ontology of the object,' characteristic of modern metaphysics, including aspects of Husserlian phenomenology, and classical physics (...), into an ontology of the flesh as the proper and originary mode of givenness of the world." (111) Beistegui claims that this movement reverberates the scientific developments of the 20th Century, where the focus shifts from a "world of things" to a "world as phenomena." He shows that a confrontation with contemporary science (geometry, physics,

biology, as examined in the *Course on Nature*) leads the way for the later Merleau-Ponty's passage into ontology, and that this scientific influence makes Merleau-Ponty's ontology genetic. In these fields, the scientific object's representational character is abandoned in favor of a conception where the ground is part of the object's determination, and genesis is inseparable from analysis.

In Beistegui's enumeration, this is the case of non-Euclidean geometry, quantum physics and embryogenesis. Beistegui (116) concludes that:

[w]hat emerges from Merleau-Ponty's analyses is the impossibility of grasping the essence of the organism on the basis of its organized state alone, the essence of metric or Euclidean space on the basis of its sole extension, the essence of the atom on the basis of a concept of indivisible substance. We could summarize this new problematic with the concept of emergence, or of genesis.

This conception of genesis shows how far Merleau-Ponty departs from the description of genetic phenomenology as reproduced in the preface to PP. Inverting the order Husserl had proposed, the genetic precedes the static, and ultimately does away with the static altogether. In Merleau-Ponty's words, it is the transformation of genetic phenomenology into phenomenology of genesis, which also implies a different understanding of givenness, to be explored in his own work. Moreover, it points towards a conception of both being and knowledge as prominently genetic. Simondon takes up this philosophical project and develops its full consequences: when criticizing the traditional principles of individuation, gathered under the general names of hylomorphism and atomism (in the widest possible sense, i.e. any conception of reality as built up from single, perfectly determined units), Simondon suggests a philosophy where ontogenesis has precedence over ontology, and "[t]he word ontogenesis takes on its full meaning if, instead of granting it the restricted and derived sense of the individual's genesis (...), it is made to designate the nature of being's becoming, that through which being becomes insofar as it is, qua being." (ILFI 4).

It is not by chance that an effort to draw inspiration from scientific developments leads to an emphasis on becoming through a genetic ontology or a fully ontogenetic project. Merleau-Ponty notes that it has become impossible to limit the analysis to the object in its own internal structure and relations, as "[b]odily givenness is no longer a function of an intentional, intuitive act (...). It is rather the 'subject' who is now intended and constituted within the world, in what amounts to a reciprocal and co-originary opening up" (Beistegui 2005 111). And, as Beistegui shows regarding Merleau-Ponty, Simondon himself is keen to point out that several advances of science in the 20th century are grounded on process and genesis. Hence his interest in cybernetics and information theory, which, as Guchet (2005) argues, supply him with the new concepts necessary for the renewal of traditional notions such as form and individual. One of these concepts requires a closer look: transduction.

2.1 Transduction

Both Merleau-Ponty and Simondon experience the need to create a new vocabulary to account for the preeminence of genesis and relation. As Barthélémy (2005 18) observes, overcoming the subject/object distinction is a central task in Simondon's thinking, in line with the concern with the non-objective foundation of knowledge (ILFI 15), which was to a great extent the guideline (*fil directeur*) of phenomenology, according to Barthélémy, as well as for Bachelard and Bergson, and to which Merleau-Ponty goes back repeatedly. Likewise, Simondon's interest in the relations between continuous and discontinuous stems from the phenomenological heritage, in tandem with his Bergsonian influence (Barthélémy 2005 40). To pin down a discontinuity in a continuous "domain of transductivity", in Simondon's parlance (ILFI 149), is the core of the analogical act of knowing,¹⁰ since the discrete must be taken as a node in the continuous, not an apprehension of a substantial reality; the emergence of sense, or "individuation of knowledge" (ILFI 17) is one such act, apprehended with a phenomenological attitude.

Nevertheless, Simondon's perspective "is not phenomenological, and consists in proposing *another* path to subvert the opposition between empirical and transcendental" (Barthélémy 2005 59). The main reason is that the genesis of the subject is not "in time", but itself "gives time" (*idem*), as time is a dimension of individuation itself. Thus through the notion of preindividual (see sec. 4), "the transcendental subject is not rendered 'temporal' by means of a time which is itself transcendental (*idem*)."¹¹ Barthélémy underscores how Simondon radicalizes the notion of genesis, no longer merely a genesis *of* an entity or object, but the core of being itself, as we have seen, to which the apprehension of an object should lead. Simondon writes that "time itself, in th[e] ontogenetic perspective, is considered as an expression of the *dimensionality of the being that is individuating* (ILFI 15)," meaning that genesis does not occur in time, but time can be said to exist for the observer because genesis is taking place.¹¹ The same goes for the living being and, by way of extension, the subject: the living being is "problematic," Simondon says, and this claim consists in considering "becoming as a dimension of the living being: the living being exists according to becoming, which operates a mediation (*idem* 9)." The mediation is what brings together the becoming of the individual and the becoming of its milieu (hence the term *problematic*), which together constitute the genesis of the relation, being as *complete* being.

This explains the metaphysical tinge in Simondon's text, that crosses the boundaries of phenomenology, and addresses the questions set up by Husserl that were pushing Merleau-Ponty beyond the phenomenological framework. For his philosophy to work as a bridge towards a fully ontogenetic thinking, Simondon needs to find what he calls a *procedure* of thought by which genesis and the processes of nature can express themselves directly. He finds it in transduction, defined as "a physical, biological, mental, or social operation through which an activity propagates incrementally

within a domain by basing this propagation on a structuration of the domain operated from one region to another (ILFI 13)," and as "correlative appearance of dimensions and structures of being in a state of preindividual tension," whose "extreme terms" are reached but do not "preexist the operation (14)." The initial mode of grasping the world and engendering thought is transductive: a manner of reflecting and reasoning that does not "have proof value," as it is first and foremost "a mental procedure, (...) the mind's way of discovering." It discovers by "following being in its genesis," by "accomplishing the genesis of thought at the same time as the genesis of the object is accomplished (*idem*)." If perception, affectivity, imagination, draw their energy from a state of preindividual nature neither stable nor unstable, but metastable (supersaturated, needing only a low-energy stimulus to alter its state), then it is how the subject produces individuations in the world, and it is a shift in the polarity of the system containing subject and world. Ultimately, what is meant is that thought transduces, it is shaped, while being transduces, takes shape; in sum, transductive thought is the thought of transductions and is itself transduction. Hence the completion of its definition as "a notion both metaphysical and logical, applicable to ontogenesis and itself ontogenesis (*idem*)."

Transduction involves the emergence of sense, which Simondon designates *information*. Not that the term "information" accounts for the notion of sense (which would make it a translation of *Sinngebung*); it refers to a *change* in being, namely the emergence of regularity or structure and its transductive propagation, akin to the discovery of sense for the living being in its relation to the world, and for thought. By focusing on thought, and correlative gestures such as technical or social activity, information is a matter of intuition and *invention*. Thinking is transductive when it invents, and then follows the individuations as they occur in a field of investigation, or "domain of transductivity (ILFI 33)." Thus creation in thought is a case of ontogenesis in nature: the domain is not given in advance, but established by observation and invention, discovering "dimensions according to which a problematic can be defined (*idem*)." But it cannot be invented from the pure will of the observer: it is a matter of resonances with the milieu, with the metastable and preindividual nature to which thought relates, similarly to how technical activity must resonate with its materials.

Nonetheless, Simondon resorts to intuition as a grounding for transductive thought. His notion of intuition inherits from Bergson and designates the singular germ of thinking and apperception, rather than the field of sensible intuition in the Kantian or even Husserlian sense. Besides this germ, correlative to the singular germ of individuation in general, for Simondon knowledge requires invention, no less than technical activity does. The mode of thinking that leads from a singular intuition to a structured discourse, scientific or otherwise, is transduction, which stands as necessary predecessor to any logic or formal knowledge. Simondon suggests that logic "superposes" the individuated being to "being as it is (ILFI 15)," in the sense that logic is concerned with the discourse on entities, even if it is transcendental and applies the *a priori/a posteriori* distinction. The "theory of

being previous to all logic" (*idem*), as we have seen, is necessarily a theory beyond entities, given that the idea of "being as it is" as distinct from "being as individuated" calls for the inclusion of the preindividual, which itself cannot be an object of (logical) discourse. Like Merleau-Ponty, Simondon struggles to think beyond the constituted and (transcendental) conditions of constitution; this means thinking beyond, or before, logic. Where Merleau-Ponty sought for the prethematic and the conditions of dehiscence, Simondon asks about invention and transduction.

A consequence of adding a "prelogical" conception of transductive thought is that the implicit hierarchy of organization between matter and life (we could add: mind) is dissolved; hence the call to pluralize logic, as the material and the vital become modes of organizing, or logics of individuation. This leads Simondon to one of his highly heterodox statements: "we would have to suppose that science will never be complete, since this science is a relation of beings that by definition have the same degree of organization: a material system and an organized living being attempting to think this system by means of science (*idem* 170)." Knowledge is ultimately the relation by which the (living) subject, and the collective in which it acts, resonates with the domain of reality that concentrates their attention, so that "the relation between thought and the real becomes a relation between two organized reals that can be analogically linked by their internal structure (*idem*)."

This remark shows how Simondon's epistemology of transduction retains a marked proximity with the later Merleau-Ponty's working notes. A phenomenological attitude remains in this conception of knowledge, as the act of knowing is singular, takes place at a contact surface where two processes of individuation are *articulated*. Rather than opposing the knower to the object, Simondon places the knower in the midst of a system of communication, which he names its central "dark zone (ILFI 10)." It is not phenomenology in the Husserlian sense; what is being performed is not a description of an experience. There is no problem of understanding how the "I" and the world come together, because the process where an "I" comes about is no different from any individuation. Rather the movement of knowing is an opening or alignment to flows and rhythms of nature, inasmuch as their differentials can be subjected to determination. It is *ontogenesis* as the mode of knowledge that should precede the "regional ontologies of the sciences" which "freeze the individuation of the entities" in order to "grasp their generic structures (Barthélémy 2005, 38)."

In this sense, Simondon takes over from Merleau-Ponty at a point where consciousness appears in a position that is no longer primary. Merleau-Ponty was already heading in this direction, which explains why both *denying* and *affirming* that Simondon kept close to phenomenology remain common, as we have seen. On the one hand, little in Simondon is reminiscent of the reduction, there is no call to return to "things themselves" or take a naive view on the life world. On the other, in stating that the knower must follow the operations of becoming, so that their distinct manners of genesis and transduction can present themselves, according to their continuities and discontinuities,

Simondon links epistemology to the *prelogical* and the *preindividual* (see sec. 4), i.e. the experience of the knower.¹² Moreover, the subject is conscious (it must be, if it is to *know*) because it exists (Barthélémy 48), meaning that it becomes, it is "problematic," a determined phase of being, communicating with another phase (its milieu) in the flows of preindividual nature. It is also embodied, since the regime of individuation where subjectivity comes about (named *transindividual*) occurs in a living being, as an unfolding of biological individuation. This is why "the *conditions of possibility* of knowledge are in fact the individuated being's *causes of existence* (ILFI 293)." In other words, knowledge is not the adequacy of an object to *a priori* conditions of sensibility in the knower, but the *genesis* of a relation *containing* a mental process (knowledge) and the processes in the milieu.

3. Relation and Relationality

The last citation of the previous section highlights a distinctive trait of Simondon's thinking: the *realism of relations*. While phenomenology attaches great importance to relation, from the noesis/noema to the chiasm, the term is used in its usual sense of a link *between* two poles, even if constitutive (sensible and sensed, subject and object etc.). Simondon however attributes a particular and stronger sense to the name *relation*, made to mean a state of being as system, unfolded into an entity and its milieu. "Relation" designates the "complete reality" as opposed to the partiality of the individual, which does not subsist independently of the milieu. Consequently, any connection (a possible translation for *rapport*, the term Simondon uses for bilateral links in a relation) pertains to a *triadic* system with the individual, the milieu and the overarching relation (ILFI 11). By raising the relation to the foreground, Simondon sets aside the possibility to make sense of a system either through consciousness or the structures that constitute the object. In thinking individuation, the individual should be envisaged as a springboard towards the "complete system" where individual and milieu subsist. If Merleau-Ponty introduces the chiasm to make sense of embodiment and flesh, conceiving of a point where the embodied subjectivity is in touch with the world, as the interactions of what one could designate as two systems, for Simondon what connects the system of the living being to its surroundings is the relation. The operation of individuation is the "active center" of the relation that constitutes the actual, the system taking shape as information flows. Dualities such as matter/energy, continuous/discontinuous, structure/operation, are extremities of the relation, once a reality is not grasped *via* individuation, but as static, i.e. substance; but "we can only apprehend reality through its manifestations, i.e., when it changes", so "rather than the real, what we perceive are dimensions of the real (ILFI 162);" the real can only be envisaged through its relations and these relations through the intuition of a process, which is then coupled with the process that thinks it.

In Merleau-Ponty, relationality becomes an issue while he is investigating the "thickness" of the *objective* and the *phenomenal* body, the body that feels itself and can conceive and question itself,

thus establishing an opening to the depths of the world where it is embedded. This distinction is important, as Simondon's realism of relations is a step beyond the reversibility between the sensing and the sensed, which for Merleau-Ponty "defines the flesh (VI 144):" sensing is already the act through which one composes the relation. Nevertheless, the question of thickness remains in Simondon, albeit with a different wording: the perceiving, imagining, psychically active living being is characterized by subjectivity, which consists in *problematizing itself* in the world (ILFI 9), i.e. considering its own presence and activity as part of a world. This means no other than what Merleau-Ponty intends by making itself *also* an object; in Simondon's words, psychic individuation is the individuation of an individuated being, or *individualization* (*idem* 296).

In the later Merleau-Ponty, the embodiment that allows for the chiasm is no longer a question of reception/perception, but participation (VI 250),¹³ understood as part of the relation itself. In a passage of VI that expresses many elements of the problem, he writes: "The body unites us directly with the things through its own ontogenesis, by welding to one another the two outlines of which it is made, its two laps: the sensible mass it is and the mass of the sensible wherein it is born by segregation and upon which, as seer, it remains open (VI 136)." Here relationality appears as firstly a question of surfaces (in Simondon, "membranes," ILFI 251 *et seq.*). On surfaces, two dimensions are in contact: inside and outside. Information crosses membranes, providing the meaning needed for sensing and knowing. It is also a matter of thickness, or dimensionality, of the body, communicating with the thickness of things. Merleau-Ponty states that things themselves (*choses mêmes*) are not "flat beings," but "beings in depth," "open only to whoever coexists with them in the world (VI 136)." These elements come together progressively in Merleau-Ponty, beginning with the concept of *corps propre*, the body as experienced, often translated as "proper body", itself a translation of Husserl's use of the German *Leib*. This leads the way to the duplicity of the body as visible and seeing, and the duplicity of the world as surface and depth. These poles are articulated, as *chiasm*, at the moment of *dehiscence*, the opening to a world. Such contact implies that what becomes visible does not precede the encounter, it is underdetermined. This understanding of relationality from the perspective of the body can be seen as a privileged case of Simondon's understanding of being in general, as also expressed in his understanding of subjectivity, as outlined above. Once again, Simondon amplifies problems that originate in phenomenology, and then turns back to incorporate them.

A feature of Simondon's realism of relations is that relationality carries along the problem of indeterminacy, non-actuality, that Bergson named "virtual." Merleau-Ponty also shows, with his emphasis on bodily experience in PP, that every phenomenological problem contains a question of virtuality. Conversely, the opening of *dehiscence* in Merleau-Ponty, like individuation in Simondon, inaugurates a two-part relation between subject and world, dependent on how the opening originally (singularly) took place. This is the domain Simondon addresses with the concept of *preindividual*.

4. Preindividual

With his emphasis on individuation, Simondon situates his most fundamental questions at the level of the "pre-theoretical, pre-thetic and preobjective," that according to Merleau-Ponty Husserl was striving to reach, particularly in *Ideas II* (PO 172), in such a way that the questions surrounding perception and knowledge are reexamined from the perspective of becoming in general. Subjacent to this strategy lies a critique of substance: Simondon rejects substantialism both in the hylomorphic and the atomistic determinations of individuated being: both traditions consider determined entities as the centerpiece of Being, leaving relation in the background. For Simondon, the system composed of individuated beings and the milieu they presuppose and in which they are embedded should be understood not as substance, but as the result and markers of a relational field. This field is neither entity nor milieu, but the system where individuals come to be: a productive system, "tense, supersaturated" and "above the level of unity (ILFI 4)," which he defines as being *metastable*.

Thinking within the tradition of authors where nature plays a distinct role, such as Spinoza and Schelling, one would be tempted to equate Simondon's pair individual/milieu with the concept of *natura naturata* and the preindividual with the *natura naturans*. Simondon himself never makes this link. But the shared principle of an overflow from the set of determined external objects can be attributed to his proximity with Merleau-Ponty, who was reflecting on the problem of "brute being," "savage principle" and "resistant nature" in the 50s. Merleau-Ponty's and Simondon's relations to the concept of nature are too vast to be dealt with in this article, but are tackled from different angles by Toadvine (2009), Wirth&Burke (2013), Lefebvre (2011), Vaccari (2010), Hui (2016). Nonetheless, one concept must be addressed if we are to provide an overview of the phenomenological influence on Simondon: the *preindividual*, a subtle notion that radicalizes the problem of the virtual.

Simondon claims that the individual is a relative reality, inseparable from the milieu, as we have seen. This individual/milieu relation presupposes a "preindividual reality," "prior to it (ILFI 3)." Here, the precedence is both logical and chronological. He adds that "the preindividual precedes the system of individual and milieu (*idem*)," individual and milieu being phases of this system.¹⁴ The preindividual is said "phaseless being," where ontogenesis "does not exhaust the potentials of preindividual reality (4)," so that the goal of taking the preindividual reality and ontogenesis as the starting point of reflection is to highlight "being's character as becoming, whereby being becomes as it is, as being (*idem*)." By phases, Simondon means a certain shape a system may acquire, as in the physical states from which he borrows the term (solid, gaseous etc.); in his philosophy, the phase plays a role similar to that of modes in Spinozism: affections not of the substance, one might say, but of the system, with its potentials and tensions, i.e. its *metastability*. What then is the *phaseless*? It is not only the state of being that precedes individuation, but the system *regardless* of its phases, being

as a system that individuates and de-individuates, and individuates differently at each time. This is why he can speak of the preindividual as being's character *as becoming*, where its character as structure, or form, is a particular case. Being as a thing is a particular case of being as *not* thing, both physically and epistemologically, as we have seen.

Once again, Simondon's metaphysical concept addresses concerns that are present in Merleau-Ponty. Many of the latter's notes on the concept of *flesh* revolve around the indeterminacy that sustains Simondon's preindividual. He writes (VI 147):

What we are calling flesh (...) has no name in any philosophy. As the formative medium of the object and the subject, it is not the atom of being, the hard in itself that resides in a unique place and moment: one can indeed say of my body that it is not *elsewhere*, but one cannot say that it is *here* or *now* in the sense that objects are; and yet my vision does not soar over them, it is not the being that is wholly knowing, for it has its own inertia, its ties. We must not think the flesh starting from substances, from body and spirit—for then it would be the union of contradictories—but we must think it, as we said, as an element, as the concrete emblem of a general manner of being.

Which adds to the passage where Merleau-Ponty invites us to think in terms of the Greek *element*, as Garelli and Landes point out (VI 139-140):

The flesh is not matter, is not mind, is not substance. To designate it, we should need the old term "element," in the sense it was used to speak of water, air, earth, and fire, that is, in the sense of a *general thing*, midway between the spatio-temporal individual and the idea, a sort of incarnate principle that brings a style of being wherever there is a fragment of being. The flesh is in this sense an "element" of Being. Not a fact or a sum of facts, and yet adherent to location and to the now. Much more: the inauguration of the where and the when, the possibility and exigency for the fact; in a word: facticity, what makes the fact be a fact. And, at the same time, what makes the facts have meaning, makes the fragmentary facts dispose themselves about "something."

The effort to introduce a concept unnamed "in any philosophy" unites Merleau-Ponty and Simondon. Much of the difficulty lies in having to define a name for a reality conceptualized from the outset as neither objective nor subjective, which amounts to being not determined. In this sense, to define the concept of this reality would consist in smuggling determination into the undetermined. Merleau-Ponty's solution relies on the plasticity and life of the flesh. When speaking of flesh with respect to "things", he also names it "possibility" and "latency (VI 133)," expressing their fluidity in the same way as Simondon applies his concept of *associated milieu*, which is not an environment as fixed, predating the individual, but the correlative to the individual in the process of individuation. The flesh, Merleau-Ponty writes, is a "fabric that doubles [things], supports them, nourishes them and that is not a thing (*idem*)." The flesh is also an "ephemeral modulation of the world (*idem*)," that Merleau-Ponty relates to difference and variation.

Beyond the relation to things, the flesh is "formative medium", where the genesis of subject and object takes place, and it is not substantial. What does it mean to be non-substantial? By resorting to the notion of "element", rejecting both materialism and idealism as grounds for the flesh, Merleau-

Ponty provides an indication of what he intends. The Presocratic philosophies where elements were the foundation of thought sought to devise the *arche*, the moving principle for the entire cosmos (Naddaf 1992); they were also philosophies of the *physis* (Hadot 2006), which translates as nature in the sense of genesis, becoming and transformation. The touch between the body, living flesh, and the flesh of the world, brings forth the facticity of being situated, in the sense of finding a here and now within the non-substantiality of the flesh. Yet Merleau-Ponty also suggests that it is not only a matter of *finding* a where and a when, but *inaugurating* them. The solidity of a situation and a temporality is established in the act of communicating, which is linked to the flesh, or, as in the wording of this passage, the act that "brings a style of being wherever there is a fragment of being."

Simondon's preindividual has a similar function and is also inscribed in the tradition of thinking nature (*physis*) as what precedes and envelops determination, objectivity or individuality. One of the most often mentioned references for Simondon's preindividual is the Presocratic *apeiron* (Duhem 2012), that Aristotle discusses as a universal, *the unbounded*. Recent scholarship (Kočandrle&Coupric 2017, Graham 2006) tends to deny the *apeiron* this idealistic tinge, referring it to *physis*, thus forming a definition of "boundless nature" (*apeiros physis*). Simondon also refers to the preindividual as "preindividual nature" and, as we have seen, equates the preindividual with the *phaseless reality* that precedes and underlies any determined system.¹⁵ Ultimately, for Simondon, being is preindividual, "phaseless reality". All becoming consists in a *dephasement* by which the structure of individuality emerges correlative to its associated milieu. This does not exhaust the preindividual, otherwise it would eliminate nature; hence the claim that Being is said in two senses: *as it is* and *as it is individuated* (ILFI 17): individuated being, objective or subjective, is in Simondon's parlance a dephasement, a transductive dimension of being. To grasp an individual entity is to access a field, i.e. a relation, by means of another relation, which is how he envisages perception, cognition, and knowledge. Embodiment is a dephasement, as are perception, affect, emotion, action, thought. Once again, between the preindividual and Merleau-Ponty's invitation to think the *flesh* through the *element* what takes place is, first, an amplification – Simondon presents the question as metaphysical, rather than phenomenological; and then a return over subjectivity: he shows that the experience whereby one obtains access to being and becoming is also individuation.

Simondon's preindividual is conceived for thinking with a wider scope the unboundedness that Merleau-Ponty faced when thinking in terms of nature, and for which he invoked the flesh. This problem arises when Merleau-Ponty expands his reflection beyond the Ego and its embodiment. Commenting on how Merleau-Ponty, in CN, arrives at the necessity to think correlatively genesis and structure (that Simondon names *allagmatic*), Beistegui states: "[w]e need to ask whether, to be realized as ontology, philosophy must not go beyond the phenomenological standpoint. This is the point at which Simondon's thought (...) turns out to be decisive" (117). If indeed Simondon is decisive,

the reason is the radical manner in which he dislodges all forms of individuated entities or notions from the central position they occupy in the philosophical tradition. This includes the Ego in phenomenology. It is a matter of doing away with substantiality, by means of the preindividual and a set of processual concepts. He thus names the formless of what precedes any concept or notion, but is neither absolute nor transcendental; the preindividual expresses the ontogenetic character of this philosophy. Once the metaphysical role of the preindividual is established, Simondon can proceed to decentering such problems as the conception of the transcendental and the opening to being, thus returning over the questions set forth by Merleau-Ponty: the dual position of perceptive and perceived, the initial opening to an indeterminate depth of being, the situated character of knowledge and, in sum, the call to a thinking centered on coming to be. Only this is done from a different angle, more radically anti-substantial.

Concluding remarks

The previous sections sought to show how several pillars of Simondon's philosophy of individuation are built upon a dialogue with problems inherited from Merleau-Ponty's interpretation of Husserl's phenomenology. As we have seen, Simondon's transductive theory of knowledge centers on the problem of constitution in a way that is not phenomenological, as the problem is not framed in terms of the transcendental consciousness or embodiment; there is no suspension of a natural attitude, no *epoché*, no reduction. Nonetheless, his concern for relations as the source and basic structure of determined being stems from the field of problems Husserl had introduced with intentionality, and that Merleau-Ponty had developed.

Simondon's use of intuition, his epistemology and metaphysics of transduction and his defense of analogy, as we have seen, take root on these same problems. Echoes of phenomenology appear in Simondon's epistemology when he defines knowing as a relation (*relation*), as opposed to a link (*rapport*), according to his distinction between these terms. But if indeed a *relation* can be said a "*rapport* among three terms" (ILFI 57), then knowing corresponds to the dephasing of the preindividual into knower and known, which ultimately consists in what the knowing subject can grasp from reality (as "complete") by engaging with a known object, i.e. an object determined in such a way as to be known. Ultimately, Simondon will proclaim that the act of knowing is an individuation; knowledge itself is individuation, one that brings about subject and object in a particular way – as opposed to the individuation of perception and affect, or individuation in collective life.

The topics addressed in this article do not exhaust the influence and dialogue between Merleau-Ponty and Simondon. The problem of nature and the preindividual, for instance, requires a more detailed look. Merleau-Ponty's growing attention to the philosophy of nature in his later years – Nature would be one of the chapter titles of the completed VI – not only contains a criticism of the

Cartesian inheritance that severs human knowledge from nature, which Husserl had already criticized, but also expresses an interest in the work of Schelling, particularly the *Naturphilosophie* of his youth (Wirth&Burke 2013). If Simondon's proposal to think by means of the preindividual amounts to a philosophy of nature, and if it stems from a dialogue with Merleau-Ponty, then one is justified to consider that through Merleau-Ponty, Simondon maintains a mediated dialogue with Schelling and German idealism.

Another field where the link between Merleau-Ponty and Simondon deserves a deeper attention is that of intersubjectivity and the transindividual. Although most studies where these two authors are confronted deal with issues relating to perception, affectivity and technics, they often concentrate on what differentiates these two philosophies, rather than the common problems they try to solve. Yet the concept of transindividual provides an addition to the problems of intersubjectivity that can enrich discussions in the field of phenomenology. It has been a major influence for, among others, Stiegler (1996), who applies it in dialogue with the Husserlian retentions. Such further investigations will be a significant contribution to the understanding of Simondon and his place in the philosophy practiced in France in the 20th century.

References

- Alloa, E. (2008). *La Résistance du Sensible. Merleau-Ponty Critique de la Transparence*. Paris: Kimé.
- Bardin, A. (2009). "Simondon: transcendantal et individuation." In: G. Rametta (éd), *Les métamorphoses du transcendantal. Parcours multiples de Kant à Deleuze*. Hildesheim: Georg Olms. pp. 189-215.
- Bardin, A. (2015). *Epistemology and Political Philosophy in Gilbert Simondon: Individuation, Technics, Social Systems*. Dordrecht: Springer. DOI: 10.1007/978-94-017-9831-0
- Barthélémy, J.-H. (2005) *Penser l'Individuation. Simondon et la philosophie de la nature*. Paris: L'Harmattan.
- Deleuze, G. (1969) *Logique du Sens*. Paris: Minuit.
- Dereclenne, E. (2014) "De Merleau-Ponty à Simondon: la valeur épistémologique de la notion de norme". In: *Cahiers Simondon*, 6, pp. 131-144.
- Dereclenne, E. (2015) "Penser l'essence de la vie : le matérialisme comme question et comme préalable chez Simondon". *Appareil* [Online], 16, Online since 09 February 2016, connection on 07 December 2021. URL: <http://journals.openedition.org/appareil/2214>; DOI: 10.4000/appareil.2214
- Dereclenne, E. (2019). Simondon and enaction: the articulation of life, subjectivity, and technics. *Adaptive Behavior*. V. 29, N. 5, pp. 449-458. DOI: [10.1177/1059712319861915](https://doi.org/10.1177/1059712319861915)
- Dillon, M. C. (1997) *Merleau Ponty's Ontology*. Evanston: Northwestern University Press.
- Duhem, L. (2012) "*Apeiron et physis*. Simondon transducteur des présocratiques". In: *Cahiers Simondon*, N. 4. Paris, L'Harmattan.
- Fink, E. (1995) *Sixth Cartesian Meditation: The Idea of a Transcendental Theory of Method; with Textual Notations by Edmund Husserl*. Bloomington and Indianapolis: Indiana University Press.
- Graham, D.W. (2006) *Explaining the Cosmos. The Ionian Tradition of Scientific Philosophy*. Princeton and Oxford: Princeton University Press. DOI: <https://doi.org/10.1515/9781400827459>
- Guchet, X. (2001) "Théorie du lien social, technologie et philosophie: Simondon lecteur de Merleau-Ponty". In: *Les Études philosophiques*, N. 57, pp. 219-237. DOI: <https://doi.org/10.3917/leph.012.0219>
- Guchet, X. (2005) "Simondon, la cybernétique et les sciences humaines. Genèse de l'ontologie simondonienne dans deux manuscrits sur la cybernétique". In: *Merleau-Ponty, Vie et Individuation*. Chiasmi N. 7, Paris: Vrin, pp. 187-204. DOI: <https://doi.org/10.5840/chiasmi2005731>

- Hadot, P. (2006) *The Veil of Isis: An Essay on the History of the Idea of Nature*. Cambridge: Harvard University Press.
- Heredia, J. M. (2019) "Simondon y el problema de la analogía". In: *Ideas y Valores*, V. 68, N. 171, pp. 209-230. <http://doi.org/10.15446/ideasyvalores.v68n171.65307>
- Heredia, J. M. (2021) "La Vindicación de Uexküll en Merleau-Ponty, Simondon y Deleuze". In: *Revista Colombiana de Filosofía de la Ciencia*^[1]_[SEP] V. 21 n. 43 (2021): 295-332. DOI: 10.18270/rcfc.v43i21.3793
- Hui, Y. (2016) "The Parallax of Individuation". In: *Angelaki*, V. 21, N. 4, pp. 77-89. DOI: [10.1080/0969725X.2016.1229427](https://doi.org/10.1080/0969725X.2016.1229427)
- Husserl, E. (2001) *Analyses Concerning Passive and Active Synthesis: Lectures on Transcendental Logic*. Dordrecht: Kluwer.
- Husserl, E. (1970) *The Crisis of European Sciences and Transcendental Phenomenology*. Evanston: Northwestern University Press.
- Kee, H. (2019) "Phenomenological reduction in Merleau-Ponty's *The Structure of Behavior*: An alternative approach to the naturalization of phenomenology". In: *European Journal of Philosophy*, pp. 1-18. DOI:10.1111/ejop.12452
- Kocandrl, R. & Couprie, D.L. (2017) *Apeiron*^[1]_[SEP] *Anaximander on Generation and Destruction*. Dordrecht: Springer. DOI: 10.1007/978-3-319-49754-9
- Landes, D. (2013) *Merleau-Ponty and the paradoxes of expression*. London: Bloomsbury. DOI: [10.5040/9781472548061](https://doi.org/10.5040/9781472548061)
- Lefebvre, A. (2011) "The Individuation of Nature in Gilbert Simondon's Philosophy and the Problematic Nature of the Technological Object". In: *Techné: Research in Philosophy and Technology*, 15(1), pp. 1-15. <https://doi.org/10.5840/techne20111511>
- Madison, G. B. (1981) *The Phenomenology of Merleau-Ponty*. Athens: Ohio University Press.
- Marin, A. & Pietsch-Lima, A. (2009) "Individuação, percepção, ambiente: Merleau-Ponty e Gilbert Simondon". In: *Educação em Revista*, V. 25, N. 3, pp. 265-281. <https://doi.org/10.1590/S0102-46982009000300013>
- Merleau-Ponty, M. (1942) *La Structure du Comportement*. (SC) Paris: PUF.
- Merleau-Ponty, M. (1945) *Phénoménologie de la Perception*. (PP) Paris: Tel Gallimard. English translation by Donald A. Landes. (2012) *Phenomenology of Perception*. New York: Routledge.
- Merleau-Ponty, M. (2005) *Notes de travail*. In: *Chiasmi international* N.7. Paris: Vrin, p. 40.
- Merleau-Ponty, M. (2003) *Nature. Course Notes from the Collège de France*. Evanston: Northwestern University Press.
- Merleau-Ponty, M. (1960) "Le Philosophe et son Ombre" (PO). In: *Signes*. Paris: Gallimard. English translation by Richard C. McCleary. (1964) *Signs*. Evanston: Northwestern.
- Merleau-Ponty, M. (1964) *Le Visible et l'Invisible*. (VI) Paris: Gallimard. English translation by Alphonso Lingis. (1968) *The Visible and the Invisible. Followed by Working Notes*. Evanston: Northwestern.
- Naddaf, G. (1992) *The Greek Concept of Nature*. Albany: Suny Press.
- Ramos, S. (2019) "Merleau-Ponty e Simondon: sobre o animal e o humano". In: *DoisPontos*. V. 16, N. 3, pp. 137-146. DOI: <http://dx.doi.org/10.5380/dp.v16i2.70273>
- Schelling, F.W.J. (1988) *Ideas for a Philosophy of Nature*. Cambridge: Cambridge University Press.
- Schelling, F.W.J. (2004) *First Outline of a System of the Philosophy of Nature*. Albany: SUNY Press.
- Simondon, G. (2005) *L'Individuation à la Lumière des Notions de Forme et d'Information*. (ILFI) Grenoble: Millon. Translated by Taylor Adkins. (2020) *Individuation in Light of Notions of Form and Information*. Minneapolis: University of Minnesota Press.
- Steinbock, A. J. (1995) *Home and Beyond: Generative Phenomenology after Husserl*. Evanston: Northwestern University Press.
- Stiegler, B. (1996) *La technique et le temps, 2: La Désorientation*. Paris: Galilée.
- Taminiaux, J. (1972) "Phenomenology in Merleau-Ponty's Late Work". In: *Life-World and Consciousness, Essays for Aron Gurwitsch*. Evanston: Northwestern University Press.
- Toadvine, T. (2009) *Merleau-Ponty's Philosophy of Nature*. Evanston: Northwestern University Press.

- Tourneux, O. (2016) "Lectures contemporaines du principe présocratique d'*apeiron*: Simondon, Castoriadis". In: *Philonsorbonne*, N. 10.
- Vaccari, A. (2010) "Vida, técnica y naturaleza en el pensamiento de Gilbert Simondon". In: *Revista CTS*, V. 5, N. 14, pp. 153-65.
- Vargas Guillén, G. (2014) *Individuación y anarquía. Metafísica y fenomenología de la individuación*. Bogotá, Aula de Humanidades.
- Viana, D. (2019) "A Afeto-emotividade em Simondon e o conceito de desejo". In: *Kriterion*, 60(144), 537-561. DOI: <https://dx.doi.org/10.1590/0100-512X2019n14403dv>
- Wirth, J. & Burke, P. (orgs.) (2013) *The Barbarian Principle. Merleau-Ponty, Schelling and the Question of Nature*. Albany: SUNY Press.
- Zahavi, D. (2002) "Merleau-Ponty on Husserl: A Reappraisal". In: Toadvine T., Embree L. (eds) *Merleau-Ponty's Reading of Husserl*. Dordrecht: Springer. DOI: https://doi.org/10.1007/978-94-015-9944-3_1

¹ Merleau-Ponty's dialogue with Husserl began when attending the conferences that became the *Cartesian Meditations* (1929). His access to the manuscripts would ultimately be instrumental when writing PP (1945). In the preface to this book, Merleau-Ponty already discusses the legacy of phenomenology beyond its most well-known traits. For instance, he identifies the tendency, present in Husserl and developed in Heidegger, to progressively expand from the possibilities afforded by intentionality and consciousness, its transcendental bedrock, towards a greater concern with lived experience (hence the *Lebenswelt*). He also identifies a progressive intensification of the dialogue with quantum physics and biology.

² Published in *Signes* (1960/1964).

³ Simondon engages briefly with other readers of Husserl. Though transformed by his concept of transindividual, the discussion surrounding anguish (ILFI 282-285) is a polemic with Heidegger and Sartre.

⁴ Taminiaux (1972, 307) reports that it was common in the 1960s to consider that Merleau-Ponty had reneged on Husserl, so much so that Gérard Granel writes of his "ritual murder" of the father. For Zahavi (2002), the reason is that most of Husserl's manuscripts were unpublished. Later, the publication of the *Husserliana* progressively revealed that Husserl did think through some of the themes Merleau-Ponty took to belong to his unthought.

⁵ Though language is not part of this investigation, it is worth noticing that in 1960 Paul Ricoeur criticized Simondon precisely for downplaying language – it was the age of structuralism and the "linguistic turn" in general. Simondon's response resonates with Merleau-Ponty: language does not constitute a domain in itself and it is illusory to determine language as an abstraction; one can only refer to the gesture of expressing oneself. The conversation took place at the *Société Française de Philosophie* and the transcription is available at: https://s3.archive-host.com/membres/up/784571560/GrandesConfPhiloSciences/philosc25_simondon_1960.pdf

⁶ In the later typology, the outreach of Merleau-Ponty's discussion of genesis is closer to the concerns of generative phenomenology, which seek to incorporate historicity, culture and normativity. See Steinbock (1995).

⁷ See Kee (2019).

⁸ The concept of Nature at play in these reflections bears little resemblance with the modern, Cartesian sense of the term, as the realm of exteriority and necessity that humanity could ultimately master. It is rather the Greek sense (Naddaf 1992; Hadot 2006), retaken by Schelling (1988, 2004), that expresses a productive power. Cf. Toadvine (2009).

⁹ As presented in the last chapter of *The Structure of Behavior* (SC 139).

¹⁰ Simondon considers that the proper method for thinking in a transductive philosophy is analogy, not in terms of the similitude of objects or parts, but of fields where processes occur according to the same processual logic, differentiating as an effect of their singularities. Cf. (Heredia 2019).

¹¹ Merleau-Ponty evokes this possibility in a note of VI (113): "[t]he visible present is not *in* time and space, nor, of course, *outside* of them: there is nothing before it, after it, about it, that could compete with its visibility. And yet it is not alone, it is not everything. (...) [T]ime and space extend beyond the visible present, and at the same time they are *behind* it, in depth, in hiding. The visible can thus fill me and occupy me only because I who see it do not see it from the depths of nothingness, but from the midst; I the seer am also visible."

¹² The theme of continuity and discontinuity is central to the first chapter of ILFI; transduction, analogy and information are called upon to account for the presence of the discontinuous in the continuous, and the dependence of the former on the latter, without rendering either of them substantial.

¹³ Simondon also resorts to the term "participation" in this sense. Cf. ILFI 8.

¹⁴ The term "phase" in Simondon is borrowed from thermodynamics, meaning the states of matter; it is also employed in the physics of wave functions to designate the cycles of oscillation; these senses coincide inasmuch as states of matter have wave functions. Cf. Papon *et al* (2010).

¹⁵ Cf. ILFI 8, 160, 164, 170, 178, 179, 182, 240, 243, 279, 282-283, 299-300, 343-350, 352-354, 357, 359.