

Nanomutations, *hypomnemata* and grammatisation

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Now a few years into this 21st century, which will be the century of nanotechnologies and which will see unheard of relations between technics, science and desire, the crucial question of what links and distinguishes power, knowledge and the will, i.e., the question of what can, at times, set these infinitives into oppositions, composing them at the same time, by posing them together, this question which, more profoundly and par excellence is the problem of thought and its ass's skin – as though it diagrammed the mechanism of that stupidity Deleuze called “transcendental” --, this question is a problem for us, so much so as to appear to have become unthinkable, the test and ordeal of powerlessness itself.

The great transformation of these terms, inasmuch as they are constituted only through the relation they form, begins with the advent of machines as a stage in the process of grammatisation. I call “grammatisation” the process whereby the flux and flow networking our existences become discreet elements: writing is thus, as the breaking into discreet elements of the flux of speech (let us invent the word “discretisation” for this possibility), a stage in grammatisation. Now, the process of grammatisation, with the dawn of the industrial revolution, suddenly surpasses the sphere of language – one wants to say that the same thing happened to the sphere of logos – and invades the sphere of the body: first and foremost, the gestures of workers, which are discredited, devalued in view of their automatic reproduction – while at the same time the machines and apparatuses of reproducibilities of the visible and the audible appear on the scene.

This grammatisation of gesture, which is the key to what Marx describes as the process of proletarianisation, i.e., as the loss of knowledge and of know-how, and which continues, with cognitive technologies, as the grammatisation of all kinds of knowledge in general, including linguistic knowledge now transformed into technologies and industries of language, but also the knowledge inherent in what can remain in French as “savoir-vivre,” i.e., behavior in general, from user profiling to the grammatisation of affects, leading to what is known today as cognitive capitalism, which is also cultural capitalism, which I have analysed elsewhere as a hyperindustrial cognitive capitalism, where new forms of transductive relations between processes of psychic, social, technical and scientific individuation are seen to appear. In this evolution, capitalism, characterised firstly as power gained over bodies, and to this extent as disciplinary society, rapidly becomes a dispositif in the control of consciousness and, ultimately, of the unconscious of individuals, i.e., of that which assures the composition of consciousness and the body. Capitalism thus mutates from disciplinary societies to control societies.

Be that as it may, the unconscious is uncontrollable. Thus I was able to proclaim, recently, that the new formula which connects and disconnects power, knowledge and will while grammatising them at the same time is what leads to uncontrollable societies, by producing essentially a powerlessness of the rational.

A thinking of nanomutations, insofar as they designate a process leading to the convergence of technologies of matter, information and living entities, and as a potential of grammatisation, is what brings to the fore technics and technology as 1) structural factors of historical, proto-historical and prehistorical mutations in general (inasmuch as they form systems which are also processes of technical individuation interacting with the processes of psychic and collective individuation, and periodically upsetting them, and 2) as the basis of largely outstanding and “nanomutant” problems posed by what we call, without actually

knowing very well what is meant by the term, the nanotechnologies – and this “not very well” is one of the questions overdetermining them all.

The thought of such a becoming, and of what seems unthinkable therein, both as the powerlessness and the problem of thought, requires a reading of Simondon, not only because the Simondonian critique of hylemorphism and substantialism provides the indispensable categories for the characterisation of nano-physical-chemical problems, but also because only Simondon can spark a thinking of the psychic, collective, technical and scientific process of individuation as forming a transductive relation wherein the affect, that is, desire, as psychic individuation socialising itself always already into will, trans-forms itself into knowledge, that is, into power, that is, into both science and technics. The relation ‘power/knowledge/will’ thus appears as having to be thought as a relation between psychic, collective, technical and scientific processes.

Although it is henceforth common knowledge that Simondon, a top-notch French philosopher (but little known and rarely studied in France, let alone elsewhere) deeply and directly influenced Gilles Deleuze (and through him Michel Foucault), most French thought of the second half of the 20th century has generally ignored his stature: in particular J. Lacan, L. Althusser, J. Derrida and J.F. Lyotard. The incredible questions brought up by the nanotechnologies and the problem they throw back into the arena of the relation between power, knowledge and will, i.e., as we shall see below, between desire and technics, could spur a new reading of the questions handled by these thinkers from a Simondonian vantage and in the shadow of his limitations.

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Power is at once knowledge, i.e. acquired and accumulated experience, and potential – in the Aristotelian sense, and in accordance with the idea that technics empowers mankind, i.e., bestows knowledge, and consequently power to trans-form nature. The fact that power and knowledge, despite everything, since the Platonic watershed, tending to set them up as an opposition, are able to unite in what Dominique Janicaud called the “power/potential of the rational,” designating thereby the age in which technics becomes industrial technology in a reconciliation with science. This is what concretises the coalescence of knowledge and power which, since Plato, philosophy has always opposed as technical empeiria and theoretical epistémè.

This new assemblage – the power/potential of the rational – is what Habermas called “technoscience” defining it as that which, as the power of calculation constituting itself as “rationality en relation to en end” trans-forms no longer only nature, but culture as well, i.e., society, in a systematic and planified way (in this sense, then “rational”), as “ideology.” Now, in our age, the society engendered by this “power/potential of the rational,” namely, cultural and hyperindustrial and now financierised capitalism, is what has engendered a profound powerlessness of the rational – a deep irrationality.¹ Thus a new century begins – and inception that can be rather precisely dated: 9. 11. 2001.

If power is first of all technics, it is technics also and originarily as knowledge. That is why Heidegger, referring to Homer, insists of the fact that knowledge is first and foremost know-how, and that the episteme designated back then technical knowledge, knowledge as “knowing the strings” or being knowledgeable. “Back then,” i.e., prior to what will nevertheless historically accomplish the separation between knowledge in the sense of episteme, and technics, and as the effect of the advent of that hypomnesic technique which is writing, and which is, precisely, a technique of power just as much as of knowledge. I upheld this position in Disorientation: when writing turns logos into power, into logography as Plato says, philosophy constitutes itself in opposing itself, as knowledge, to the sophistic power of

¹ This theme is developed at length in Misbelief and discredit. The uncontrollable societies of disused individuals.

logos having become tekhne in the service of the control of opinion (of willing) by pithanon and rhetoric – as we can learn from the Gorgias. Now, Derrida, the reader of Phaedrus, will show that knowledge is itself and always already difference, i.e., an economy of the trace, i.e., a tekhne: a logic of the supplement, and to that extent a hypomnesis.

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The role of hypomnesis and the hypomnemata in the constitution of forms of knowledge as well as power is what Simondon's philosophy allows us to think and what that philosophy fails to think through.

By forming a general theory of what he calls the processes of individuation, Simondon attempts to elude what he identifies as the two characteristic pillars of all metaphysics issuing from Plato and Aristotle: substantialism and hylemorphism. The hylemorphic schema and substantialism

Presuppose the existence of a principle of individuation prior to individuation itself.

These two poles assume an already-constituted individual to account for individuation. Now, the point is to maintain oneself in neither unity nor duality but in the process, to

Know the individual through individuation rather than individuation on the basis of the individual.

The individual reflects the process, which encompasses and surpasses the former, cutting across its space and tensing it: the individual is not the origin of the process, but a moment as phase in a "individual-milieu couple" which itself presupposes a "pre-individual reality" whose "potentials are not exhausted in one stroke" by individuation. In short, this complex relation is a tension. Individuation is the play of a difference of forces. The individual is what maintains itself in the tension of the inaccomplishment in command of all individuation and, as regards the case of the psycho-social individual, by the deferral of its end (of its death – Heidegger --, and its pleasure – Freud), which is the effectivity of a primordial difference – Derrida.

This is the play of a difference in potential between the phases of being coming through the individual and commanding it to individuate itself, i.e., ordering it to produce a difference, retaining it in the process of its individuation

Considered as the only onto-genetic one, insofar as it is the operation of a complete being

in a system

containing something of an incompatibility with respect to itself.

There is then at the heart of the individual an irreducible inadequation which produces the process of individuation, the play of pre-individual forces in the individual, which become concretised as tendencies. It is then necessary to conceive of becoming as the dimension of a being in a dephased state. Temporality is this dephased state – qua spacing, i.e., the syncrystallisation of structures. This very well is a phaseless being, but, as pre-individual, it remains inaccessible: it is only the potential of which individuation is an act always already dephasing itself into potential, deferring itself and thereby differentiating itself (individuating itself). The pre-individual is for the individual always already there. This already, as the

potential of an inadequation instantiated by the individual, constitutes itself from out of an over-saturation of being: being conserves itself through becoming. This conservation constitutes the physical, biological or psycho-social already. The transmission that becoming is, then, the transductive operation that re-inscribes the conserved into the flux of individuation.

Transductivity means the propagation of an operation between two terms constituted as terms by the operation itself.

Transduction corresponds to that existence of relations coming into existence when a pre-individual being individuates itself.

Thus, the components of an internal combustion engine are the terms of a transductive operation of functional over-determination that Simondon names concretisation. In the case of psycho-social individuation, the pre-individual individuates itself at once socially and psychically. Thus the psychological no more precedes the sociological that the other way around: they are poles in a relation that constitutes them in the tension of a pre-individual already-there they share. The pre-individual already is the bearer of tensions that transductively transform themselves into structures. This transformation is a quantic leap embedded in an indetermination that Simondon here intends in a Heideggerian sense: the relations of uncertainty call into crisis all separation into bipolarity. The separation is a result which diminishes the phenomenon.

In order to think individuation, you must consider being not as substance, or matter, or form, but as a tensed system, over-saturated, above the level of unity, consisting not only in itself, and unable to be thought in terms of the principle of the excluded middle term; the concrete being, or complete being, i.e., the pre-individual being, is a being that is more than a unity.

The individual thus defined as a moment in a process appears as a metastable equilibrium. Metastability accounts for psychosocial individuation as the deferral of an individual identity never fully constituted.

Now, never completely constituted psychosocial individuation confronts the identity of technical objects of all artefacts in general already constituted. But this “advance” of technics – objective identities over psychosocial identity is not studied by Simondon, whereas it is explicitly through his analyses of industrial technical objects as a new age of individuation that he is able to detail the political and historical scope of his philosophical project.

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On the mode of existence of technical objects indeed proposes the invention of a new relationship of culture to technics in a context wherein machinism, i.e., the industrial process of concretisation as the realisation of technical becoming, results, for the proletarian, in his losing his individuation: in the 19th century, the former technical individual, the tool bearer, was the worker, but then he becomes the servant of the machine, the new technical individual. This state of affairs is a particular case of what emerged then and more generally since then as the entropic dimension of mechanical technology. This brings on a conflict between culture, which is the negentropic reality of psychic and collective individuation, and technics, which is however the condition of this individuation.

Simondon affirms that he has a solution to this state of affairs, to this blocage in psychic and collective individuation, to this “alienation”: that of a theorisation of technical becoming – what he calls mechanology – and whose final axiom is that

If man (or culture) can be alienated by technics, this is cause not by the machine but by a misunderstanding of its nature and essence.

Mechanology has confidence in the knowledge it has commissioned itself to constitute in a clearly political vantage, even though, elsewhere, Simondon says that individuation can never be known (and we shall see in our conclusion that it is precisely because individuation cannot be known that its knowledge can only be political). Mechanology is a theory of power, even when it theorises an individuation that cannot be totally known, since individuation in general and as such can never be known.

This power is thus also a default of power [impouvoir]. But this default of power is then, precisely what Simondon never theorises. Now, I believe that this profound and serious theoretical default is due to the fact that Simondon is unclear on the subject of the process of technical individuation:

- 1) He refers throughout On the mode of existence to technical objects, whereas he has established, in The Individual and its psychico-biological genesis, that the individual is only a phase of being relative to the operation of individuation from out of which it comes into existence: there is no individual without a process of individuation.
- 2) While he does develop a theory of psychic individuation as always already also a collective individuation, he never broaches the role of technical individuation – when there is one – and more precisely, in what binds the psychic and the collective.

I will now turn in this paper to this theoretical hesitation concerning the link in which technical individuation consists, but also as to its delinking potential and thus, to disindividuation as entropic potential. I will examine as constitutive of the kernel of the question of the relations holding between power, knowledge and technics, the consequences of these ambiguities in regard to religion and psychoanalysis in Simondon, inasmuch as they make a political mechanology impossible.

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Simondon's discourse on religion profoundly recasts the question by placing it in essential rapport with technics. And yet it is surprisingly disappointing. It ends up showing that technics is the result of a decomposition of a pre-technical magical unity, which means that technics is but a moment in psychic and collective individuation, and that it plays no part in the constitution of pre-individual milieu, whereas Simondon underscores its role as stabiliser of the transindividual, i.e., of that whereby psychic individuals can individuate themselves socially:

The technical object ... becomes the support and the symbol of this relation we wish to name transindividual (MOET, 247)

And yet the pre-individual is not techno-logical. To the contrary: Simondon defines it as nature:

The entity-subject can be conceived as a more or less perfectly coherent system of three successive phases of the entity: pre-individual, individual, transindividual, partially but not completely corresponding to what the concepts of nature, individual and spirituality designate. (IPC 205)

Only the transindividual is techno-logical. However, Simondon allows himself a margin of hesitation – and the whole question takes shape here – when he specifies that the pre-individual “corresponds” to nature “practically but not completely.” In other words, this

“correspondence” is uncertain. Now, such uncertainty also contaminates and fragilises Simondon’s discourse on magical society, religion, morality and the work of art at the end of MEOT, and on psychoanalysis in IPC: the stakes lie in the question of desire.

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Simondon establishes Freud as the thinker of sexuality, not desire. Now, desire is not sexuality, it is not “completely” sexuality, it is only “partially” sexuality: desire is socialised sexuality, i.e., always already transindividuated – while transindividuation is techno-logical. If desire was nothing but sexuality, it would be only drive: sexuality is based in the drives. Sexed animals also have a sexuality. But it is desire, constitutive of the process of psychic and collective individuation as such, that binds the drives, that is, that denatures them. And that means that the pre-individual of psychic and collective individuation is not simply or completely the unaccomplished vital realm. For its vitality is in fact the deepest level of psychic pre-individuality as a drive-based ground, this is true only insofar as vitality, so to speak, inaccomplishes itself wholly otherwise and not completely, that is, not itself alone, once it becomes technical, and inasmuch as it projects itself as social: technicity is the new word of inaccomplishment – that inaccomplishment that intrinsically is all process of individuation, precisely qua process. The pre-individual milieux of psychic individuation are originarily technical, that is, social.

In other words, there are no “simply and completely” successive phases of the entity.” There is an eternal return of the transindividuated individual to the pre-individual stage where the transindividual becomes once again drive-based material (and not only instinctual material). Now, this circuit is constituted by the technicity of individuation. The techno-logical modality of inaccomplishment – which is called especially in the 20TH century existence, is what constitutes psychosocial individuation insofar as existence individuates an over-saturated pre-individual potential no longer as the becoming and onto-genesis of a living species, but as the co-individuation of a psychic individual or of a social group wherein it individuates itself by provoking a process of internal resonance whereby the ensemble of technical elements individuates itself through technical individuals, which thus form a technical system that must be analysed as a process of technical individuation when “the dead seize the living.”² This technical system individuates itself in turn only in intrinsic relation to psychosocial individuation, of which it is the third strand.

Individuation consists in resonance, which is both internal to the group and internal to the psyche. But this “both” is possible only insofar as it allows the stabilisation of a transindividuation which presupposes a technicity itself a support of the stabilisation. Now, the religious realm is a historical modality of the process of psychic and collective individuation – it is a stage and an organisational mode in the history of the psyche and in the history of society, which is also a modality of transindividuation – allowing that transindividuations form collective and social individuals just as much as the processes of psychic individuation which without them amount to nothing, and which are only in this transduction. And it is as a modality of transindividuation, and in its profoundly technical aspect, that religion constitutes an epoch of “moral consciousness” as the psyche which, desiring, sublimates and superegos.

Because Simondon does not thematise technical individuation in the constitution of psychic and collective individuation, he cannot think religion from out of its technical constitution, nor, in particular in relation to monotheism, it emerges as the religion of the book, that is, in an essential relationship to those hypomnemata which are first of all techniques of calculation, and on the subject of which Simondon remains silent.

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² I comment on Marx’s phrase in On symbolic misery 2 : the catastrophe of the sensible

The relations between the psychic and the collective constantly transform themselves in the course of the processes of psychic, collective and technical individuation, and this transformation, that I analyse with the concept of a general organology³, takes place precisely under the conditions of the evolution of the technical system, the other social systems, produced by collective individuation (language, education, law, economy, etc.), and the psychic system, produced by psychic individuation. This is why the thinking of what I call tertiary retentions requires an historical analysis of the process of individuation of the technical system and of the role of epiphylogenetics and, starting with the constitution of the city-state (the polis), the analysis of hypomnemata as a writing of the self, i.e. as the political modality of psychic individuation – always already passing through an exteriority, that is, through a potential making public (and, as for the case of epistolary exchange in Seneca's *Letters to Lucilius* studied by Foucault, an actual making public (see Foucault, "The Writing of the self)).

Hypomnesis, as writing of the self as well as the constitution of what I have called retentional apparatuses (in Technics and time vol 3: the time of cinema and the question of unease) is what supports psychic and collective individuation, anamnesis as selection, -- that is, as forgetting, in which it consists both as psycho-genesis and as socio-genesis which individuates a pre-individual which is intrinsically (hypo)mnesic. This is the question of the trace that Derrida strove to think with Husserl and others.

It becomes necessary at this point to restate the thought of psychic and collective individuation through the technical metastabilisation of the transindividual via the concepts of retentions and protentions, inasmuch as they can become collective via tertiary retentions. Individuation is both a temporal and a spatial process. As perception, that is, as temporality, inasmuch as the latter perceives the spatial on which it distinguishes figure from ground, psychic individuation is what amalgamates primary retentions (in Husserl's sense) which it selects in phenomena on the basis of siftings (criteria of selection) constituted by its individual secondary retentions. These individual secondary retentions constitute horizons of expectations, that is, also protentions. And since there are such retentions, Simondon can write that

If there were no tension prior to a potential, perception could not reach the level of segregation of unities which is simultaneously the discovery of the polarity of these unities. (page 79)

This tension is the protention constituted by the encounter of the retention and the perceived which, by tensing it, transforms it into expectation, and into attention. And this is why Simondon can posit that

The unity is perceived when a reorientation of the perceptual field can take place with regard to the polarity proper to the object.

This transformation – it is individuation itself – plays itself out both on the plane of secondary psychic retentions which produce primary retentions (as primary selections), and on the plane of collective secondary retentions supporting them – with respect to which primary and secondary protentions are constituted, the latter being collective or psychic themselves. But the mobilisation of these secondary retentions, which therefore constitute primary retentions as aggregates of remarkable points, operates under the conditions of tertiary retentions insofar as they are the unity of the psychic and the collective and through which the process of

³ the term is not used as Simondon does – where it refers to the study of technical elements composing technical individuals, which compose in turn technical ensembles.

individuation encounters the phenomenon whereby it individuates itself: tertiary retentions are the milieu of psychic and collective individuation.

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Secondary retention constitutes the pre-individual milieu of the individual:

The mental matter having become memory or rather memory content is the milieu associated with the present “I”

Memory constitutes the “state of the mind or soul” of the individual (its current individuation) in the manner in which for Bergson this state (actually a process) snowballs:

There it is, y memory, pushing something of this past into this present. My state of mind (soul) progresses along the road of time, constantly expands with the duration accruing to it; my soul, so to speak, becomes an ever-expanding snow-ball; this is even more the case with profoundly interior state, sensations, feelings, desires, etc., that, unlike a simple visual perception, do not correspond to a fixed exterior object. But it is practical not to pay attention to this uninterrupted change, and to become cognizant of it only when it has grown big enough to provoke a new attitude in the body, a new direction to attention – at this precise moment we realise our state has changed. The truth is that we change constantly, and that the state itself is already a change. (Creative Evolution, page 1, translation GC)

But the individual can only access these psychic secondary retentions through the occurrences of collective secondary retentions he has inherited, and which constitute another pre-individual already there and social base: nothing is memorisable that does not first configure itself in the milieu and out of the pre-individual base constituted by the collective secondary retentions that permit psychic individuation insofar as it is always already collective. This cannot be theorised with the cone of the relation ‘pure memory/perception’ with which Bergson melts the snowball.

Collective secondary retentions are transindividuated psychic secondary retentions. This means that *tekhnè* is at the heart of individuation in its most originary and most original moments, since the stabilisation of collective secondary retentions requires tertiary retentions, being themselves constitutively prosthetic, and which cannot be collective otherwise than as stabilities – they are the organised inorganic matter whereby the milieu in which psychic and social individuals who themselves are nothing but meta-stable, can stabilise itself.

There is then a double pre-individual structure for the psychic individual:

- 1) the collective secondary retentions transmitted by inheritance, which are not simply the individual’s retentions, but which constitute a non-lived already there for her
- 2) secondary lived retentions, lived only by her, but which cannot constitute themselves otherwise than on the non-lived backdrop of collective secondary retentions, and which constitute her own pre-individual base, her lived base, her memory milieu.

This network of lived secondary retentions on a backdrop of non-lived secondary retentions, and presupposing the existence of tertiary retentions, constitutes the warp and the woof of psychic and collective individuation: there is no other way of understanding how psychic individuation can be originarily collective than by articulating these levels of non-lived and lived pre-individuality. But this also implies that psychic individuation is originarily technical – i.e., more-than-psychic – spiritual, noetic in Greek.

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In Beyond the pleasure principle Freud introduces the following hypothesis:

All instincts tend towards the restoration of an earlier state of things. (SE 18, p. 37)

In much the same way we can posit, inside the secondary retentional pool accompanying the ego as its milieu, and which constitutes the singularity of its part of pre-individuality in the network of collective pre-individuality formed by collective secondary retentions, a tendency to stereotyping, which would be the expression of the living being's tendency to reproduce the already existent, i.e., to homeostatically maintain the synchrony of existing secondary retentions. Strangely enough, this tendency is not taken up in Simondon's philosophy of metastability which, as an economy of tendencies, could have seen this as a key opening up the processes of individuation and the conditions of their articulations.

Now, the Freudian question in Beyond the pleasure principle is one pointing to another kind of metastability having incorporated the vital economy of drives, if it is true that the task in the description of the individual and collective life of protozoa would be to describe the double tendency characteristic of life in general looking for a vital optimum:

The life process of the individual leads for internal reason to an abolition of chemical tensions, that is to say, to death, whereas union with the living substance of a different individual increases those tensions, introducing what may be described as fresh 'vital differences' which must then be lived off. As regard this dissimilarity there must of course be one or more optima. (ibid. 55)

This is the moment the death drives appears on Freud's theoretical stage as the primordial component of vital individuation, but in permanent composition with eros which constitutes, precisely, the metastability of the living:

The dominating tendency of mental life, and perhaps of nervous life in general, is the effort to reduce, to keep constant or to remove internal tension due to stimuli (the 'Nirvana principle' to borrow a term from Barbara Low (ibid.))

For the moment I wish only to place these points next to what Simondon, in The Mode of existence of technical objects describes as constituting the spontaneous tendency to elevation, a motif he introduces with considerations on the "affective ground" behind the desire for conquest and the spirit of competition, which I elsewhere named, using an ancient word so dear to Nietzsche, éris, which

Allows the passage from ordinary existence to states of exception (moet)

This passage from out of the ordinary into the extra-ordinary finds its footing on the ground from which surge up the "remarkable points" of what Simondon thinks he can call the "magic unity," and which constitute "key points" whereby a world marked by privileged places and moments is given. This "key points" are also the origin of what I elsewhere refer to as the cardinal and calendar basis of all processes of individuation. Here, Simondon posits at the very source of all individuation the existence of a desire to mount, that is, to rise up, that these key points and the network formed by them weave (?) as the very ground of affect:

Ascension, exploration, and in general terms all gestures of the pioneer, consist in an adherence to the key points offered by nature. To climb so as to reach the

summit is to work one's way to the privileged place looking out over a mountain range, not so much to dominate or possess but to exchange a relation of friendship with it.

The power of the summit and the desire to reach it are sparked by its singularity as a place of exception.

However, the concept of magic unity makes the whole line of thought strange. Just as in Rousseau, we would have to admit a pre-technical magical humanity: the magic unity is that which in effect, except for these key points, has not yet analytically separated forms from ground, that is, schema, which only later will become, as technical tools, movable objects.

It is this reticular structure which is dephased in the passage from the original magic unity to techniques and to religion. (167)

The key points become technical objects, transportable and abstracted from their milieu. (168)

These theses, then, presuppose that technical detachability, which Leroi-Gourhan, unlike Simondon, sees as central to a definition of psychic and collective individuation (commonly called man) as a process of exteriorisation, is what occurs as disequilibrium and break in the magic unity, exactly as in Rousseau's schema.

This definition of magic society seems to ignore, moreover, the role of churinga and other "mythograms," to use Leroi-Gourhan's term, in magical society, and which constitute the already very technical and detachable ancestors of hypomnemata.

At the basis, then, of Simondon's misunderstanding of religion, there is an ignorance and a lack of attention to the memory function of the most primitive and, following Leroi-Gourhan and according to my view also, the most essential features of techniques at the heart of the process of psychosocial individuation qua the upending [dégagement] beyond vital individuation.

Indeed, Simondon sees the advent of religion as the advent of technics as break with magical unity:

While the key points become objectified in the guise of concretised tools and instruments, the ground powers are subjectified by becoming personified in the guise of the divine and the sacred (Gods, heroes, priests) (170)

Mediation is objectified in technics and subjectified in religion, making the first object appear in the technical object and the first subject in the divinity, whereas only the unity of the living and its milieu existed originally (170)

But this definition of religion, which is also to confuse it with mythology, does not take into account the fact that religions and mythologies presuppose mnemo-technics, and that religion is constituted precisely when the former are no longer magical but have become, strictu sensu hypomnesic.

What Simondon cannot see is that technics as memory worlds [fait monde]: he doesn't understand that technics, as epiphylogenesis and networking of tertiary retentions, constitutes the preindividual ground of non-vital individuation which psychosocial individuation is. That is why Simondon stays mired in the ontogenetic illusion of a succession of phases of being (preindividuality of nature, individuation of the individual, transindividuation of the spiritual) which, to make matters worse, presupposes that technics is analytical:

The availability of the technical thing consist in being freed from the subjection to the ground of the world. Technics is analytical.

But positing the technics is analytical is to oppose it to the synthesis of individuation, in other words, to the world as milieu of individuation. Thus Simondon can write that

The world is a unity, a milieu rather than an ensemble of objects; there are in fact three types of reality: the world, the subject and the object, intermediary between the world and the subject, whose first form is that of the technical object.

Now, technics as the support of individuation, and in particular as hypomnesis, which reconfigures and trans-forms the epochal conditions in which psychic individuation is collective individuation, is not only “analytical” it is a prosthetic synthesis a posteriori. To say the same thing in Simondon’s idiom, it is the transductive relation whereby the terms of the relation, the “world” and the “subject,” are constituted as terms. Because he cannot see this, and indeed because he excludes this, remaining to this extent profoundly entrenched in the metaphysics of subject and object which here is emitting loud and clear, Simondon can thus write, unexpectedly:

A structure of the universe for mankind prior to the birth of techniques. (171)

There is a magical unity from which “remarkable points” stand out which are not yet techniques. It is evident here that what is lacking is a thinking of technics as milieu of memory, that is, as tertiary retention.

From that point, Simondon cannot think the discretisation that technics and to a greater extent mnemo-technics constitute from the word go: he amalgamates this discretisation with a purely analytical character. But he cannot see that this world changes when the hypomnemata detach themselves, as such, from this, which is the constituting moment of a new analytic stage itself opening up onto a new type of synthesis, that is, of individuation. Besides the fact that his concept of religion is extremely encompassing and vague, and, to be truthful, quite questionable, he is not able to think what might be called the pre-grammatising stage (see Sylvain Aureau, and my extension of the concept in Symbolic misery 2 and in Misbelief and discredit 1) but already discretising, of the first mnemotechniques which will be at the origin of monotheism by trans-formation of the epiphylogenetic into the hypomnesic strictu sensu, into hieroglyphic and ideogrammatical writing, then into alphabetical writing the absence of which would make the religions of the book inconceivable.

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The fact remains that Simondon posits an original tendency to elevation that constitutes a daring, fruitful starting point for a thinking of the religious and, more generally, of desire of which the former is a sublimated form. This is all the more interesting given that, placed besides the tendency to equalisation in Freud, this counter-tendency, which is beyond a shadow of a doubt a specific form of neguentropy, not only as life, but as culture, opens up the perspective of a metastability which would be the negotiation between these tendencies: one toward equalisation and levelling, the other to elevation – and constantly restaged throughout the history of the process of individuation as a succession of economies negotiating between the two tendencies via the play of tertiary retentions. But here we are no longer in the framework of Simondon’s thought: we are in the framework of what can possibly become of that thought once individuated with the question of hypomnesis.

Now, as for tertiary retentions, it is of the utmost importance to note that Simondon's question of elevation as attraction for the remarkable points and the summits that man is inclined to mount, and which call out to her to climb ever-higher, with the risk of ever more dangerous falls, neglects the basis from which the summit detaches itself: the sky. For there comes a time when it is not longer a question of climbing the mountain, but actually of contemplating the stars, and of gazing at this sky in which the great empire and the polytheistic "religions" would see gods, these stars themselves, these heavenly bodies, this sky in which, later, the proto-monotheism of Plato and Aristotle, and the monotheisms of Judaism, then that of Paul of Tarsus, will affirm the great divide between heaven and earth.

The mode of existence of technical objects does not mention the sky in the infinity of which this object of desire which is Aristotle's god is projected, along with the idealities whereby the psychosocial individuation typical of the West – via the hypomnesic notes of the proto-geometricians, as Husserl claims late in his life, discovering retentional finitude. And Simondon's book mentions nothing of this, for it seems of little consequence to him, who cannot see that a transformation in the question of elevation is produced with the new forms of tertiary retentions appearing as forms of writing and, in particular, as alphabetical forms.

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The book opens a new question on elevation, which is not longer one of gravitation and of climbing hills and mountains, of travel throughout the earth insofar as, under the earth, we find the world of spirits and the hell of the dead. The new question is one of walking, of going toward, of direction, meaning, orientation (and of the distinction of an Orient) in mobility which is a form of emotion, as conquest no less than as exodus, and of the announcement which is the protention par excellence qua prophecy insofar as it psychically and collectively individuates. This prophecy, led by a lodestar, leading shepherds and wise men who will see the newborn child, is also, before all this and more generally, that which, as the experience of contemplation, opens the age of interpretation as hermeneia, and no longer as divination.

The earth becomes then this place from which one contemplates the sky but while writing down what transpires there. And the subterranean region where the spirits of the dead has disappeared: the hell of Hades, which lends its name to the Greek aidos, is no longer underground. Nothing is left underground. Everything plays itself out between heaven and earth. What is affirmed, then, is the distinction between otium and negotium, precisely because there is a world and because it is desacralised: monotheism is a desacralisation of the world and simultaneously a separation of orders into two worlds.

That which opens with the first hypomnesic forms constituted in retentional dispositifs organising collective individuation as royal or pharaonic power, then political, then religious power, is the elevation of the question of elevation to the level of that of interpretation: the interpretation of signs given by heavenly bodies is Mesopotamia, Egypt; oracular, tragic, juridical and logical interpretation is the Greek city-state, which become the space of gods whose multiplicity constitutes the consistency of the multiple in the One and of the One through its multiplicity, but from which these gods withdraw; interpretation, lastly, of texts themselves as monotheism.

And then God dies, and hermeneia, wherein otium is distinguished from negotium, issues in industrial and capitalism psychic and collective individuation. And that is the beginning of the process of disindividuation, of a "loss of individuation" where the machine becomes the technical individual.

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Whereas in the final analysis Simondon, in a classical gesture, makes the advent of technics a fall out of an originary magical unity, he never considers the possibility of falling that opens with any and all elevation. Where Heidegger ignores the question of we (or us) – the very

question Simondon opens with psychic and collective individuation – which perhaps would have kept him out of his calamitous political adventurism, Simondon himself ignores the question of the they that Heidegger opened and into which he falls in 1933 for having failed to think the we/us, but also the neuter, the impersonal which, as technics, ties it to the “I,” inasmuch as this bond transductively constitutes Dasein: technics is this he that is not a they and which Heidegger transforms into a fall – as Besorgen which for him (this is his mistake – but this is the whole question of the relation of otium to negotium) is a Verfallen. Now, the absence of any question as to the necessity of falling and therefore of learning how to fall in order to get back up to climbing, which is called the walls of empiricism but also epimetheia, results there being no room in Simondon’s IPC for the solely intermittent character of the noetic soul – that is for the fact that the soul is noetic only in its passage into actuality, to the act that individuation is as quantic leap, but such that it can also regress to the stage of potential where, to stay with the Aristotelian idiom, the soul is only “sensitive.” Regression of which the ontico-ontological difference is an attempted account (grandiose and infelicitous), but which is also the Freudian question that Simondon does away with too easily.

Consequently, Simondon will have no truck with questions of superego or sublimation in his thought of the affect, whereas the collective becoming of this affect, which is its transindividuation, and the concretisation of the psychic individual, is only possible in superegoisation and sublimation. In the same stroke, and although in several magnificent pages he suggests that

The solution to the moral problem cannot be sought by computer (IPC, 257)
and that
automatic and stereotyped conduct emerge with the first signs of the
resignation of moral consciousness (258)

he still cannot see on the horizon the role of the cybernetic machine as a technology of control aiming to liquidate the superego and sublimation so as to substitute automatic superegoisation (see here MD3: The lost spirit of capitalism, Galilée, 2006) and to effect a process of desublimation which is also a psychic as well as social dis-individuation (see MD 2. The uncontrollable societies of disaffected individuals, Galilée, 2006). Simondon short-circuits this question, and projects onto the digital stage of the individuation of the technical system, which is the most recent epoch in the process of grammatisation whereby the hypomnemata (of which cybernetic machines are but an exemplar) a horizon of the mastery of technics by mecanology which, after the fact, seems more than slightly naïve – and the inevitable consequence of his metaphysics of subject and object, of which we have seen the Rousseau-ist roots.

Simondon has replaced the Aristotelian distinction matter/form with one coming from Gestalt theory, foreground/background. His reasoning is, therefore, in terms of remarkable points. But that means that he is reasoning in the terms of information theory. And therein lies the contradiction:

- 1) to speak of transindividuation as having to be buttressed by technical objects as a power of stabilisation (what I call tertiary retentions) and at the same time
- 2) to posit that the support of information can be neutralised in its empirical characteristics

This is a profound contradiction which brings on quite a few fundamental problems – beginning with the fact that the preindividual is not considered as itself already constituted par tertiary retentions. These are problems that show up in the surprising final section of MEOT, and, first and foremost, in the discourse of magical unity.

According to Simondon, a new optimism is announced, in the second half of the 20th century, following the pessimism that had opposed technics and culture without realising that techniques is constitutive of culture, and which saw it, from the vantage of thermodynamic industrial machine-ism, as the source of a negentropy negating the life of the spirit and, in the dimension of work, as an organisation splitting it up so as to disindividuate the worker to turn him into a proletarian. In other words, the thermodynamic epoch of technics was that of the loss of individuation, and Simondon, at the close of the fifties, sees in the dawning cybernetic age the beginning of a new process of individuation, Simondon's own, opening onto an age of renewed optimism. But this optimism is not Simondon's own – nor is it that of the ideologues he criticises.

For unfortunately on this score, history has proven Simondon totally wrong. As of the fifties, an unprecedented pessimism has imposed itself throughout the world, largely induced by the extraordinary aggravation in the diremption between technological evolution and the societies it destroys. Simondon certainly saw the age of a felicitous technology to the extent that he could foresee the advent of a mechanology that would have facilitated the adjustment of technical ensembles, corresponding to the launching of a new negentropy process, factor of a new form of individuation. But this mechanology, with its roots in a radical ambiguity as to the place of technics in the constitution of the preindividual, and leading to a decidedly metaphysical discourse, was stillborn: it failed to in that in which alone it could consist: as a politics. There is no simondonian politics, whereas the question of individuation is political through and through.

In beginning this paper I recalled that Simondon does say that individuation cannot be known: the knowledge of individuation can only be its continuation, that is, a quantic leap in the trans-formation of the conditions of individuation. Now politics is, indeed, of this order: an irreducible performativity. But without having provided himself the means of thinking the irreducible empiricity of individuation, he cannot accomplish his knowledge in the only form he himself acknowledges: as a politics. And this was due to the fact of his inability to identify the question of hymomnesis.

Simondon was not able to think the sky on the backdrop of which mountains stand out, but there is a sky in Simondon, and it is angelical: one does not fall from this sky. Today, however, God is dead – Simondon names this event the loss of individuation – and the sky is now only the infinity of emptiness. No more angels, no more gods. Nor demons. But on the earth, the loss of individuation has become horribly still worse: you no longer have to assumpt to heaven to fall in such a way even Faust could not have imagined. Although the sky is no longer the other world of the earth, and God dead, the factor of disindividuation is more active than ever – and this factor, called the death instinct, is what, when the idea of Heavens was still around, was called the devil.

This is the way of the earth – the reign of generalised disindividuation, which is also a generalised proletarianisation – because the technologies of the latest stage of grammatisation have been hegemonically socialised as technologies of control. Cybernetics, but more widely, the technologies of industrial temporal objects, of which cybernetics is but a part, today diluted in my estimation, in the convergence of telecommunications, form the industry of technologies of control at the origin of a process of generalised dis-individuation, at the level of the psychic individual as consumer as well as that of collective individuals destroyed by the world-wide organisation of consumption by techniques of marketing whose aim is the elimination of any form of singularity, which as such is incalculable and therefore irreducible to the models of investment that the financierisation of planetary capitalism imposes.

In 1956 Simondon couldn't see that cybernetic machines – technologies of information as we call them today – would soon begin to accentuate the proletarianisation of consumers by the destruction of their *savoir-vivre*: the industrial technical individual, who is no longer the

machine, but the apparatus, here deprives the psychosocial individual of his *savoir-vivre*, i.e., both his psyche and his role in the constitution and circulation of libidinal energy without which there would be no psycho-social-technical process of individuation. To see on the horizon this new stage of disindividuation would require a thinking of the technical character of desire insofar as it specifically constitutes a preindividual ground charged with drives, that is, whose origin is vital, but trans-formed into a libidinal power and potential to mount as well as to fall.

The philosophical, that is political struggle against disindividuation is a question of the political economy of the technologies of spirit: these new hypomnesic apparatuses, where the question is no longer the appropriation of “means” of production, but of new practices of the supports of production: techniques, qua tertiary retentions of preindividual grounds, are not means, and this is why Marx must be criticised with Simondon and Simondon with the late Husserl. We must launch the initially political project of a “mechanology,” while changing the name – this is why I speak of a general organology. The philosophical thought of individuation by machines, et beyond them by apparatuses, as Pierre-Damien Huyghe has seen so keenly, can only be the critique of these machines and these apparatuses, a new critique, and which will be constituted as a time of critical apparatuses.

There can be no doubt that only under the conditions of a transindividuation of the new forms of hypomnesis that are the technologies of control can a new form of individuation happen. And there can be no doubt that here, techniques, technologies and apparatuses are the synthetic – not only analytic -- supports of individuation. But this is possible only providing we conceive of what must follow upon the mechanological project as a new thought of the *otium* (and of an *otium* of the people) the possibility of which these forms of hypomnemata open, making possible the instauration of a new relation between the psychic, the collective and the technical having become techno-logical.

(translated by Georges Collins in April 2006 in Le Kremlin-Bicêtre, thinking of the liberations of Lenin and Foucault)