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ON BODIES AND ORGANS: SCALES OF AFFECTABILITY

Abstract

Starting from the Deleuzo-Spinozist question “what can a body do”, this essay traces a theoretical background from which some of the main questions regarding Artificial Intelligence as a possible extension of the human body may be addressed. After considering the capacity of affecting and being affected of any kind of body, such a background is built thanks to Bernard Stiegler’s philosophy of technics and his point of view on technogenesis, anthropogenesis and organogenesis as a threefold movement in the same tendency. Stiegler also shows that humans are characterised by the tendency to store memory in external devices, that he sees as “exosomatic organs”, and it is in this sense that he proposes to study the co-constitutive relationship among organs as a “general (ex)organology”. Relying on this, the last section of the essay presents several speculative questions about Artificial Intelligence and its possible compositions with other bodies and calls for an “exorganological ethics” to study relations between organs and understand how such relations increase or decrease the power of bodies to act.

Keywords: Affects, Ethics, Memory, Organogenesis, Technogenesis

During the last decades, we have witnessed the proliferation of countless variants of the Deleuzo-Spinozist question about «what can a body do»¹. From the recovery of an ecological relationship that would place the body in its “immediacy” at the centre of any reflection to the analysis of possible technological enhancements and their more or less techno-enthusiastic derivatives, the question of the body, of its construction and its remaking, of its limits and its unlimitedness, has certainly occupied a central position in questioning any possible line of thought that aimed to “delink” itself from the realm of Modernity.

Particularly in ordinary artistic research, this question has often been enthusiastically interpreted as regarding the human body’s intrinsic ability to express itself, giving place to forms, movements or compositions that would have arisen directly from its essential power, already potentially present and as such still to be discovered. Nevertheless, this interpretation dismisses a fundamental part of the argument. Indeed, what is central to such a question is related to the body’s nature and limits, or its mode of being: the essence thus becomes a degree of power, and it *expresses* itself in its capacity to be affected².

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1 See G. Deleuze, *Expressionism in Philosophy: Spinoza*, Zone Books, New York 1990, pp. 217 ss.

2 *Ibid.* Before continuing, it is necessary to highlight how in Spinoza (and consequentially in Deleuze’s reading of Spinoza) the term “expression” is not used according to the common sense attributed to it, but it becomes a precise concept characterised as a system of enfolding or implication (*implicatio*) and unfolding or explication (*explicatio*), pointing to «an order of continuous “turning” inward and outward, involution and evolution, rather than the elementary order of folds». M. Joughin, *Translator’s Preface*, G. Deleuze, *Expressionism in Philosophy: Spinoza*, cit., p. 7. The translator also explains how

This means that in this kind of ontology, which is not limited to the human body but is extended by Deleuze and Guattari to a broader sense that includes not only nonhuman bodies but also the mind³, the body cannot be taken as a whole substance individuated by properties, which exists by virtue of its own nature. Rather, its existence is composed by extensive parts that are able to be determined and affected by actions or passions from outside, by modes external to them, so that their own nature is inevitably linked to this power of variation, and the subsequent changes cannot be explained without positing a relational structure of the body⁴.

In this sense on the one hand each different body has its own capacity of affecting and being affected in several ways, but on the other hand this capacity is always exercised under the action of external modes, which have in turn their own capacity of affecting and being affected: that is why active affections or actions – completely explained by the nature of the affected body – should be distinguished by passive affections or passions⁵. But this says nothing about the content of such affections and relations: once again, pure relationality is a structure, a mode of being, an expression, and not an effect of it. So that one might be tempted to answer rhetorically to the question “what can a body do” by stating that it can be affected.

Equally far from any attempt to enclose Deleuze’s ontology in its own terms and from placing a blind faith on its acritical repetition, in this essay I want to understand what force this kind of theorisation gives us to think today. This means questioning the performativity of such power of being affected, its poietic level and its productivity. In this sense, the question “what can a body do” could be turned into what does it produce and what does it preserve? What does it allow – not as an instrument of an alien will – and how can it also be crossed, as a surface of writing, even by such a will? It is by following this line of thought that we will try here to ask ourselves how the particular extensions of the body that contemporary technology proposes work. Is it really a question of expanding and strengthening this body and its power, or do we urgently need further specifications of the latter?

When analysing Nietzsche’s style in «Nomadic Thought»⁶ Deleuze emphasises Nietzsche’s invention of a new *body*, the body of writing, on which forces can pass and flow: a body that is always in an immediate relation with the outside⁷. A body that has to be machined «to find out which actual external force will get something through»⁸. Following this methodology, I will focus on the forces and tendencies that are at work in

this polysemy is difficult to render in English.

3 G. Deleuze, F. Guattari, *A Thousand Plateaus. Capitalism and Schizophrenia*, University of Minnesota Press, Minneapolis-London 1987, p. 80.

4 G. Deleuze, *Expressionism in Philosophy*, cit., p. 218.

5 «It would be wrong indeed to confuse affection and suffering or passion. An affection is not a passion, except when it cannot be explained by the nature of the affected body: it then of course involves the body, but is explained by the influence of other bodies»; *ivi*, pp. 218-219.

6 G. Deleuze, *Nomadic Thought*, in *Desert Islands and Other Texts (1953-1974)*, Semiotext(e), Los Angeles 2004, pp. 252-261.

7 *Ivi*, p. 255.

8 *Ivi*, p. 256.

the body relations with its extensive parts, and I will observe how, at the crossroads of this expanded relationality, the body manages to extend itself extensively and intensively, between its folds and its prostheses.

To do this it will be necessary to move from an analytical perspective that places the inert object as a whole at its core to a performative paradigm, which instead allows us to grasp it in its behavioural poiesis. A performative paradigm allows to study activities in their own making: it recovers production in its total sense as a radically different way of observing the world, focused on the iterative and transformative action associated with the attribution of meanings, in opposition – although not dichotomous – to the traditional narrative (de)monstrative logics that govern knowledge as representation. In this sense, its objects always have an alive character, such as events, behaviours and practices⁹. In our case, as we will see, these events, behaviours or practices are “stored” into several kinds of organs, whose performances work as means of storing and transmitting knowledge.

1. *An artificial organogenesis*

According to Bernard Stiegler the most radical change in the conditions of life is what he calls “exosomatisation”. This term, first proposed by the bio-mathematician Alfred Lotka¹⁰, refers to the constitution of objects theoretically analogous to organs but external to organic bodies¹¹. Now, in Stiegler’s view, not only the production of such organs is the specific character of human societies but the constitution of the human being as such depends on this particular organogenesis. In his series *Technics and Time*, he depicts this dependence through the myth of Prometheus and Epimetheus¹²: the latter, charged with distributing qualities among living beings, forgets to save some for human beings too, who thus find themselves without suitable means to face the world. This is why Prometheus, his brother, steals fire from the gods to give it to human beings. But despite the various Promethean interpretations of technics that read in the Titan’s gift the compensation of an original lack which it would replace, in Stiegler’s philosophy there is no reference to such a lack, but rather, on the contrary, the insistence on a constitutive *defect of origin*, for which the figure of Prometheus would have no meaning if not in his continuous relationship with Epimetheus.

The absence of qualities in the human being, that is, Epimetheus’ fault, and the consequent creation of prostheses (Prometheus’ gift) must therefore not be thought of in an oppositional logic (according to which the prosthesis replaces a structural deficiency, as

9 See R. Schechner, *Performance Studies. An Introduction*, Routledge, London-New York 2006.

10 See A. Lotka, *The Law of Evolution as a Maximal Principle*, in «Human Biology», 17, n. 3, 1945, pp. 167-194.

11 M. Montevil, B. Stiegler, G. Longo, A. Soto, C. Sonnenschein, *Antropocene, Exosomatization and Negentropy*, in B. Stiegler with the Internation Collective (eds.), *Bifurcate. “There is no alternative”*, Open Humanities Press, London 2021, p. 56.

12 See B. Stiegler, *Technics and Time. 1. The Fault of Epimetheus*, Stanford University Press, Stanford 1998, pp. 185 ss.

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in the Promethean visions of technology), but in terms of a reciprocal *supplementation*. Prometheus' fire is then also the gift of (the awareness of) mortality and of the need to defer it; therefore, of the outside and of the different ways of being "outside oneself", which do not constitute an essence (nor a "second nature"), since they never become substantial properties of the human being. It is rather the capacity to exteriorise oneself, and, only through this exit, generate an inside (a *self*), that will eventually characterize the specificity of the human – in other words, the fact that the origin itself is defective, that it is generated in a chain of faults that double the initial fault in the attempt to compensate for it¹³, and in a succession of delay, anticipation, worry, conservation, etc.: «there is no origin at all, there is only the duplicity of an original flaw»¹⁴.

This does not point to the origin from a defect, but to a defect in the origin itself, ambiguous and undecidable. A defect from which artificial organs and knowledge are generated, or in other words, a delay, an idiocy, which allows us to anticipate, and therefore to know: «this process of anticipation, return, and withdrawal in return – which is nothing but a detour – bears the name of *ēpimētheia*, knowledge after the event»¹⁵. The fault of Epimetheus is thus «nothing but the de-fault of origin or the origin as de-fault»¹⁶. While anticipation is also prostheticity, ex-position, where pros-thesis means «placed-there-in-front»¹⁷. In this sense technics is always what is placed before us and in front: an extension.

Outside of the myth, Stiegler relies on the theories proposed by the paleoanthropologist André Leroi-Gourhan to demonstrate how the origin of the human being has always been technical, that is, that something like what we call "the human" could not exist without the tool also existing. Or rather, as he famously declares, technics is «the invention of the human»¹⁸, where the ambiguity of the double genitive «signals a question that breaks down into two: "Who" or "what" does the inventing? "Who" or "what" is invented?»¹⁹. His answer does not resolve the ambiguity but fixes it by removing any possibility of defining who is the subject or the object once and for all: «the human invents himself in the technical by inventing the tool – by becoming exteriorized techno-logically»²⁰. This posits the human at the same time as object as well as subject, and it becomes impossible to define in which sense such an invention takes place.

Technics and the human, interiority and exteriority: far from being opposed, the two terms compose with one another, in a single movement where neither one precedes the

13 In this sense, not only does Prometheus' gift double Epimetheus' forgetfulness, but Epimetheus himself doubles his brother's gesture again, as a «return through the failure of experience» (ivi, p. 186) lending his name to the thought itself (*epimetheia* is the thought that arrives late, following a *défaillance*) only to then, in a further reversal, end up in turn forgotten by subsequent philosophical thought, which has instead invested in Prometheus making him the absolute protagonist of the myth.

14 Ivi, p. 196.

15 Ivi, p. 219.

16 Ivi, p. 188.

17 Ivi, p. 235.

18 Ivi, pp. 22 ss.

19 *Ibid.*

20 Ivi, p. 141.

other, nor is the origin of the other, the origin being defective and consisting in «the simultaneous arrival of the two – which are in truth the same considered from two different points of view»²¹.

It is in this sense that a further definition of technics must be understood: «As a “process of exteriorization”, technics is the pursuit of life by means other than life»²². In other words: if life as such is finite, delimited by mortality, in its composition with technics a fissure is created, and it is from this *différance* that life conquers the possibility of an extension. Now, the latter is not at all to be understood in a generic transhumanist sense, that is, as the production of devices that aim at the prolongation of individual life in time or at a surpassing as enhancement or augmentation of the human being as such²³. In this vision technics is rather what constantly invents and reinvents human nature from within. To better understand what this means and what the extension brought about by the process of exteriorisation refers to, we must examine another fundamental aspect of Stiegler’s theorisation and relate it to the initial questions about what a body can do, and what this power consists of.

2. *Organs of memory*

In *Memory and Rhythms*²⁴ André Leroi-Gourhan describes how the production of technical objects can be thought of as a machinic exteriorization of the nervous system²⁵, and in particular as a tendency to exteriorise memory. Building on this, and leaning on an Husserlian terminology to update it, Stiegler comes to propose one of his most successful concepts: *tertiary retention*, which points to the understanding of the technical object as a support of memory. Initially called «tertiary memory»²⁶, it is aggregated to Husserl’s primary and secondary retentions, the first indicating what consciousness retains in the present, the now of the temporal phenomenon, and the latter the re-memorisation of a past temporal phenomenon that could come back into presence. As «organised inorganic matter»²⁷ and material traces, tertiary retentions are more specific than the “consciousness of an image” of which Husserl talks about. Husserl distinguishes the consciousness of an image from secondary retentions by insisting on the fact that the material sup-

21 Ivi, p. 152.

22 Ivi, p. 17.

23 See B. Stiegler, *The Age of Disruption. Technology and Madness in Computational Capitalism*, Polity Press, Cambridge 2019.

24 See A. Leroi-Gourhan, *Memory and Rhythms*, second volume of *Gesture and Speech*, The MIT Press, Cambridge 1993.

25 The Australanthropians «appear to have acquired them [the technical tools], not through some flash of genius which, one fine day, led them to pick up a sharp-edged pebble and use it as an extension of their fist (an infantile hypothesis well-beloved of many works of popularization), but as if their brains and their bodies had gradually exuded them»; A. Leroi-Gourhan, *Technics and Language*, first volume of *Gesture and Speech*, cit., p. 106.

26 Ivi, p. 246.

27 B. Stiegler, *Technics and Time. 1.*, cit, p. 70.

port cannot retain the “originary impression” (that of consciousness), but according to Stiegler this is nothing but one of the many cases of the “oblivion of technics” carried forward by the entire history of philosophy, never truly able to think of it outside of its function as a means²⁸.

On the contrary, Stiegler’s concept is aimed at showing not only how consciousness does not pre-exist the process of exteriorisation, but also that the very conditions of possibility of consciousness and its temporality are precisely based on a material exteriorisation. In other words, consciousness (the inside) is not something that can be exteriorised and “stored” on some external support at the cost of a small loss, as in Husserl²⁹, but is something that can be constituted only thanks to the process of exteriorisation: «the interior is invented in this movement; it can therefore not precede it. Interior and exterior are consequently constituted in a movement that invents both one and the other: a moment in which they invent each other respectively, as if there were a technological maieutic of what is called humanity»³⁰.

Before achieving this concept Stiegler builds a theory in which anthropogenesis corresponds to technogenesis: if the emergence of the human being is associated with a process of neurological evolution, it is important to underline that in this process there is a break, following which the pre-human brain stabilizes and stops evolving, while the process of evolution continues in terms of a «pure technological evolution»³¹.

Or, seen in another perspective, first, the freedom of the hand during locomotion allows «the use of artificial organs»³² (and the hand stops changing from the moment it begins to hold a tool³³), and second, the cerebral development is a correlative of erect posture (which also allows the development of spoken language). So, as Leroi-Gourhan states, «all began with the feet»³⁴, while the brain functionally appears later and is «subordinate to the edifice as a whole»³⁵. In this sense, if the brain still controls evolution, nevertheless it remains dependent upon the selective adaptation of the body and its organs, and, as Stiegler states, «the conquest of mobility [...] is more significant than intelligence – or rather, intelligence is but a type of mobility, a singular relation of space and time»³⁶.

This evolutionary process also has to do with changes in the operational sequences that relate the different organs. In distinguishing the living organisms in terms of program-

28 P. Vignola, *Prefazione. Il ritardo dell’anticipazione*, in B. Stiegler, *La tecnica e il tempo. 1. La colpa di Epimeteo*, Luiss University Press, Roma 2023, p. 35.

29 An analogous critique can be found in Plato’s *Phaedrus*, where writing (and extensively, technicisation), by allowing the transmission of knowledge without the need for the presence of the person who produced it, actually represents a loss or degradation of memory: «hypomnesic logography menaces the anamnestic memory of knowledge, and *hypomnēsis* risks contaminating all memory, thereby even destroying it», B. Stiegler, *Technics and Time. 1.*, cit, p. 3.

30 Ivi, p. 142.

31 B. Stiegler, *Technics and Time. 1.*, cit, p. 135.

32 A. Leroi-Gourhan, *Technics and Language*, cit., p. 19.

33 Id., *Memory and Rhythms*, cit., p. 251.

34 Id., *Technics and Language*, cit., p. 65.

35 Ivi, p. 37.

36 B. Stiegler, *Technics and Time. 1.*, cit, p. 146.

ming and recording the operational information³⁷, Leroi-Gourhan arrives to declare that

The whole of our evolution has been oriented toward placing outside ourselves what in the rest of the animal world is achieved *inside* by species adaptation. The most striking material fact is certainly the “freeing” of tools, but the fundamental fact is really the freeing of the word and our unique ability to transfer our memory to a social organism outside ourselves³⁸.

In short this is what Stiegler means when he talks about «the pursuit of the evolution of the living by other means than life»³⁹: thanks to exosomatisation, the incipient human has become able to inscribe a part of the living – one that can be reduced into *grammē*⁴⁰ – into an external support, by projecting outside something that does not yet exist inside, but which is formed precisely with this projection: memory. According to Stiegler, this constitutes memory (and consciousness) to the extent that what we exteriorise into a physical memory support not only always conditions the composition of primary and secondary retentions and therefore of protentions (projections), but that it is only by mirroring oneself into this gesture that “the artifice of temporality” (as the temporality of the artifice) appears to the living being, allowing at the same time the comprehension of the past as such and a projection into the future of the past events that one has not lived but that are nevertheless part of their past.

We could thus think to one of the most powerful images that can arise from *The Fault of Epimetheus*: a primitive hominid standing in front of a chipped flint, where the cut,

37 Leroi-Gourhan divides the living organisms into three groups, in terms of instinct and intelligence. The first group, that of the lower invertebrates, own a very rudimentary brain system in which the programs take the form of very simple actions, and their memory can be compared to that of an electronic machine, to the extent that it responds to programs elaborated in relation with a specific range of needs and means to satisfy them, and is determined by physiological or external causes. The second group holds programs that can be modified, and their action sequences are more complex. The third group, that includes vertebrates, acts for the first time following a process of trial and error, which result is recorded as a program in a series of memories whose interplay can trigger complex operating sequences. See A. Leroi-Gourhan, *Memory and Rhythms*, cit., pp. 222-223.

38 Ivi, p. 235.

39 B. Stiegler, *Technics and Time. 1.*, cit, p. 135.

40 Here the reference goes to Jacques Derrida, *Of Grammatology*, John Hopkins University Press, Baltimore 1974. The insistence on *grammē* is not the only reference to Derrida that we have met in Stiegler: another decisive term is that of “trace”, which, in couple with the insistence on writing, allows Stiegler to argue the impossibility of constituting an inside independently of the outside (in a logic of *supplementation*), as well as to introduce the necessary temporisation of the lived experience in this act and the constitutive *defect of origin* that all this means. But despite this continuous and dialogically productive relation, it is important to underline how, even though starting from many elaborations proposed by his master, Stiegler often ends up leading his own argumentation towards positions that are quite incompatible with those of Derrida. Since I do not have the space here to delve into this in depth, I suggest to confront some other recognitions of Stiegler’s shift with respect to Derrida: G. Bennington, *Emergencies*, in «Oxford Literary Review», 18, vol. 1, 1996, pp. 175-216; B. Roberts, *Stiegler Reading Derrida: The Prosthesis of Deconstruction in Technics*, in «Postmodern Culture», 16, vol. 1, 2005; P. Vignola, *Dal pharmakon alla tecnodiversità. Breve genealogia di una eterogenesi concettuale*, in «Cuestiones de Filosofía», 10, vol. 35, 2024, pp. 17-37; F. Vitale, *Making the Différance: Between Derrida and Stiegler*, in «Derrida Today», 13, vol. 1, 2020, pp. 1-16.

the particular shape that this object acquires recalls the forms of hunting, the possibility of increasing its success, and establishes a link with the previous generations who experienced that success. In this sense, the chipped flint is the first support of memory as recording of experience, not an experience that has been lived by such precise primitive hominid, but one that was already there, before him or her, and which is present in his or her own experience as a form tradition consigned to and inscribed into the object. A recording that recalls the “gestures” that, once restored and performed with other gestures, allow to anticipate future tasks and to predict the carrying out of future technical operations. It is in this movement that this same flint thus configurate itself as a material condition of possibility for the constitution of the past and for the anticipation, therefore, for the constitution of the future.

And it is in this act of “recognition” that the human becomes such and technics the invention of man: in the coupling of the living being and their organized inorganic matter as generator of a temporal relationship. It is now easier to understand in which sense human beings are such insofar as they are able to put themselves outside of themselves, and therefore, to exosomatise, (re)producing themselves as beings endowed with exteriorised memory. The technical object, on the other hand, also continues to evolve in its organization, transforming itself over time and in relation to the environment.

It is in this co-evolution that collective memory, and thus cultural habits and institutions, are built. Thanks to this dynamic, irreducible to biology, mechanics and even more so to anthropology, the history of technology thus coincides with the history of humanity, which is that of electronic files and reading machines as well, and the continued trend toward the exteriorisation of cultural memory, which Leroi-Gourhan describes as the «freeing of memory», forms what Stiegler calls in return «an epiphylogenetic memory»⁴¹. By reading Leroi-Gourhan with Derrida Stiegler puts a non-anthropocentric concept (that of *grammē*) at the very centre of the production of memory, and the process of “grammatisation” becomes what makes discrete and storable even that which is not genetically conserved – that is, individual experience. It is thus the possibility of making such past individual experiences collective, that is, *public*, that makes consciousness (as consciousness of the past and of the past generations’ experiences) to appear.

According to Stiegler «Epiphylogenesis is a break with pure life, in that in the latter, epigenesis is precisely what is not conserved»⁴², while with this kind of exosomatic memory it becomes possible to store and transmit it even after the death of the living body and throughout the following generations (thus becoming part of the *phylum*). And more: «with the advent of exteriorization, the body of the living individual is no longer only a body: it can only function with its tools»⁴³. An affirmation that opens to what some year later Stiegler will call «general organology»⁴⁴: a perspective that invites us to study

41 B. Stiegler, *Technics and Time. I.*, cit, p. 137.

42 Ivi, p. 140.

43 Ivi, p. 148.

44 Evidently inspired by Canguilhem (even if very different to some extent), but also from musicology, this concept appears in the second phase of Stiegler’s thought, namely in the first decade of the years 2000, and in the series *Symbolic Misery* it comes to correspond to an aesthetic and political project.

the various kind of organs (psycho-biological organs, technical organs, social organizations) as always in relation to each other and in their mutual co-constitution, and which understands the related transformations as a transductive dynamic.

3. *Artificial Intelligence: future scales of affectability?*

With all this we have arrived at once again postulating a pure relationality as an ontological and methodological plane from which to study the body and its extensions. It is now necessary to skip forward to our times, and at the same time to go back to the main questions already introduced.

Just to recapitulate: a body can be thought of as a surface, on which several extensive parts, be they endosomatic or exosomatic, compose each other reciprocally⁴⁵. According to (late) Stiegler each body can thus configure as a simple or complex *exo-organism* (or exorganism): a simple exorganism is a living (and mortal) body that is equipped with organic and inorganic organs which organise it psychically and bodily. A complex exorganism can be of different types: from social bodies such as groups, which can be thought of as inferior complex exorganisms, to civilisations, corporations and so forth, which can be thought of as superior complex exorganisms⁴⁶. For Stiegler it is never possible to study the dynamics that disrupt social order only from the point of view of the simple exorganism, while it is necessary to understand them starting from recognising a systematic movement that co-modifies complex and simple exorganisms at the same time and that needs a theory of operations (that would call into question Simondon's theory to update and extend it⁴⁷) capable of simultaneously crossing such different co-constituted viewpoints on their different scales and to study them in the terms of a constant activity of organ production⁴⁸.

This is especially true when a new category emerges: that of the "hypercomplex exorganisms", which would have a planetary dimension linked to techno-spheric monopolies and transnational powers⁴⁹. This kind of exorganisms, which is based on algorithmic technologies and calculation, exploits the network effect in such a way that the tendencies

See in particular B. Stiegler, *Symbolic Misery. Volume one: The Hyperindustrial Epoch*, John Wiley & Sons, Hoboken (New Jersey) 2014.

45 This can remind Deleuze and Guattari's theorization of the Body without Organs (BwO), as proposed in particular in *A Thousand Plateaus* (cit.). Due to space, I cannot expand on this point, but I hope to come back to this in a future publication.

46 See B. Stiegler, *Qu'appelle-t-on panser ? 1. L'immense régression*, Les Liens qui Libèrent, Paris 2018, cap. 4.

47 An attempt to reinterpret Simondon's theories in the light of the new exosomatic organs and in line with Stiegler's thought is that of Anaïs Nony, *Performative Images. A Philosophy of Video Art Technology in France*, Amsterdam University Press, Amsterdam 2023. The first two chapters in particular deal with aspects that intersect with this essay.

48 As is well known, Stiegler represents this co-constitutive movement by a multi-spiral diagram, which he draws in many of his books. If once this diagram was related to organology, in the last period of Stiegler's thought it is better referred as an *exorganology*.

49 B. Stiegler, *Qu'appelle-t-on panser ? 1.*, cit., p. 83.

and countertendencies that cross societies are easily integrated into an industrial system of synchronisation of the time of consciousness and the unconscious. As we have already seen the formation of these always depends on the production of exosomatic organs in a continuous co-constitutive feedback that allows difference. But when the production of exosomatic organs is mostly orientated by a disruptive innovation, rather than producing new knowledge and difference such organs contribute mainly to denoetization⁵⁰.

Furthermore, in such an exosomatic milieu of connected objects what performance theorist Richard Schechner calls “the restoration of behaviour”, that is, the remembrance and recovery of behaviours stored in the (body or external) memory to be performed again⁵¹, produces increasingly similar and stereotyped results, which certainly generate a superficial community effect, but that in the long run reduce the possibility of variation of these same behaviours, which is linked to each singular execution (or performance). Stiegler calls this loss of differences (which is at work not only on a human scale) *proletarianisation*. This loss has not only to do with the particular situation of the Marxist conception of the proletariat, whose professional knowledge, once delegated to machines, is “expropriated” and no longer necessary (since the machine will carry out the work gestures that were previously performed by humans), but that is generalised (and continuous): when coupled with exosomatic organs, each individual *always* experiences a loss of knowledge⁵², precisely because of the originary technicity that distinguishes the human.

We are now ready to conclude by offering a first attempt to answer the initial questions, which, although incomplete, still has the intention of opening a speculative field necessary for the present times.

Thinking the body as an inscription surface and exosomatic organs as particular forms of writing (as they are based on *grammē*), would easily allow to extend this to contemporary technology and in particular to artificial intelligences⁵³. Trained with Large Language Models, which are artificial neural networks that enable a very efficient processing and generation of large-scale datasets that can take different perceptible forms, such as texts or images or sound, the current AIs are not only able to predict accurately any kind of behaviour or choice (as in technologies which are trained with statistical models), but also to execute specific tasks by imitating human capabilities and styles in an extraordinary way, to the point that it becomes very difficult to distinguish between a text (or an image, or a sound) that is produced by an AI and one that is not. If this has immediately generated both enthusiastic and paranoid reactions, sometimes dreaming

50 See *ivi*, § 20 e ss.

51 See R. Schechner, *Performance Studies. An Introduction*, cit.

52 To be more precise, proletarianization is nothing other than the countertendency of the tendency of technical objects to work as a memory storage device (and thus, as a help for storing and transmitting knowledge). This interplay of tendency and countertendency is what Stiegler calls *pharmacology* (the Greek term *pharmakon* always meaning remedy and poison at the same time). I do not have space to develop these themes further, so I refer to B. Dillet, *Proletarianization, Deproletarianization, and the Rise of the Amateur*, in «Boundary 2», 44, n. 1, 2017, pp. 79-105.

53 Despite the critical nature of the signifier chosen to define these devices, the issue of attributing intelligence to them will not be addressed here.

of an extension of the body able to recognise and overcome its limits, and sometimes falling into the all-too-human fear of being the next victim of planned obsolescence, it has also produced the need for a more accurate critique of technology, that goes hand in hand with the need for a new vocabulary and a new set of concepts that may be able to grasp the complexity of this kind of machines.

First of all it is necessary to agree what is artificial intelligence an extension of (given that, as any exosomatisation, it is an extension), and at what cost (in a *pharmaco-logics*). It is indeed too easy to say that it extends the body (including the mind) power: we posited at the beginning that, following Deleuze's Spinoza, the power that expresses the essence of the body is that of being affected, in active or passive ways. What is thus that which can be extended in such an expression? Is it once more – as in previous typologies of exosomatic organs – the ability to remember? Can artificial intelligence be analogically interpreted as a “tertiary retention” or as a memory storage device? And if yes, which kind of memories it can store? Is epiphylogenetic memory still implied?

Many other questions would be needed before to perform an answer, so that at this stage any possible one could only be provisional and programmatic. Our theoretical hypothesis, which would guide the next steps of this work-in-progress, is thus the following: if a body is defined according to its power of being affected, that is, to enter in an affective relation with other bodies, and if each body is composed by organs that have in their turn this same power, the starting point must necessarily be the encounter between them. But which kind of encounter is this? Since we have no doubts about the actual corporeality of the human and the possibility that the encounter with artificial intelligence affects it, we should perhaps look at the other term of this relationship.

And we should do it very carefully: the way in which artificial intelligence learns and performs by analysing and imitating (or replicating) human abilities should not push us towards the temptation to explain these relationships through some anthropomorphic projection. If on the one hand it does not seem possible to say that artificial intelligence does not have the power of being affected by other bodies, organs and organisations, being done that it learns (and thus variates its responses) according to the inputs it receives, on the other hand it is very complicated to see any “experience” of the affective encounter for the artificial intelligence to be performed and acquired. In this case, perhaps, what we need to look for is not the friction between two spatially extended bodies, but another way of being affected, or another scale of affectability.

In our opinion the nature of these questions shows why any theoretical project that aims to understand these aspects cannot ignore the need for an “exorganological ethics” that supports the ontological and genealogical dimension of this reflection. Such an ethics, which is also a politics, should understand the relationship between psycho-biological and artificial organs without silencing the necessary critique to the complex exorganisms (or social organisations) where the tendencies (or the forces) that cross these organs grow. So, at a first sight, if what we can grasp is a relationship of imitation, what is produced is a copy of the faculties of the body and mind intensified in their power of cognition but purified from their intrinsically human limitations, among which subjecti-

vity, emotions, orientations, weakness and all that follows.

Indeed, is not this very akin to a proletarianisation of the (human) body (and its organs, including the exosomatic ones) as such, in their ability of being affected? And if the training of the AI is aimed at overcoming the fallibility of the human being, the coupling with it really increases the power to act of a body, its knowledge, or just the efficiency of the execution of some kind of task (in terms of speed, precision, and perhaps reliability)? And isn't this obtained but at a price of a reduction of what exists by eliminating those elements and tasks that don't fit with grammatisation? Is there any new knowledge, ability or idea that is generated by the relation with the AI or its generative power only consists in a recombination of what exists already? Could this proletarianisation possibly lead to a paralysis of the human psycho-social spirit, making people regress towards reactive behaviours, which could induce drives of destruction and other compulsive symptoms? Perhaps, before really entering the «uncontrollable societies of disaffected individuals»⁵⁴, incapable of sensing, feeling and being affected, more attention to these different scales of affectability and a collective effort for answering such questions are needed.

Acknowledgements

The research from which this article is derived has been promoted by the NEST research project (<https://www.nestproject.eu/>), funded by the Horizon 2020 Marie Skłodowska-Curie Action (MSCA) RISE programme under Grant Agreement No. 101007915. The author would also like to thank Anaïs Nony, Benoît Dillet, Paolo Vignola and Alexander Wilson for the collective thinking and the brilliant conversations that have helped many questions to take.

54 This expression refers to B. Stiegler, *Disbelief and Discredit. Volume 2: Uncontrollable Societies of Disaffected Individuals*, Polity Press, Cambridge 2012, from which the previous symptomatology is taken.