



ANTI-DUALISM IN THE DISCOURSE ON THE ANTHROPOCENE

ANTI-DUALISMO NO DISCURSO SOBRE O ANTROPOCENO

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Abstract. *18 years after its introduction into scientific vocabulary, a vast discourse on the Anthropocene has settled in very heterogeneous scientific areas, from Biology and Geology to the Arts and Humanities, including Philosophy itself. Despite its multidisciplinary nature, there seems to be a common presupposition in this discourse that often becomes a demand: to abandon a false dualism allegedly responsible for the lack of answers to the challenges that the new anthropogenic age poses to us. Anti-dualism seems to be a common denominator, widely shared by the most diverse authors of the Anthropocene discourse, but what is meant by 'dualism' seems extremely heterogeneous to me, embracing ontological, epistemological, and political dimensions, and sometimes mixing them. Whatever the combated dualism – nature and culture, social system and terrestrial system, Man and Earth, biosphere and noosphere, subject and object, observer and observed, natural sciences and human sciences, etc. – the golden key to unravelling and developing a different way of thinking and being capable of facing the environmental challenges of the present would be by overcoming these dualisms, that is, in a perspective that can account for the intersection and overlap of the hitherto opposed elements and which presupposes, in the end, their assimilation. How both imbrication and assimilation can or should be thought of, however, can vary greatly from one author to another. Based on these assumptions, I will focus on two criticisms of anti-dualism put forward by Andrew Feenberg and Gernot Böhme. Both critics chose the theories of Haraway and Latour – authors who are today among the most cited philosophers of the Anthropocene – as distinct exponents of anti-dualism. I will argue that criticism of anti-dualism is pertinent and necessary, but that the alternatives proposed by Feenberg and Böhme are not convincing.*

Keywords: *Anthropocene; dualism; anti-dualism; philosophy of technology.*

Sumário. *18 anos após a sua introdução no vocabulário científico existe um vasto discurso sobre o Antropoceno que se instalou em áreas científicas muito heterogêneas, desde a Biologia e Geologia até às Artes e Humanidades, inclusive na própria Filosofia. Apesar da sua multidisciplinariedade, parece haver neste discurso um pressuposto comum que, não raras vezes, se transforma numa exigência: a de abandonar um falso dualismo alegadamente responsável pela falta*

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de respostas aos desafios que a nova era antropocénica nos coloca. O antidualismo parece ser um denominador comum, largamente partilhado pelos mais diversos autores do discurso sobre o Antropoceno, mas aquilo que se entende por ‘dualismo’ parece-me extremamente heterogéneo, abrangendo dimensões ontológicas, epistemológicas e políticas, e, por vezes, misturando-as. Seja qual for o dualismo combatido – natureza e cultura, sistema social e sistema terrestre, Homem e Terra, biosfera e noosfera, sujeito e objeto, observador e observado, ciências da natureza e ciências humanas, etc. –, a chave de ouro para desencerrar e desenvolver um pensamento diferente, capaz de enfrentar os desafios ambientais do tempo presente, estaria na superação destes dualismos, i. e., numa perspetiva capaz não apenas de dar conta da intersecção e imbricação dos elementos até então opostos, mas que pressupõe, no fundo, a sua equiparação. Como se pode ou deve pensar tanto a imbricação como a equiparação, pode, no entanto, variar bastante de um autor para outro. Com base nestes pressupostos, focar-me-ei em duas críticas do antidualismo, apresentadas por Andrew Feenberg e por Gernot Böhme. Ambas as críticas escolheram as teorias de Haraway e Latour – autores que se encontram, hoje em dia, entre os mais citados filósofos do pensamento sobre o Antropoceno – como representantes distintos do antidualismo. Defenderei que a crítica ao antidualismo é pertinente e necessária, mas que as versões propostas por Feenberg e Böhme não convencem.

Palavras-chave: Antropoceno; dualismo; antidualismo; filosofia da tecnologia.

o. Some examples of anti-dualistic theses in the Anthropocene discourse

Without wishing to be exhaustive, I would like to give some examples of the formulation of anti-dualistic theses in the Anthropocene discourse. The number of examples could be expanded arbitrarily because as stated in the introduction, I am convinced that the anti-dualistic perspective has advanced to a kind of common sense conviction. The few examples I give here provide a first insight into the heterogeneity of what can be meant by anti-dualistic theses. I proceed in such a way that I quote a few selected passages or statements from articles and then comment briefly on their content implications.

The Anthropocene perspective is one that encapsulates a world of intertwined drivers, complex dynamic structures, emergent phenomena and unintended consequences, manifest across different scales and within interlinked biophysical constraints and social conditions. (Bai, X. *et al.* 2016: 351)

Implicit here is that ‘social conditions’ and ‘biophysical constraints’ are directly linked, i.e., it is implied that they are to be regarded as *relata*, which, to put it mildly, are neither incommensurable nor totally heterogeneous, nor do they belong to ontologically completely different systems. In many other texts, only the designations of the two *relata* change. The common feature, that a dualism of seemingly heterogeneous realms of being should be abolished, remains. Although many authors do not explicitly distinguish between being, thinking, and acting,

these three levels are often referred to. On the ontological level, they hold that the separation of nature and culture is not justified, in epistemological terms we would have to rethink and also reorganize the traditional areas of science, and in practical-ethical-political terms we would have to change our norms and act differently. The following two quotes are examples of the ‘mingled’ reference to the three dimensions of being, thinking and acting:

We argue that, because what currently counts as ‘environmental’ is also social (or, in some accounts, ‘biosocial’ or ‘naturalcultural’). (...) We suggest that the new era, characterized by measurable global human impact – the so called Anthropocene – does not just imply conflation of the natural and the social, but also a ‘radical’ change in perspective and action in terms of human awareness of and responsibility for a vulnerable earth. (...) It is now time for us to articulate the culture of emerging Anthropocene societies by drawing upon natural scientists, humanities scholars, and social scientists, emphasizing the new fusion of the natural and the ideational, (...). (Pálsson, G. *et al.* 2013: 4; 7)

(...) the ecological crisis we are facing today will not be solved by new policies to restrict industrial pollution, the preservation of natural resources or the reduction of greenhouse gas emissions. The ecological crisis is rooted in *anthropocentric humanism* (...). This humanism is characterized by a fundamental dualism between humankind and nature (...). (Blok 2014: 309)

Based on this assumption, some, but not all of the authors draw the epistemological conclusion that a correct and appropriate scientific view should not be environmentalist, because it is still based on the false assumption of a present opposition between agent and environment. Environmentalism must therefore be replaced by a non-dualistic unified science, which is often referred to as *Earth System science*.

Ecology is the science of the relationship between organisms and their local environments, whereas Earth System science is the science of the whole Earth as a complex system beyond the sum of its parts. (...) The Anthropocene concerns human impacts on the Earth System, not on the environment. (Hamilton 2015: 1f.)

Some radical ecocentrics, or radical environmentalists, are undoubtedly anti-dualists, but differ from Earth System scientists in applying anti-dualism only to all living beings, not to all entities. Often exponents of the anti-dualism thesis also draw political consequences, demanding that all beings or, as we shall see in Latour, all entities should be given a right to participation or at least representative participation in democratic decision-making. As an example for authors who hold a moderate position, that is, who maintain thinking in the context of today’s notions of political representation, I quote a short passage from Dryzek:

The claims [of climate politicians] include deliberation's ability to integrate the interests and perspectives of diverse actors (scientists, public officials, activists and others) concerned with different aspects of complex issues, promote public goods and generalizable interests, enlarge the perspectives of participants by bringing to mind those not physically present such as future generations and non-human nature, and organizing feedback on the state of social-ecological systems into political processes. (Dryzek 2014: 12)

In terms of a first conclusion, we may say that the anti-dualism in the Anthropocene debate tends to establish ontological, epistemological and ethical-political claims, although these three domains are not always clearly distinguished and explicated. If one wants to reflect critically on the anti-dualistic theses, one should consider these differences.

In the following, I will analyse the anti-dualistic theses of D. Haraway and B. Latour in more detail. Both are not only outstanding authors of the debate on the Anthropocene, but at the same time are the authors to which Feenberg and Böhme addressed their criticisms.

1. Anti-dualism in Latour and Haraway

1.1. Anti-dualism in Latour

Latour's anti-dualism is complex and has been elaborated in many of his writings. A basic requirement for this anti-dualism is Latour's understanding of a type of thought that he designates with the term 'modernity.' In particular, in his work *Nous n'avons jamais été modernes*¹, published in 1991 and translated into numerous languages, Latour explicates that this age, termed 'modern,' has produced a dualism that is, as a matter of fact, non-existent. Latour describes his hypothesis as follows:

The hypothesis of this essay is that the word 'modern' designates two sets of entirely different practices which must remain distinct if they are to remain effective, but have recently begun to be confused. The first set of practices, by 'translation', creates mixtures between entirely new types of beings, hybrids of nature and culture. The second, by 'purification', creates two entirely distinct ontological zones: that of human beings on the one hand; that of nonhumans on the other. (Latour 1993: 10f.)

Responsible for the false and, as we shall see, dangerous 'second set of practices' is a dualism that rigorously separates the two macro-spheres of nature and culture. This separation, which Latour lets begin with Hobbes and Boyle and

¹ I use here the English version translated by Catherine Porter (Latour 1993).

the reception of their works, corresponds to a strategy that seeks a clear and, above all, exclusive attribution of ontological, epistemological and ethical-political valences, competencies and roles. Nature becomes an exclusive subject of the natural sciences, excluded from the political-ethical discourse and separated from the human sciences. In parallel to this profound dualism which becomes the absolutely dominant and unquestioned type of thought and action, entities are permanently created that simply undermine this dualism because they are mixtures of the natural and the social. Therefore, they were always there but were ignored and, so to speak, suppressed in modernity, especially in scientific, normative, and political terms.

Ontologically, these hybrids are not just mixtures of the discrete areas of nature and culture. What is new about Latour is that hybrids contain not only entities of the object class, but also of the class of relations (see Latour 1993: 111-114), for example, “CO², sea levels, plant nodules or algae, in addition to the many different factions of fighting humans” (Latour 2013: 103), i.e., relationships that, together with the hybrid and non-hybrid object entities, form a network and have agent or actor status. However, the very challenge of Latour’s theory lies not in the ontological field but in the epistemological and ethical-political. While a simple anti-dualism and anti-anthropocentrism, as it is represented in countless articles, wants us *as humans* to radically rethink our being (ontology), our thinking (epistemology) as well as our doing (ethics and politics), a radical anti-dualism would like to go a step further because it argues that the means of radical change, that is, *being, thinking and acting itself, must be ‘de-humanized.’* Despite all radicalism, Latour does not abandon the orientation in the three categories of *theos*, *nomos*, and *demos*. In the present context, I cannot deal with all the difficulties that the redefinition of these categories raises, above all not with the questions of the function of religion and the instance of God, as well as its further replacement by the Gaia principle. By contrast, I would like to briefly discuss some aspects that affect the *nomos* and *demos* domains.

The new onticity of the world poses new nomological and political challenges, according to Latour. The nomological ones concern what he calls “agency distribution” (*ibid.*, 44) and their principles. This distribution and the determination of its principles seem to me, on the one hand, to occur ‘on their

own'; and on the other hand, they can or should be coordinated and this coordination makes demands on a new policy. This requires a brief explanation.

By itself ('on its own'), agency distribution takes place in that agents or species of agents occupy their place in the overall context of all entities in an autonomous manner, and that is, in their peculiar manner and in compliance with the specific conditions of their self-preservation and best possible proliferation. In line with Carl Schmitt, Latour also assumes that at this stage of the new community of all agents it can become quite normal that groups of agents can be totally alien to each other, that there are conflicts of interest which are serious and in which the survival of a group of entities is at stake, and that there is no third impartial Arbitration Panel competent and authorized to resolve or settle these conflicts from the position of a sovereign judge. Given this Hobbesian scenario of a war of all against all, there is a need for the members of this 'state of agents' to agree on their claims, rights, and duties. One difficulty in Latour's conception of this challenge is that candidates for recognized membership in that state have to prove their entitlement to membership:

Instead, what I propose to say is that, in this new cosmopolitical situation, those who wish to present themselves to other collectives have to specify what sort of people they are, to state what is the entity or divinity that they hold as their supreme guarantee and to identify the principles by which they distribute agencies throughout their cosmos (Latour 2013: 83).

But how can an entity that cannot speak do the three named actions – specify, state, and identify? Even Latour cannot avoid the fact that this is only possible through representation, and that means that these entities have to be interpreted and represented by conscious living beings, who were designated in *Politics of Nature* as 'spokespersons' and identified with scientists (see Latour 2004, 64ff.).² The problem of this situation, however, is greatly increased by the fact that the hybrid agents are produced not only in most cases by man himself, but also by the fact that democratic decisions in the new Gaia state have an existential weight. They decide over life and death, or in other words, they decide about the date of birth and the expiry date of these hybrids: "the production of

² See for instance these statements: "the lab coats are the spokespersons of the nonhumans" (Latour 2004, 64); "We shall say, then, that lab coats have invented speech prostheses that allow nonhumans to participate in the discussions of humans, when humans become perplexed about the participation of new entities in collective life." (ibid., 67).

hybrids, by becoming explicit and collective, becomes the object of an enlarged democracy that regulates or slows down its cadence.” (Latour 2013, 141).

However, Latour’s conception is most questionable where ethics and morality are concerned. The thesis already held in 1991 that the attitude of modernity not only led to crime (see the subchapter entitled “Avoid Adding New Crimes to Old,” Latour 1993: 125-127), but also – in domains like politics, economics and science – to an unbearable totalitarianism (*ibid.*, 125f.), resembles rather a capital insinuation and is, even in later works of Latour, not satisfactorily justified. As a remedy against crime and totalitarianism, Latour suggests a kind of a connectivism or relativism:

When we abandon the modern world, we do not fall upon someone or something, we do not land on an essence, but on a process, on a movement, a passage – literally a pass, in the sense of this term as used in ball games. (...) We start from the *vinculum* itself, from passages and relations, not accepting as a starting point any being that does not emerge from this relation that is at once collective, real and discursive. (Latour 1993: 129)

As a decisive positive feature of connectivism, its transparency is emphasized, i.e., that relations as such are not suppressed or ignored, but become conscious and accessible to debate in political committees. However, it seems to me to be problematic if the awareness and transparency of the production and connection of hybrids become the *decisive* criterion of morality, as the following statement by Latour seems to claim:

Reveal its [of the human species] work of mediation, and it will take on human form. Conceal it again, and we shall have to talk about inhumanity, even if it is draping itself in the Bill of Rights. (Latour 1993: 137)

The problem, however, is not only the reduction of ethics and morality to functioning and transparent relationships, but also the blatant contradiction that, on one hand, the status and meaning of the typical human thought, action, and being undergoes a significant degradation which almost leads to its elimination, and that, on the other hand, one demands a lot more from human thinking and action than in modern times: not only to produce hybrids and scientifically illuminate their connectivity in a manner that is understandable to all fellow citizens, but also to represent these hybrids politically and to decide on their lifespan and life entitlement. Faced with an extreme downgrade and an extreme upgrade, man now fills the gap between nothingness and God, a result that clearly contradicts Latour’s very concerns.

1.2. Anti-dualism in Haraway

I will only briefly comment on Haraway's anti-dualism because this seems sufficient to me in the analysis presented here. Haraway's and Latour's ideas meet in some essential points and therefore it is not surprising that Haraway sees in Latour one of the closest and most prominent companions in defence of her anti-dualistic worldview (see Haraway 2016: 43). On the other hand, she also distances herself from Latour (*ibid.*), and this demarcation may have to be even clearer than Haraway herself expresses it. I would like to explain this very briefly.

I would argue that the strongest resemblance between Latour and Haraway lies in their ontological premises. The extension of the terms *hybrid*, *actant* or *agent* in Latour and *critter* or *cyborg* in Haraway certainly has a large overlap. When Haraway defines her use of the terms 'cyborg' or, later on, 'critter', potential elements of this species are "microbes, plants, animals, humans and nonhumans, and sometimes even (...) machines." (*ibid.*, 169). Even though all these entities are also involved in relations, it seems to me that Haraway does not want to allow relations as such, i.e., *relational universals*, as species members.³ Haraway herself mentions two other parallels: "Like Stengers and like myself, Latour is a thoroughgoing materialist committed to an ecology of practices" (*ibid.*, 42). With regard to the first feature, materialism, I would add that in both authors this does not lead to a complete suppression of the transcendent. I only briefly mentioned this aspect with regard to Latour and, here too, I will not elaborate on it. As far as the ecology of practice is concerned, I see more differences than similarities.

On the one hand, Haraway rejects Latour's recourse to Carl Schmitt and thus the idea of a war of all against all as *movens* of a representative democracy: "Schmitt's enemies do not allow the story to change in its marrow; the Earthbound need a more tentacular, less binary life story. Latour's Gaia stories

³ In Haraway's most well-known text – "The Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century" – which, based on a shorter version edited in 1985 (Haraway 1985), was published in 1990 (Haraway 1990) and repeatedly republished online (I use the version edited by Warwick University (Haraway 2017)) – we can find two definitions of cyborg: "A cyborg is a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction." (Haraway 2017: 3); "The cyborg is a creature in a postgender world" (Haraway 2017: 9). While in the later text entities are admitted that seemingly are not mixtures at all, in the earlier text the mixture of organism and machine seems to be the outstanding criterion, whereby cyborgs can exist factually or fictionally. Therefore, the later text seems to extend the extension of the term. On the other hand, one could dare to argue that, in fact, there are no truly non-hybrid entities anymore, so that the listed examples of the younger text, in fact, do not contain any pure, unmixed entities. Still, I believe I am right in stating that Haraway never cites relational universals as examples of hybrids or critters.

deserve better companions in storytelling than Schmitt.” (*ibid.*, 43). Secondly, the function of the political representation of all entities, emphasized by Latour, does not seem to play a significant role in Haraway’s arguments. Democratic and decision-making processes are presupposed in their present form and, in principle, are not considered to be in need of reform. On their basis, the major changes happen and these concern rather separate *oikoi* than the global world. Haraway rejects total perspectives which is in some ways consistent because the way we think is, according to Haraway, quite a material thing and of material importance: “The question of whom to think-with is immensely material” (*ibid.*). Ecology of practice is practical ecology, and that practical ecology is implemented in limited, manageable spaces, even though it naturally has significance for the ecology of the whole, the Earth. The aim of a limited ecological practice is to create protective refuge or retreat spaces in which the relations between “microbes, plants, animals, humans and nonhumans, and sometimes even machines” can flourish. Haraway calls this ecological practice also ‘composting,’ and composting requires not only the material association or fusion but also the selection of the compost partner. Instead of the concept of holistic ecology, where all have to live together, here the limited ‘domestic’ cohabitation becomes central (“The brand of holist ecological philosophy that emphasizes that ‘everything is connected to everything,’ will not help us here. Rather, everything is connected to *something*, which is connected to something else.” (*ibid.*, 173)). This conception, which declares itself as feminist and combines ideas, suggestions, and realizations of ecological practice with feminist practice, combats a type of thought and action that tolerates or systematically includes destruction, domination, and oppression: especially capitalism, environmental destruction and typical patriarchal forms of discrimination. The present age in which the confrontation between old and new forms of life takes place and must take place, Haraway calls *Chthulucene*. It is the age which would have to begin now because of the imminent collapse of planet Earth. She describes it like this:

My Chthulucene, even burdened with its problematic Greekish tendrils, entangles myriad temporalities and spatialities and diverse intra-active entities-in-assemblages – including the more-than human, other-than-human, inhuman, and human-as-humus. The symchthonic ones are not extinct, but they are mortal. One way to live and die well as mortal critters in the Chthulucene is to join forces to reconstitute refuges, to make possible partial and robust biological-cultural-political-technological recuperation and recomposition, which must include mourning irreversible losses. (Haraway 2016: 192)

For Haraway, man's hybrid connection with other entities is no problem at all, just as minor as radical changes of the material constitution of man through technology.

2. Anti-anti-dualism: the criticisms of Böhme and Feenberg

The criticisms directed to Haraway and Latour by the authors Gernot Böhme and Andrew Feenberg are very interesting for two principal reasons. (i) They cannot be understood as traditional-classical criticisms which brand anti-dualism as irrational and dangerous and do not want to give up the 'modern' dualism. Rather, both authors emphasize that Haraway and Latour are perfectly right in their ontological diagnosis of the increasing hybridity of entities in the world today. However, they emphasize that this diagnosis should not lead to total suppression of duality since such a one-dimensional view would not only be uncritical but also dangerous. It is therefore important to recognize dualistic dynamics in anti-dualism itself. Hence, this criticism could also be characterized as anti-anti-dualism or dualistic anti-dualism. (ii) On the other hand, both critiques are also important because they highlight an aspect that was not explicitly raised as a problem in our analysis until now: the function of technology. The key point of the critiques is that in the context of the required recognition of hybrids, the reflection on the function and role of technology is inadequate. However, as far as the logical connection between reflection on the function of technology and suppressed dualism is concerned, the criticisms of the two authors differ considerably. I would like to briefly comment on both critiques before I draw the last general conclusions.

2.1. Anti-anti-dualism in Böhme

The text by Böhme, which I would like to refer to here and in which he expresses his criticism of Haraway and Latour dates back to 2002 but is as relevant today as in the year it was written, although he obviously could not have taken the more recent texts by Haraway and Latour into account.

Böhme first emphasizes that Haraway and Latour are correct in their ontological diagnosis of our age: the increasing hybridization of our reality is

undoubtedly already a fact as shown by a look at reproductive medicine, transplantation medicine and genetic engineering. Therefore, it is not surprising that some authors, such as Haraway and Latour, make this fact a desideratum:

In this situation it is not surprising that there are authors who, as it were, seek refuge in attack, declare the old European self-understanding of the human being to be obsolete, and disdainfully jettison those – supposedly modern – dichotomies: nature/technology, nature/culture, nature/civilization, nature/spirit. The human being is a hybrid, according to Bruno Latour, or a cyborg, according to Donna Haraway, and that's a good thing, they say, and freedom consists in grasping this. (Böhme 2002: 8)

Following Böhme, Haraway's feminist-socialist approach blurs the criticism of the dualism of modernity with the rejection of the patriarchal meta-narratives, in which the oppression of the weaker is structurally anchored. Cyborgism is linked not only to the rescue of the pleasure principle beyond its anchoring in gender thinking, but also linked to the liberation from the oppressive thinking in oppositional fundamental categories.

Her decision is therefore to have “pleasure in the confusion of boundaries”, (Haraway 1991 [*sic*]⁴, 150)⁵ that is, she emphatically welcomes the metamorphosis of the human being into a cyborg, a metamorphosis that transpires partly through a fusion of the human being's organism with cybernetic machines, and partly through his or her absorption into networks. (Böhme 2002: 8)

Böhme's criticism is simple and clear: even if Haraway's unsentimentality and intrepid reality diagnosis is correct and deserves to be appreciated, it is nevertheless uncritical and corresponds to a kind of wishful thinking coupled with a naive new affirmation:

What we can value in Donna Haraway is her sober, indeed, fearless account of what is actually happening to the human being. However, one wonders whether her form of critique (...) is not much more than the call to make the best of it. (...) What is called critique becomes affirmation because every standard for critique was already relinquished at the outset with the abandonment of all differentiations. (Böhme 2002: 9)

Böhme's assessment of Latour is almost identical. He appreciates his correct and unsentimental diagnosis of the current state of civilization – “What is impressive about Bruno Latour's large-scale project – like Haraway's project – is above all the unreserved recognition of the state of our civilization.” (Böhme 2002: 10) –, but criticizes the omission of a criterion for our actions, and that is, the uncritical nature of Latour's theory:

⁴ The text was not published in 1991, but in 1990.

⁵ Haraway (2017: 7).

This [Latour's] analysis is correct and therefore Latour's proposal to turn modern thinking inside out, that is, to proceed conceptually from the center, has to be taken very seriously. But one wonders whether he can in this way find a new basis for critique or – to say it once more – a criterion for the choice between hybrids, which would then no longer be termed hybrids. (Böhme 2002: 9)

It seems now that Böhme is only concerned with adding the missing critical moment to the basically correct theories of Haraway and Latour: "The question arises as to whether his call to proceed conceptually from the center might not be answered in the form of a critical theory." (*ibid.*, 11). Latour's suggestion to fill the gap between matter and mind, natural and social, and the humanities and natural sciences by starting 'from the centre,' or, in other words, to recognize the hybrids that have always existed in this centre, contains an uncritical moment because all entities are drawn to a one-dimensional level which allows no differentiation. That is why Böhme is concerned with reintroducing differentiation or giving it back its right of existence. Instead of starting from hybrids, as Latour and Haraway do, Böhme returns to the human being and anchors in him the common ground from which duality is created. Duality is now related to the opposition 'body and its scientific-objective appropriation' *versus* 'autonomous subject.' However, both poles are only possible if they are related to the more original 'self-giveness,' which is the source of the two poles. Self-giveness holds in itself the critical potential that is lacking in the category of hybrids, it is the centre out of which duality develops. Only its reflexive assertion guarantees the overcoming and reversal of a false dualism, i.e. guarantees the realization of the project that Haraway and Latour have written on their flags:

Because the body and the autonomous ego are products of a differentiation from the original concerned self-giveness, they cannot be assumed in any way to be immovably given – its constellation always remains precarious. In insufferable pain, in shock, lust, or through meditation, body and autonomous ego can indeed disappear again, in regression to the original concerned self-giveness. I claim that sovereign human beings will have to keep this possibility open. They will refuse to stylize themselves into autonomous subjects, not only because this is an illusion but also because they would lose contact with everything that affects, that concerns them. On the other hand, they will refuse to objectivize their corporeality [Leib] completely into a body because they would lose their original self-giveness in corporeal sensing. (...) In the concept of a differentiation of the body and the autonomous subject from original concerned self-giveness, on the one hand, and in the idea of the sovereign human being, on the other, we have the theoretical-practical background for a critical theory of human nature. (Böhme 2002: 12f.)

Böhme's criticism may well have its justification, but it does not raise a particularly strong argument against the anti-dualists, for in the end it conservatively advocates a return to anthropocentrism which the anti-dualists

consider to be the main reason for the catastrophic situation of the planet Earth (and with it of humanity). Therefore, it is not surprising that Böhme also returns in a somewhat conservative manner to the antagonism between man and machine held by the technophobic theories of the second half of the 20th century. Since the overcoming of a false dualism lies in the hands of humans, and technological manipulation of the body threatens to sabotage this overcoming, technologization and hybridization are stigmatized and move into the enemy camp – in evident opposition to anti-dualistic theories. According to Böhme, this opposition is not only legitimate but it is also the highest ethical maxim:

Human dignity is threatened today by the technologization of the human body. This leads to the fact that to be human must be defined no longer in demarcation from animality or deity but in demarcation from the machine. (...) we would have to formulate the maxim of the sovereign human being as follows: “To learn to live and to die and, in order to be a human being, to refuse to be a machine.” (Böhme 2002: 13f.)

2.2. Anti-anti-dualism in Feenberg

Feenberg’s text *Transforming Technology*, published in 2002, which I consider here, can not only be regarded as one of the author’s most important texts on the role of technology in a critical theory of society, but also offers the advantage that Feenberg expressly refers to Latour and Haraway.

Like Böhme, Feenberg believes that Haraway and Latour are right in their ontological diagnosis of reality. The mixture of nature and social, technical and natural that they have stated is an undeniable reality. However, according to Feenberg, Latour and Haraway do not adequately cover this hybrid zone. Feenberg’s position could be summarized as follows: The hybrid zone is primarily of a technological nature, but it *is not one-dimensional*, and that is, it is neither exclusively ‘evil’/dangerous nor neutral, as claimed by virtually all modern and postmodern philosophies of technology during the twentieth century, *but is fundamentally dual*. Although posthumanists, including Latour and Haraway, differ from those previous theories in that they now hold a technophile position, they still reduce technology to a false one-dimensionality. It is therefore necessary to first explain what Feenberg means by ‘two-dimensionality’ of technology. I would like to highlight two particular moments. First, technology is a two-dimensional phenomenon because it involves a relationship between agent and

object. This relationship has social meaning and is, especially when the object is a human being, an expression of a power relationship. On the other hand, also to the *object itself* as a technological product inheres a two-dimensionality because it is not neutral but contains an ethical maxim in itself: “Ethics is not only discursively and in action but in artefacts.” (Feenberg 2002: 21). If we reduce technology to one-dimensionality, we ignore its ethical dimension.

Technology is a two-sided phenomenon: on the one hand, there is the operator; on the other, the object. Where both operator and object are human beings, technical action is an exercise of power. Where, further, society is organized around technology, technological power is the principal form of power in the society. One-dimensionality results from the difficulty of criticizing this form of power in terms of traditional concepts of justice, freedom, equality, and so on. (Feenberg 2002: 16)

We can also put it this way: to co-emergent, hybrid entities inhere a two-dimensionality and an ethical decision that should not be suppressed, because otherwise there would be no scope for those phenomena that aren't possible without duality, as there are: consciousness, awareness of difference, awareness of contingency, awareness of optionality, decision-making, and, ultimately, ethical decision. In addition, duality is also *conceptually* indispensable because if the duality of knowing and the known is suppressed, then the signifier 'hybrid' becomes, according to Feenberg, a word without meaning and ultimately a term without reference, since even reference without duality cannot exist (see *ibid.*, 30). The suppression of duality also has normative consequences: since the new standard of posthumanists is that of network functioning, a discrimination that only makes sense when based on a separation of nature and social meaning can no longer be valued rationally and falls away. Thus, a new discrimination creeps in, as the entity that does not know how to integrate into the network is automatically excluded:

This has disturbing normative implications. It means, for example, that the losers' perspective in any struggle disappears from view as it cannot be operationalized in terms of the nature/society distinction realized in the structure of the network. (Feenberg 2002: 31)

Latour had responded to this critique (Latour 1999), but, in Feenberg's opinion, his answer was anything but convincing:

Latour agrees that it must be possible to resist the definition of reality imposed by the victors in the struggle for control of the network. (...) True democracy must protect public access for entities and persons hitherto excluded from consideration, while also ensuring that new elements and voices be integrated harmoniously with the established structure of the network. In sum, allowance must be made for the

intervention of the new and unpredictable while preserving the network from incoherence and collapse (Latour, 1999: 172-173). So far so good. Latour recognizes the problem of participation by subordinate actors and offers a solution. But one would like to know how these actors are to argue for the reforms they desire without reference to any transcendent sanction. Morality in this new theory is now confined to holding the collective open to new claimants and ordering its members in a hierarchy (Latour, 1999: 213). (...) On Latour's account, morality is no longer based on principles but on these operational rules. (Feenberg 2002: 31f.)

Feenberg's argument is therefore that we live in a world with an increasing amount of hybrid entities, most of which technologically produced. They contain ethical maxims that we are often unaware of. But the ability to account for these ethical maxims, to recognize them as an option and to deal with them ethically is only possible for humans.

It [Feenberg's theory] retains the commonsense notion that human actors have unique reflexive capacities. These capacities make it possible for humans to represent the networks in which they "emerge" and to measure them against unrealized potentialities identified in thought. Reflexivity of this sort is essentially different from the contributions of nonhuman actors, and forms the basis for social struggles that may challenge or disrupt the networks and even reconfigure them in new forms. These reconfigurations have an ethical dimension that cannot be explained on posthumanist terms. (Feenberg 2002: 34)

The responsibility that humans have in dealing with technology poses ethical-political challenges which, according to Feenberg, can only be adequately addressed if radical socio-political consequences are drawn. Neither capitalism nor communism provide the conditions for this transformation, but only a social reorganization that guarantees a radical democratic participation of all citizens in politics, industry, economy and all other areas of society. In addition, of course, it also requires insight into the value-ladenness, that is, the two-dimensionality of technology.

I show that the control-oriented attributes of technology emphasized in capitalist and communist societies do not exhaust its potentialities. A fundamentally different form of civilization will emphasize other attributes of technology compatible with a wider distribution of cultural qualifications and powers. Such attributes are present in both preindustrial crafts and modern professions. They include the vocational investment of technical subjects in their work, collegial forms of self-organization, and the technical integration of a wide range of life-enhancing values, beyond the mere pursuit of profit or power. Today these dimensions of technology can be brought into play only in the context of the democratic reorganization of industrial society, which they make possible. (Feenberg 2002: 35)

3. Conclusion

In my view, Feenberg's theory has great merit, in particular his thesis that technology is neither neutral nor in itself 'evil,' but a concretization of ethical implications and values incorporated in objects and procedures, a thesis sustained in a similar form by other authors like Grunwald (see Grunwald 2002) or Bunge (see Bunge 1977). On the other hand, Feenberg's theory is also based on a kind of wishful thinking, namely the old utopian hope that man is capable of realising a just and human form of political coexistence. A look at history, however, seems to advise us to be more sceptical. Given the inability of man to realize his ideals of justice and the good life, it seems to me more likely that in the long run man will tend to produce the abilities of reflection, awareness, ethical decision-making and social control, hitherto exclusively attributed to himself, in technological products, and thus passing over on them the burden of constructing a better world. This idea, like all other ideas of man, unites both dystopian and utopian moments, and if, in the form predicted here, it actually becomes a stronger reality than it already is today, it will undoubtedly present new challenges that we still cannot imagine today.

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