

**DOSSIÊ TEMÁTICO: A PHYSIS EM UMA FILOSOFIA
DA TÉCNICA PÓS-HEIDEGGERIANA**

SEÇÃO 1 - HEIDEGGER, A PHYSIS E A TÉCNICA

THE PET-IFICATION OF NATURE OR THE IDEA OF PHYSIS IN
THE ANTHROPOCENE¹

A Pet-ficação da Natureza ou a Idéia da Physis no Antropoceno

Agostino Cera²

INTRODUCTION

My paper deals with the topic “Physis in a post-Heideggerian philosophy of technology”, by interpreting it as two topics or questions. By doing so, I have the opportunity to present two related sides of my philosophical work. The first side consists in a several years historical and theoretical work on the philosophy of technology, which culminates in the proposal of a Philosophy of Technology in the Nominative Case (TECNOM). The second side is more recent and has to do with the philosophical implications of the Anthropocene and culminates in its reinterpretation/redefinition as Technocene.

The two topics/questions around which move these pages are the following: 1) *whatis (whathasbecome) the post-Heideggerian philosophy of technology?* 2) *whatis the peculiar interpretation of physis in our age (the idea of nature) expressed by the Anthropocene?* With reference to the first question, in the Part I (*After Heidegger, Beyond Heidegger. The Empirical Turn in the Philosophy of Technology*) I will sketch an overview on the most recent developments in this area of studies, or better, a critical historicization of the post-Heideggerian philosophy of technology, starting from the so-called empirical turn. My thesis is that the empirical turn gradually turned in to an *ontophobic turn*, namely a rejection of Heidegger’s legacy, which has produced a philosophical lack/deficit in the philosophy of technology, namely its genetivization. A counter movement against this ontophobic turn (i.e. as first step for the establishment of a “philosophy of technology in the

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nomivative case”) I suggest a Heidegger-*renaissance* in the philosophy of technology.

Moving from Heidegger’s assumption according to which the *technisches Zeitalter* establishes the death of *physis/nature*, that is its definitive transformation in to an object (*Gegenstand*) or standing-reserve (*Bestand*), in the Part II (*After Physis, Beyond Physis. The Pet-ification of Nature*) I will highlight a new form of reification of nature. This is the *Pet-ification of Nature*, a trans-objectual reification of it which takes place in the Anthropocene. More than a new geological epoch, with “Anthropocene” I mean the entelechy of the age of technology and this is why I propose to call it *Techno-cene*. In the pet-ification of nature I see the accomplishment of the “disenchantment of the world” (Weber) as goal of the whole modernity. Pet-ification of nature’s main outcome consists in an ethical paradox: the *Paradox of Omnipresence*, namely the overcoming of Hans Jonas’s imperative of responsibility as an ethical standard for philosophical thought over recent decades.

Part I

After Heidegger, Beyond Heidegger. The Empirical Turn in the Philosophy of Technology³

1. Empirical Turn as Ontophobic Turn

In 1997 Hans Achterhuis published as editor a collective volume which has become a reference point in the philosophy of technology: *Van stoommachine tot cyborg; denken over techniek in de nieuwe wereld*⁴. It is an attempt to give an overview of the post-heideggerian and post-continental (i.e. American) philosophy of technology. In 2001 the American translation of the book was published with the title: *American Philosophy of Technology: The Empirical Turn*⁵. This translation is edited and prefaced by Don Ihde, the father of the postphenomenological approach, currently the most influential approach in this area of study. Ihde’s preface to the book

³ The Part I summarizes an argument I have fully developed in Cera 2021 and above all Cera 2020b.

⁴ See Achterhuis 1997.

⁵ See Achterhuis 2001.

can be considered an acknowledgement of the fact that “the centre of gravity for front-rank work in the philosophy of technology shifted from Europe to North America.”⁶

Achterhuis argues that, from the 1980s on, all philosophy of technology must be traced back to its *Empirical Turn*, namely to its rejection of the essentialist approach inspired by Heidegger and, more in general, by continental philosophy. Achterhuis defines Heidegger, Jacques Ellul, Hannah Arendt, Hans Jonas, Lewis Mumford as “the first-generation of philosophers of technology” or “the classical philosophers of technology”⁷. According to him, though they understood that technology is neither “applied natural science” nor “instrumentality” but rather a “form of life”, they were unable to understand “the manifold ways in which technology manifests it self⁸. ”The limits of the first generation’s approach would be *essentialism, apriorism, determinism (one-dimensionalism), dystopian attitude*.

Just from the awareness that “the time has come for an anti-essentialist philosophy of technology”⁹ – the Empirical Turn begins. The latter is characterized by a *pragmatist, optimistic* (or, at least, non-apocalyptic) and *constructivist* approach. The Empirical Turn, namely the second generation of philosophers of technology, includes scholars such as Albert Borgmann, author of the so-called *device paradigm*; Hubert Dreyfus, a pioneer of ‘the Critique of Artificial Reason’; Andrew Feenberg, who studied with Herbert Marcuse and proposes a *critical constructivism*; Donna Haraway, who deals with the question of technology in its link with feminism and posthumanism; the already mentioned Don Ihde; and Langdon Winner, “the political theorist of technology”.¹⁰

While these are the authors directly considered by Achterhuis, other scholars can be included with in the Empirical Turn, such as Carl Mitcham (“the most important historian of the philosophy of technology”¹¹); Paul Durbin, another significant historian of the philosophy of technology; Jo-

⁶ Ihde 2001, vii. On this topic see Gessmann 2014. For an overview on Postphenomenology, see Roseneberger & Verbeek 2015.

⁷ Achterhuis 2001, 3.

⁸ Id.

⁹ Feenberg 1999, 1.

¹⁰ Babich 2012–13, 60.

¹¹ Achterhuis 2001, 4.

seph *Pitt*, a point of reference for the engineering-oriented philosophy of technology; and Dutch scholar Peter-Paul *Verbeek*, who in the last few years has carried out Ihde's postphenomenology on the continent. This means that 'empirical turn' is no longer a synonym for 'American philosophy of technology'.

My claim is that, after 35 years, a historicization of the Empirical Turn would be useful¹². At the basis of my *critical* historicization – as reply to the apologetic one that currently prevails¹³ – lies the idea that the Empirical Turn gradually became an *Ontophobic Turn*. By this expression I mean an *over-reaction against the so-called essentialist approach*, in particular a kind of rejection of Heidegger's legacy.

This over-reaction consists in a two-stage process. On the one hand we have the rejection of the potential mystical drift involved in Heidegger's approach, namely his interpretation of technology as "a way of revealing",¹⁴ i.e. an *Ereignis* within the history of Being. We could call it legitimate rejection, that is a physiological parricide performed by the second generation of scholars in order to free itself from a too heavy legacy. However, on the other hand, this physiological parricide gradually transformed into a *damnatio* which also involved a rejection of what I consider the epistemic imprimatur of the philosophy of technology itself. Such an imprimatur is expressed in another well-known Heideggerian sentence, according to which "the essence of technology is by no means anything technological."¹⁵ In my view this second rejection should be considered an illegitimate rejection, that is an over-reaction (until a rejection) by the second generation of scholars against Heidegger's legacy. Concretely, this illegitimate (over-)reaction – best represented by the postphenomenological approach – gives birth to an exclusive interest in the ontic dimension of technology (namely, its social, political, practical implications) with a consequent a priori disinterest in any

¹² I take 1984 to be the conventional birth date of the "Empirical Turn", the year Albert Borgmann's book *Technology and the Character of Contemporary Life: A Philosophical Inquiry* (Borgmann 1984) was published. This book and, more generally, the figure of Borgmann represent a natural trait d'union between the continental/Heideggerian tradition and the American philosophical milieu.

¹³ Two examples of this apologetic historicization are Brey 2010 and Franssen et al. 2016.

¹⁴ Heidegger 1977, 12.

¹⁵ Id., 4.

of its ontological implications. These implications are characterized *ipso facto* as “essentialist” or “deterministic” and thus ends up becoming a taboo. That is, a real *Onto-phobia*.

With reference to the state of things I have just described, my objection is the following. If technology with capital T becomes nothing, namely if technology as epochal phenomenon (i.e. potential *Weltanschauung* or *métarécit* of our age) disappears to become only the umbrella term for single technologies, then the paradoxical but consequential result of this situation is that the philosophy of technology ceases to have a meaning in itself. In other word, if the philosophy of technology turns into a problem-solving activity (a search for solutions to the concrete problems emerging from single technologies), then it must be admitted that this kind of activity can be performed much better by “experts” (scientists, engineers, politicians...) than by philosophers. As a consequence, the Ontophobic Turn in philosophy of technology – its over-reaction/rejection against Heidegger’s legacy – culminates in the reason itself for a strictly philosophical approach to the question of technology disappearing. On this basis, the paradoxical fulfilment of the Empirical Turn would be the final *self-suppression, or at least self-overcoming, of the philosophy of technology*.

In his book on nihilism, Franco Volpi speaks about the risk of *genetivization* for contemporary philosophy, in particular for the philosophy of technology. He affirms: “There is a risk: that yet another *philosophy in the genitive case* will be produced. I mean, a reflection whose only function is ancillary and subordinate [...] the risk of numerous genitive philosophies is to reduce philosophical thought [...] to a strategic withdrawal from the great questions to take refuge in problems of detail [...] So, one asks oneself: is philosophy of technology in the nominative case (*filosofia della tecnica al nominativo*) possible?”¹⁶

I think that such a genetivization corresponds to the ontophobic outcome characterizing the current mainstream in the philosophy of technology. As a consequence, what is most urgently needed in this field is an affirmative reply to Volpi’s question by means of a *countermovement* (in the Nietzschean sense) *against the now prevailing Ontophobic Turn*. The first step of

¹⁶ Volpi 2004, 146–147.

an *Ontophilic Turn* should be an overcoming of the actual ontological taboo, that is a right metabolization of Heidegger's legacy. This means to avoid the potential mystical drift of his approach, but without compromising the epistemic imprimatur he gave to this area of study. The philosophy of technology *after* Heidegger should go *beyond* Heidegger but not *without* Heidegger (that is, by ignoring or rejecting his legacy). At stake in this Heidegger-renaissance as countermovement to the Ontophobic Turn is not only to preserve the irreplaceability of a strictly philosophical approach to the question of technology, but also to safeguard the *epistemic biodiversity of the philosophy itself*. The countermovement I am proposing consists therefore in a re-philosophising of the philosophy of technology; that is, in a *philosophical (re)turn in the philosophy of technology*.

2. Towards a Philosophy of Technology in the Nominative Case

The second step of my overview on the most recent philosophy of technology corresponds to a short characterization of the idea of a *Philosophy of Technology in the Nominative Case*. My several years engagement with the philosophy of technology moved precisely from Volpi's question cited above, namely if philosophy of technology in the nominative is possible. The following are the basic reasons for my affirmative response.

1) The philosophy of technology in the nominative case defines itself by a rejection of all those approaches 'in the genitive case' (i.e. ontophobic) that debase the philosophical idea of technology by fragmenting it into a plethora of single items (techniques or technologies), each with its own special issues. By opting for 'technology' against 'technologies', the philosophy of technology in the nominative case recognizes its own object as *grand récitor Weltanschauung* of our age, namely as the current "subject of history"¹⁷.

2) However, the philosophy of technology in the nominative case does not aim at being *a system or a method*, as doing so would result in a harmonious adjustment to the technological *ratio* and its effects¹⁸. Instead, such an approach should be defined as a *habitus*, a style. A concrete and ins-

¹⁷ Anders 1992, 271–279.

piring example of this unsystematic *habitus* can be found in Günther Anders's "philosophical anthropology in the epoch of technocracy", which, while claiming an analytical strictness, intends at the same time to remain an "occasional philosophy" which, starting from the consideration of precise phenomena, arrives at a "systematic *après coup*."¹⁹ If technology represents the current subject of history, then the philosophy of technology should also emerge as the updated version of the traditional philosophy of history. In other words, it should emerge as our best resource for doing in the here and now what philosophy has always tried to do: to "comprehend its own time in thoughts."²⁰

3) Although technology is not an anthropological matter *tout court*, it always concerns the question of the human being. As a consequence, the philosophy of technology in the nominative case opts for a conscious *anthropological involvement*. This involvement expresses an awareness of the inextricable connection between human being and technology, because any position regarding technology implies an anthropological assumption. Anthropogenesis and technogenesis are synonyms. As a result, the philosophy of technology in the nominative case is *ipso facto* philosophical *anthropology* of technology and, therefore, though strongly inspired by Heidegger, rejects his *anthropological interdict*²¹. Or better, it attempts to overcome such an interdict by appealing to the *non anthropocentric neohumanism* which characterizes, for instance, Günther Anders' and Jacques Ellul's work on technology. This means that the philosophy of technology in the nominative case chooses to occupy a hybrid space – an "ontic-ontological" space²² – which lies between the two poles of Heidegger's work. On the one hand it shares his premise according to which "the essence of technology is by no

¹⁸ About this antisystematic approach, Jacques Ellul affirms: "I refuse to present my thinking in the form of a theory or in a systematic fashion. I am making a dialectical ensemble that is open and not closed and I am making sure not to present solutions of the ensemble [...] If I did do these things, I too would be contributing to the technological totalization." (Ellul 1980, p. 204n).

¹⁹ Anders 1992, 9–10.

²⁰ Hegel 1991, 21.

²¹ With "anthropological interdict" I mean Heidegger's critique of the possibility itself of a philosophical anthropology. Two emblematic examples, among many others, of this interdict are: Heidegger 1998, 79–80; Heidegger 2002, 84n.

²² See Zwier & Blok 2017.

means anything technological”; on the other, it avoids affirming that “technology is a way of revealing.”

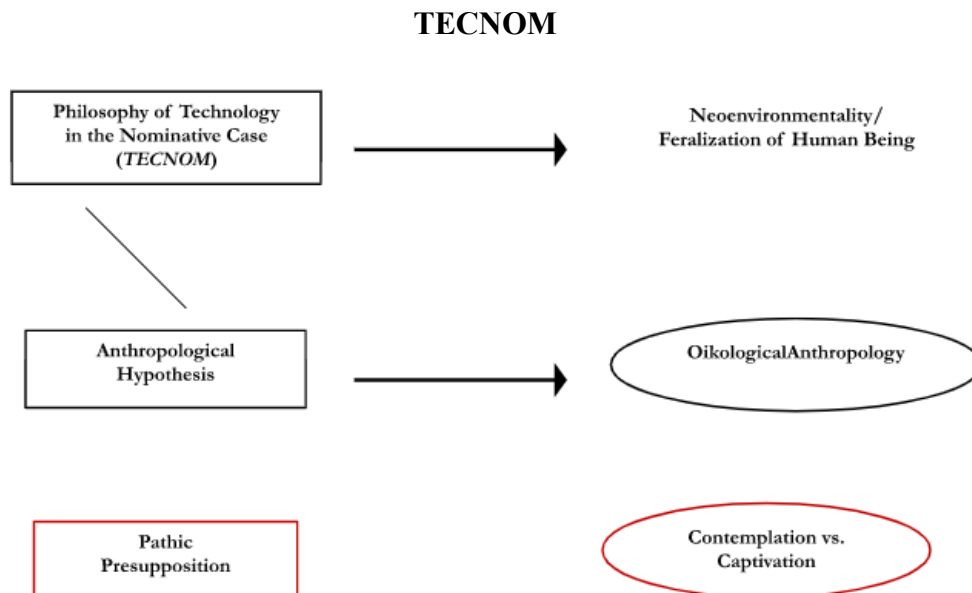
4) Starting from the acknowledgment of the epochal meaning of the technological phenomenon, the philosophy of technology in the nominative case doesn’t restrict itself to a descriptive horizon. Without conforming to sterile normativism (which so often becomes nothing else but a list of good intentions), it takes on the responsibility of an evaluative commitment. As a consequence of its conscious non-neutrality, the philosophy of technology in the nominative case chooses an *interstitial position*, thereby abstaining from two complementary temptations. The first is to avoid the paradoxical outcome of all those approaches characterized by an overly disenchanting rationalism that, while refusing to recognize the epochal meaning of technology, end up making it an irrefutable *positum* and therefore an *idolum*²³. The second is to avoid that divinatory determinism which involves even some of the most meaningful attempts to ask philosophical questions about technology. While recognizing its intrinsic historicity, the philosophy of technology in the nominative case presents itself – as stated above – as a new philosophy of history; yet it doesn’t mean the latter as historical manticism, a kind of “Nostradamus-game”.

As a conclusion of the part I of this paper, few words about my personal attempt to implement such a decalogue, namely to establish a *philosophical anthropology of technology* that I called precisely *Philosophy of Technology in the Nominative Case (TECNOM)*²⁴. TECNOM is grounded on the concept of *Neoenvironmentality*, namely it finds the essential character of contemporary technology (i.e. technology interpreted as epochal phenomenon) in its rise to the status of *Neoenvironment* and its main outcome in its capacity to produce a *Feralization of Human Being*. Concretely, *TECNOM* moves from an *Anthropological Hypothesis*, that is an *Oikological Anthropology* which recognizes the peculiarity of the human condition – and its difference to the animal one, as well – in the particular relationship of the human being with his/her own vital space, that is to say with his/her *oikos*.

²³ On this topic see Cera 2007, 52–56 and 63–67.

²⁴ I am aware this is a very short and thus inadequate presentation. I tried to give a complete presentation of TECNOM in Cera 2007; Cera 2017; Cera 2018, 131–179, Cera 2020c.

This anthropological hypothesis is in turn based on a *Pathic Presupposition*, namely on those “*fundamental moods (Grundstimmungen)*” that bring each specific living being (i.e. human being or animal) back to its respective “*findingness (Befindlichkeit)*”. Here, therefore, the benchmark of the ontological condition of a specific living being is represented by the pathos, the *affectio*. Such an anthropological hypothesis finds its basic assumption in the idea of *Anthropic Perimeter*. Anthropic perimeter is a replacement for the classic formulas “*natura hominis*” or “human essence”, or better, it proposes a post-essentialist definition of the human being/human condition. Anthropic perimeter consists in the set of conditions (*worldhood, ek-staticity and historicity*) which define the limits of *conditiohumana*, namely which define the *oikological horizon* (i.e. the perimeter) *within which the human being is able to recognize itself as such*. According to TECNOM, the main goal of contemporary technology –and thus the proof that it has become an epochal phenomenon, the current subject of history – is a complete redefinition of the Anthropic Perimeter, that is the equalization of the human condition to the animal one. As said, a feralization of human being.



Part II

After Physis, Beyond Physis. The Pet-ification of Nature²⁵

The recovery of a philosophically strong sense of “technology”, that is the establishment of a philosophy of technology in the nominative case represents the condition of possibility to properly grasp the ‘phenomenon Anthropocene’ and thus to point out the peculiar meaning of *physis*/nature emerging from it. That is to say, to understand that actually the Anthropocene equates to a Techno-cene: an epochal framework within which takes place the Pet-ification of Nature.

1. The Anthropocene between Epoch and Discourse

As is well-known, the term “Anthropocene” refers to an aspirant new geological epoch, the third epoch (after Pleistocene and Holocene) of the Quaternary period. This label was first put forth in 2000 by the Dutch chemist and Nobel prize winner Paul Jozef Crutzen in a very brief article – an anthropocenic manifesto – entitled *The “Anthropocene”*²⁶. Crutzen argues that, beginning around the year 1800 – “the onset of industrialization” – “humans and our societies have become a global geophysical force”²⁷. The term Anthropocene suggests that “human activities have become so pervasive and profound that they rival the great forces of Nature and are pushing the Earth into planetary *terra incognita* (unknown land).²⁸” Already listed in the anthropocenic manifesto are the parameters which certifies the escalation of the ‘anthropic variable’ over the last three centuries, namely: increasing human population, urbanization, exploitation of fossil fuels, “sixth mass extinction”, climate change and the concentration of greenhouse gases.

My argument presents a critical dissection of the Anthropocene as “discourse”²⁹, namely the acknowledgment that in its essence this aspirant

²⁵ The Part II summaries an argument I have fully developed in Cera 2019a, Cera 2019b, Cera 2020a.

²⁶ See Crutzen & Stoermer 2000.

²⁷ Steffen & Crutzen et al. 2007, 614.

²⁸ Id.

²⁹ Here discourse is interpreted “in the strong sense of organizing the perception of a world picture (past, present, and future) through a set of ideas and prescriptions.” (Crist 2016, 24).

geological epoch corresponds less to a scientific concept than to “a paradigm dressed as epoch.”³⁰ As Christophe Bonneuil and Jean-Baptiste Fressoz argue, *l'Événement Anthropocène* establishes a new *grand récit*, where the human being confirms its power within “a hegemonic system for representing the world as a totality to be governed.”³¹ In my interpretation the Anthropocene emerges as a paradigm or *grand récit* because of its *epistemic ambiguity*, because it introduces evaluative (prescriptive) statements disguised as neutral (descriptive) by way of their scientific matrix. The ideological character of the Anthropocene depends on the fact that it uncritically embraces an ‘epochal evidence’, namely the definitive *naturalization of technology*. The normative/prescriptive element of this aspirant geological epoch lies in its unconditional acceptance of the metamorphosis of *techne* (i.e. the artificial dimension) into *physis* (i.e. the natural dimension). In other words: within the present-day historical configuration, technology has taken on such a pervasive role that the only way it can be properly is to interpret it as being nature itself. That is to say, as being *physis* (nature).

However, looking at this metamorphosis more closely, it turns out to be the effect of an additional cause. *Techne* can be interpreted as *physis* only because it has previously and surreptitiously replaced *physis* in both meaning and function. This means that that particular *physis*, which relates *techne* to itself, has already been converted according to technological parameters. The metamorphosis of *techne* in *physis* (the naturalization of technology) emerges therefore as an epiphenomenon in relation to the main phenomenon, something that I call the *anthropocenic Urphänomen*, according to the Goethean meaning of the word.³² Such an *Urphänomen* equates to the *preliminary metamorphosis of physis in techne* (the technologization of nature), namely to that long process of *de-physization of physis* or *de-cosmization of nature* that characterizes all of modernity. On this basis, the Anthropocene can be interpreted as the *redderationem* of modernity, the moment in which the de-cosmization of nature finds its complete realization.

³⁰ Baskin 2015, 9.

³¹ Bonneuil & Fressoz 2016, 64.

³² See Goethe 1983, 195 (§ 175).

2. The Pet-ification of Nature

According to the South-African scholar Jeremy Baskin, the Anthropocene presents “a dual movement” in relation to nature. First, “deprived of exteriority, agency and otherness, nature is de-natured and we are held [...] to be after or beyond nature”. Second, humanity is “re-inserted into ‘nature’ only to simultaneously be elevated within and above it”. As a consequence, the only vision left available to us is that of a “Technature”³³, that is a “physics without *physis* and a nature without *logos*”³⁴. In the context of the Anthropocene, nature is perceived, conceived and made use of in entirely technological terms. This brand-new epoch establishes that “it’s no longer us against nature,” but only because now “*nature is us.*”³⁵ In other words, within this new framework we can finally respect the otherness of nature, but only because such an otherness becomes (i.e. we make it) nothing. Such an *anthropocenic reification of nature* takes place in a very peculiar way, that is worth to describe.

The difficulty in keeping all the different requests and needs emerging in this unprecedented framework together (exponential growth of technology, economic development, ecological anxieties...) gives birth to a *substantial metamorphosis in the images of human being and nature*, and in their relation as well. Within the Anthropocene, the human being leaves its traditional role as the *lord* of a nature conceived as *object* or “*standing-reserve*” (I refer here to Heidegger’s idea of *Bestand*)³⁶ and takes on that of “*Steward of the Earth System*” or “*Planetary Manager*”³⁷ of a nature conceived as *living being* (see James Lovelock’s *Gaia hypothesis*, for instance). More precisely, nature becomes a kind of *pet*: something living, but entirely

³³ Schwägerl 2014, 127–149.

³⁴ Löwith 1986, 62.

³⁵ Crutzen & Schwägerl 2011.

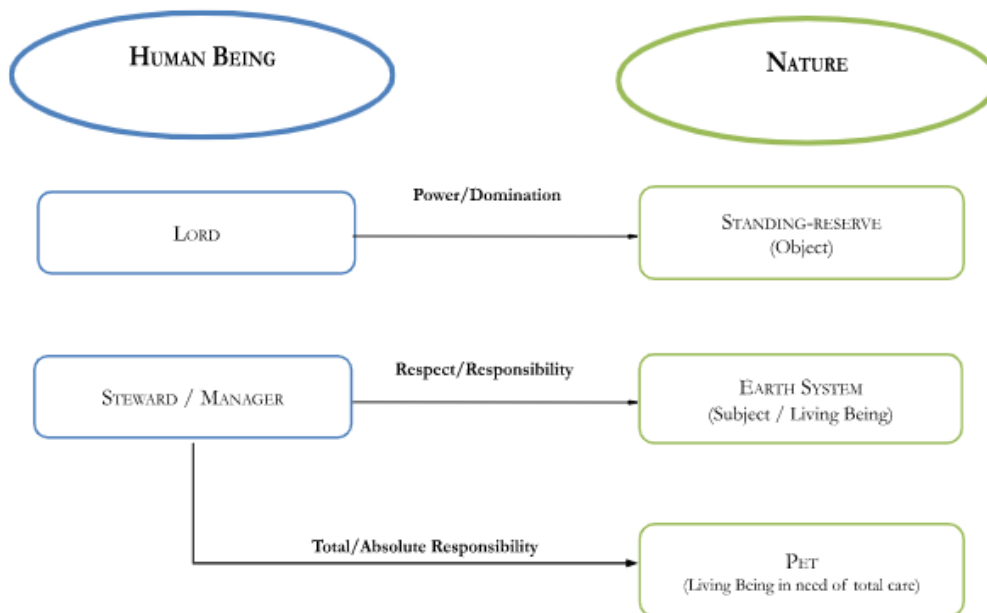
³⁶ “The name ‘standing-reserve (Bestand)’ [...] designates nothing less than the way in which everything presences that is wrought upon by the challenging revealing. Whatever stands by in the sense of standing-reserve no longer stands over against us as object.” (Heidegger 1977, 17).

³⁷ See Steffen & Crutzen et al. 2011a. Steffen and Crutzen define the “Earth System” as “the suite of interacting physical, chemical and biological global-scale cycles and energy fluxes that provide the life-support system for life at the surface of the planet [...] the Earth System includes humans, our societies, and our activities; thus, humans are not an outside force perturbing an otherwise natural system but rather an integral and interacting part of the Earth System itself” (Steffen, Crutzen et al. 2007, 615).

dependent on us – i.e. on our capability to take care of it – and thus something for which we must feel *totally, absolutely responsible*.

The coming of the Anthropocene produces therefore a significant change in the image of nature, which from a warehouse of exploitable resources turns into a living entity we must take care of. As a result, the basic relationship between human being and nature is no longer characterized by power/ domination, but rather by respect/responsibility. I define this phenomenon the *Pet-ification of Nature*.³⁸

Pet-ification of Nature



The ethical ambiguity emerging from this situation depends on the fact that the stewardship of the Earth System – i.e. our caretaking of the planetary pet – consists of an “*active* planetary management” that could take the form of an extensive *geoengineering* program. The most incisive and controversial example of this program is the “artificially adding aerosols” into the stratosphere as a solution to global warming³⁹. In my view that such

³⁸ To avoid misunderstanding, I make clear that I am referring here to the idea of pet in its “hard version”. More precisely, I mean that kind of human-animal relation in which the human being completely annihilates the animality (i.e. the difference/otherness) of a pet. In my view the paradigmatic image of this hard pet-ification is the beauty contest for dogs. I hope we can soon acknowledge the same indifference (cruelty, violence) toward the other in this manifestation that we now acknowledge in circus animals.

³⁹ Steffen & Crutzen et al. 2011b, 858.

a solution is even proposed is sufficient to show the authentic spirit of the stewardship/management of the Earth System, which can be expressed by the following formula. He/she who feels the burden of total/absolute responsibility also feels the obligation (the moral imperative) to fully exercise it. In other words, here and now the human being's only potential fault corresponds to a lack of responsibility, which in turn amounts to non-intervention. The only guilt still valid in the age of total responsibility is the *lack of agency*.

Worth unwrapping here is a crucial theoretical shift, one involving the transformation of possibility (specifically the possibility of making: Makeability/*Machbarkeit*) into cogency and obligation. Such a transformation stands out as the *Anthropocene's categorical imperative*. Jacques Ellul calls it "Gabor's Law" after the name of its unintentional creator: the Hungarian physicist Dennis Gabor. Yet its most effective formulation comes from Günther Anders and reads: "*what can be made, must be made.*"⁴⁰ Technological possibility and moral obligation become one and the same thing. *The ethical imperative turns into a technological imperative.*

Given these assumptions, nature's new configuration as pet presents an intrinsically contradictory character. Beyond the comforting appearance, the evolution of nature's image from inert entity to living being – from object to subject – does not imply a real overcoming of its reification. Such an evolution does not change the fact that it is perceived and employed as something entirely at our own disposition, at the whim of technological agency. On the contrary, this evolution reinforces nature's reification because it uses the nobility of its intentions as an alibi. Seen from this point of view, the pet-ification of nature seems to be the fulfilment of a more general process which involves nature's interpretations from object to Gaia and Earth System. In fact, despite their significant differences, all these interpretations of nature remain different expressions of the same basic principle: what Max Weber called "the disenchantment of the world", considering it the benchmark of modernity. More precisely, these interpretations confirm the gradual de-cosmization of nature (de-physization of *physis*), that is the systematic erosion of its otherness. They are therefore woven into the very fa-

⁴⁰ Anders 1992, 17.

bric of modernity, each representing a chapter of the modern *métarécit*. The invariant element through all these changes is nature becoming a function of culture, namely that preliminary metamorphosis of *physis* in *techne* which I have defined the *anthropocenic Urphänomen*.

As the final act of the modern *métarécit*, pet-ification corresponds to a *trans-objectual reification of nature*. In fact, differently from objectual reification of nature (i.e. nature interpreted as object), which simply denies its otherness, here said otherness is apparently acknowledged (i.e. nature interpreted as living being), but only on the condition that nature is fully converted into technological parameters, that is something completely manageable by technological agency. It is thus *de facto* emptied out and annihilated in itself. This trans-objectual reification, then, presents us with a *soft reification* but precisely for this, more insidious. The denial/disenchantment of nature's otherness no longer occurs by way of negation but by *domestication*. It no longer takes the form of a struggle (a *polemos*), but rather of *caretaking*. It no longer adopts a warlike logic, but a *moralistic*, paternalistic one.

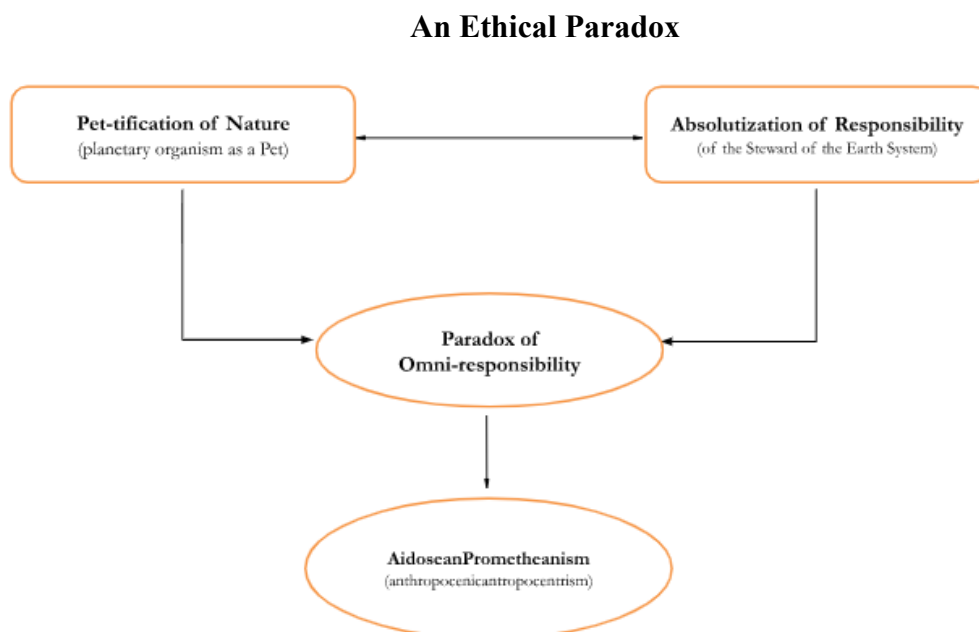
The combination of the pet-tification of nature (i.e. the characterization of the planetary organism as a pet) and the absolutization of the steward of the Earth System's responsibility generates the *Ethical Paradox of Omni-Responsibility*. On the basis of its moral and/or ecological duty of total caretaking of its own environment (that is, a situation in which the technological capability to make something becomes *ipso facto* moral obligation to do so), the human being gives birth to a *Neo-Prometheanism* – that is, a *new form of anthropocentrism* – which beneath the surface is no less problematic than the traditional one. So with the coming of the Anthropocene we have *two different kinds of Prometheanisms* or anthropocentrisms.⁴¹

1) The *traditional Prometheanism* (or the *classic anthropocentrism*), i.e. the outcome of a *Faustian man* who sees himself as the lord/subject of a nature conceived as object or standing-reserve. In this case, the relationship between human being and nature is characterized by power and domination, and thus the Promethean *hybris* is the result of *dis-interest* and *ir-responsibility* towards the otherness of nature.

⁴¹ I went deeper into the topic “Neo-Prometheanism” in Cera 2019b.

2) The *anthropocenic* or *neo-Prometheanism* (i.e., a *neo-anthropocentrism*), i.e. the outcome of an *Aidosean man* (after Aidos, the Greek goddess of shame, modesty and humility). The Aidosean Man is he who ‘only’ considers himself a steward/manager of nature conceived as living being. However this living being is also considered in permanent need of total care. In this second case, the relationship between human being and nature is characterized by respect and responsibility, and the Promethean *hybris* that emerges is the paradoxical result of *hyper-interest* and *omni-responsibility* towards the otherness of nature. It therefore represents a classic case of heterogony of ends.

The paradigmatic example of such a reification of the other by virtue of an excess of care/responsibility is the pet (in its “hard version”). The idea of pet equates to a totally domesticated animal, namely the total negation of its animality (otherness), of its being *per se*, as it is reduced entirely to its being *per me* in the form of an entity in permanent need of care. Pet represents nothing but the projection (or the embodiment, if you prefer) of the human need to caretake.



3. The Paradox of Omni-responsibility

To adequately introduce the conclusion of this paper, I will further clarify two key issues of my argument.

1) The first is my idea of “Omni-responsibility”, which I will clarify by way of a very brief comparison to Hans Jonas: the father of the Imperative of Responsibility. In the third chapter of the fourth part of his masterpiece,⁴² Jonas draws a parallel between private and public responsibility, between the paradigm cases of the parent’s responsibility for the infant and that of the statesman for their citizens. These are two “eminent paradigms” of a *total* responsibility.

By “*omni-responsibility*” I mean the evolution of this *total* responsibility towards an *absolute* responsibility. By “absolute” I intend its etymological meaning, from the Latin *absolutus*, past participle of the verb *absolvere*: “to set free”, “make separate”. By virtue of its noble intentions, this kind of responsibility considers itself absolved from any consideration/respect towards the otherness of its “object”. The *omni-responsibility* is a responsibility that, precisely due to its moral duty of total caretaking of the other, becomes *blind to the otherness, blind to the difference*. So, paradoxically, the absolute responsibility (i.e. a responsibility which is concretely/technologically able to realize all its aspirations) emerges as the anteroom of the *property*, namely that kind of relationship whereby the otherness of the other is completely denied. The risk is therefore that once become absolute, our current cosmic responsibility could turn into a *totalitarian responsibility*, give birth to a *totalitarianism of responsibility*.

2) The second key issue of my argument I would like to make explicit is that the real subjectivity of the Anthropocene as discourse/worldview is not to be found either in nature (as *physis, oikos*, environment, Earth System, vital space...) or the human being (as lord or steward or manager of nature), but rather in technology. Indeed it is precisely *technology* – conceived as *epochal phenomenon*, that is as synthesis between *disenchantment (Entzauberung)* and *rationalization (Rationalisierung)*, under the imperative of *makeability (Machbarkeit)*⁴³ – that transforms our traditional *utopian ambitions* into *concrete possibilities*, and finally these concrete possibilities into *re-obligations*. Within this new historical singularity the possibility turns into cogency and destiny. According to the already mentioned Gabor’s Law

⁴² Jonas 1985, 125 ss.

⁴³ See Cera 2017, 261–263.

(“what can be made, must be made”)the possibility (*Können*) of making (something) becomes necessity (*Sollen*) of making (something) and, at last, obligation (*Müssen*) not to refrain from making (something).

Given this assumption, I think that the best definition for this aspirant new epoch is not *Anthropo-cene* but *Techno-cene*⁴⁴, as in its essence it does not correspond to the Age of Humans or the Age of “Human Turn”⁴⁵, but rather to what philosophical thought has called *technischesZeitalter* (age of technology). In my view the Anthropocene equates to the epoch in which technology becomes not only the “subject of history”, but the subject of nature, too. Although of a Technature, that is a de-natured nature, de-physized physis. This is why I Technocene the entelechy of *technischesZeitalter*. By the way, I confirm that the in order to grasp the Anthropocene as Technocene we need a philosophically strong interpretation of technology, that is a philosophy of technology in the nominative case.

The main consequence of the Anthropocene/Technocene is to be found in the pet-ification of nature, namely the metamorphosis of the idea/image of nature, which, from an object/standing-reserve (i.e. *something* to be exploited) turns into a pet (i.e. ‘*someone*’ needing total/absolute care). This consideration suggests that *the Anthropocene as paradigm or Weltanschauung undermines Jonas’s imperative/principle responsibility as ethical standard* for the philosophical thought of recent decades. If this imperative has been the cornerstone of an “ethics for the technological age,”⁴⁶ it probably cannot play the same role in the rising anthropocenic/technocenic age. Omni-responsibility acts as a Trojan horse for a neo-anthropocentrism which, feeling a duty toward everything (that is, feeling capable of answering for anything), ends up looking after everything, measuring (and thus subjugating) everything according to its own claim to a cosmic, total, absolute responsibility. *The paradox of omni-responsibility equates to a totalitarianism of responsibility as synthesis between the pet-ification of nature* (a new

⁴⁴ On this topic see Cera 2017 and Cera 2019a. Though in a different way (and without attributing particular importance to it), the term “Technocene” already appeared in Hornborg 2015.

⁴⁵ See Schwägerl 2014, 127–149 and Raffnsøe 2016.

⁴⁶ Jonas 1985, 1.

and more insidious mortification of nature's otherness) and *AidoseanPrometheanism* (a new and more insidious form of anthropocentrism).

As the age of our absolute (i.e. total and potentially totalitarian) responsibility, the Anthropocene represents the limit case where the principle/imperative responsibility – precisely because it can be integrally actualized – unknowingly becomes the instrument of a new form of anthropocentrism. This means that, ethically speaking, the most urgent request of our age is that we acknowledge the *limits of responsibility*, namely the possibly dangerous consequences of our best intentions when they become completely/entirely makeable. It is important to remark that within this new epochal framework the technological capability to make something becomes *ipso facto* moral obligation to do so, that is technology becomes a kind of ethical transcendental, the condition of possibility for the ethics itself.

As a consequence of our understanding of the limits of responsibility, our age demands that we become aware of a new ethical problem, that is *the potential aporia between the responsibility for the other and the respect of its otherness*, namely of the fact that no authentic “*Verantwortung*” (responsibility) is possible without “*Gelassenheit*” (releasement)⁴⁷. Any form of tutelage/preservation should safeguard the other's being other, giving way to a superior form of “ir-responsibility”: not that of dis-interest, but that of the higher interest expressed by *Gelassenheit*. Such a superior irresponsibility recognizes *the value of difference as the authentic epiphany of otherness*. There is no way to produce or create difference; we can only welcome it and preserve it. We can only offer it hospitality, letting it happen.

The awareness of the aporia between responsibility for the other and respect for its otherness could suggest the first stage for its overcoming, namely the first philosophical step towards building an ethical/moral paradigm good enough for this brand-new epoch. This first step would correspond to an *encounter between Verantwortung and Gelassenheit* in the form of a renewed ethical dialogue between Jonas and Heidegger. Releasement represents the fundamental guarantee of Difference/Otherness, which in turn embodies the condition of possibility for a genuine Responsibility. Thus, in addition to the imperative of responsibility, an *imperative of releasement* is

⁴⁷ See Heidegger 1966.

needed; a *PrinzipGelassenheit* must accompany the *PrinzipVerantwortung*. This is the additional counterweight responsibility (as omni-responsibility) needs to balance the excesses of technological omni-power, to contrast the new *hybris* of hyper-interest and total caretaking.

However, regardless to the concrete strategies adopted, it remains that the only reliable measure of our responsibility is our “Taste for the Other(ness)”⁴⁸.

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⁴⁸ Here I am evoking the beautiful film by Agnes Jaoui, by paraphrasing its title: *Le Goût des autres* (2000). It is an extremely useful instruction manual for human relationships (and probably non-human, too).

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