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**Author(s):** Dana S. Belu and Andrew Feeberg

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# Heidegger's Aporetic Ontology of Technology

DANA S. BELU<sup>1</sup>

*California State University Dominguez Hills, USA*

ANDREW FEEBERG

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*Simon Fraser University, Canada*

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**ABSTRACT** *The aim of this inquiry is to investigate Heidegger's ontology of technology. We will show that this ontology is aporetic. In Heidegger's key technical essays, "The Question Concerning Technology" and its earlier versions "Enframing" and "The Danger", enframing is described as the ontological basis of modern life. But the account of enframing is ambiguous. Sometimes it is described as totally binding and at other times it appears to allow for exceptions. This oscillation between, what we will call total enframing and partial enframing, is underscored in the work of two influential scholars of Heidegger's later thought, Hubert Dreyfus and Iain Thomson. We will show that like Heidegger, Dreyfus and Thomson unwittingly perpetuate this dilemma that ultimately covers up the aporetic structure of enframing.*

"there appears the consideration of the transcendence of Being over being as one of those questions which must stab themselves in the heart, not so that thinking should die from it but that it may live transformed."<sup>2</sup>

## I. Introduction

Heidegger uses the neologism enframing (*Gestell*) to refer to the essence of the technological age. Enframing is "nothing technological"<sup>3</sup> but rather an

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*Correspondence Address:* Dana S. Belu, Department of Philosophy, California State University Dominguez Hills, Carson Ca 90747, USA. Email: [dbelu@csudh.edu](mailto:dbelu@csudh.edu)

Andrew Feenberg, School of Communication, Simon Fraser University, Vancouver, Canada V6B 5K3. Email: [feenberg@sfu.ca](mailto:feenberg@sfu.ca)

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historical (*geschichtlich*) mode of revealing (*aletheuein*) that sums up the possibilities of the technical age according to the imperatives of ordering, control and efficiency. It is a general attitude of imposition, or challenging-forth (*Herausforderung*), that aims to reduce all things and relationships to mere resources (*Bestand*) awaiting optimization.<sup>4</sup> This technical disclosure is nihilistic because it levels all meaningful differences and hierarchical value systems. 30

Heidegger insists that the technical worldview<sup>5</sup> regards nature and the world as a heap of fungible raw materials. Technology denotes: 35

all the areas of beings which equip the whole of beings: objectified nature, the business of culture, manufactured politics, and the gloss of ideals overlying everything. Thus “technology” does not signify here the separate areas of the production and equipment of machines . . . its meaning coincides with the term “completed metaphysics”.<sup>6</sup> 40

In some texts Heidegger applies the concept of enframing to human beings without qualification. For example:

Enframing is, in its setting-up, universal. It concerns everything that presences; Everything, not just as sum and series but everything insofar as each entity as such, is enframed in its existence as the orderable . . . Everything that presences in the age of technology does so according to the way of constancy of stock-pieces in standing-reserve. Even the human being presences in this way, even if it seems that his essence and presence is not affected by the setting-up of enframing.<sup>7</sup> 45

This version of the concept of enframing conforms with a tendency in Heidegger’s work to treat the history of being as a succession of universal principles of intelligibility. Each epoch is characterized by the way in which beings are given according to such a principle. Thus enframing is not simply a widespread “problem” we could solve with appropriate remedies, but the underlying structure of being in our time. It is *ontological* rather than *ontic*, to use the terminology Heidegger applied in his earlier work. 50 55

However, the universality of enframing would seem to block knowledge of it. The enframed subject should not be able to understand or to have a sense of her own enframing. Heidegger says as much in a passage in “The Question Concerning Technology.” He writes that “the challenging Enframing not only conceals a former way of revealing, bringing forth, but it conceals revealing itself and with it that wherein unconcealment, i.e., truth, comes to pass.” (QCT, p. 27). How then does the philosopher step outside the enframing, the universality of which he posits, in order to describe it? If he can do so, the enframing is not universal. But if he cannot, the enframing must remain concealed forever. 60 65

Heidegger encounters here at the theoretical level the generic tension in all totalizing dystopian narratives. In these narratives individuality is effectively suppressed by a system of mind control. But if the dystopia is truly universal, there can be no story. Hence characters must be introduced who escape the dystopian frame. These “extopian” rebels whose “conditioning” has broken down reveal the dystopia in its flawed universality. 70

A fine narrative strategy in literature makes an ambiguous theoretical argument in philosophy. For Heidegger, humans are and are not enframed, appearing to lie both within and without the norms of order, control and optimization. In the essays “Das Ge-stell” and “Die Gefahr” this ambiguous positioning of the human is weighted in favour of a total enframing. In the later essay, “The Question Concerning Technology”, Heidegger takes the opposite tack and presents a theory of the partial enframing, an interpretation endorsed by Hubert Dreyfus and Iain Thomson. They argue that, as the site of the revealing, *Dasein* can never be reduced to a thing within the revealing. Therefore, it is still possible to occupy a perspective from which the technological epoch shows up as ontologically contingent. Appealing as is this quasi-transcendental interpretation, it is inconsistent with the totalizing nature of enframing as the epochal principle of intelligibility of modern times. 75 80 85

In the two sections that follow we will discuss various approaches to this problem, first, in “Das Ge-stell” and “Die Gefahr” in which Heidegger introduced the themes of his later critique of technology, and second in the famous essay on “The Question Concerning Technology”. We will argue that the structure of enframing is in fact aporetic because the conditions of its possibility also constitute the conditions of its impossibility. 90

## II. On the way to “The Question Concerning Technology”

In “Das Ge-Stell”<sup>8</sup> Heidegger tends toward a totalized account of enframing. Ordering is a fundamental feature of the technical lifeworld.<sup>9</sup> Its essence is something more than “merely a machination (*Machenschaft*) of people, consummated in the way of exploitation,” (GA 79, p. 29) because in the technical age people are themselves constrained to order. This constraint is, presumably, most evident in our handling of machine technology but is not restricted to this realm. 95 100

This power of ordering allows the supposition that, what is here called “ordering” is not merely a *human* doing, even though the human being belongs to its execution[. . .] Insofar as human representation readily sets up what presences as the orderable in the calculation of ordering, *the human being remains in its essence, whether consciously or not, set up as something to be ordered by ordering* [. . .] *The human being is ordering’s man* [. . .] *The essence of man is consequently set-up, bringing ordering into human ways.*<sup>10</sup> 105

Thus we in the technological age are determined or “set-up” by being as  
enframing. The truth or unhiddenness (*aletheia*) of technical beings and  
things remains concealed. “Ordering strikes nature and history, everything  
that is, and in all ways, how what presences is. What presences is set-up as  
orderability and is in advance represented as permanence whose stand is  
determined from out of ordering. What is permanent and constantly present  
is standing-reserve.”<sup>11</sup>

Heidegger’s description of this system in these essays is remarkable.  
Enframing “snatches everything that presences into orderability and is in this  
way a gathering of this snatching. Enframing is: Ensnatching (*Geraff*).”<sup>12</sup> The  
possibilities of relating to *any and all types* of machine technology are  
summed up by enframing.<sup>13</sup> Enframing describes the on-going commotion  
(*Betrieb*) of rotation<sup>14</sup> and turning or spinning (*Drehung*) of gears (*Getriebe*),  
that orders (*bestellt*) hydroelectric power plants<sup>15</sup>, automobiles and business  
(*Betrieb*) round and round (*Kreisgang*) in a chain of ordering (*Kette des*  
*Bestellens*), without substantive goals and meaning. Thus, a leveled down,  
impersonal and mechanical form of exchange defines all human activity.  
Furthermore, the rotating mechanism that sets wheels and gears in motion is  
the same as the circulation of industry, information and the flow of markets.  
Heidegger writes,

Machine technology does not exist separately . . . Machine technology  
does not merely replace equipment and mechanisms. It is just as little  
an object. It stands only insofar as it moves. It moves insofar as it runs.  
It runs in the hustle and bustle of business. The hustle and bustle drives  
as the intrigue of the ordering of the orderable. When the machine  
idles, then its rest constitutes a circumstance of business, its stopping or  
disturbance. Machines belong inside a machinery. But this machinery is  
not a heap of machines. This machinery runs out of the ensnatching of  
business as that which is ordered as resource by enframing.<sup>16</sup>

Machine technology is, fundamentally, no mere mechanism (*Räderwerk*)  
and it is not a particular instantiation of enframing as a universal concept.<sup>17</sup>  
Rather, enframing is an essential dispensation as that *sine qua non* without  
which machines cannot exist. In fact, “Modern technology is what it is *not*  
*only through* the machine, rather the machine is what it is and how it is from  
out of the essence of technology. One says *nothing about the essence of*  
*modern technology* when one represents it as machine technology.”<sup>18</sup> The  
staggering implication is that machine technology is somehow superfluous  
for understanding the essence of technology.<sup>19</sup> Heidegger underscores this  
point when he says, elsewhere, that “the utilization of machinery and the man-  
ufacture of machines. . . is only an instrument concordant with technology,  
whereby the nature of technology is established in the objective character of its  
raw materials.”<sup>20</sup>

How does this affect human beings? Heidegger claims that “because man cannot decide, out of himself and by himself, regarding his own essence it follows that the ordering of standing-reserve and enframing *is not only something human*”.<sup>21</sup> But insofar as it *is* something human, humans are co-responsible because they exercise a capacity (*Fähigkeit*) for determined participation. The apparent autonomy and self-determination humans enjoy gives the impression that they can opt out of continuous ordering but this is merely the way that enframing dissimulates itself as the illusion of agency. If people “are in their essence already enframed as standing-reserve”<sup>22</sup> what kind of freedom is this but a mechanical and nihilistic reproduction of the same? When Heidegger insists on the *universal* character of enframing he underscores this point.<sup>23</sup>

In Heidegger’s view freedom is to be conceived only ontologically, as openness to being in the form of enframing, rather than ontically or instrumentally (as the ability of the autonomous agent to choose among a variety of options). Unable to change his urge to order and control, the technicized being is sub-jected to the imperatives of the system. Substantive goals and meaningful differences are leveled by the ubiquity of technical reason and replaced with a self-optimizing system.

Total enframing thus totally encompasses humans. “To the enframed belongs also man, admittedly in his own way, be it that he serves the machine or that within ordering he designs and constructs the machine. The human being is *in his own way* a stock-piece in the strongest sense of the words, stock and piece.”<sup>24</sup> Thus, as technical makers, users and designers, human beings are resources too. Because all activities today are in one way or another technologically mediated everyone is enframed as either a technical maker, user and/or designer or a combination thereof.

In his most extreme statements of the case the difference between humans and things is effaced. For instance, the technological ordering of nature is

of a different kind than the one through which the earlier peasant ordered his acres. The peasant’s doing did not impose upon, nor challenge the earth; it concerned itself with the potential growing powers of the seed; it sheltered them in their thriving. In the meantime the ordering of the fields crosses over in the same ordering, reducing the air to oxygen, the earth to coal and ore, the ore to uranium, the uranium to atomic energy and this to an orderable destruction. Agriculture is now the motorized food industry, in essence the same as the production of corpses in the gas chambers and the extermination camps, the same as the embargo and starvation of countries, the same as the production of hydrogen bombs.<sup>25</sup>

The industrialization of agriculture is ontologically equivalent to technicized death and ethnic cleansing during the Second World War. Presumably, the

imperatives of efficiency and control organize our relationship to the earth and to human life alike so that the reduction of each to a mere resource reflects in equal measure the impersonal calculability of the age.<sup>26</sup> 195

But here the argument breaks down. Total enframing so understood amounts to the denial of what is specifically human, the historical ability (as receptivity) for disclosing worlds and for grasping this disclosure in thought. Yet this ability is presupposed by the event of enframing itself. The total reduction of everything to raw materials and system components cannot extend to the human being whose technical way of being is essential to the enframing. 200

How then does the enframing of the technical agent differ from that of the machine? Human beings are neither present-at-hand nor ready-to-hand.<sup>27</sup> They cannot be equated with chickens and cows, nor is it convincing to claim that their “own way” of being enframed is simply to serve the system as designers or users of technology, that is, as just another system component. Heidegger appears to recognize this. Thus he writes: 205

The human being is exchangeable within the ordering of standing-reserve. Because he is a stock-piece the assumption holds that he can become the functionary of an ordering. Nevertheless man belongs in an entirely different way to enframing than does the machine. This way can become in-human.<sup>28</sup> The *in*-human is, however, always still *inhuman* [ . . . ] The human being of this epoch is, however, enframed by enframing, even when he does not stand immediately in front of machines and operates machinery.<sup>29</sup> 210  
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Here human beings are reduced to fungible raw materials, the *in*-human, albeit in a distinctive manner because as *in-human* they are the site of the disclosure of a world reduced to raw material in the first place. This *in*-human way is not merely unethical or inhumane but indexes an ontological condition bequeathed by enframing as the current configuration of truth. Within that configuration, the human has a special status of some undefined sort. 220

It is tempting to read this special status as evidence of a partial enframing. In fact it is compatible with a total enframing because all the work of enframing happens inside the frame with the peculiarly enframed human being as an essentially passive conduit for the process. Thus although human beings and things are enframed differently, both *are* enframed. The human being does not stand outside of enframing as its origin or source. In other words, how both things and human beings show up is determined from the ground up according to the imperatives of efficient ordering. 225  
230

This less extreme formulation of the total enframing still raises the reflexive problem of Heidegger’s own capacity to understand it. Could he at least witness what he was helpless to control? This should be impossible because an enframed being is by its very nature *only* what it is in the system of operations

to which it belongs. Even if the human being is the site of disclosure, it is so 235  
in an inhuman way, i.e. as enframed, and so it is implausible to attribute to it  
the transcending power of reflection. Heidegger says as much:

This is why ordering does not let itself be explained on the basis of any  
one single case of standing-reserve; it is just as little explainable out of 240  
the sum of the previously determined standing-reserves as their float-  
ing generality.

Ordering does not let itself be explained at all, i.e., it does not lead  
back to something clear, as something clear that is suddenly given out,  
something that is without further ado familiar and that counts as gener- 245  
ally unquestionable. What we care to explain out of this clarity  
would be entrusted only to thoughtlessness and rash thinking. We are  
not allowed to want to explain the ordering in which standing-reserve  
essences (to the extent that explanation leads away from the matter  
(Sache)). We must all the more try to experience its unthought essence 250  
first of all.<sup>30</sup>

This unthought essence is the epochal nature of enframing as a mode of  
revealing. As such, enframing is not identical with the essence of being but is  
only one of many ways in which being gives itself to *Dasein*. Presumably, if  
*Dasein* could understand this historical "fact," it would be situated beyond 255  
enframing and able to reflect on its situation as Heidegger himself does. But  
at the beginning of this passage, Heidegger seems to exclude any explanation  
of enframing. The enframed subject would grasp history too as a resource  
rather than as a succession of revealings. The enframing is so totalizing that  
it encompasses the thinker. Heidegger underscores this point when he insists  
in "Die Gefahr" that "human thinking cannot think the essence of the 260  
revealing."<sup>31</sup>

He therefore appeals to us to "experience" the enframing rather than to  
explain it. It is difficult to know what sort of experience he has in mind. Per-  
haps he is thinking of something like the *Angst* that gives access to an intui- 265  
tion of the contingency of the world in "What is Metaphysics." Yet the  
passage from such pre-reflective experience of enframing as contingent to a  
full blown theory of the revealing such as Heidegger presents ought to be  
impossible on the terms of that very theory.

The outcome of the argument for total enframing is paradoxical.  
Heidegger seems to say that essential though the human being is to the dis- 270  
closure of an enframed world, no one within that world has the capacity to  
understand enframing as a historically contingent mode of disclosure, i.e. as  
the true essence of technology. Yet Heidegger does so understand it.

Can the paradox be avoided? Could it be that the human being is only  
partially enframed or somehow left out of the enframing in instituting it? 275



This appears to be the solution offered in “The Question Concerning Technology.” The partial enframing described there presupposes the availability of a non-enframed point of view situated outside of the discourse it describes. While this extopian<sup>32</sup> perspective is a necessary condition of the possibility of accounting for the enframing, it simultaneously undermines the universality of the event it sets out to describe as total, all-encompassing for its epoch. In sum, if humans are *totally enframed* then their essence is compromised and no theory of enframing is conceivable. But if they are only *partially enframed*, then the essence of technology is compromised and Heidegger’s history of being is undermined.

### III. Partial enframing or total enframing?

“The Question Concerning Technology” recapitulates and develops many of the arguments in the earlier essays, but with a difference. Heidegger argues that when “man [. . .] from within unconcealment reveals that which presences, he merely responds to the call of unconcealment [. . .].” (QCT, p. 19) The solicited response is such that it transforms nature into a mere resource (standing-reserve)<sup>33</sup>. However, “man”, as Heidegger repeatedly insists, is not in charge, is not the origin of this call, rather it is being itself that claims us. Consider the following:

Who accomplishes the challenging setting-upon through which what we call the real is revealed as standing-reserve? Obviously, man [. . .] Yet precisely because man is challenged more originally than are the energies of nature, i.e., into the process of ordering, he is never transformed into mere standing-reserve. Since man drives technology forward, he takes part in ordering as a way of revealing. But the unconcealment itself, within which ordering unfolds, is never a human handiwork..[. . .]. (QCT, p. 18)

Man stands in relationship to two levels of being, the unconcealment and the revealed or the real.<sup>34</sup> As claimed by enframing, man is the site of *this* historical revealing of being (*aletheia*, *Unverborgenheit*) but he has no control over the structure of revealing as such, the unconcealment (*a-letheia*).<sup>35</sup> Although his belonging to enframing differs from that of other entities, because his essence is to be a world-discloser, he cannot choose *not* to belong to *this* revealing; he is thrown into it.<sup>36</sup> As in the earlier essays the enframing as a mode of revealing grants intelligibility to the revealed. It is the way in which things make sense for human understanding in modern times.

But just how far is man himself enframed? We have seen that this is the crux of the argument in the earlier essays. Heidegger wavers here, writing that modern man “comes to the very brink of a precipitous fall; that is, he comes to the point where he himself will have to be taken as standing-reserve.” (QCT,

p. 27) Presumably, standing on the brink is not yet to fall and so this formulation differs significantly from the earlier claim of total enframing and permits reflective understanding. There are other passages in which Heidegger claims that the enframing is not yet fully achieved. For instance, "The coming to presence of technology threatens revealing, threatens it with the possibility that all revealing will be consumed in ordering and that everything will present itself only in the unconcealedness of standing reserve." (QCT, p. 33). Thus, it seems uncertain when the enframing will consummate itself. Furthermore, in "The Turning" Heidegger says, "When and how it will come to pass after the manner of a destining no one knows. Nor is it necessary that we know. A knowledge of this kind would even be most ruinous for man, because his essence is to be the one who waits [ . . . ]."<sup>37</sup>

These reservations open possibilities foreclosed in the earlier essays. We can experience a transformed understanding of a reality to come—presumably by practicing what Heidegger calls, essential or meditative thinking (*das besinnliches Denken*). And somehow the mere fact of achieving such an understanding can contribute to the transformation: "if our thinking should succeed in its efforts to go back into the ground of metaphysics, it might well help to bring about a change in human nature, accompanied by a transformation of metaphysics."<sup>38</sup>

Our relationship to technology remains unfree until this transformation comes to pass. But this sense of openness to a new dispensation is precisely what is foreclosed by the technological understanding of being. Insofar as enframing is an epochal framework of intelligibility, it simply does not permit the possibilities Heidegger introduces here. And in the very next paragraph Heidegger returns to the earlier claim, explaining that the enframing blocks every other form of revealing and even the knowledge of revealing itself. We never get clear how this ontological transformation is supposed to be effected or how to achieve "openness" for an epoch "to come." In contemplating this future epoch, meditative thinking (*das besinnliches Denken*) presupposes what it predicts and intends to accomplish, namely, the possibility of transcending the enframing.<sup>39</sup>

Still, the preponderance of the text of "The Question Concerning Technology" supports the quasi-transcendental implication that what goes on within the enframing cannot sum up the essence of man because the enframing is disclosed in and through him. Total enframing threatens the access of Dasein to the truth of revealing but has not yet happened. Man is "placed between these possibilities."<sup>40</sup> Thus, in a formal capacity man stands outside of the enframing even as he continues to enframe himself daily and to drive the enframing forward. This describes the partial enframing or the *enframed-enframing double*.<sup>41</sup>

Let us now turn to Dreyfus' and Thomson's readings of the double and the path it cuts toward overcoming the enframing. In "Heidegger on the Connection between Nihilism, Art, Technology and Politics" Dreyfus

underscores Heidegger's claim that "the essence of modern technology is to seek to order everything so as to achieve more and more flexibility and efficiency."<sup>42</sup> On Dreyfus' reading, individuals do not consciously choose to practice orderability on a case by case basis but rather always already belong to a set of background norms which determine intelligibility as ordering-orderable beings. 365

From an ontological perspective, to be a part of the technological understanding of being is to enact orderability, as the "for the sake of which" of all activities and to view this as an end in itself. This goal reflects a lack of real and substantive commitments (and "shared concerns") that is typical of our nihilistic cultural paradigm. The spread of the technological understanding of being increasingly homogenizes all norms into one binding global norm of orderability and control for its own sake. This, and not the devastation inflicted by particular technologies, is the ontological danger of the technical age, i.e., the illusion that we have finally gained total mastery over the world and ourselves. As Heidegger points out, and Dreyfus underscores, what remains unmastered is the urge toward mastery and control that, in fact, accounts for the fundamental meaning of all human activities. 370 375

Dreyfus says, "Human beings [. . .] become a resource to be used, but more important to be enhanced—like any other [. . .] We thus become part of a system which no one directs but which moves toward the total mobilization of all beings, even us."<sup>43</sup> Here Dreyfus appears to endorse the claim of a total enframing. However, he ultimately abandons this claim in favour of partial enframing. He writes: 380

although a technological understanding of being is our destiny it is not our fate. That is, although our understanding of things and ourselves as resources to be ordered, enhanced and used efficiently has been building up since Plato, we are not stuck with that understanding. Although the technological understanding of being governs the way things have to show up for us, we can be open to a transformation of our current cultural clearing.<sup>44</sup> 385 390

Dreyfus claims that marginal practices are the source of resistance to the enframing precisely because they are excluded by our current paradigm. Activities such as "hiking in the wilderness and friendship", if undertaken in the right spirit, can be seen as intrinsically valuable. Dreyfus' understanding of marginal practices draws its textual inspiration from Heidegger's remark in "The Question Concerning Technology" that the saving power is to be found "here, there and in little things." (QTC, p. 33) Multiplying and disseminating activities that are worthy in themselves (because they contain their own intrinsic goals) is a means of resisting, "the total mobilization and enhancement of all beings, even us."<sup>45</sup> According to Dreyfus, "once we realize—in our practices, of course, not just as a matter of reflection—that we 400

receive our technological understanding of being, we have stepped out of the technological understanding of being, for we then see that what is most important in our lives is not subject to efficient enhancement.”<sup>46</sup> 405

In “Heidegger on Gaining a Free Relation to Technology” Dreyfus argues that enframing was almost overcome at Woodstock. The reason it ultimately failed to hit the mark was because “Greek virtues such as openness, enjoyment of nature, dancing, and Dionysian ecstasy along with a neglected Christian concern with peace, tolerance, and love of one’s neighbour without desire and exclusivity” were not what “enough people . . . most cared about”.<sup>47</sup> Woodstock failed to deliver a total cultural transformation because most people actually identified with “mainline contemporary concerns with rationality, sobriety, wilful activity, and flexible, efficient control.”<sup>48</sup> Presumably, had mainstream culture felt more solicited by these new values, this mini revolution might have succeeded. While it would be unfair to saddle Dreyfus with Woodstock as a model of a better future, he clearly does see human agency as making a difference in the grip enframing exercises. 410 415

But in fact, Woodstock turned out to be a local reaction against dominant norms that it ultimately reinforced as it became a benign symbol of degeneracy for the majority. From a Heideggerian standpoint the failure of Woodstock to generate a new reality actually reveals the impotence of marginal acts of resistance. Furthermore, Woodstock brought to the fore one of the attendant paradoxes of enframing, i.e., in attempting to overcome enframing we only consolidate its grip upon the culture. This paradox is apparent in all attempts to “spiritualize” the enframed world, employing philosophy, religion or art as a “technique” for achieving a “healthy” attitude toward life. Dreyfus’s reference to Woodstock comes perilously close to such “new age” ideology and suggests that for him enframing is reducible to a cultural phenomenon. 420 425 430

But in that case the Heideggerian problem of the revealing reappears as a question about the underlying intelligibility of this cultural phenomenon. But this question was supposed to be answered by the enframing itself, as the basis on which the sort of thing we call “culture” can appear as a subjective principle in an objectivistically conceived universe. 435

Let us turn to Thomson’s account. In *Heidegger on Ontotheology: Technology and the Politics of Education*, he echoes Heidegger’s and Dreyfus’ claim that the enframing marks the advent of a post-modern or late modern epoch that effectively collapses the subject-object distinction and erases the notion of a fixed subjectivity. 440

The transformation of modernity’s vaunted subject into just another intrinsically meaningless resource awaiting optimization results from the fact that we late-moderns have turned the practices developed by the moderns for objectifying and controlling nature back *onto ourselves*. 445

Once modern subjects dominating an objective world begin treating *themselves* as objects, the subject/object distinction itself is undermined, and the subject is thereby put on the path toward becoming just another resource to be *optimized*, that is, ‘*secured and ordered for the sake of flexible use*’.<sup>49</sup> 450

Thomson insists further that “self-objectification. . .dissolves the subject into the resource pool”<sup>50</sup>. He writes:

Heidegger thinks this enframing could effect and enforce that double forgetting in which we lose sight of our distinctive capacity for world disclosure and forget that anything has thus been forgotten. The danger, as he provocatively puts it, is that we could become so satiated by the endless possibilities for flexible self-optimization opened up by treating our worlds and ourselves as resources to be optimized that we could lose the very sense that anything is lost with such a self-understanding (the very idea that entities have “intrinsic meanings,” for example, may come to seem like an outdated myth).<sup>51</sup> 455 460

This reading of the case appears to be inconsistent with Heidegger’s claim that enframing is an inevitable feature of the age, an ontological dispensation, for now it depends on a new configuration of modern practices or the attitude of the “happy enframer” who grows content with his loss of subjectivity. But whether enframing is ontologically prior to practices and attitudes or a result of them is irrelevant since this oblivion has already come to pass. Is this not what lies at the heart of the current nihilism? The question is rather what, if anything, given our current state of self-objectification, could enable us to escape from continued self-objectification? Following Dreyfus, Thomson appeals to a “Heideggerian caveat, which holds that our actions could *indirectly* transform the essence of technology”.<sup>52</sup> Yet this undermines his claim of radical self-objectification by inconsistently reintroducing a type of human agency that is imaginative and draws on otherwise foreclosed possibilities. He does not, however, discuss the context in which these new possibilities would make sense beyond arguing that education must undertake “the prior labor of first recognizing and breaking the hold of enframing in order to clear the conceptual space for, and help to motivate, the development of alternatives”.<sup>53</sup> 465 470 475

Thus, Thomson, like Dreyfus, advocates a partial enframing; the human being is and is not enframed, albeit in an equivocal sense, i.e., concretely chained to the enframing, but formally open to *new* possibilities. While our current cultural practices continue to derive their scope and meaning from an enframed sense of being, this sense may be overcome through *extra-technical* means, i.e., marginal practices, deep acts of reflection, and a revitalization of education. This conclusion is problematic for two reasons. Firstly, it undermines the total 480 485

character of enframing by leaping ahead and invoking future alternatives which are currently unavailable in the culture. Secondly, it posits a transformation from *outside* of the technical realm. But according to the theory everything is thoroughly mediated by technology so no such “outside” exists. 490

Dreyfus and Thomson try to withhold something from the enframing while recognizing its ontological hegemony. But this strategy cannot succeed because the ontic and the ontological levels are internally linked. According to Heidegger's theory, the link is uni-directional—the ontological level shapes the ontic dimension (of experience) in its totality.<sup>54</sup> Nothing in the 495  
enframed world, hence no human action or thought, can alter the dispensation under which that world stands. Furthermore, if “The actual threat has already affected man in his essence” (QTC, p. 28), it would seem that he is effectively enframed. This means, as Heidegger repeatedly asserts, that man has *lost the possibility to disclose the world in any other way*. Thus enframing 500  
can be transcended neither in thought nor in action. Least of all can enframing itself be revealed in its limits as a mode of revealing. This conclusion is the only consistent one, yet Dreyfus and Thomson, even Heidegger himself, waver before it, preferring instead to cling to a vestige of hope. In circular 505  
fashion, the principle evidence for their argument turns out to be the very possibility of that argument, which exempts itself from the enframing.

In sum Dreyfus and Thomson uncritically underscore Heidegger's account of the essence of technology as partial enframing. The level of abstraction and ambiguity in Heidegger's own account of partial enframing, especially his appeal to meditative thinking (*das besinnliches Denken*) and 510  
“little things” appears to legitimate the subsequent interpretations developed by Dreyfus and Thomson.<sup>55</sup> However, their alternatives to the enframing differ significantly from Heidegger's: where Heidegger merely touches on obscure possibilities, without calling for action, they develop those hints into positive strategies for overcoming enframing. They thus present ontic solu- 515  
tions to an ontological condition.<sup>56</sup> Nonetheless, the alternatives offered by Dreyfus and Thomson, however inconsistent, provide some content to Heidegger's own vague hints. Together they further cover up the aporetic structure of the enframing.

#### IV. Conclusion

520

Evidence from Heidegger's texts wavers between a *total enframing* and a *partial enframing*. Dreyfus and Thomson inconsistently endorse both positions at different points and ultimately endorse partial enframing. However, on 525  
our reading both positions miss the *aporia* constitutive of enframing. On the one hand, if man shows up as totally enframed (or committed to nihilism) then enframing ceases to be problematic. This would spell the end of history: no other epoch would exist for a meaningful comparison, and no thinker could identify enframing as such. On the other hand, if man shows up as

more than or other than completely enframed, then enframing is incoherent. 530  
 It is not the basis of intelligibility of its epoch but only one among a number  
 of possible attitudes human beings can take up. Either way, enframing para-  
 lyzes itself in attempting to deploy itself.

Dreyfus and Thomson are really dealing in ontic alternatives, culture, val- 535  
 ues. But Heidegger's notion of the ontological is meant to rise above that  
 level and lay down the conditions of value and meaning generally for a  
 whole historical epoch. That is why he avoids describing a strategy of  
 change. There can only be a different dispensation in the future, not alterna-  
 tives in the present. Heidegger's theory is eschatological rather than prac- 540  
 tical, hence his claim that man is the being that waits. Meditative thinking is  
 not a means comparable with Dreyfus' practical means. Rather it is not a  
 means at all but a kind of testimony to the still historically possible reversal  
 of the fate of the West in an indefinite future.

Perhaps these difficulties explain the drift of Heidegger's last period away 545  
 from the assumption of unified epochal revealings and toward a less for-  
 mally structured vision in which the enframing may be just one of several  
 ways of understanding the world. There are even late passages in which  
 Heidegger argues that the enframing is not yet fully established but threatens  
 the future of humanity. For instance, in his 1966 interview with *Der Spiegel*  
 he claims that "the technological age. . . is just beginning."<sup>57</sup> The current 550  
 epoch then would not be characterized by enframing as a revealing in the  
 sense of the history of being. That of course leaves open the question of the  
 grounds of intelligibility today. What other ontological account of this  
 epoch makes sense Heidegger does not explain.

The idea of a partial revealing, suggested vaguely in *The Question Con- 555*  
*cerning Technology* and developed into an explicit position by Dreyfus and  
 Thomson, falls between two stools. It is neither coherent as an epochal  
 revealing nor clearly developed as an alternative ontological conception.

That Heidegger was unable to resolve the difficulties satisfactorily may 560  
 have deep roots in the phenomenon of modernity, an epoch that liquidates  
 the intellectual resources that earlier times employed to think about the  
 nature of value and meaning, such as the concept of essence, while simulta-  
 neously bringing value and meaning as such into focus as a problem for  
 thought. Heidegger's unique contribution was to address that problem in an 565  
 ontology rather than through ontic categories such as culture.<sup>58</sup> In his  
 thought technoscience as a universal framework for validity both obliterates  
 philosophy as outmoded and provokes philosophy to a new and more radi-  
 cal conception of itself and of being. Heidegger struggled with this dilemma  
 throughout his long career without achieving a final resolution. As a result,  
 Heidegger appears to describe enframing as an incurable disease with a cure. 570  
 Meditative thinking, marginal practices, education, become philosophical  
 analogues to prayer for a cure that is no ordinary cure but a kind of divine  
 intervention.

Notes

1. Dana Belu would like to thank Dan Zahavi and *The Center for Subjectivity Research* for providing the opportunity to do the research for this article. 575
2. Heidegger, M. [1956] (1958) *The Question of Being*, trans. Kluback, W. & Wilde, J.T. (New York: Twayne Publishers), p. 95.
3. Heidegger, M. [1954] (1977) "The Question Concerning Technology", in: *The Question Concerning Technology and Other Essays*, trans. Lovitt, W., p. 4 (New York: Harper & Row, Publishers, Inc.). We will cite this text as QCT in the body of our article. 580
4. In part, our account is sympathetic to Peter-Paul Verbeek's argument that this ontological story accounts for people and things as mere "outcomes of the history of being". See Verbeek, P-P. (2005) *What Things Do: Philosophical Reflections on Technology, Agency, and Design* (Philadelphia: Pennsylvania State University Press), p. 93. 585
5. Heidegger, M. (1973) "Overcoming Metaphysics" in: *The End of Philosophy*, trans. Stambaugh, J. p.104 (Chicago: The University of Chicago Press).
6. *Ibid.*, p. 93.
7. See Heidegger, M. [1949] "Das Ge-Stell" in: *Gesamtausgabe Band 79, Bremer und Freiburger Vorträge*, p.44 (Frankfurt: Vittorio Klosterman). The passage reads: "Das Ge-Stell ist in seinem Stellen universal. Es geht alles Anwesende an; alles, nicht nur in der Summe und nacheinander, sondern alles, insofern jedes Anwesende als ein solches in seinem Bestehen aus dem Bestellen her gestellt ist . . . Alles Anwesende west im Weltalter der Technik an nach der Weise der Beständigkeit des Bestandstücke im Bestand. Auch der Mensch west so an, mag es strecken—und bezirkweise noch so scheinen, als sei sein Wesen und Anwesen vom Stellen des Ge-Stells nicht angegangen." All subsequent translations from GA 79 are ours. This volume has not yet been translated into English. 590
8. See GA 79. Together with "Die Gefahr", this essay presents an early formulation of the ideas expressed in "The Question Concerning Technology". While "Das Ge-Stell" focuses on the nature of the enframing itself, the task of "Die Gefahr" is to inquire into the ontological origins of enframing. It develops a multiplication of ontological levels (the *a-letheic* structure and the enframing as *this* particular *aletheia* or historical dispensation of the deeper structure) to account for technology and emphasizes the possibility for overcoming the enframing through extra-technical means, reflection, poetry, art. In this respect it anticipates the ambiguities of "The Question Concerning Technology" discussed below. 595
9. See GA 79, p. 29: "Was ist das Bestellen in sich? Das Stellen hat den Charakter des Herausforderns. Demgemäß wird es ein Herausfordern. Dies geschieht mit der Kohle, den Erzen, dem Rohöl, mit den Strömen und Seen, mit der Luft. Man sagt, die Erde werde hinsichtlich der in ihr geborgenen Stoffe und Kräfte ausgebeutet. Die Ausbeutung aber sei das Tun und Treiben des Menschen" "What is ordering in itself? The setting up has the character of challenging-forth. Consequently it becomes a challenging-forth. This happens with the coal, the ore, crude oil, with the rivers and the oceans, with the air. One says that the earth is exploited with regard to its hidden matter and powers. This exploitation, however, is the doing and driving of people." 600
10. See GA 79, p. 30–1: "Diese Gewalt des Bestellens läßt vermuten, daß, was hier >>Bestellen<< genannt wird, kein bloß *menschliches* Tun ist, wengleich der Mensch zum Vollzug des Bestellens gehört. . . Insofern das menschliche Vorstellen bereits das Anwesende als das Bestellbare in die Rechnung des Bestellens gestellt hat, *bleibt der Mensch nach seinem Wesen, ob wissentlich oder nicht, für das Bestellen des Bestellbaren in das Bestellen bestellt. . . Der Mensch ist. . . der Angestellte des Bestellens. . .* Das Wesen des Menschen wird daraufhin gestellt, das Bestellen in menschlicher Weise mitzuvollziehen." (emphasis added). 605
11. See GA 79, p. 31: "Das Bestellen betrifft Natur und Geschichte, alles, was ist, und nach allen Weisen, wie das Anwesende ist. Das Anwesende wird als solches auf die 610 615 620 625



- Bestellbarkeit hingestellt und so zum voraus als das Ständige vorgestellt, dessen Stand aus dem Bestellen west. Das in solcher Weise Ständige und ständig Anwesende ist der Bestand.”
12. See GA 79, p. 32: This Heideggerian neologism builds on the German word, *raffen*, to snatch or grab for oneself, to hold things together forcefully, to condense. There is no equivalent in the English for *Geraff*. We add the prefix *en*, rather than opt for the more straightforward translation, *snatching*, in order to denote the activity of holding things together that is also reflected in Heidegger’s use of the prefix *Ge* in *Geraff*. 630
  13. Enframing also sums up our relationship to nature so as to constitute the reduction of all of nature to the flexible and paradigmatic components of matter and energy. This underscores a totalizing and post-objective world disclosure. See GA 79, p.41–44: “Für die Physik ist die Natur der Bestand von Energie und Materie. Sie sind die Bestandstücke der Natur. . . Die Natur ist nicht einmal mehr ein Gegen-stand. Sie ist als das Grundstück des Bestandes im Ge-Stell ein Beständiges, dessen Stand und Ständigkeit sich einzig aus dem Bestellen her bestimmt.” “For physics, nature is the resource of energy and matter. They are the stock-pieces of nature. . . Nature is no longer an object. She is a fundamental piece of standing-reserve within enframing, a resource whose stand and standing derives solely from ordering.” 635
  14. See GA 79, p. 41–44: “Das Ge-Stell ist in sich die raffend treibende Zirkulation des Bestellens des Bestellbaren in das Bestellen. Das Ge-Stell erstellt als diese Zirkulation des Bestellens in sich selber das Wesen der Maschine. Zu dieser gehört die Rotation, ohne dass sie notwendig die Gestalt des Rades hat: denn *das Rad ist aus der Rotation bestimmt, nicht die Rotation durch Räder*. . . Die Rotation ist die in sich zurücklaufende Drehung, die Bestellbares (Treibstoff) in das Bestellen von Bestellbarem (Triebkraft) umtreibt. Die Rotation der Maschine ist gestellt, d.h. herausgefordert und beständig in der Zirkulation, die im Getriebe, dem Wesenscharakter des Ge-Stells, beruht.“ “Enframing is in itself the snatching, driven circulation of ordering of the orderable in order. Enframing builds this circulation of ordering in the essence of the machine. To this belongs rotation without necessarily assuming the shape of the wheel: because *the wheel is determined out of rotation and not rotation out of wheels*. . . Rotation is that returning in itself turning that drives what is ordered (fuel) in the order of the orderable (drive). The rotation of the machine is enframed, that means challenged forth and made constant in circulation that in business, contains the essential character of enframing.” (emphasis added). 640
  15. Heidegger, M. [1949] “Das Ge-Stell” in: *Gesamtausgabe Band 79, Bremer und Freiburger Vorträge*, pp. 28-9 (Frankfurt: Vittorio Klosterman). Also compare with Heidegger, M. [1954] “Die Frage nach der Technik” in: *Vorträge und Aufsätze*, p.16 (Pfullingen: Günther Neske Verlag). 645
  16. See GA 79, p.3 5: “Die Maschine ist nichts, was für sich gesondert anwest . . . Die Maschine tritt überhaupt nicht bloss an die Stelle der Gerätschaften und Werkzeuge. Die Maschine ist ebensowenig ein Gegenstand. Sie steht nur, insofern sie geht. Sie geht, insofern sie läuft. Sie läuft im Getriebe des Betriebes. Das Getriebe treibt als der Umtrieb des Bestellens des Bestellbaren. Wenn die Maschine steht, dann ist ihr Stillstand ein Zustand des Getriebes, dessen Aufhören oder dessen Störung. Maschinen sind innerhalb einer Maschinerie. Aber dies ist keine Anhäufung von Maschinen. Die Maschinerie läuft aus dem Geraff des Getriebes, als welches das Ge-Stell den Bestand bestellt.” 650
  17. For a possible explanation of this strange notion, see Feenberg, A. (2000) “The Ontic and the Ontological in Heidegger’s Philosophy of Technology: Response to Thomson”, *Inquiry*, 43, pp. 447–448. 655
  18. See GA 79, p. 34–5: “Die moderne Technik ist, was sie ist, nicht nur durch die Maschine, sondern die Maschine ist nur, was sie ist und wie sie ist, aus dem Wesen der Technik. *Man sagt daher nichts vom Wesen der modernen Technik*, wenn man sie als Maschinentechnik vorstellt.” (emphasis added). By analogy Heidegger claims that by means of 670 675

- historical research and calculation it is impossible to determine the essence of history and mathematics, respectively. 680
19. Verbeek, P-P. (2005) *What Things Do: Philosophical Reflections on Technology, Agency, and Design* (Philadelphia: Pennsylvania State University Press), p. 92. His analysis underscores this point; "It is not the machines that disclose beings as standing-reserve; rather, the machines exist only because beings are *already present* as standing-reserve."
  20. Heidegger, M. [1950] (1971) "What Are Poets For?" in: J.G. Gray (Ed.), *Poetry, Language, Thought*, trans. Hofstadter, A., p. 112 (New York: Harper & Row, Publishers). 685
  21. Heidegger, M. [1949] "Das Ge-Stell" in: *Gesamtausgabe Band 79, Bremer und Freiburger Vorträge*, p. 38 (Frankfurt: Vittorio Klosterman).
  22. Ibid.
  23. Heidegger, M. [1949] "Das Ge-Stell", in: *Gesamtausgabe Band 79, Bremer und Freiburger Vorträge*, p. 44 (Frankfurt: Vittorio Klosterman). 690
  24. See GA 79, p. 37: "Zum so Gestellten gehört freilich auch, allerdings in seiner Weise, der Mensch, sei es, das er die Maschine bedient, sei es, daß er innerhalb des Bestellens der Maschinerie die Maschine konstruiert und baut. [. . .] Der Mensch ist *in seiner Weise* Bestand-Stück im strengen Sinn der Wörter Bestand und Stück." (emphasis added). 695
  25. See GA 79, p. 27: "[. . .] schon anderer Art als jenes, wodurch vormals der Bauer seinen Acker bestellte. Das bäuerliche Tun fordert den Ackerboden nicht heraus; es gibt vielmehr die Saat den Wachstumskräften anheim; es hütet sie in ihr Gedeihen. Inzwischen ist jedoch auch die Feldbestellung in das gleiche Bestellen übergegangen, das die Luft auf Stickstoff, den Boden auf Kohle und Erze stellt, das Erze auf Uran, das Uran auf Atomenergie, dies auf bestellbare Zerstörung. Ackerbau ist jetzt motorisierte Ernährungsindustrie, im Wesen das Selbe wie die Fabrikation von Leichen in Gaskammern und Vernichtungsanlagen, das Selbe wie die Blockade und Aushungerung von Ländern, das Selbe wie die Fabrikation von Wasserstoffbomben." Significantly, when Heidegger repeats essentially the same text in "The Question Concerning Technology," he drops the mention of ethnic cleansing and genocide and instead ends the paragraph with references to fertilizer and atomic power (QCT, p. 15). 700
  26. Ontically conceived, the passage could also be interpreted as striking an obscene *political* equivalence between the crimes perpetrated by the Nazis against the victims of the Holocaust camps, the dropping of the atomic bomb on the civilians of Hiroshima and Nagasaki by the U.S. and the Soviet blockade of Berlin. Furthermore, it can also be seen as drawing an equally obscene *moral* equivalence between these war crimes and the modernization qua mechanization of food production. 705
  27. Heidegger, M. [1953](1996) *Being and Time*, trans. Stambaugh, J. (New York: State University of New York Press), chs. 15–18. 715
  28. See GA 79, p. 37: Footnote p reads: "und ist es geworden", and has already become in-human.
  29. See GA 79, p. 37: "Der Mensch ist auswechselbar innerhalb des Bestellens von Bestand. Das er Bestand-Stück ist, bleibt die Voraussetzung dafür, das er Funktionär eines Bestellens werden kann. Gleichwohl gehört der Mensch in einer völlig anderen Weise in das Ge-Stell als die Maschine. Diese Weise kann unmenschlich werden. Das Unmenschliche ist jedoch immer noch unmenschlich [. . .] Der Mensch dieses Weltalters ist aber in das Ge-Stell gestellt, auch wenn er nicht unmittelbar vor Maschinen und im Betrieb einer Maschinerie steht." 720
  30. See GA 79, p. 31: "Das Bestellen läßt sich überhaupt nicht erklären, d.h. es läßt sich nicht auf jenes Klare zurückführen, als welches Klare wir unversehens all das ausgeben, was uns ohne weiteres und gewöhnlich bekannt ist und gemeinhin als das Fraglose gilt. Was wir aus diesem Klaren her zu erklären pflegen, wird dadurch nur dem Unbedachten und Gedankenlosen überantwortet. Wir dürfen das Bestellen, worin der Bestand west, nicht erklären wollen (inwiefern das Erklären von der Sache wegführt). Wir müssen vielmehr versuchen, sein noch ungedachtes Wesen allererst zu erfahren." 730

31. Heidegger, M. [1949] “Die Gefahr“ in: *Gesamtausgabe Band 79, Bremer und Freiburger Vorträge*, (Frankfurt: Vittorio Klosterman), p. 50. The passage reads: “Menschliches Denken kann [. . .] an das Wesen der Unverborgenheit [. . .] nicht denken.”
32. Considered as a dystopian narrative, an external or *extopian* observer is both necessary and impossible for the telling of Heidegger’s story. 735
33. See Spengler, O. (1932) *Man and Technics: A Contribution to a Philosophy of Life* (New York: Alfred Knopf Publishers), p. 94. Oswald Spengler agrees with Heidegger’s analysis of the technical age albeit without attributing to it an ontological dimension. He says “We cannot look at a waterfall without mentally turning it into electric power; we cannot survey a countryside full of pasturing cattle without thinking of its exploitation as a source of meat-supply; we cannot look at the beautiful old handwork of an unspoilt primitive people without wishing to replace it by a modern technical process. Our technical thinking must have its actualization, sensible or senseless.” 740
34. In “The Danger” he multiplies the ontological meta-levels to which the essence of technology is indebted. See GA 79, p. 57: “Die Gefahr verbirgt sich, indem sie sich durch das Ge-Stell verstellt. Dieses selber wiederum verhüllt sich in dem, was es wesen läßt, in der Technik. Daran liegt es auch, dass unser Verhältnis zum Wesen der Technik so seltsam ist. Inwiefern ist es seltsam? Weil das Wesen der Technik nicht als das Ge-Stell und dessen Wesen nicht als die Gefahr und diese nicht als das Seyn selbst ans Licht kommt, deshalb mißdeuten wir gerade jetzt, wo alles doch von technischen Erscheinungen und Wirkungen der Technik mehr und mehr durchsetzt wird, überall noch die Technik. Wir denken über sie entweder zu kurz oder zu voreilig.” “The danger hides itself by dissimulating itself as enframing. In its turn this covers itself up through what it allows to be seen, technology. This accounts for our rarely thought relationship to the essence of technology. To what extent is it rare? To the extent that the essence of technology does not appear as enframing and the essence of enframing does not appear as the danger, and the essence of the danger does not appear as Beyng. This accounts for our misunderstanding, in an age traversed by technical appearances and effects, and above all technology. We think about this either too short or too superficially.” 745 750 755
35. Caputo, J.D. (1993) “*Aletheia* and the Myth of Being”, in: *Demythologizing Heidegger*, pp.9–38 (Bloomington: Indiana University Press). 760
36. The later Heidegger introduces sharp and relatively discontinuous historical breaks between the different “modes” of historical interpretation or “revealings” available in the West. See Heidegger, M., [1989] (1999) *Contributions to Philosophy (From Enowning)*, trans. Emad, P. & Maly, K. (Bloomington: Indiana University Press). 765
37. Heidegger, M. [1954] (1977) “The Turning”, in: *The Question Concerning Technology and Other Essays*, trans. Lovitt, W., pp. 41–2 (New York: Harper & Row, Publishers, Inc.).
38. For more on the power of this thinking see Heidegger, M. (1975) “The Way Back into the Ground of Metaphysics” in: W. Kaufmann (Ed.) *Existentialism from Dostoevsky to Sartre*, trans. Kaufmann, W., p. 267 (Meridian Press). Also, on the power of meditative thinking and the difference between essential or meditative thinking and calculative or representational thinking see his (1996) *Principle of Reason* (Bloomington: Indiana University Press) and especially his (1966) “Memorial Address” and “Conversations on a Country Path” in *Discourse on Thinking* (New York: Harper & Row Publishers). 770 775
39. For a detailed account of meditative thinking as constituted by the togetherness of “releasement toward things” (*Gelassenheit*) and openness to the mystery (*die Offenheit für das Geheimnis*) see Heidegger, M., [1959] (1966) *Discourse on Thinking*, trans. Anderson, J.M. (New York: Harper & Row, Publishers Inc.), p. 55. 780
40. Heidegger, M. [1954] (1977) “The Question Concerning Technology”, in: *The Question Concerning Technology and Other Essays*, trans. Lovitt, W., pp. 26, 28, 32, 33, 35 (New York: Harper & Row, Publishers, Inc.).

41. See Foucault, M. (1994) *The Order of Things: An Archaeology of the Human Sciences* (New York: Vintage Press), pp. 318–20. The enframed-enframing double is a paradoxical figure of the modern age similar to Foucault's "empirical-transcendental doublet" problematized in *The Order of Things*. Foucault claims that "Man, in the analytic of finitude, is a strange empirico-transcendental doublet, since he is a being such that knowledge will be attained in him of what renders all knowledge possible." Although the constitution of knowledge is not primarily at stake in Heidegger's writings, the impossible convergence between man as the one in charge of the process of enframing and man as the enframed product presents a similar paradox. 785
42. Dreyfus, H. (1993) "Heidegger on the Connection between Nihilism, Art, Technology and Politics" in: C.B. Guignon (Ed.), *The Cambridge Companion to Heidegger*, p. 305 (Cambridge: Cambridge University Press). 790
43. Dreyfus, H. (1995) "Heidegger on Gaining a Free Relation to Technology" in: A. Feenberg & A. Hannay (Eds.), *Technology & The Politics of Knowledge*, p. 101 (Bloomington: Indiana University Press). 795
44. Dreyfus, H. (1993) "Heidegger on the Connection between Nihilism, Art, Technology and Politics" in C.B. Guignon (Ed.), *The Cambridge Companion to Heidegger* p.3 07 (Cambridge: Cambridge University Press). 800
45. *Ibid.*, p. 306.
46. *Ibid.*, p. 307.
47. Dreyfus, H. "Heidegger on Gaining a Free Relation to Technology" in: A. Feenberg & A. Hannay (Eds.), *Technology & The Politics of Knowledge*, p.106 (Bloomington: Indiana University Press). 805
48. *Ibid.*
49. Thomson, I. (2005) *Heidegger on Ontotheology and the Politics of Education* (New York: Cambridge University Press), p. 60.
50. *Ibid.*, p.72. A significant aspect of Thomson's book addresses the question of education. His account of the way(s) in which teachers, professors and the educational process itself reflect enframing is particularly illuminating. 810
51. *Ibid.*, p. 56–7, emphasis added.
52. *Ibid.*, p. 62.
53. *Ibid.*, p. 171. 815
54. But in the background the ontic level actually shapes the *theory* of the ontological level. For more on this relationship see Feenberg's argument in his exchange with Thomson in "The Ontic and the Ontological in Heidegger's Philosophy of Technology: Response to Thomson" *Inquiry* 43, pp. 449–450.
55. In the conclusion to "The Question Concerning Technology" Heidegger hints at the saving and transformative power of art as a way for preparing the passage through the crisis of enframing. 820
56. Despite Dreyfus' explicit claims to the contrary. See his (1995) "Heidegger on Gaining a Free Relationship to Technology" (Cambridge: Cambridge University Press).
57. Heidegger, M. (1976) "Only a God Can Save Us": *Der Spiegel Interview with Martin Heidegger*, trans. Caputo, J.D. & Alter, M. P. *Philosophy Today*, XX, p. 280. 825
58. It has been suggested to us that the Davidsonian critique of conceptual frameworks would be helpful for understanding Heidegger's concept of revealing. However, we are doubtful that this critique can apply in any straightforward way as Heidegger is himself sensitive to the sort of problem Davidson raises and attempts to find a different way out. 830