

A new a cosmopolitics? Deleuze and Guattari on the making with what is worthwhile

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Abstract

To reframe the cosmological issue in the context of the Anthrop-/Capitalocene, is to do so under two main conditions: first, the absence of a unifiable world, which is at the same time overshadowed by a techno-economically enforced globalization of the Western way of worlding; and second, the destructive forces associated with the latter and the “end of the world” as we know it. In light of this catastrophic predicament the paper argues for the need and urgency to reformulate the cosmological question in terms of cosmopolitics and explores the extent to which the collaborative work of Deleuze and Guattari can contribute to this endeavor. As will be demonstrated, Deleuze and Guattari conceive of the cosmos as genuinely constituted by the interplay of desire and its semio-technical channeling. The latter can thus be described as cosmotechniques. Arguing that their essence consists in the association and dissociation, the very construction and deconstruction of the *socius*, cosmotechniques are at the same time always already cosmopolitical. By revisiting key concepts from Deleuze and Guattari, such as the desiring machine, the manifold, and the refrain, the paper aims to elucidate their cosmopolitical implications and utilize them to critically examine the pressing issues of our time. The argument is presented in three steps, starting with a historical-theoretical outline of the cosmological theme; followed by an exploration of its absorption and displacement within the theoretical framework of Deleuze and Guattari; and closing with a discussion of therapeutic ways out of the *malaise* of the Anthrop-/Capitalocene.

«We require just a little order to protect us from chaos,» write Gilles Deleuze and Félix Guattari in the final chapter of their book, *What is Philosophy?*, subtitled «From Chaos to the Brain» (Deleuze & Guattari 1994: 201). They emphasize that even the smallest semblance of order would not exist for us if it did not already reside within the things or facts themselves, acting as an objective counter to chaos. The chaos we seek protection from must inherently contain a trace of anti-chaos—a certain differentiation among things, such as the red of cinnabar contrasting with the green of turquoise, as well as a certain consistency of sensations and the accompanying ideas. These serve as evidence of their accord with our bodily organs, which do not perceive the present without imposing a conformity with the past. This is all we require to form our opinions, like an «umbrella» shielding us from chaos (cf. Deleuze & Guattari 1994: 202).

The opinions we use as shields against chaos, the ways in which we condense the objective anti-chaos into subjective order, and the frames of reference that make sense to us are inherently diverse and dependent on geographical, historical, natural, and cultural predispositions and modes of expression. They vary in different degrees of freedom from one mode of existence to another, from one form of life to another, from culture to culture, and from individual to individual. In fact, they are only accessible to us as retrospective traces of our previous encounters with chaos and our production of opinions, meaning, or sense.¹ Philosophy, science, and art—referred to by Deleuze and Guattari as the three daughters of chaos—according to their assertion, nevertheless, behave in direct opposition to the factual nature of the constructed order. They want us to «tear open the firmament [of opinions, A.S.] and plunge into the chaos. We defeat it only at this price» (Deleuze & Guattari 1994: 202).

Since antiquity, the question of order within the broader framework of existence has been explored through cosmological inquiries, which connect (astro-)physical observations with metaphysical questions. These inquiries delve into the fundamental queries of why something exists rather than nothing (ontological question), how we acquire knowledge about it (epistemological question), and what we shall do with it (ethical question). Thus, cosmological thinking encompasses the conceptualization of an ordered universe, whether it strives for a comprehensive total order, a necessary foundational order, or a relative normal order. Totality represents the pursuit of a complete order, universality seeks a fundamental order, and positivity aims for a regular order. These various conceptions serve as different focal points within the cosmological theme, but they can also acquire ideological or even totalitarian attributes when the pursued order becomes an unquestioned principle.

In contrast, the experience of modernity, spanning from the early modern period to the present, has often been characterized as a series of successive crises concerning cosmic order. The collapse of the external order, attributed to the 17th and 18th centuries (Brague 2003, Koryé 1957), was followed by the disintegration of the internal order, which had initially absorbed the former and established the modern subject as its bearer. In fact, one could argue that the emergence of the modern subject itself is a consequence of the breakdown of the pre-modern cosmos:

Only when the cosmos becomes fragile, when the support of a comprehensive order of life dwindles, and the boundaries of the whole begin to blur... when the foundation on which everything rests starts to sway, it becomes beneficial to recall something that is no longer all-encompassing but still seems to underlie everything in some way—a *hypokeimenon*, a *subjectum*. (Waldenfels 2013: 114, my translation)

¹ By alluding to what is mine, or, for me, the German expression for opinion, “Meinung,” plays a central role in Husserl’s phenomenology, designating, in its verbal form, “meinen,” the basic disposition of consciousness, i.e. intentionality.

If the modern subject emerges as the epicenter of a comprehensive disruption of the external order, it does so while constantly facing the risk of being shaken to the core in turn: by the unconscious that propels it (Freud), the institutional imagery that traverses it (Castoriadis), the historical destiny that shapes it (Heidegger), the epistemes that structure its discourse (Foucault), the media that define its situation (Kittler), and so on. The consequences of this dual earthquake do not entail the annihilation of all order, but rather the realization that the sought-after order cannot be neatly encompassed within a whole or based on sufficient grounds. The facticity of order, even in the absence of a complete whole and lacking sufficient reasons, thus reveals itself as eventual: as a series of events of order, that is, as *cosmosis*, or rather, *chaosmosis*. Moreover, it carries within it a moment of groundlessness, though by no means arbitrary positivity. The world, then, as Wittgenstein would say, is everything that is the case. However, thinking, as Pierre Lévy expressed in relation to Deleuze and Guattari, must surpass what is the case, the facts themselves, and inquire into

what makes them be what they are, into the assemblages of enunciation, of which they are the enunciated, into the emerging worlds of life and meaning. Returning to the sources, this is the essence of the transcendental problem. (Lévy 1994: 167)

If the cosmological theme is addressed here as a problem of the transcendental, it is not done so without simultaneously connecting it to the concrete historical conditions that currently shape it: the conditions of the so-called Anthropo- or Capitalocene, i.e. the current geophysical epoch characterized by an extensive technologization of the environment and the corresponding environmentalization of technology. As argued by Déborah Danowski and Eduardo Viveiros de Castro in reference to Bruno Latour, its main characteristic consists in the «the collapse of scalar magnitudes, when the species as a biological agent becomes a species as a geophysical force [...] when political economy meets cosmic entropy» (Danowski & de Castro 2017: 96). Evoking a rupture in the history of the Earth and its inhabitants, the Anthro- / Capitalocene confronts us with the profound impact that humans, or a portion thereof, have on the Earth, as well as an unforeseen or overlooked agency of the Earth itself. Proponents of the Anthropocene have consequently advocated for a renewed Earth perspective, rather than a human-centered worldview. Conversely, proponents of the Capitalocene have highlighted the blind spots in the Anthropocene discourse by emphasizing the unequal distribution of actions, benefits, and costs associated with these terraforming transformations. Despite differences in perspective, there is agreement on the profound and destabilizing effects of these transformations, which are inextricably linked to the globalization of industrial technology. They plunge into crisis ecosystems, social structures, and psychological frameworks alike, leaving the contemporary subject without temporal and spatial grounding and confronting it with the «end of the world» as we once knew it. As Timothy Morton argued with regard to the events of Trinity, Hiroshima, and Nagasaki in 1945, the prospect

of such an ending intimately corresponds with the logarithmic increase in humans' role as a geophysical force (Morton 2013: 6).² Tracing the increase of human terraforming further back to the first industrial revolution, Morton goes so far as to suggest that «the end of the world» has not only happened already, but happened already (at least) twice (Morton 2013: 7).

To rearticulate the cosmological theme in the context of the Anthro-/Capitalocene, we must thus consider two main conditions. Firstly, the withdrawal of a unified or unifiable world, overshadowed by the enforced globalization of the Western way of worlding, made possible through its powerful techno-economical means. Secondly, we must acknowledge the destructive powers that have been unleashed thereby and that point towards a far-reaching ecocide. This ecocide encompasses not only the extinction of rare species but also the eradication of modes of existence, ways of life, and realms of thought, feeling, and sensibility. These dual conditions provide the framework for the following reflections. Deleuze's and Guattari's work is particularly relevant in this regard, as their transcendental-empirical approach paves the way for a future cosmology, that is, a way of thinking about and making with the world that enables or recovers a sense of futurity. To achieve this, the cosmological question must, first of all be shifted from the subject's perspective to that of the world itself. This entails moving away from ideal cognitive conditions and focusing on the actual assemblages of enunciation. It furthermore entails a shift from the noun to the verb, or from the cosmos to c(ha)osmosis. The first shift aims to reevaluate the instance through which the world is *de jure* given to us, while the second shift concerns the ways in which it is *de facto* unfolded or articulated—an inherently political matter. Shifting the cosmological question from the subject's perspective to that of the world itself does not imply regressing to a naive materialism or empiricism that disregards Kant's critical insights. Instead, it necessitates a relocation and reevaluation of the transcendental. Moreover, articulating the cosmological question as a cosmopolitical one entails acknowledging that the world is constantly being made (up) in a collective effort and through the interplay of various, not always harmonious, and never innocent assemblages of enunciation.

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² It is the convergence of so-called hyperobjects such as global warming, black holes, the solar system, and others, characterized by their viscous, non-local, Gaussian, and interobjective properties, that has led to the «end of the world» according to Morton. The «end of the world» is understood here as the impossibility of assembling the heterogeneous multiplicity of hyperobjects into a coherent whole: «Hyperobjects are what have brought about the end of the world. Clearly, planet Earth has not exploded. But the concept world is no longer operational, and hyperobjects are what brought about its demise» (Morton 2013: 6).

«By what is there a world?» (Lévy 1994: 167, my trans.) This question, identified by Lévy as the central theme of the transcendental and the necessary starting point for a mode of thought that extends beyond the mere facticity of the world, received a well-known response from Deleuze and Guattari in the form of the concept of desiring machines. Through this concept, they proposed a distinct interpretation of the unconscious. In this context, the unconscious is no longer understood as an intrapsychic entity but rather as «the collective assemblage of enunciation, the heterogeneous rhizomes through which our desires circulate and in which our existences occur again and again» (Lévy 1994: 168, my trans.). As explained in *Anti-Oedipus*, nothing lies outside the realm of desire and its productions, which encompasses the natural, cultural, and industrial domains, and thus integrates the processes of production, consumption, and registration, while simultaneously being doubled over by its own anti-production—the determination of the collective body as socius:

This socius may be the body of the earth, that of the tyrant, or capital. This is the body that Marx is referring to when he says that it is not the product of labor, but rather appears as its natural or divine presupposition. In fact, it does not restrict itself merely to opposing productive forces in and of themselves. It falls back on (*il se rabat sur*)* all production, constituting a surface over which the forces and agents of production are distributed, thereby appropriating for itself all surplus production and arrogating to itself both the whole and the parts of the process, which now seem to emanate from it as a quasi cause. (Deleuze & Guattari 2000: 10)

I read Deleuze and Guattari here as suggesting that the full body is synonymous with the undetermined flow of desire. In this context, desire is both a process of production and a result of it. The socius, as an instance of anti-production, is therefore the historically specific outcome of desiring machines, which in turn acts upon them by determining or encoding the flows of desire that traverse it. Its role is to ensure «that no flow exists that is not properly dammed up, channeled, regulated» (Deleuze & Guattari 2000: 33). By being dammed up, channeled, and regulated, the full body becomes the determined body of the socius, blurring the distinction between production and anti-production, and driving the immanent reproduction of its ever-shifting boundaries.³ In this sense, Deleuze and Guattari assert that

social production is purely and simply desiring-production itself under determinate conditions. We maintain that the social field is immediately invested by desire, that it is the historically determined product of desire, and that libido has no need of any

³ The historical analysis yields various insights, including the differentiation between an early territorial machine, a later despotic machine, and the present capitalist machine. Unlike previous or alternative social machines, the capitalist machine generates its surplus value by systematically deterritorializing and decoding the desire flows that traverse it, albeit accompanied by an increasingly rigid process of recoding.

mediation or sublimation, any psychic operation, any transformation, in order to invade and invest the productive forces and the relations of production. *There is only desire and the social, and nothing else.* (Deleuze & Guattari 2000: 38)

However, as Lévy points out, one cannot make an *a priori* list of all the elements that contribute to the production of desiring machines, including places, moments, images, languages, techniques, or institutions. «Finally,» Lévy states, «we will discover once again that the ultimate concept, or rather conceptless horizon, of the transcendental here called <unconscious> could very well be the world itself» (Lévy 1994: 168). Therefore, in order to comprehend the existence of a world, we are ultimately confined to the complexity and interplay of the world itself, in which we are involved in various ways, such as sensing and acting, being passive and active, engaging in cognitive and motoric activities, and participating individually and collectively. Although we are the subjects of these diverse experiences, the world itself remains the focal point, with its chaotic multiplicity serving as our starting point and extending beyond us while also being contained within us:

The world has folded itself locally into the living [...]. The transcendental world lying above the empirical world experienced by us [...] is certainly not to be reduced to any physical, biological, social, cognitive or other kind of layer. It is also not the ordered and clearly divided sum of the layers. It is the world as an infinite supply, the trans-world [French: *trans-monde*] without hierarchy of complexity, which is always and everywhere different and complicated: Cosmopolis. (Lévy 1994: 170, my trans.)

With the depiction of the transcendental world as an infinite, constantly varying and intricate supply that is differently complicated (French: *compliqué*) everywhere and at all times, Lévy clearly draws on the concept of the fold (French: *pli*) developed by Deleuze in reference to Leibniz and the Baroque (Seppi 2016). «Cosmopolis» was already the image Leibniz used to represent the infinite folding of the world, while he employed the captivating concept of the monad to illustrate its localized envelopment. According to Leibniz, monads, which are unique instances of subjectivity distributed throughout matter, exist in such abundance as the folds themselves. Each monad, depending on the position it occupies, expresses the entirety of the world, though in varying degrees of distinction / confusion. The folds, which permeate both the external aspects of matter and the internal aspects of the soul, signify both the distinction and the connection between the two dimensions. Within this double-bind of distinction and connection, Deleuze perceives the potential of the baroque fold as an alternative to the dichotomous understanding of the world prevalent in earlier metaphysics. It presents the possibility of thinking through one world characterized by infinite differentiation.

To the question of how the world is given to us, Leibniz would undoubtedly have answered: through the ideas of the monad. Strangely enough, Deleuze seems to agree with

Leibniz to a certain extent, with the condition of no longer considering the monad as a substantial entity, but rather as the final cause of the fold⁴. Regarding the monad, the soul, or the subject as the final cause of the fold means not presupposing it as a transcendental fact, but conceiving it as a moment of folding that complements the infinite unfolding of the world itself. It can be seen as a local folding of the world into the living, as formulated by Lévy. While the infinite curve of the world represents the trans-world without a hierarchical complexity, always different and complicated, its points of inflection—original *clinamen* or inclination—represent a genuine cosmogenesis: a becoming of the world for us, even before we exist, the becoming of an infinite number of singular viewpoints (Deleuze 1993: 16). Deleuze refers to that which remains in the point of view, occupying it, as the monad, the soul, or the subject. He defines it more precisely as the instance that «includes what it apprehends from its point of view, in other words, inflection. *Inflection is an ideal condition or a virtuality that currently exists only in the soul that envelops it.* Thus, the soul is what has folds and is full of folds» (Deleuze 1993: 24). With inclusion, inflection, or inherence as the final cause of the fold, Deleuze presents his own variation on the windowlessness of the Leibnizian monad. Its very closure functions here as

infinite opening of the finite: it «finitely represents infinity.» It gives the world the possibility of beginning over and again in each monad. The world must be placed in the subject in order that the subject can be for the world. This is the torsion that constitutes the fold of the world and of the soul. (Deleuze 1993: 28)

Thus, the transcendental is no longer conceived as lying beyond the empirical, but rather in the very midst of it. The one world, as transcendental and empirical, virtual and actual, folds and unfolds continuously in all directions and into infinity, fold upon fold. The image of infinite un-/folding not only signifies the primacy of differentiation over the differentiated but also highlights the contingency of the differentiated itself. It emphasizes the simple yet far-reaching fact that it could just as well have (been) un-/folded in completely different ways. Consequently, any reconciliation with the idea of a teleological movement, or any sort of *principium principii*—be it physical, biological, social, or otherwise—is firmly excluded. The world, seen from the point of view of its infinite un-/folding, is precisely worlding and composed of an infinity of existential refrains: from the chirping of birds to children's songs to cosmic chants.

⁴ As Deleuze writes, «a very simple intuition» is responsible for positioning the monad / subject as the final cause of the fold, for «[w]hy would something be folded, if it were not to be enveloped, wrapped, or put into something else? It appears that here the envelope acquires its ultimate or perhaps final meaning [...]. It is an envelope of inherence or of unilateral «inhesion:» inclusion or inherence is *the final cause of the fold*, such that we move indiscernibly from the latter to the former. Between the two, a gap is opened which makes the envelope the reason for the fold: what is folded is the included, the inherent. It can be stated that what is folded is only virtual and currently exists only in an envelope, in something that envelops it» (Deleuze 1993: 22-23).

It is through the concept of the refrain (French: *ritournelle*) that Deleuze and Guattari in *A Thousand Plateaus* attempt to provide a theory of the manifold as such and, with it, an answer to the question of how the world is, de facto, unfolded or articulated. While *Anti-Oedipus* was strongly influenced by Kant and driven by the desire to critique pure reason on the level of the unconscious, *A Thousand Plateaus* bears the signs of a post-Kantian and decidedly constructivist endeavor. As specified in the preface to the Italian edition, *A Thousand Plateaus* «is about a theory of manifolds as such, and precisely where the manifold passes into a substantive state, whereas in *Anti-Oedipus* it was still considered in syntheses and under the conditions of the unconscious» (Deleuze & Guattari 2003: 30, my trans.). Furthermore, *A Thousand Plateaus* aims, in a decidedly constructivist sense, to provide a universal history of the earth, a history that must be conceived as utterly contingent, as it depends on the free interplay of its constitutive factors—earth, territory, de- and reterritorialization—in other words, on the various refrains that make the earth sound.

What the concept of the refrain primarily brings about is a relinquishing of the idea of a generality of space and time. On the contrary, the latter are conceived as being marked by an irreducible facialization and pulsation: «Just as space is facialized according to dominant social norms and rituals, time is «beaten» [French: *battu*] by concrete assemblages of semiotization, whether collective or individuated, territorialized or deterritorialized, machinic or stratified» (Guattari 2011: 107). Every individual, group, and nation equip themselves with a series of evocative refrains that fundamentally precede them and create a spatiotemporal net, an abode or home that allows for their individuation in the first place. Using the example of a child singing in the frightening darkness of the night to comfort itself and feel a little less lost, Deleuze and Guattari explain the three constitutive movements of any refrain, that is, territorialization, deterritorialization, and reterritorialization:

I. A child in the dark, gripped with fear, comforts himself by singing under his breath. He walks and halts to his song. Lost, he takes shelter, or orients himself with his little song as best he can. The song is like a rough sketch of a calming and stabilizing, calm and stable, center in the heart of chaos. Perhaps the child skips as he sings, hastens or slows his pace. [...]

II. Now we are at home. But home does not preexist: it was necessary to draw a circle around that uncertain and fragile center, to organize a limited space. Many, very diverse, components have a part in this, landmarks and marks of all kinds. This was already true of the previous case. But now the components are used for organizing a space, not for the momentary determination of a center. The forces of chaos are kept outside as much as possible, and the interior space protects the germinal forces of a task to fulfill or a deed to do. [...]

III. Finally, one opens the circle a crack, opens it all the way, lets someone in, calls someone, or else goes out oneself, launches forth. One opens the circle not on the side where the old forces of chaos press against it but in another region, one created by the circle itself. As though the circle tended on its own to open onto a future, as a function of the working forces it shelters. This time, it is in order to join with the forces of the future, cosmic forces. One launches forth, hazards an improvisation. But to improvise is to join with the World, or meld with it. One ventures from home on the thread of a tune. (Deleuze & Guattari 1987: 311)

A child singing in the night, clapping its hands perhaps, moving with and orienting itself along the thread of a tune... By focusing on these sonorous, gestural, and motor lines, the scene highlights the affective nature of the threefold process of de-/re-/territorialization, as well as the embodied and experiential nature of space and time. It emphasizes the aesthetic dimension as the primary mode of an inseparable becoming with the world, rather than the dimension of reflexive consciousness. What is crucial here is the decentralization of the assumed subject of experience and the rejection of a presumed distinction between subjective interiority and environmental exteriority. Instead of a predetermined boundary, the refrain articulates a pre-reflective and non-dualistic existential territory, a sort of potential space, where the differentiation of an inside and outside, a sensing subject and a sensed object, unfolds in the first place.

One can also recall Deleuze's discussion of sensation in his book on Francis Bacon, where he describes it as a two-faced process, with one face turned towards the subject and the other turned towards the object of sensation, or rather, as a face- or side-less process, where the first side does not exist without something happening in and through the second, one through another or even one in the other (Deleuze 2002). This highlights the differential, generative, and transformative nature of sensation, which leaves neither *what senses* nor *what is sensed* unaltered. One way to conceive this double alteration is, once again, through the concept of the fold, encompassing both the infinite unfolding of an outside that is more distant than any exteriority, and its doubling over, its envelopment or enclosure in an inside that is more intimate than any interiority: «The most distant point becomes interior, by being converted into the nearest: life within the folds» (Deleuze 2003: 123). Another way to conceive it is through the notion of rhythmic modulation that Deleuze borrowed from Henri Maldiney to understand the movement of form in formation (Deleuze 2003: 34-44). In any case, what we encounter here is the irrefutable belatedness of the figure-ground or interior-exterior divide with respect to the very milieu of their mutual unfolding, or, and what amounts to the same, the primacy of the milieu itself, both in the sense of the middle and the medium.

If the fundamental axiom of media theory consists of positing the medium (the third) as preceding the two it mediates, we can identify sensation here as a sort of primordial

medium.⁵ It does what all media, on all levels and historical stages, do: it defers the assumed here, now and self towards an irreducible then, there and other. Although this media-theoretical approach is more hinted at than fully developed within the writings of Deleuze and Guattari, the double articulation of content and expression that permeates all layers of organic and inorganic life, as well as the double articulation of social subjection and machinic enslavement characteristic of the alloplastic stratum, clearly allows for such an interpretation. Recall that the three basic layers that compose the entirety of the Earth are the geological, biological, and alloplastic ones. While the geological layer remains, so to speak, self-contained, the processes on the biological layer start to unfold in terms of de-/re-/territorialization, occurring as *transduction* between different strata. On the alloplastic layer, reserved for those living being equipped with language and techniques, an altogether different process takes place, enabling the *translation* of the other (Greek: *allo*) strata into one's own and thus providing access to a «scientific» worldview:

The scientific world (*Welt**, as opposed to the *Umwelt** of the animal) is the translation of all of the flows, particles, codes, and territorialities of the other strata into a sufficiently deterritorialized system of signs, in other words, into an overcoding specific to language. (Deleuze & Guattari 1987: 62)

It is through this translation and overcoding, and more broadly, through the media-technological instantiation of a «scientific world,» that I would like to conclude my remarks and return to the question of a cosmopolitics for the Anthropo-/Capitalocene.⁶

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To characterize the alloplastic layer through language and techniques may initially appear quite conventional. However, upon closer examination, Deleuze's and Guattari's interpretation reveals a subversive quality. This subversion emerges from a shift in perspective that no longer regards language and techniques as projects and products of the

⁵ Although I cannot delve into details here, I would like to highlight how closely this account resonates with the Deleuzian-Spinozist notion of affect (i.e., becoming), which equally emphasizes the primacy of the relationship over the relata (cf. Deleuze & Guattari 1987: 232-310).

⁶ I am hesitant to confine the alloplastic layer, as Deleuze and Guattari appear to do here, solely to humanity. Instead, I would rather address it in terms of bioturbation and distributed intelligences, as exemplified by Nigel Thrift (Thrift 2005). Additionally, I would like to acknowledge and distance myself from the problematic tradition underlying the juxtaposition of (a scientific) *Welt* and (an animal) *Umwelt*, which can be traced back to Jakob von Uexküll and was revived in a problematic manner in Martin Heidegger's tripartite division of the human being (German: *Dasein*) as «world forming,» animals as «poor in world,» and stones as «worldless» (Heidegger 1995: 177).

so-called *Anthropos*, but rather posits the latter as aftereffect of a bio-semio-technological co-evolution.⁷ At the same time, Deleuze and Guattari emphasize that it is not specific technical objects or sign systems alone that determine the direction of the evolutionary process. Rather, it is their integration into the social machine that plays a crucial role. Only with their integration into the social machine do technical objects and sign systems achieve tangible efficacy. To strengthen their argument, Deleuze and Guattari provide examples such as the invention of hoplite weapons, the lance and sword of the Bronze Age, as well as feudal innovations like the stirrup and plow. In each case, the respective technical object allows for significant societal changes, but its transformative potential can only be realized through corresponding social shifts. For instance, changes in warfare and the emergence of the phalanx as a new battle formation in relation to hoplite weapons, or the reconfiguration of man and horse in relation to lance and sword. Similarly, the introduction of the stirrup has to be seen in connection with the changes in land donation, the adoption of the plow in connection with the implementation of three-field farming (Deleuze & Guattari 1987: 398-399). The same line of reasoning applies to the semiotic domain, where different sign systems are linked to specific social formations such as nomadism, agrarian society, feudal society, disciplinary society, or the society of control⁸ (Deleuze & Guattari 1987: 111-149).

While not delving into the specifics, it is important to note that Deleuze and Guattari's approach distinguishes itself from any one-sided conception that conceives of cultural phenomena either in terms of technical determinism or symbolic motivation. Instead of an exclusive either/or, their approach encompasses both the technical and semiotic assemblages, which together form the double axis of the social machine (cf. Seppi 2020). If the analysis of these historically and culturally contingent assemblages lends itself, as argued here, to a form of cosmology, so under the strict condition of dispensing with any naturalistic assumptions: The cosmos, according to Deleuze and Guattari, is genuinely made (up) by the interplay of semio-technical concatenations and as such always already the product of cosmopolitics. The reassessment of the cosmological question in terms of cosmopolitics can in turn be understood as a time-critical event in itself: Where different cosmologies collide and none can claim sovereignty over the other, their factitious character becomes conspicuous.

This holds especially true for our contemporary predicament. As Yuk Hui has recently argued (Hui 2016), the cosmological question is today permeated by an inherent tension between two simultaneous but opposing developments: the emergence of the Anthro-

⁷ Such a change of perspective was early on and most explicitly proposed by André Leroi-Gourhan (Leroi-Gourhan 1964).

⁸ Chapter 5 of *A Thousand Plateaus* draws on the remarks in *Anti-Oedipus* and continues the analysis of territorial, despotic, and capitalist forms of society and representation begun there. Henning Schmidgen assigns territorial representation to the pre-significant semiologies, despotic representation to the significant semiologies, and capitalist representation to the a- or post-significant semiotics (Schmidgen 1997: 144). As apt as this classification is, as misleading it would be to conclude from it a linear evolution of social formations and sign regimes.

/Capitalocene on one hand, and the end of unilateral globalization on the other. The arrival of the Anthro-/Capitalocene confronts us with the global impact of anthropo-/capitalogenic transformations on the Earth system, while the end of unilateral globalization points towards the growing recognition of multiple ways of worlding. Acknowledging this multiplicity is one thing, but take it seriously is another. Starting to seriously consider the multiplicity of worlding, implies revealing that what has been called globalization thus far is actually the effect of a techno-economic war that violently imposed, and continues to impose, one way of worlding upon all others. From colonial genocide, to the ongoing ecocide, Western cosmopolitics has proven to be a veritable pain machine. It is undeniable that this way of world-making, or rather, world-destroying, has no future. A new cosmopolitics is thus urgently required.

For Guattari, for a future cosmopolitics to be possible, a radical ecosophical revolution needs to be fostered (Guattari 2000). As he argues, only through an integrated evaluation of the three ecological spheres—environment, social relations, and human subjectivity—can a satisfactory response to the catastrophic climate of our time be formulated. Moreover, such an attempt would need, as Guattari adds, to extend beyond national or discursive boundaries and could only be realized through an authentic political, social, and cultural revolution, one that was capable of reorienting the goals of the production of material as well as immaterial assets. Guattari's ecosophical vision, therefore, encompasses not only the visible relations of power on a large scale but also, equally importantly, the molecular domains of sensibility, intelligence, and desire. It involves a dual macro- and micropolitical approach, aiming at a radical transformation of all three ecological spheres, emphasizing the reorientation of modes and scopes of production and calling for a corresponding transvaluation of all values. The question remains, where to begin and how to cope with it in a world so intricately structured by the semio-technological assemblages of a cosmopolitics driven by the idea of progress, and measured in terms of profit, rather than futurity.

To conclude, let me tie this question back to the above discussion of desiring machines and connect it with the notion of «adoption» that Bernhard Stiegler has suggested as a therapeutic answer to the unavoidable pharmacology of our semio-technological mode of existence. Contrary to the paradigms of adaptation (understood as submission without resistance) and reappropriation (understood as return to the proper), adoption is conceived by Stiegler in terms of an individuation that takes place within what he refers to, drawing on Donald W. Winnicott, as a «potential space» (Winnicott 1971: 3). It is here, where the objects of desire are formed, driving both infantile psychogenesis and anthropogenesis encompassing culture, the arts, religion and science. Through the investment of desire, the creativity of experiencing is accentuated as «a *doing* [*faire avec*: doing, or making the most of, or making with] *what is worthwhile*» (Stiegler 2013: 45).

The way Stiegler situates desire here in relation to a doing or making with what is

worthwhile is closely related to the cosmopolitical interpretation of desiring machines suggested in the previous sections. In an interview with Tetsuo Kogawa, Guattari affirms this reading, stating that desire is first and foremost the triggering of another world of possibilities (Kogawa, Guattari 1981: 16-18 min). It is by its potential to trigger another world of possibilities and thus a rupture with the economy of the already there, that desire imminently transcends the sphere of micropolitics and points in the direction of a future cosmopolitics. Certainly, any effort to address our contemporary catastrophic climate would fall short if it were limited to the molecular domain of desire alone. However, it is precisely within the potential space of desire, a space that transcends the boundaries of self and other, between the internal and the external, the micro and macro, that the possibility arises to engage and align with the forces of the future, «cosmic forces,» perhaps: «One launches forth, hazards an improvisation. But to improvise is to join with the World, or meld with it. One ventures from home on the thread of a tune» (Deleuze & Guattari 1987: 311).

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