## Free Human Action in the Modern Technological World Rebecca Davies Wilson

Insofar as it has transformed human action, modern technology is a question of freedom. Human life is inconceivable without technology because technology is bound to both the scope and nature of the way the human operates in the world. Modern technology, however, has fundamentally and irrevocably altered human action in such a way as to threaten not only the course of human history, but also the continued existence of human life. In this paper I will examine the problem of modern technology and its impact on human action as articulated by Martin Heidegger and Hans Jonas. I will explore how these two thinkers deal with the possibility of human freedom in light of the way human action has been fundamentally transformed by modern technology. In their differing articulations of responsibility, Heidegger and Jonas reveal both the merits and the limitations of their positions. What is at stake here is not the content or direction of modern technology as such, but rather how positive individual freedom, in light of this qualitative shift in human action, is possible at all. Ultimately I will argue that human responsibility can only be meaningful as an expression of positive freedom grounded not in an oppressive power dynamic, but in reciprocity.

For Heidegger, understanding the novel problem posed by the emergence of modern technology begins with critical and open engagement with the essence of modern technology as such. By "questioning" concerning its essence, one may access the truth about technology. Here Heidegger lays out a clear distinction between "truth" and "correctness" – he is not interested in superficial information *about* technology, but rather in how technology is *revealed*.<sup>1</sup> Though much can be said and known about the content of technology, "only the true brings us into a free relationship with that which concerns us from its essence."<sup>2</sup> Truth, for Heidegger, becomes available to us through revealing. Technology, the essence of which is this revealing, becomes one way that the human is able to access truth in the world.<sup>3</sup> Revelation for

<sup>&</sup>lt;sup>1</sup> Martin Heidegger, "The Question Concerning Technology," in *Basic Writings: From Being* and *Time (1927) to The Task of Thinking (1964)*, edited by David Farrell Krell, (New York: Harper & Row, 1977), 313.

<sup>&</sup>lt;sup>2</sup> Ibid.

<sup>&</sup>lt;sup>3</sup> Ibid., 318.

Heidegger is the illumination of one aspect of an object's being – when something is revealed, this means that the human is able to understand it as meaningful in a particular way. *Technē*, from which technology originates, is an aspect of a broader revealing encompassed by the Ancient Greek concept of *poieisis*. *Poieisis*, or bring-ing-forth, "brings out of concealment into unconcealment" and as such has a claim on not merely representation, but on truth itself.<sup>4</sup>

The human's role is unique insofar as she, through her interactions and engagement with the world and all it contains, is the being who allows things in the world to be brought to light. This is what it means to exist understandingly in the world – in the human's mere existence, always in relation to the world, the truth that is immanently present is able to come forth and be revealed in such a way that the world becomes meaningful for the human. This is important to our question because without awareness of the distinction between "truth" and the merely "correct" with respect to technology, the human is not free. This lack of freedom is in fact a current feature of human life, brought upon by our ignorance of technology's essence: "Everywhere we remain unfree and chained to technology, whether we passionately affirm or deny it."<sup>5</sup> A free relationship to technology begins with the recognition that it is not inert – there is something belonging to technology's essence that engages with and affects the human being in *her* essence. Thus human freedom is possible only when the individual is conscious of the corresponding relationship she shares with the technological.

It is at this point that Heidegger introduces the crux of the issue: this understanding of the essence of technology, *technē*, as revealing, is no longer enough because "it simply does not fit modern machine-powered technology."<sup>6</sup> Modern technology is fundamentally, qualitatively different "because it is based on modern physics as an exact science."<sup>7</sup> This means that modern technology operates within the modern scientific framework, which presupposes the natural as an orderable, cognizable coherence of forces that exist for the human to organize, gain knowledge of, and use. What results is the "setting upon" of nature, which Heidegger describes as a particular orientation of the human towards the natural. This orientation is not caused by the objective presence of certain discoverable qualities in nature's being; these qualities are something that the human finds because she has projected a particular structure and valuation upon nature.<sup>8</sup> In this way nature is still brought to light, but in a newly narrow perspective. The essence of modern technology is thus also "a revealing," but in an entirely novel way: "The revealing that rules in modern technology is a challenging, which puts to nature the unreasonable demand that it supply energy which can be extracted and stored as such."9

<sup>&</sup>lt;sup>4</sup> Ibid. <sup>5</sup> Ibid., 311. <sup>6</sup> Ibid., 319. <sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> Ibid., 321 <sup>9</sup> Ibid., 320.

This revealing of the natural as "challenging" has several new features. First, it uncovers a specific and limited aspect of the world, which prevents the natural from being revealed in any other capacity. Heidegger names this reductive perspective on nature, which the human being is locked into when he is ordered by the technological, "enframing."<sup>10</sup> When nature is enframed by modern technology, it can only reveal itself as potential resources to be used and consumed by the human. Secondly, the revealing that takes place in enframing is nonreciprocal and exploitative in character. In this mode of relating to the natural, the human forcefully extracts energy (or other desired resources) to be stored for later use. The result of enframing is the reduction of the natural to "standing-reserve," an entity whose sole value lies in its utility for the human, and which must lie in wait until the human challenges it forth.<sup>11</sup>

Heidegger contrasts the role of the modern technological human with that of the peasant cultivating his field. The peasant recognizes that it is his job "to take care of and maintain" nature. He cares for nature by recognizing his inherent responsibility for watching over and assisting the occasioning that he is bringing-forth out of the natural.<sup>12</sup> The peasant realizes that this bringing forth out of nature is not a process entirely subject to his control. Though he directs nature by helping natural forces to reveal in certain ways, he also understands that this process of revealing in which he partakes is itself a granting.<sup>13</sup> For Heidegger, truth is something that the world gives of itself – truth, to be experienced authentically, cannot simply be taken at will by the human because it is something given. Thus the human's relationship to the natural as caretaker includes an implicit notion of reciprocity: the human carefully tends to the natural world, and in this interaction nature gives itself over, in revelation, to the human. But in the exploitative way that the human now approaches nature, the human forgets that he is responsible for the care of the bringing-to-light of nature under his direction. Instead, he becomes passively absorbed into the unidirectional, forcefully extractive chain of nature's exploitation. This seems to create an oppressive power dynamic between the human (as the oppressor) and the natural (as the victim), but even this is an optimistic illusion. When the human loses herself in the enframing from the technological, she is not, as she believes, in control of the endless chain of exploitation. Instead she herself becomes "set upon" by technology; that is to say, she too runs the risk of becoming standing-reserve.

When the human loses awareness of the nature of her being and is closed off to the reciprocity in revealing, she is locked into the process of enframing and is thus distanced from her own essence. This convenient forgetting facilitates the third aspect of enframing: that this technological revealing, which manifests itself as a highly regulated pathway, becomes the aim itself of technology. Because of this shift, the modern technological sequence never ends. Jonas too remarks upon this difference between the earlier form of technology, which "conceived itself as a determinate tribute to necessity," and modern technology, which has become "an indefinite, selfvalidating advance to mankind's major goal, claiming in its pursuit man's ultimate effort and concern."<sup>14</sup> Instead of serving the aims of human action, modern technology has *become* the aim of human action.

Thus for both Heidegger and Jonas, the emergence of modern technology has fundamentally and irrevocably altered human action in the world. While Heidegger's engagement with this problem is primarily metaphysical, Jonas' analysis adds a new ethical imperative to this discussion. Jonas too argues that modern technology has changed how the human acts in the world. Before the advent of modern technology, Jonas claims that human action mainly *reacted* to nature. The human found herself under the law of necessity, and though she acted "in defiance of the elements...by venturing into them and overpowering their creatures... [and] securing an enclave against them in the shelter of the city and its laws," her action remained an insignificant response to a much more powerful entity.<sup>15</sup> There used to be no meaningful or lasting way that the human could act *upon* nature. This necessitated the creation of the city, the human's enclosure, to offer transient human lives some measure of protection from the eternal natural forces that remained always outside of human control.<sup>16</sup>

With the advent of modern technology, both the scope and the nature of human action have changed. Modern technology has increased the breadth of the human's power to such an extent as to render the natural world newly vulnerable in our hands. Armed with modern technology, the human can permanently and irreversibly alter the natural world, and therefore now poses a significant threat to "the self-sustaining nature of things."<sup>17</sup> This new power over nature has both spatial and temporal implications. Jonas argues that the role of the city has changed from that which encloses to that which expands: human domination, as "the expanding artificial environment," now extends spatially into the natural world.<sup>18</sup> Furthermore, the chain of technological production and advancement has far-reaching temporal implications. These continuous modern technological actions *in the present* accumulate to such an extent that they in fact determine, in ways that can never be fully understood in advance, the *future* of humanity.<sup>19</sup>

Because "ethics is concerned with action," Jonas argues that the transformation of human action by modern technology necessitates a corresponding transformation of human ethics. Previous ethical systems are not equipped to deal with the new parameters of human action that have been set by modern technology; they rely

<sup>&</sup>lt;sup>14</sup> Hans Jonas, *The Imperative of Responsibility: In Search of an Ethics for the Technological Age*, (Chicago: University of Chicago, 1984), 4.

on the now obsolete premises that human nature is fixed and determinable, and that "the range of human action and therefore responsibility is narrowly circumscribed."20 Now that human power has expanded irreversibly across time and space, humans must acknowledge the need for a corresponding extension of their responsibility. The human's action upon nature via modern technology is no longer ethically neutral because the continued existence of the natural world is itself at stake. This new drastic power imbalance between nature and the human necessitates that the human claim responsibility for nature's maintenance and protection by adopting the role of steward of nature, which differs importantly from Heidegger's notion of caretaker in that it presupposes no reciprocity. Jonas bases this relationship of responsibility on what he considers to be the archetypal responsibility paradigm: a parent's responsibility for their child.<sup>21</sup> Here responsibility is based on the idea that one participant, occupying the role of the "child," is both utterly vulnerable to the actions of the more powerful "parent," and also completely dependent upon the parent for their survival. This "parental" responsibility extends not simply to the natural, however, but to the future generations of humanity. At stake here is thus the continued existence of both the natural world and the human species; the fates of both, utterly inseparable from each other, are ultimately bound to human technological action.

Some scholars see Jonas' project as a response to Heidegger's *Question Concerning Technology*, insofar as it contributes an ethical imperative that Jonas finds to be lacking from Heidegger's account.<sup>22</sup> Jonas' compelling demand that we take ownership of our collective responsibility for the survival of humankind and the planet does touch upon a significant blind spot missed by previous ethical systems. This is not to say, however, that his doctrine of responsibility is without its own difficulties. Both Bernstein and Melle take issue with Jonas' presentation of the parent/child relationship as the archetype of responsibility, and consider to be problematic Jonas' application of this model to humanity's relationship with the recipients of this action.<sup>23</sup>

As Melle remarks, Jonas' parental responsibility model is questionable insofar as it seems to rest on "a very crude opposition between the masses of people... and an elite which rules over them."<sup>24</sup> In his appeal to public policy, Jonas champions such an elite as the "guardians" of humanity's future. The actualization of Jonas' collective responsibility appears to be a political situation in which the decisions of an enlightened few would be made on behalf of humanity as a whole, both pres-

<sup>&</sup>lt;sup>20</sup> Ibid., **1**.

 <sup>&</sup>lt;sup>21</sup> Richard J. Bernstein, "Rethinking Responsibility," *The Hastings Center Report* 25, 7 (1995): 17.
<sup>22</sup> Ibid.

<sup>&</sup>lt;sup>23</sup> *Ibid.*; Ullrich Melle, "Responsibility and the Crisis of Technological Civilization: A Husserlian Meditation on Hans Jonas," *Human Studies*. **21**, 4 (1998): 338.

<sup>&</sup>lt;sup>24</sup> Melle, "Responsibility and the Crisis of Technological Civilization," 336.

ent and future. The danger, as Bernstein points out, is that this situation will result in the subordination of present-human needs and desires, justified for the possible benefit of future-humans.<sup>25</sup> The prioritization of the future, knowledge of which can never move beyond the hypothetical, threatens to undermine the affirmation of the present-world and all that this implies for humans living in it now. This is not to say that Jonas advocates for a complete negation of present-centered priorities in order to suspend living well until a later, undisclosed future moment. In fact, it is clear in his thinking that though his new categorical imperative, "act so that the effects of your action are compatible with the permanence of genuine human life," is presented as a departure from previous ethics, this not only does not oppose former maxims such as "never treat your fellow man as a means only but always also as an end in himself," but it also presupposes and contains these earlier ethical standards.<sup>26</sup> Rather, what is needed in Jonas' thinking is a greater engagement with the inherent danger of exploitation in his parental responsibility model; after all, "there are times when parents in carrying out their responsibilities must act in ways that go against the wishes and desires of their children."27

This tension between the affirmation of the present-world and that of the future has further implications. In order to protect the hypothetical interests of future generations of humanity, Jonas soberly calls, not unwarrantedly, for restrictions upon human action. The urgency of Jonas' imperative lies in what is at stake: not merely humanity's well-being, but its very survival. The legitimacy of his imperative is not in question; what can, however, be considered a limitation of Jonas' position is its inability to frame the question of human freedom, in light of modern technological action, positively. Jonas' "ethics of responsibility" can only conceive of freedom negatively – as such, Melle calls it "an ethics of bitter renunciation."<sup>28</sup> For Jonas, the question is to what extent human action must be restricted, and freedom is understood negatively, in relation to these restrictions, which are justified based on an ethical responsibility for future humans. Ultimately it fails to answer what Dreyfus and Spinosa consider to be "the question for our generation: 'How can we relate ourselves to technology in a way that not only resists its devastation but also gives it a positive role in our lives?"<sup>29</sup> The challenge is thus to conceive of free human action not as something which must always be restricted, but as a force capable of creating and growing with, rather than in spite of, modern technology.

<sup>&</sup>lt;sup>25</sup> Bernstein, "Rethinking Responsibility," 17.

<sup>&</sup>lt;sup>26</sup> Jonas, The Imperative of Responsibility, 5, 11; Bernstein, "Rethinking Responsibility," 20.

<sup>&</sup>lt;sup>27</sup> Bernstein, "Rethinking Responsibility," 17.

<sup>&</sup>lt;sup>28</sup> Ibid.

<sup>&</sup>lt;sup>29</sup> David Edward Tabachnick, "Heidegger's Essentialist Responses to the Challenge of Technology," *Canadian Journal of Political Science.* 40, 2 (2007): 496.

I argue that Jonas' position cannot deal with this question because it fails to take into account the need for reciprocity. Jonas' relation of responsibility presupposes an unequal distribution of power between the relationship's two parties.<sup>30</sup> The question of fostering a reciprocal relationship, *contra* the current practice of unidirectional exploitation, is not given much attention in Jonas' account. To a certain extent this is logical – in the case of the present-human's new power to influence the lives of future humans, this relationship cannot be conceived as being anything *but* unidirectional. However, in order to begin to understand the human's possibilities for free action in the world *positively*, the idea of mutual responsibility needs to be reexamined.

It is in fact Heidegger who begins this rethinking of the human's relationship with the natural in terms of reciprocity. This belongs to the very nature of his inquiry, because for Heidegger, "to answer [the question concerning the essence of technology] means to respond, in the sense of correspond, to this essence of what is being asked about."<sup>31</sup> Freedom begins with an openness to the truth that the technological, including modern technology, brings to light. To be free is to know that every revealing is a form of concealing, or put differently, every form of knowing is a form of ignorance.<sup>32</sup> The recognition that the revealing which occurs through technology is at the same time a concealing of the many other aspects of a thing's being frees the human individual from the illusion that the technological is the tool by which the human masters the world. When the human remembers that the technological is in fact one of many ways that the human corresponds with and accesses truth, modern technology's absolute claim on how the human relates to the natural loses its power. The human is free from the setting-upon of technology with the recognition that modern technology is simply one limited component of the human's dialogic relationship with truth in the world. Our authentic relationship to truth is dialogic insofar as we understand that we are summoned to the process of revealing as listeners. As beings that are "called to" in revealing, the potential for positive action in the world begins with our response.

The limitation of Heidegger's position is that it leaves open the question of how this metaphysical understanding of the essentially reciprocal relationship between the essence of the technological and the essence of the human corresponds to practical human action in the world. Positive human freedom is possible for Heidegger – despite the claim of some scholars that Heidegger's views on modern technology are overly deterministic, Heidegger's thinking actually encourages positive human action.<sup>33</sup> For Heidegger, this takes the form of a constant, active, critical en-

<sup>31</sup> Heidegger, "The Question Concerning Technology," 238.

<sup>&</sup>lt;sup>30</sup> Melle, "Responsibility and the Crisis of Technological Civilization," 338.

<sup>&</sup>lt;sup>32</sup> Ibid., 330.

<sup>&</sup>lt;sup>33</sup> Tabachnick, "Heidegger's Essentialist Responses to the Challenge of Technology," 487.

gagement with the revealing that is brought forward by technology, especially from the perspective of the different and yet fundamentally related discipline of art.<sup>34</sup>

Though both Heidegger and Jonas agree that we need to address the problem of modern technology, they part ways with respect to how they understand human responsibility. While for Heidegger this responsibility is born necessarily out of a reciprocal partnership between the human and the world, Jonas frames human responsibility solely in terms of unidirectional power. "Modern science and technology... is energetically directed towards power, control, and the conquest of things and people," Melle states; insofar as Jonas' solution is framed in terms of this exploitative power paradigm, it cannot hope to undermine it.<sup>35</sup> Jonas' position is thus limited to the treatment of the symptom, not the root problem. Modern technology as an instrument of oppression originates in human freedom "in the sense that we bring [modern technology] about freely."<sup>36</sup> In order to address the crisis at hand, it is not enough to simply restrict this positive human freedom, but rather one must change how such freedom is directed and manifested in the world. This begins with the recognition that modern technology is a product of our freedom, and as such is fundamentally dependent on "our collaboration, our effort and discipline, our ingenuity, our desires, dreams, and ideals."37 Human responsibility for technology is bound to the exercise of positive freedom in the world, which means that responsible ownership of the problem necessitates a new conception of positive free action.

The real task is thus to re-imagine positive human freedom and, most importantly, to determine how it can be expressed in the world both meaningfully and practically. Ultimately both Heidegger and Jonas leave this question unanswered, but the seeds of such a response are found in their positions to different degrees. I would argue that the answer to this question has two components. The first, proposed by Heidegger, is a constant critical engagement with the role of modern technology in human life. As long as its status is continuously challenged and questioned, and as long as its relationship to the human is consciously recognized as dialogic in character, its threat to the authenticity of human life can be kept in check. The second step is the purposeful reclamation of our responsibility for nature, as cultivators rather than exploiters, by reconstructing the role of Heidegger's "peasant" for the modern age. This is not to negate modern technological action, but rather to reorient it in terms of these new priorities. What is at stake in the understanding of the human as nature's cultivator is the notion of reciprocity inherent in this relationship. This relationship depends on personal, individual transformation, a subject that Jonas

<sup>&</sup>lt;sup>34</sup> Heidegger, "The Question Concerning Technology," 340.

<sup>&</sup>lt;sup>35</sup> Melle, "Responsibility and the Crisis of Technological Civilization," 330.

<sup>&</sup>lt;sup>36</sup> Ibid., 334.

<sup>&</sup>lt;sup>37</sup> Ibid.

treats little in his discussion.<sup>38</sup> In light of Jonas' proposal, and in validation of the legitimacy of Jonas' claims, Melle proposes a new model of responsibility oriented around the preservation of positive freedom. Responsibility must not be solely motivated by obligation, born out of the unequal distribution of power, but rather must originate in co-operation, born out of humility, respect, and love.<sup>39</sup> Positive human freedom thus can only begin with the human's capacity to co-operate, as the world's partner rather than its tyrant.

Responsibility uniquely belongs to authentic human being in the world. This manifests itself both metaphysically, in the human's capacity to engage in a dialogic relationship to truth as it is revealed in the world, and concretely, in the human's ability to deal with and understand the implications of the new parameters of her action. Whether it is possible for this authentic being to manifest itself in either of these two ways depends on the human's invocation of positive freedom. In discussing the problem of modern technology's impact on human action as articulated by Martin Heidegger and Hans Jonas, it has been made clear that for responsible human action to be truly meaningful in the world, it must express positive freedom grounded in reciprocity. Herein lies the only possibility for the subversion of the oppressive, dualistic power structure that everywhere otherwise characterizes human life. This paper thus calls for a refined ethics of responsibility based not on power, but on love.<sup>40</sup>

## Works Cited

- Bernstein, Richard J. "Rethinking Responsibility." *The Hastings Center Report.* 25, 7 (1995): 13-20.
- Heidegger, Martin. "The Question Concerning Technology." Basic Writings: From Being and Time (1927) to The Task of Thinking (1964). Edited by David Farrell Krell. New York: Harper & Row, 1977. 308-41.
- Jonas, Hans. The Imperative of Responsibility: In Search of an Ethics for the Technological Age. Chicago: University of Chicago, 1984.
- Melle, Ullrich. "Responsibility and the Crisis of Technological Civilization: A Husserlian Meditation on Hans Jonas." *Human Studies.* 21, 4 (1998): 329-345. Web.
- Tabachnick, David Edward. "Heidegger's Essentialist Responses to the Challenge of Technology." *Canadian Journal of Political Science*. 40, 2 (2007): 487-505. Web.