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This paper challenges the prevailing notion in vulnerability theory that only relational vulnerability holds moral significance for aiding the vulnerable. Contrary to this stance, I contend that ontological vulnerability carries moral relevance, and thus grounds a consequentialist duty to mitigate potential harm. This duty constitutes the core ethical principle of transhumanism. My aim will therefore be to defend transhumanism's central moral tenet from within the framework of vulnerability theory, by showing that ontological vulnerability has moral significance. Section 1 will introduce transhumanism's moral objective, emphasizing the role of ontological vulnerability. Section 2 will analyze the relational and dispositional accounts of vulnerability, emphasizing the reasons why such kinds of vulnerabilities ground duties to help the vulnerable. Section 3 argues that these same reasons also ground moral obligations to remedy ontological vulnerability, therefore committing us to endorse transhumanism's moral endeavor highlighted in section 1.

Introduction

The concept of vulnerability has recently garnered a lot of attention in the fields of bioethics and medical research ethics. Even though this concept has always been part of our everyday language, its philosophical use is rather recent. It first emerged in 1931 when it was used in the German Reichsgesundheitsamt's (the imperial health office) Guidelines for Human Experimentation to express concern regarding experiments conducted on people who did not or could not

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properly consent¹. In 1979, the *Belmont Report* advised that vulnerable *populations* should be identified, and their participation in health research should only be considered under special protections². Vulnerable populations were "racial minorities, the economically disadvantaged, the very sick, and the institutionalized"³. It was feared that due to their situations, these populations could be taken advantage of and lured into research.

More recently, the concept of vulnerability has been discussed in a wider context. It no longer pertains solely to the domain of research ethics but is the object of much discussion in medical ethics in general. However, this discussion has not yet converged on a single conception of vulnerability. There are still many disagreements regarding a working definition, how vulnerability could ground moral obligations, and the very usefulness of the concept, which some commentators deny. This being said, some common ground exists among commentators.

According to most commentators, although all of us are vulnerable, first, in virtue of our embodiment, which condemns us to suffer, fall ill and eventually die, it is questionable whether this kind of ontological vulnerability has moral salience. Some authors claim that the only morally significant harms we can suffer are those that occur through our relationships with other persons. More precisely, they claim that morally significant vulnerability arises only when we are dependent on particular others to have our needs met, or when particular others have the power to harm us. Since the harm comes about through a relationship, what is considered morally significant is

¹ Hans Martin Sass, "Reichsrundschreiben 1931: Pre-Nuremberg German Regulations Concerning New Therapy and Human Experimentation", *The Journal of Medicine and Philosophy: A Forum for Bioethics and Philosophy of Medicine* 8, n° 2 (1983): 99-112.

² Department of Health, Education and Welfare; National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, *The Belmont Report. Ethical principles and guidelines for the protection of human subjects of research* (United States of America: Department of Health, Education and Welfare; National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979), 705.

³ Wendy A. Rogers, "Vulnerability", in The Cambridge Handbook of Health Research Regulation, ed. G. T. Laurie (Cambridge: Cambridge University Press, 2021), 18.

the relationship we have towards others. Of course, commentators recognize that in some cases, as those of newborn babies, there is an undeniable ontological vulnerability which is morally significant. But in most cases, commentators seem to broadly agree that, even if we are all, in some sense, essentially vulnerable, this characteristic of the human condition is not morally significant since it would entail that everyone is vulnerable, thus rendering the concept irrelevant, useless, or even trivial. They argue the morally relevant work done by the concept of vulnerability happens somewhere else.

I will argue against this idea. I will suggest that there is a blind spot in the literature surrounding the concept of vulnerability, and that our ontological vulnerability is morally relevant. More precisely, I will argue that ontological vulnerability gives rise to a consequentialist moral duty to alleviate the risk of harm. In other words, our ontological vulnerability puts us at risk of a particular kind of harm, of falling ill and dying, and this risk ought to be alleviated. This obligation is the central moral tenet of transhumanism, and as such, my general goal will be here to provide a defense of the latter from the standpoint of vulnerability theory.

This project is grounded in a consequentialist framework. Most transhumanist literature adopts this moral view, but it has been argued that deontological and virtue ethics could also lead to similar conclusions⁴. I will not take a stand on this issue here, and my adopting a consequentialism framework is merely motivated by the desire to conform to most transhumanist literature, and to engage with vulnerability theory more fruitfully, which also seems to adopt, by default, a consequentialist framework. I do not deny that other ethical views could offer helpful insights.

My paper will be organized as follows. In section 1, I will explain the moral endeavour of transhumanism and highlight the role played by ontological vulnerability in transhumanism. In section 2, I will analyze the relational and dispositional account of vulnerability in order to highlight the moral principle underlying the obligation to

⁴ Alcibiades Malapi-Nelson, "Is Transhumanism Necessarily Utilitarian? Recasting Alternative Ethical Systems Towards a Future Human Flourishing", *Postdigital Science and Education* 3, (2021): 893-909, https://doi.org/10.1007/s42438-021-00246-4.

help the vulnerable. I will engage with relational vulnerability through Robert Goodin's account, which I take to be representative of work in this area, and I will engage with dispositional vulnerability through the account given of it by Angela Martin, Nicolas Tavaglione and Samia Hurst, which I similarly take to be representative of those supporting this position. In section 3, I will argue that the reasons why vulnerability grounds moral obligations in relational and dispositional vulnerability theory, identified in section 2, also apply to ontological vulnerability, and must also therefore ground moral obligations to remedy ontological vulnerability. I will show that on both the relational and dispositional account, the principle that grounds moral obligations is the consequentialist principle highlighted by Goodin which, and this is the crux of my argument, also grounds moral obligation to help the ontologically vulnerable. In other words, vulnerability theory seems to commit one to defend transhumanism's central moral tenet. The conclusion will be dedicated to objections.

Section 1: What's the Central Moral Tenet of Transhumanism?

As far-fetched as it might sound, the claim that we should work towards eradicating or at least strongly decreasing ontological vulnerability can be defended. The hope of one day remedying ontological vulnerability is the driving force of the transhumanist movement. Frequently ridiculed, often attacked, it has received widespread attention and is generally mischaracterized as a philosophical and cultural movement promoting a new form of eugenics striving for the creation of a new, better species of humans. Even if some authors indulge in these sorts of aspirations, softer, more modest, or "weak" versions of it exist.

Transhumanism isn't necessarily committed to radical enhancements of the human condition. As Allen Buchanan points out⁵, millions of persons today have conditions that are below satisfactory. Our first task should be to help those in dire need and help bring their condition to a satisfactory level. In its broadest possible acceptation, transhumanism simply means looking for ways to overcome some harmful human limitations. It means not passively accepting the essential vulnerability that is our lot.

⁵ Allen Buchanan, Beyond humanity? (Oxford: Oxford University Press, 2014).
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As expected, transhumanism argues for such a modification of the human condition from a utilitarian standpoint. Its fundamental task is to improve "the well-being of all sentience, including humans⁶". Since diminishing ontological vulnerability has a positive impact on people's welfare, we should strive for it:

Central to transhumanism is the belief that human vulnerability in all its forms is a huge problem and that we should no longer put up with it because it may no longer be necessary to do so. Science and technology promise a way out, a way to overcome the human condition and become something better, something other and more than human, something less vulnerable⁷.

Julian Savulescu captured this idea when he said that "[i]f we have an obligation to treat and prevent disease, we have an obligation to try to manipulate these characteristics to give an individual the best opportunity of the best life⁸." The idea is deceptively simple: we should try to maximize well-being, and doing so requires us to go beyond mere treatment of disease or their prevention, but to actively better our condition so that we can lead better and more fulfilling lives:

Once technology affords us with the power to enhance our and our children's lives, to fail to do so will be to be responsible for the consequences. To fail to treat our children's disease, is to harm them. To fail to prevent them getting depression, is to harm them. To fail to improve their physical, musical, psychological and other capacities is to harm them, just as it would be to harm them if we gave

⁶ Humanity+, "The Transhumanist Declaration", March 2009, https://www.humanityplus.org/the-transhumanist-declaration.

⁷ Michael Hauskeller, "Ephemeroi – Human Vulnerability, Transhumanism, and the Meaning of Life", *Scientia et Fides* 7, n° 2 (2019): 16.

⁸ Julian Savulescu, "New breeds of humans: the moral obligation to enhance", Reproductive Biomedicine Online 10, supp.1 (2005): 36.

them a toxic substance that stunted or reduced these capacities⁹.

Such a stance has also been defended by David Pearce, who supports an abolitionist view: "to eradicate suffering in all sentient life10." This may sound farcical, but on a larger time scale, our existence at the beginning of the 21st century is already incredibly painless compared to a couple hundred years ago. To use the language of vulnerability, we could say that our vulnerability has been drastically reduced. Some centuries ago, dying of the flu or the cold would have been characterized as ontological vulnerability: "it just so happens that we are vulnerable to these diseases, and there's nothing we can do about it," people would have said. Today, dying from such diseases is almost unheard of in industrial and technologically advanced societies. If people do die of those diseases, we contend it's because they did not have access to proper care or sanitation: they were vulnerable due to their environment, not due to their body being illness-prone. The vulnerability to the flu and the cold were then part of ontological vulnerability. It is today part of another kind of vulnerability. Our ontological vulnerability has decreased over time, and although I do not endorse Pearce's abolitionist view, I argue that we have the moral obligation to further this reduction of ontological vulnerability.

The welfare argument underlying transhumanism's ambitions is straightforward: avoidable suffering is morally outraging, and steps should be taken towards reducing people's ontological vulnerability. I will now provide a bit of background on vulnerability theory. In the following section I will present the landscape of definitions of vulnerability that have been suggested in order to, in section 3, point out the ways in which these different accounts of vulnerability contend that vulnerability grounds moral obligations.

⁹ Savulescu, 36.

¹⁰ David Pearce, The Hedonistic Imperative, 1995, https://www.hedweb.com/.
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Section 2: Relational, Dispositional and Ontological Vulnerability

My goal in this section will be to provide background on vulnerability theory and set the stage for the presentation of how these different accounts ground the moral obligation to help the vulnerable, which will come in section 3.

It is generally recognized that there are three main types of definition of vulnerability. It can either be understood as an ontological concept, a relational one, or a dispositional one.

The ontological definition of vulnerability is generally attributed to Martha Fineman. According to her, "vulnerability is – and should be understood to be – universal and constant, inherent in the human condition¹¹." It arises "from our embodiment¹²," which constantly puts us under the threat of harm^{13,14,15}. For vulnerability to be an ontological feature of humanity means that someone is vulnerable simply by virtue of being human, and thus having a body. It is because a person has a body, and therefore physical needs (as well as social and psychological needs) and can be harmed, that she is vulnerable. Through being embodied, we are open to the world's harms.

Some critics argue that this is trivially true. Of course, all of us are at risk of being harmed or of suffering. But since we are all here in the same boat, they claim, this grounds no special moral obligation

¹¹ Martha Fineman, "The Vulnerable Subject: Anchoring Equality in the Human Condition", *Yale Journal of Law and Feminism* 20, n° 1 (2008): 8.

¹² Fineman, "The Vulnerable Subject", 17.

¹³ Other theorists, such as MacIntyre and Nussbaum, have also adopted such a view. For all three of them, such a view was mobilized in order to highlight the "need to reframe some of the founding assumptions" we have of the human subject. Indeed, Fineman uses the concept of ontological vulnerability in order to argue for a more interventionist state, MacIntyre in order to relativize how we should think of ourselves as rational agents, and Nussbaum to critique the Kantian version of dignity.

¹⁴ Alasdair MacIntyre, Dependent Rational Animals: Why Human Beings Need the Virtues (London, Duckworth, 1999), 172.

¹⁵ Martha Nussbaum, "Human functioning and social justice: In defense of Aristotelian essentialism", *Political Theory* 20, n° 2 (1992): 202–246.

towards anyone. The world is simply built this way, and there's nothing we can do about it. No one has a special position to which could be attributed special protections, and this definition of vulnerability is therefore useless, since it is too wide-ranging. As Frédérick Armstrong says,

some people prefer the circumstantial account of vulnerability because they worry that our definition of vulnerability loses its normative sway if it entails that *everyone* is vulnerable. Indeed, given that vulnerability is appealed to in order to call for special attention for *some* people, if *everyone* is entitled to special attention, it seems that this extra attention is no longer special¹⁶.

What we should strive for instead is a view in which not everybody is vulnerable. We should aim at a definition of vulnerability where only some people qualify as vulnerable, and this would give us a more precise task: help those who are vulnerable, which is only a subset of the population. That is at least the hope of proponents of the relational and dispositional account of vulnerability.

The relational or circumstantial definition of vulnerability is generally attributed to Robert Goodin. He claims that

vulnerability implies that there is some agent (actual or metaphorical) capable of exercising some effective choice (actual or, as in the case of the dormant volcano, metaphorical) over whether to cause or to avert the threatened harm. The implication that an agent exists, in turn, implies that "vulnerability" is essentially a relational notion¹⁷.

Defining vulnerability as a relational notion allows us to say that persons are vulnerable *to some other people*, and that those who are on the vulnerable end of this asymmetric relationship are those who deserve additional moral consideration. We are thus vulnerable in

¹⁶ Frédérick Armstrong, "An Extrinsic Dispositional Account of Vulnerability", Les Ateliers de l'éthique, The Ethics Forum 12, n° 2-3 (2017): 184. ¹⁷ Robert Goodin, Protecting the Vulnerable. A Re-Analysis of our Social Responsibilities (Chicago: The University of Chicago Press, 1985), 112. 30

virtue of the relations we have with other people. If those relations are asymmetrical in power, then the party with less power has a diminished capacity to protect its interests and is thus open to being harmed by the more powerful party. It is further generally claimed that the moral responsibility to help the vulnerable primarily falls on those to whom the vulnerable people are vulnerable. Since the power to harm the vulnerable lies in their hands, they are in prime position to avoid the harms befalling the vulnerable. This being said, this does not mean that they (the person located at the powerful end of this asymmetric relationship) bear the *sole* responsibility of alleviating the risk of harm. As I mentioned earlier, I take this account to be representative of relational vulnerability theory and will engage with this theory through Goodin's account.

The dispositional definition of vulnerability is chiefly defended by Martin, Tavaglione and Hurst, and has also been defended by Armstrong. Martin, Tavaglione and Hurst contend that the distinction between an ontological notion and a relational notion is artificial and is in fact a "philosophical pseudo problem¹⁸." They

show that the two apparently disparate views of vulnerability are neither competitive nor contradictory. In fact, they depend on each other, since they refer to the very same concept with different likelihoods of manifestation: the notion of vulnerability requiring protection just for some needs to be embedded into the view that vulnerability encompasses everyone¹⁹.

They try to bridge the gap between an ontological and a relational account, by suggesting what they call a *dispositional* account.

According to them, in order to reach a satisfactory definition of the concept of vulnerability it is first required to highlight the conditions of vulnerability. They believe the first condition is the

¹⁸ Angela K. Martin, Nicolas Tavaglione, and Samia Hurst, "Resolving the Conflict: Clarifying 'Vulnerability' in Health Care Ethics", *Kennedy Institute of Ethics Journal* 24, n° 1 (2014): 53.

¹⁹ Martin, Tavaglione and Hurst, "Resolving the Conflict", 53.

"possession of welfare interests²⁰." Since it is only if a being has its welfare interests frustrated or not satisfied that a harm occurs, having welfare interests is a pre-condition of being vulnerable. But since everyone has welfare interests, everyone is potentially vulnerable. This first step of their argument accounts for the ontological aspect of vulnerability. As for the relational aspect, it is accounted for in this following step. We have already said that having welfare interests is necessary for being harmed. But how does this harm actually come about? They contend that a harm occurs either when "someone is worse off than he or she was before or could have been 'relative to the potential of our species to live a human life'21," or "if someone is worse off measured by his or her personal potential welfare and flourishing²²." The harm or the wrong therefore doesn't just happen to the individual. It has to be brought about somehow and the conditions that have to be met for the individual to be actually vulnerable are relational conditions: "Thus, while vulnerability is an intrinsic property, its conditions of manifestations are relational: a manifestation of vulnerability occurs due to some interactions of the vulnerable individual with the world²³." In other words, even though everyone is indeed vulnerable, the conditions under which the harm can manifest itself are not constantly present. Only when these conditions do arise do the intrinsic conditions result in a vulnerable state. As Martin, Tavaglione and Hurst further claim,

there is only one type of vulnerability encompassing everyone. Depending on the context and the individuals involved, it has different likelihoods of manifestation: a change in setting may render individuals particularly vulnerable who are not likely to manifest vulnerability in another situation²⁴.

²⁰ Martin, Tavaglione and Hurst, 56.

²¹ Martin, Tavaglione and Hurst, 56.

²² Martin, Tavaglione and Hurst, 56.

²³ Martin, Tavaglione and Hurst, 58.

²⁴ Martin, Tavaglione and Hurst, 62.

Vulnerability, on the dispositional account is therefore a "permanent intrinsic property of all beings with certain types of interests, but with different likelihoods of manifestation²⁵."

Armstrong, another main proponent of the dispositional account, agrees with the broad features of this definition, contending that indeed "an object is vulnerable (...) if it is *disposed* to be harmed or damaged in certain circumstances²⁶," but contends that the conditions that make someone vulnerable are not intrinsic properties, but *extrinsic*. Vulnerability is thus indeed a disposition, he says, but an extrinsic one, since vulnerability is a function "of the object's relationships with other objects or with circumstances. If vulnerability is a disposition, then an object is only disposed to suffer harm when it is in relation to external objects²⁷."

Up to now, I have defined relational and dispositional vulnerability. I'll now examine how these accounts of vulnerability ground obligations to help the vulnerable. I'll contend that the reasons they ground moral obligations to help the relationally or dispositionally vulnerable are also reasons to help the ontologically vulnerable.

Section 3: The Moral Duty to Help and the Ontological Vulnerability

Let's now turn to how these accounts of vulnerability ground the moral duty to help the vulnerable. I will first review relational vulnerability's grounds to claim that there is a moral obligation to help the vulnerable. As we'll see, Goodin contends that vulnerability grounds moral obligations to help the vulnerable on the basis of a consequentialist principle. Then, I'll review why dispositional vulnerability grounds moral obligations. As it turns out, Martin, Tavaglione and Hurst essentially borrow Goodin's consequentialist principle.

The way vulnerability could ground moral obligations, in the context of relational vulnerability, has been suggested by Goodin. His

²⁵ Martin, Tavaglione and Hurst, 52.

²⁶ Armstrong, "An Extrinsic Dispositional Account of Vulnerability", 181.

²⁷ Armstrong, 183.

strategy is quite straightforward. He relies on consequentialism to argue that if the susceptibility to harm that makes someone vulnerable comes about as a consequence of the actions of someone else, then this someone else has the moral duty to ensure that the consequences of his actions "protects the interests of those who are particularly vulnerable to [their] actions and choices²⁸." Goodin contends that

From the simple fact that we are in an especially good position to protect those who are particularly vulnerable to us, it follows that we should give them "special consideration" of this sort. If promoting people's welfare is the prime moral imperative, then the mere fact that one person is particularly able to protect another's welfare provides a strong welfare-consequentialist reason for supposing that he should do so, *ceteris paribus*²⁹.

In the framework of Goodin's relational account of vulnerability, and in the framework of most relational vulnerability theorists, this is how vulnerability grounds moral obligations: someone is at risk of suffering, it is morally imperative to try to prevent suffering, we should thus step in to prevent vulnerable people from suffering. The structure of his argument is as follows:

- 1. We should promote people's welfare. (Premise 1: Consequentialist principle).
- 2. People are at risk of suffering harm due to being relationally vulnerable. (Premise 2: Relational vulnerability).
- 3. Therefore, there is a moral obligation to protect the relationally vulnerable. (Goodin's conclusion).

Once again, we ought to understand that those who hold the powerful end of the asymmetrical relationship, those to whom the people are vulnerable, have the prime responsibility of protecting the people vulnerable to them. This being said, this does not dispel everyone else's responsibility. Responsibility to protect the vulnerable can be shared, and it can be shared unequally. If, for example, my nephew was to fall ill, his parents would have the primary

²⁸ Goodin, Protecting the Vulnerable, 114.

²⁹ Goodin, 115.

responsibility of caring for him. But if they were unable to do so for a reason or another, then I would also be responsible for my nephew.

As for proponents of the dispositional view, they have to navigate an uneasy path when trying to ground moral obligations to the vulnerable. What they are aiming at is "a definition of vulnerability that encompasses humanity as a whole, but at the same time can justify protective measures just for some³⁰." But, if "the notion of vulnerability requiring protection just for some needs to be embedded into the view that vulnerability encompasses everyone³¹," then they must give an account as to how their descriptive claim (everyone is vulnerable) and their normative claim (help only some of them) hold together. We quickly discover that they in fact take a path quite similar to Goodin. First, the dispositional account establishes that "what matters in a first step for a definition of vulnerability is the possession of welfare interests³²." Then, these welfare interests do all the normative work: "If someone's interests are not taken into fair consideration, the individual incurs wrongful harms or wrongs without any harm involved³³." What does "fair consideration" mean? Quite simply: "Frustrations of welfare interests occur under two conditions: first, if someone is worse off than he or she was before or could have been³⁴." A fair consideration thus means we must ensue nobody "lags behind." In essence, just like in the relational account as to how vulnerability grounds moral obligations, "a fair consideration of the interests at stake is morally binding 35."

Let's summarize the picture drawn until now. Both relational and dispositional accounts of vulnerability ground a moral obligation to help the vulnerable on a consequentialist principle inspired by Goodin's account.

But on Goodin's account, "the way in which these wounds might come to be inflicted is irrelevant³⁶." Thus, the question of which kind

³⁰ Martin, Tavaglione and Hurst, 53.

³¹ Martin, Tavaglione and Hurst, 53.

³² Martin, Tavaglione and Hurst, 56.

³³ Martin, Tavaglione and Hurst, 58.

³⁴ Martin, Tavaglione and Hurst, 58.

³⁵ Martin, Tavaglione and Hurst, 58.

 $^{^{36}}$ Goodin, Protecting the Vulnerable, 110.

of vulnerability they come about is not important. Goodin's argument develops itself in two steps. First, he suggests an analysis of relational vulnerability, and then claims that such vulnerability generates a moral duty to intervene and prevent the vulnerable from suffering harm. But I contend these two steps are not dependent on one another and can be taken separately. As Goodin said himself, "the way in which these wounds might come to be inflicted is irrelevant." Therefore, we do not have to think of vulnerability as relational if we want vulnerability to be able to ground moral obligations. What ultimately grounds the duty to help is the harm suffered by the vulnerable. What warrants help is harm itself, not the way in which it comes about, nor something else *about* that harm, nor what kind of harm it is. What does the morally relevant work in accounts of vulnerability, is harm.

Indeed, there are many examples where people we deem vulnerable manifestly deserve help, even if they are not vulnerable relationally speaking. Consider two examples.

First, imagine a newborn. The parents have a moral obligation to attend to the needs of their child in virtue of their child having needs. Do we have to posit that the child is relationally vulnerable to his parents in order to ground the moral obligation of the parents to care for their child? To make the example more salient, imagine a child with no such parental relations, nor even any sort of relationship: a feral child. Nobody is therefore in a *prime* position to harm or help the child through relationships. Therefore, on Goodin's account, this child wouldn't be vulnerable, or at least not in a morally salient way. This conclusion seems unacceptable, and we must acknowledge that a newborn, *a fortiori* a feral child, is vulnerable by virtue of being unable to meet its own needs, by virtue of it having needs, by virtue of being *ontologically* vulnerable.

Second, imagine a natural disaster. A flood or an earthquake hits a remote rural community. The inhabitants were ontologically vulnerable to suffering from such a natural disaster, and they are now vulnerable to having their needs unmet. But it seems counterintuitive to claim they are vulnerable in virtue of their relationships, and not in virtue of having been hit by a natural disaster. Given that Goodin thinks that those in a prime position to help the vulnerable are those to whom people are vulnerable, if the entity which makes one vulnerable is not a human but, for example, a rising sea-level or a

tectonic plate, he would have to say that no one is in a prime position to help them, in the sense that no one can ensure that their own actions do not harm the vulnerable. Therefore, in such an example, there is no other specific individual in prime position to come to their help, but we do generally contend that they deserve help from the government to survive and overcome the hardship brought about by the natural disaster, just as we contend the feral child is entitled to help in virtue of being vulnerable, even though we wouldn't say he is vulnerable in virtue of his relationships or that someone is in a prime position to help him. That is, we do not need to describe them as relationally vulnerable in order to recognize that there is a moral obligation to help them. As I've said: what does the morally relevant work, here, is the concept of harm, not the way in which such harm can come about.

Let's briefly go back to Goodin's argument, which we construed as follows:

- 1. We should promote people's welfare. (Premise 1: Consequentialist principle).
- 2. People are at risk of suffering harm due to being relationally vulnerable. (Premise 2: Relational vulnerability).
- 3. Therefore, there is a moral obligation to protect the vulnerable. (Goodin's conclusion).

I have said that premise 2 need not be relational but can be ontological. I can therefore reconstruct his argument as follows:

- 1. We should promote people's welfare. (Premise 1: Consequentialist principle).
- 2. People's welfare is at risk due to ontological vulnerability. (Premise 2: Ontological vulnerability).
- 3. Therefore, there is a moral obligation to protect the ontologically vulnerable. (My conclusion).

Let's summarize what we have said so far. Both relational and dispositional accounts of vulnerability ground moral obligations the same way, arguing on the basis of a consequentialist principle that we should promote people's welfare. But if this is the reason for avoiding relational and dispositional vulnerability, the consequentialist argument also applies to ontological vulnerability. If the argument is solely that we should avoid harm, and that relationally and

dispositionally vulnerable people can, under certain circumstances, suffer harm, and that we therefore have an obligation to prevent the circumstances leading to harm from happening, on a strictly consequentialist principle, the same argument can be made using instead ontological vulnerability. The exact same consequentialist principle can be used to argue in favor of reducing or remedying ontological vulnerability.

Therefore, the central moral tenet of transhumanism, which is that we ought to overcome, or at least mitigate, our ontological vulnerability, can be defended through the tools of vulnerability theory, which were consequentialist in form. I thus contend that there are strong moral incentives to help the ontologically vulnerable, and work towards an amelioration of the human condition.

Conclusion

As I am mainly discussing matters internal to vulnerability theory, I will not consider objections outside of this realm of inquiry. As such, objections like "This is technologically impossible," "This is *bubris*," "This will create further inequalities" or "This is against human nature" will not be considered here. Transhumanism has received countless critics, and has generally been able to provide rebuttals, or at least plausible answers, and I will not here examine them.

This being said, from inside vulnerability theory, some objections can still be formulated.

First, it could be said that no kind of vulnerability grounds moral obligations. Since it is an error to think relational and dispositional vulnerability ground moral obligations, it is therefore also an error to think ontological vulnerability theory grounds moral obligations.

Vida Panitch and Chad Horne contend that the concept of vulnerability does no normative work in grounding our obligations towards the vulnerable³⁷. They highlight the fact that on the accounts provided by proponents of relational and dispositional vulnerability,

³⁷ Vida Panitch And L. Chad Horne, *Vulnerability, Health Care and Need*, in *Vulnerability, Autonomy and Applied Ethics*, ed. Christine Straehle (London: Routledge, 2016), 101.

vulnerability is in fact tightly related to the concept of needs, more precisely basic or vital needs, and needs are in turn related to harms. In every case, vulnerability simply acts as a marker for the possibility of harm, and it is the need to avoid harm that does the normative work in grounding our obligations towards the vulnerable. In this sense, vulnerability is "a mere middle-man" and in itself does not ground moral obligation. Therefore, some might argue, following Panitch and Horne, that ontological vulnerability also grounds no moral obligation.

I contend that Panitch and Horne's and my analyses are not only compatible, but support each other. What they do is refocus our attention on the harm, and away from the flagging concept that is vulnerability. Similarly, by highlighting the need to tackle ontological vulnerability, we also refocus our attention on the necessity to avoid harm. It is precisely because what is meant by ontological vulnerability, namely our natural exposure to harm, is the element which grounds a moral obligation to help the vulnerable, that I contend we have strong moral incentives to tackle ontological vulnerability. By attributing moral relevance to ontological vulnerability, I am saying that the nature of the harm we are exposed to is irrelevant: harm needs to be opposed, in whatever forms. Like Panitch and Horne, I refocus the debate around the need to avoid harm. It is precisely because harm does the normative work, as Panitch and Horne contend, that we have a duty to reduce the possibility of harm occurring through ontological vulnerability.

Second, vulnerability theory grounds moral obligations only insofar as we have to help people attain normal functioning as opposed to enhancing them. This is known as the treatment/enhancement distinction. It argues that there is a morally relevant difference between therapeutic interventions, and enhancing interventions, and that only therapeutic interventions are required, and even justified.

This distinction does not withstand scrutiny. Many attacks on this distinction have been proposed³⁸, but I will limit myself to a single

³⁸ Allen Buchanan, *Beyond Humanity? The Ethics of Biomedical Enhancement* (Oxford and New York: Oxford University Press, 2011), 286.

one, which is especially relevant to us since it is centered around the concept of harm.

Imagine two men, both very bad looking. One was simply born this way, and the other wears this unfortunate face as the result of multiple accidents and disfiguring illnesses. Both suffer immensely from their condition: mockery, ostracization, difficulty to find work, difficulty to find romantic partners, and so forth. Plastic surgery would help both of them. In the case of the "naturally bad looking," this treatment would be an enhancing procedure, since he is already wearing his "base-line face". In the case of the "accidentally bad looking" this treatment would be a therapeutic procedure, aiming at restoring his past condition. One is enhancement, one is therapeutic. But since both suffer equally, shouldn't both be considered equally deserving of plastic surgery? Although one procedure is enhancing, and the other is therapeutic, both are backed up by the same moral incentive to reduce the suffering of these bad looking men.

Some authors have tried to refute this objection by claiming that the distinction between therapy and enhancement ought to be framed in terms of species-typical range of faculties: any intervention is therapeutic if it brings someone's faculties up to the species-typical range for this faculty, and is an enhancement not if it merely brings someone's faculty up, but if it brings them over this species-typical range. But this approach has also suffered a lot of criticism. If we were to accept such an idea, powered wheelchairs for the disabled should not go faster than an average humans' walking speed and athletes who suffer an injury that brings them down from their species-optimal functioning to our species-typical functioning could not be entitled to treatment³⁹. Other authors contend that this is merely another instance of medicine's "fatal attraction to normalizing⁴⁰." Further, widely accepted medical practices, generally

³⁹ Eric Juengst, "Human Enhancement", in *Stanford Encyclopedia of Philosophy*, dir. Edward N. Zalta (Stanford, CA: Stanford University 2019), accessed on April 18th 2024, https://plato.stanford.edu/entries/enhancement/.

⁴⁰ Anita Silvers, "A Fatal Attraction to Normalizing: Treating Disabilities as Deviations from "Species-Typical" Functioning", in *Enhancing Human Traits*, ed. Erik Parens (Washington: Georgetown University Press, 1998), 177-202. And: Adrienne Asch and James E. Block, "Against the Enhancement Project: Two Perspectives", *Free Inquiry* 32, n° 1 (2011), 25–33.

considered to be of a therapeutic nature, such as vaccines, actually bring our bodily functions over and above our species-typical range of faculties, in this case by making us immune to certain diseases. Finally, the difficulty of actually establishing what is this "species-typical range" is much harder than we think, and it is still open for debate whether we should set the bar at "normal" functioning or "optimal" functioning⁴¹.

Third, vulnerability can be a good thing and it helps us foster an appreciation for what is given to us. This argument has been formulated in the field of vulnerability theory, but also in direct response to transhumanism. In this latter case, it was formulated by Michael Sandel, in a book called The Case Against Perfection⁴². He suggests an argument that came to be known as the "Openness to the Unbidden" argument. As Sandel claims, "[t]he problem with eugenics and genetic engineering is that they represent the one-sided triumph of willfulness over giftedness, of domination over reverence, of molding over beholding⁴³." On his account, being vulnerable is what enables three social virtues to exist: humility, responsibility, and solidarity. Indeed, being aware of our shared vulnerability nourishes humility and solidarity. Moreover, someone who refuses to embark on the enhancing journey and remained vulnerable could be seen as responsible for his vulnerability and would thus have to face alone the consequences of his or her choices. Falling ill wouldn't be due to some ontological vulnerability, but to the personal choice of remaining vulnerable.

Transhumanist authors quickly recognized the strength of this argument, but were equally quick in answering it⁴⁴. The sanctification of our vulnerability as a source of appreciation towards our lot is not a necessary association: one can appreciate the virtues of solidarity, humility and responsibility without having to suffer immensely.

⁴¹ Jackie Leach Scully and Christoph Rehmann-Sutter, "When Norms Normalize: The Case of Genetic 'Enhancement'", *Human Gene Therapy* 12, n° 1 (2001): 87–95.

⁴² Michael Sandel, *The Case against Perfection* (Cambridge: The Belknap Press of Harvard University Press, 2007), 85.

⁴³ Sandel, 3.

⁴⁴ Buchanan, Beyond Humanity?, 1.

Again, this critique springs from a misreading of transhumanist intentions: the goal is not to create a new invulnerable species (through, say, mind uploading), but to allow us to lead less painful lives. Recognizing that ontological vulnerability has moral salience does not amount to eradicating it. As has been recognized by Mark Coeckelbergh, vulnerability is a hallmark of any form of life, and even a radically enhanced form of posthuman life would still need to be embodied one way or another, and would thus still be marked by vulnerability, though to a much lesser extent than our current form of life⁴⁵. This idea has been challenged by Michael Hauskeller, who has a different appraisal of the transhumanist movement, which he sees as an attempt to eradicate what he calls "existential vulnerability." Even if such discussions are necessary, here they fell outside the scope of this paper, which focused more on vulnerability theory. This being said, we might be able to appease this interpretative dispute by seeing, as Belén Liedo and Jon Rueda do, two forms of transhumanism46: a strong one that does indeed aim at the dubious eradication of ontological vulnerability, and a weak one that acknowledges the moral salience of ontological vulnerability and, recognizing the impossibility of completely eradicating ontological vulnerability, it at least argues we should try to reduce vulnerability's grip on our lives.

In this paper, I have shown that the reasons relational and dispositional vulnerability ground moral obligations are also reasons that ground moral obligations towards helping the ontologically vulnerable. That is, on a consequentialist principle, avoiding the harms that occur through relation or disposition is as morally binding as avoiding the harms that occur through intrinsic properties. Therefore, I contend that if relational and dispositional vulnerability ought to be remedied, so does ontological vulnerability.

⁴⁵ Mark Coeckelbergh, "Vulnerable cyborgs: Learning to live with our dragons", *Journal of Evolution and Technology* 22, n° 11 (2011): 1-9.

⁴⁶ Belén Liedo Fernández and Jon Rueda, "In defense of posthuman vulnerability", *Scientia et Fides* 9, n° 1 (2021): 215-239.

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