ON THE OUTCRY OF MUTE THINGS: HANS JONAS AND THE IMPERATIVE OF RESPONSIBILITY

by

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ABSTRACT

This project begins with the assumption that modern technology has radically increased the scope and impact of human action. Since ethics concerns itself with human action, an increased scope in human action must be met by an increased scope of ethics—our ethical principles must be able to prescribe legitimate conduct in the new spheres of action opened to us by modern technology. In this project we focus on one particular challenge that faces ethics in this technological age. Specifically, we begin with the recognition that it is now conceivable that the cumulative impacts of the collective use of modern technology could undercut the continued existence of humanity. In the face of this possibility, we must ask whether we are obligated to ensure the continued existence of humanity—this question forms the primary guiding strand for this project. In an attempt to answer this question, we critically examine Hans Jonas' attempt to demonstrate that "humanity ought to be," from his pioneering work *The Imperative of Responsibility*. We argue that while Jonas' argument is ultimately untenable, it is possible to overcome some of the challenges that face his account and demonstrate that we are obligated to ensure the continued existence of humanity. Next, we investigate the nature of our obligation to ensure the continued existence of humanity—in what ways is this obligation different from more familiar obligations? Finally, we investigate the practical economic and political implications of affirming our obligation to ensure the continued existence of humanity.

INDEX WORDS: Hans Jonas; *Imperative of Responsibility*, ethics, technology

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DEDICATION

To Katherine with love

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INTRODUCTION:

THE CHANGING SCOPE OF HUMAN ACTION AND OUR OBLIGATION TO ENSURE THE CONTINUED EXISTENCE OF HUMANITY

It has been apparent for some time that human action in the modern world is fundamentally different than human action in previous times. Over half a century ago, Hannah Arendt implored that we must "think about what we are doing" in the face of a technological prowess that has put both the dream of the liberation from labor, as well as the nightmare of the destruction of the species within our grasp.[1] The intervening decades have seen an incredible increase in our technological ability, and there is little reason to expect that our powers will not continue to increase in future decades.

The recognition that the products of our technological activity could be used for violence is likely as old as technology itself. However, it is beginning to appear that the everyday use of seemingly benign technology may pose as great a threat to the future of humanity as any weapon. In 2009, The Stockholm Resilience Centre attempted to quantify the safe biophysical limits that allow for the Earth to operate as a stable system. In this pursuit, the group outlines nine distinct "planetary boundaries" that are threatened by our technological activity.[2] According to the Centre's Report, transgressing one or more of these planetary boundaries could be

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[1] Hannah Arendt, *The Human Condition* (Chicago: University of Chicago Press, 1998), 5-6.

[2] The boundaries the Resilience Center indicates are climate change, ocean acidification, stratospheric ozone depletion, the nitrogen and phosphorus cycles, global freshwater use, change in land use, biodiversity loss, atmospheric aerosol loading, and chemical pollution. John Bellamy Foster, Brett Clark, and Richard York, *The Ecological Rift: Capitalism's War on the Earth* (New York: Monthly Review Press, 2010), 14.

catastrophic due to the possibility that crossing these boundaries will trigger abrupt environmental change.[3] In this way, it is now at least conceivable that the continued existence of humanity is threatened due to the cumulative impacts associated with the collective use of modern technology. This possibility presents a challenge for ethical theory.

I. The Challenge to Traditional Ethical Theories

1.1 *The Increasing Scope of Our Power and Traditional Ethical Theories*

Before the advent of modern technology the scope of human action was generally limited to the spatially proximate and the temporally close at hand. For this reason, it made sense for traditional ethics to focus on what is spatially proximate and temporally short-term in an attempt to determine the legitimacy of conduct.[4] For example, both the Confucian maxim, "what you do not wish for yourself, do not impose on others," as well as the Kantian imperative, "never treat your fellow man as a means only but also as an end in himself," both involve a situation in which the agent and the other inhabit a common present. It has become increasingly clear, however, that the damage of some our actions will be primarily felt by future generations. For this reason, ethics can no longer *only* concern itself with neighbors and contemporaries but must also consider the impacts of our actions on all of the inhabitants of the Earth as well as the impacts of our actions on future generations.

[3] Johan Rockstrom, *et al*. "Planetary Boundaries: Exploring the Safe Operating Space for Humanity," *Ecology and Society* 14(2): 32, accessed February 28, 1011, http://www.ecologyandsociety.org/vol14/iss2/art32.
[4]Hans Jonas, *The Imperative of Responsibility: In Search of an Ethics for the Technological Age* (Chicago: University of Chicago Press, 1984), 5.

In addition to presupposing an ethical situation that is spatially proximate and temporally short term, traditional ethics presupposes the existence of humanity and then proceeds to attempt to determine what the human good consists in. Socrates taught that it was not life but rather the good life that was important.[5] But in the context of our increased powers, we must consider the possibility that our notion of the good life might undercut the continued existence of human life in the future.

Skeptics will claim that the Stockholm Resilience Centre overstates the danger. The question of whether these boundaries actually represent an inviolable tipping point for the future of humanity does not admit of philosophic inquiry, and as such, we must leave it to the empirical sciences. But the theoretic situation remains unchanged regardless of whether we actually stand at a tipping point or whether that tipping point still lies in the distant future. *Given the possibility that our activity could undercut the possible continued existence of humanity, we must consider whether we are obligated to ensure the continued existence of humanity.*

1.2 The Increased Scope of Our Power Opens New Spaces for Ethical Investigation

In this way, the increased temporal and spatial scope of human activity requires ethics, in the technological age, to wrestle with three seemingly new questions[6]: (1) what, if anything, do we owe to currently existing humans who are indirectly impacted by our actions, but which are not members of our community?[7] (2) What, if anything do we owe future generations? (3) Are we obligated to ensure that humans continue to exist in the future?

[5] Plato, *Five Dialogues* (Indianapolis: Hacket, 2002), 50-51.
[6] Needless to say, in addition to these three questions, a comprehensive ethical theory for the technological age would also have to wrestle with all the challenges that arise within the traditional scope of ethics.
[7] By humans who are not members of our communities, I mean those who are not citizens of the impacting nation.

These questions have certainly not gone unnoticed. The first two questions in particular have received much attention. Global justice and intergenerational justice have become hot topics in academic circles. Moreover, this growing concern for future generations has not been limited to academic circles—numerous countries have attempted to provide a means to systematically take into consideration what we might owe to future generations.[8]

The third question—are we obligated to ensure the continued existence of humanity—has generally been considered as a sub-question of intergenerational justice. Most theorists have bracketed the question, preferring to presuppose the continued existence of humanity in the future, rather than attempting to demonstrate that we have a duty to ensure this continued existence.[9]

In this work, our approach is to begin with an investigation of our obligation to ensure the continued existence of humanity, and then use the results of this investigation as a lens through which to view questions of intergenerational and global justice. Given the large amount of literature on questions of global justice and intergenerational justice and the relative paucity of work on our obligation to ensure the continued existence of humanity, it is necessary to defend the choice to begin with the latter question.

Before explicitly making this defense, we first briefly note one way in which the three questions are related. The common root that the three questions share and the feature which distinguishes them from traditional conceptions of justice is the *asymmetrical* nature of the

[8] Several nations have already enacted constitutional protections for "ecological intergenerational justice." See Joerg Chet Tremmel, "Establishing Intergenerational Justice in National Constitutions," in *Handbook of Intergenerational Justice* ed. Joerg Chet Tremmel (Cheltenham: Edward Elger Publishing, 2006), Table 10.2 for a list of constitutional provisions.

[9] The oft-cited work of Joel Feinberg is typical in this regard. He says, "The rights that future generations certainly have against us are contingent rights: the interests they are sure to have when they come into being…there is no actual interest that they have in simply coming into being, and I am at a loss to think of any other reason for claiming they have a right to come into existence." Joel Feinberg, "Future Generations" in *Environmental Ethics: What Really Matters, What Really Works*, ed. David Schmidtz and Elizabeth Willott, (New York: Oxford University Press, 2002), 266-267.

respective relationship. A consideration of global justice involves, at least in part, the question of what wealthier and more powerful nations owe poorer and less powerful nations and peoples. Intergenerational justice involves questions of what earlier generations owe later generations. In this case, earlier generations are able to impact later generations in a way that later generations cannot impact earlier generations. This is especially true in the case of the existence of the particular generations. Obviously, earlier generations can prevent later generations from ever coming into being, while later generations possess no such power over earlier generations. In this way all three of these questions for ethics in the technological age are distinguished from traditional conceptions of justice, which presuppose a symmetrical relationship of reciprocity.[10] As the ancient Athenians told the leaders of Melos, "right, as the world goes, is only in question between equals in power," for those who are not equal in power, "the strong do what they can and the weak suffer what they must."[11]

But the question remains: why must we take up the question of whether we are obligated to ensure the continued existence of humanity before we can take up any questions of intergenerational justice and global justice? In order to demonstrate why we must first consider whether we are obligated to ensure the continued existence of humanity, we turn to the work of two thinkers, John Rawls and Jan Narveson, whose work has been instrumental in shaping the current debate in the areas of intergenerational and global justice. In considering what we owe to future generations, Rawls is unable to show why we are obligated to ensure the continued existence of humanity. In the following section, we argue that this leaves Rawls, and the numerous thinkers who take similar views, in a kind of paradox—we fail in our obligation if we leave future generations a depleted world, but we can avoid our obligation to future generations

[10] We fully consider this structure in Chapter 3, Section II. On the Structure of Our Obligation to Ensure the Continued Existence of Humanity.
[11] Thucydides, *History of the Peloponnesian War* (London: Penguin Books, 1972), 400.

by depleting the world to such an extent that they are unable to come into being. For this reason, intergenerational justice must begin with a consideration of whether we are obligated to ensure the continued existence of humanity before any attempt to determine what we owe future generations. If, as Rawls suggests, determining what we owe current generations also involves determining what we owe future generations, and *vice versa*, then questions of global justice also require us to investigate whether we are obligated to ensure the continued existence of humanity. In chapters four and five, we consider to what extent *what* we owe future generations, as well as what we owe current generations, is influenced by the reason *why* we are obligated to ensure the continued existence of humanity.

In the second half of the following section, I consider Jan Narveson's explicit rejection of the claim that we have any obligation to ensure the continued existence of humanity. I attempt to show that Narveson, and the thinkers who follow him, end up undercutting the legitimacy of their favored ethical principles when they claim that the existence of humanity in the future is a matter of preference and not ethics. We cannot affirm the normative supremacy of an ethical principle, while at the same time taking a neutral stance towards the continued existence of that ethical principle. For this reason, if any normative principle is objectively binding, among the obligations which follow from that principle must include the obligation to preserve the preconditions of that principle. For these reasons, any ethical theory that would hope to be equal to the challenges presented by the technological age must affirm our obligation to ensure the continued existence of humanity.

II. The Necessity of Affirming Our Obligation to Ensure the Continued Existence of Humanity

2. 1 *John Rawls and A Paradox For Intergenerational Justice*

With his *Theory of Justice,* Rawls hoped to largely maintain the results of Kant's deontological ethics while jettisoning the metaphysical foundation of the Kantian moral project.[12] In the place of Kant's metaphysics of freedom, Rawls attempts to derive his conception of justice from the precepts of rational choice theory.

If we begin with the assumption that each human is a rational maximizer of his or her own interest, then, Rawls argues we will recognize that society should be interpreted as a "cooperative venture for mutual advantage."[13] From this perspective, the central problem of justice is how to adjudicate conflicting claims upon the advantages that are derived as a result of social cooperation. We must somehow determine how to distribute the gains of social cooperation in a way that would be agreed upon by rational maximizers. The basic difficulty in reaching consensus is that each individual will be biased towards maximizing his or her own share of the social product.

In order to overcome the problem of individual bias, Rawls proposes the notion of the original position. In the original position, rational maximizers are enshrouded in a "veil of ignorance," which prevents the individual from knowing, among other things, his place in society, his class position or social status.[14] Rawls then argues that rational maximizers would agree to two principles of justice from this original position. First, each person is to have an

[12] John Rawls, "Justice as Fairness: Political not Metaphysical," *Philosophy and Public Affairs* 3 (1985): 223-251.
[13] John Rawls, *Theory of Justice: Revised Edition* (Boston: Harvard University Press, 1999), 74.
[14] Rawls, *Theory of Justice*, 11.

equal right to the most extensive basic liberty compatible with a similar liberty for others.[15] Second, Rawls argues that people in the original position would agree to the "difference principle" according to which social and economic inequalities are to be arranged in such a way that they are to the greatest benefit to the least advantaged members of society.[16]

In this context, Rawls attempts to come to terms with the problem of intergenerational justice.[17] The problem of intergenerational justice arises for Rawls because determining how we distribute the social product requires us to determine what we owe subsequent generations.[18] Simply put, if we owe nothing to subsequent generations then we have more of the social product to divvy up among the current generation, but if we are required to save some of the social product for future generations, then we have less of the social product to distribute to the current generation.[19] According to Rawls' scheme the people in the original position are contemporaries but do not know what generation they belong to. So, would those in the original position choose to save for future generations? Since those in the original position do not know what generation they belong to, they cannot be sure that their generation will benefit from implementing a "just savings principle" that would pass along sufficient social product for the next generation to maintain just institutions. So, Rawls worries that rational maximizers in the original position would not choose to save anything for future generations.[20] The basic challenge is that, in the original position, people can be sure that they will benefit by *not* passing on resources because they will have more resources to divide among the present generation, but

[15] Rawls, *Theory of Justice*, 53.
[16] Rawls, *Theory of Justice*, 303.
[17] For an excellent summary of the problem of intergenerational justice in Rawls' work see Claus Dierksmeier, "John Rawls and the Rights of Future Generations," in *Handbook of Intergenerational Justice*, ed. Joerg Chet Tremmel (Northampton: Edward Elger Publishing Limited, 2006), 50-63.
[18] Rawls tackles this problem at several points in his career, and it is not my intention to attempt to wrestle with the subtleties of his various accounts—we are interested in Rawls primarily in order to demonstrate a kind of paradox that arises in attempting to determine what we owe future generations.
[19] Rawls, *Theory of Justice*, 251.
[20] Rawls, *Theory of Justice*, 254.

cannot be sure that they will benefit from saving for the next generation because they cannot be sure the previous generation will have saved for them.

In order to avoid this result, Rawls claims we must make two assumptions. First, we must assume that those in the original position belong to family lines and care about their immediate descendants. Second, we must assume that all generations wish that the previous generation had agreed to save for the following generation.[21] If we make these assumptions, then Rawls concludes that those in the original position would consent to modify the difference principle so that it is consistent with a just savings principle which would require each generation to pass on resources to the following generation.[22] The modified difference principle states that social and economic inequalities are to be arranged so that they are to be of the greatest benefit to the least-advantaged members of society, consistent with the just savings principle.[23] In this way, Rawls' account of justice requires us to make some provisions for future generations.[24]

But can we grant that we are obligated to make some provisions for future generations without also affirming that we are obligated to ensure the continued existence of humanity? Note that in Rawls' account, the notion that we are obligated to save for subsequent generation can only be demonstrated when we assume that the existing generation cares about its descendants. In this way, Rawls can demonstrate that we ought to save for future generations only after presupposing that we ought to ensure that future generations come into being. If we do not presuppose that the members in the original position are already committed to ensuring

[21] Rawls, *Theory of Justice*, 255.
[22] It seems that in making these assumptions Rawls begs the question, but we ignore this problem for the moment for the sake of illustration.
[23] Rawls, *Theory of Justice*, 47.
[24] Rawls attempts to determine precisely what the "just saving principle" requires us to save for future generations in *Theory of Justice* 255-265. We do not recount the details of Rawls' account here because the details do not impact our investigation.

the continued existence of their descendants, then Rawls admits that the dictates of the original position will impel the current generation to save nothing for the subsequent generation.[25]

This difficulty is not particular to Rawls' account. Any theory which attempts to demonstrate that we have some duty to future generations based on the assumption that there will be future generations is ensnared by this problem. *If our duty to future generations is contingent upon the existence of future generations then our ethical obligation restrains us from activity which leaves future generations a depleted world, but our duty does nothing to prevent us from degrading the world to such an extent that future generations cannot exist*.

If what has ethical primacy is the *condition* of future human existence, and not the continued *existence* of humanity, it seems that ethics itself might impel us to undercut the possibility of future humanity. In this case, when it becomes clear that we will leave future generations a world so depleted that we could be said to be harming them, our duty would be to ensure that future generations do *not* come into existence. On this view, in this situation, the only way for us to avoid doing harm to future generations is to prevent future generations from coming into being.

For these reasons, any attempt to think through our duty to future generations must begin with the question of the existence of future humanity. We must first investigate whether we are obligated to ensure the continued existence of humanity before we can ask any questions about what conditions we owe future humanity.

[25] This is at least the view that Rawls settles on in the Revised Edition of *Theory of Justice*, 255. His position is different in both the first edition of *Theory of Justice* as well as in *Political Liberalism*.

2.2 *Jan Narveson and Future Generations as Subjective Preference*

In his well known paper, "Utilitarianism and Future Generations," Jan Narveson considers the connection between utilitarianism and our question. Is there any *moral* reason, Narveson asks, for the continued existence of humanity?[26] In this paper, Narveson attempts to demonstrate that while we might prefer a future universe with humans in it, there is no moral reason for this preference. If we are to demonstrate that we are obligated to ensure the continued existence of humanity, we must overcome the view that the existence of humans in the future is a matter of preference. In the second chapter, we explicitly consider Narveson's arguments in an attempt to address the challenge that the problem of subjective preference poses to our task.

III. Technological Threats to the Continued Existence of Humanity

For these reasons, we must endeavor to investigate whether we are obligated to ensure the continued existence of humanity. We have already indicated that our investigation will explore this question within the context of the threat to the continued existence of humanity presented by the cumulative impacts associated with the collective use of modern technology. But these impacts are surely not the only way we could conceivably undercut the continued existence of humanity. Here we briefly mention two other possible scenarios in which we could undercut the possibility of the continued existence of human life in the future.

[26] Jan Narveson, "Utilitarianism and New Generations," *Mind* 76 (1967): 72.

3.1 The Threat of Nuclear War

To be sure, the fear that we might destroy the species through the use of technology is at least as old as the bombings of Hiroshima and Nagasaki. The possibility of nuclear war still represents a grave threat to the continued existence of humanity, but as Jonas notes, we can perhaps find some consolation in that this possibility lies entirely within the realm of choice. As Jonas points out, certain actions can bring about catastrophe, but these actions can remain undone.[27] In other words, once we have constructed these weapons we are not required to use them. Indeed, the strange cold-war logic of mutually assured destruction seemed to dictate that we build nuclear weapons precisely so we would not have to use them. Admittedly, predicting retaliatory response is more difficult in a post cold-war world, where we must worry that non-state actors may obtain a nuclear weapon.

Still the threat posed to the future of humanity through nuclear weapons is distinguished from the threat posed by the dynamics of the collective use of modern technology in that the threat of nuclear weapons could be removed without necessitating any change in lifestyle.[28] The same cannot be said for the threat posed to the continued existence of humanity by the cumulative impacts associated with the collective use of modern technology. So, while the results of our investigation do have a connection to the threat of nuclear weapons, we will focus on the threat posed by the dynamics of technical civilization.

[27] Jonas, *Imperative of Responsibility*, 202.
[28] Jonas, *Imperative of Responsibility*, 202.

3.2 Non-Reproduction Pact

It will perhaps be objected that there is nothing novel about our power over future generations. After all, future generations have always depended on previous generations for their existence—if any previous generation had decided to have no children, then of course, no humans would exist.[29] In this way, the results of our investigation will have relevance to questions of reproductive liberty. In other words, if it is true that we are obligated to ensure the continued existence of humanity, it is also true that at least *some* of us are obligated to reproduce. However, in the current investigation we focus on the threat that the cumulative impact of the collective use of modern technology poses to future generation. Admittedly, humanity could also be threatened with extinction through a "no-reproduction compact," but given the current state of the global population that threat surely will not be considered imminent.

Still, the notion of reproductive liberty does seem to present a challenge to the view that we are obligated to ensure the continued existence of humanity in the future. In his book, *Future People: A Moderate Consequentialist Account of Our Obligations to Future Generations,* Tim Mulgan argues that an examination of commonsense morality reveals that it is a "decisive intuition," that reproductive choice is morally open. In other words, there is neither an obligation to reproduce nor an obligation not to reproduce.[30] On Mulgan's view, any moral theory which cannot accommodate this intuition must be abandoned. When we claim that we are obligated to ensure the continued existence of humanity we run afoul of this intuition.[31]

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[29] Although this possibility has always existed, surely the modern capacity to control reproduction through technological means makes this possibility more attainable—more attainable, but given the current state of the world population still not very plausible.

[30] Tim Mulgan, *Future People: A Moderate Consequentialist Account of Our Obligations to Future Generations* (Oxford: Oxford University Press, 2006), 6.

[31] In Chapter 1 Section 5.2 "Challenges with Jonas' Account," we attempt to demonstrate why appeals to intuition are never sufficient to legitimate ethical principles. Our critique there equally appeals to Mulgan's "decisive

In the second chapter, we argue that the type of freedom that human beings possess is essential to the reason why we are obligated to ensure the continued existence of humanity. To be sure, the capacity to freely choose whether or not one reproduces is a powerful expression of this freedom. Indeed, there are examples of human freedom rendering even more basic biological urges optional. For example, Gandhi went on hunger strikes in an attempt to bring about a cessation of hostilities between Muslims and Hindus. Perhaps paradoxically, the hunger strike as well as the decision not to reproduce can be seen as powerful affirmations of human life. Yet, when we affirm the obligation to ensure the continued existence of humanity we are denying that the *entire species* can be allowed to stop reproducing. The tension that arises between the seeming permissibility of the individual's decision to not reproduce and the impermissibility of the entire race's decision to stop reproducing causes challenges for conceiving our obligation to ensure the continued existence of humanity.

IV. The Two-Sided Problem of Anonymity for an Ethic of the Future

4.1 The Problem of the Anonymity of the Subject who is Obligated

If we are obligated to ensure the continued existence of humanity, then, at least some of us are obligated to reproduce. One challenge to understanding this obligation is the vagueness that accompanies all imperfect duties. According to Kant, we are obligated to be beneficent at least some of the time. It is not immediately obvious what some of the time means—how often

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intuitions." Here we bring up Mulgan's work primarily to indicate how our investigation relates to questions of reproductive liberty.

do I have to be beneficent in order to meet my obligation?[32] For this reason there is a kind of ambiguity in imperfect duties. The obligation to ensure the continued existence of humanity faces not only this ambiguity, but also a kind anonymity that comes from this obligation being the responsibility of a collective. In the case of reproduction, even if one admits that it is *our* responsibility to ensure the continued existence of humanity, we still have to determine when this responsibility becomes *my* responsibility.

Admittedly, the current size of the world population allows us to side-step this problem in the case of reproduction. The future of humanity does not seem to be threatened by under-breeding at the moment. However, this problem certainly does face us if the cumulative impacts of the collective use of modern technology threaten the continued existence of humanity. What does the collective responsibility to ensure the continued existence of humanity entail for the individual? When does this general responsibility become *my* responsibility?

The problem for the subject is two-fold. First, there is a question of knowledge. How can I know whether my seemingly mundane actions threaten the continued existence of humanity?[33] Second, there is the question of the dynamics of the cumulative impacts of collective action. For instance, even the most outlandish resource usage on the part of the individual is likely consistent with the continued existence of humanity, provided that the rest of this individual's contemporaries reduce their resource usage.[34]

[32] Immanuel Kant, *Groundwork for the Metaphysics of Morals* (Toronto: Broadview Press, 2005): 61.
[33] We take up these epistemological challenges in the third chapter.
[34] We take up the challenge presented by the dynamics of collective responsibility in the fourth and fifth chapters.

4.2 The Problem of the Anonymity of the Object of the Obligation

In addition to the challenges on the subjective side of the obligation, there is also the challenge of anonymity on the side of the object of our obligation. Derek Parfit describes a difficulty that arises when we attempt to think about our duty to future generations. Parfit's "non-identity problem" arises due to the recognition that our choices not only impact the conditions that we will leave to future generations but also the composition of future generations. According to Parfit, the very identity of future existing humans is among the indirect impacts of our actions.

Parfit illustrates the problem by describing two possible social and economic policies. On one of these two policies the standard of living will be slightly higher over the next century. Parfit argues that it is *not* true that the *same* particular people will exist in the further future on *both* policies. According to Parfit, given the way these policies would impact our lives, it would be increasingly likely over time that different marriages would occur, and, even within marriages that remained the same, children would be conceived at different times. Over time, Parfit argues, the proportion of those born whose existence was dependent upon the choice between the two policies would steadily grow. Within a century or two, there would be no one born within a particular community which would have been born regardless of which of the two policies had been chosen. This, Parfit thinks, causes a problem for conceiving of our duty to future generations.[35]

It is often said that we should conserve natural resources for future generations because they will claim that we have wronged them if we do not. But if the identity of future persons is dependent upon our actions, on what basis can they claim we have wronged them? If we had

[35] Derek Parfit, *Reasons and Persons* (Oxford: Clarendon Press, 1984): 361.

made the choice to conserve natural resources, Parfit argues that the future persons who would have blamed us, would never have been born.

In this way, attempting to conceive of the nature of the duty to ensure the continued existence to humanity is faced with challenges on both the side of the subject who is obligated as well as on the side of the object of the obligation. The second task that the current investigation undertakes is an elucidation of the nature of the obligation to ensure the continued existence of humanity. In the third chapter, we begin with the assumption that we are obligated to ensure the continued existence of humanity and then attempt to conceive of the nature of this obligation. In order to properly conceive of our duty, we must overcome the challenge provided by the anonymity that seems to appear both on the side of the subject who is obligated as well as the on the object which we are obligated to.

V. Of Invisibility and Mute Things

5.1 Wearing the Ring of Gyges

When it comes to our relationship to future generations, we are in the same position as Gyges, as described by Glaucon in Plato's *Republic*.[36] Glaucon argues that any person who possessed the ring of Gyges, which gives the power of invisibility, would not act ethically, but would rather steal, rape, and murder, just as, legend tell us, Gyges did. Given the traditional scope of ethics, this problem largely has the happy status of "merely theoretical" because, after all, no one possesses the ring of Gyges. The agent, in a traditional ethical situation, sees and is seen by the other who is impacted by the action.

[36] Plato, *Republic* (Dover: Dover Thrift Editions, 2000), 31-35.

However, given the increased scope of our powers, the tale of Gyges becomes more pressing for us. Our power has given us a kind of invisibility—future generations can see the impacts of our actions but they cannot see us. These future generations may accuse us, but we will not be around to hear their accusations—moreover, our actions could leave a world where there is no one left to accuse us.

Slipping on the Ring of Gyges we must wrestle with the old suspicion that the value in ethical activity does not reside in *being* ethical but rather in *appearing* ethical. The suggestion is that if we do not affirm the necessity of ensuring the continued existence of ethics in the future, we are confirming the skeptic's claim that ethics is nothing but a mask for will to power—the view that ethics is just a pretty face on our desire to dominate our fellow man. If the notion of ethics is more than a chimera its objective validity must be affirmed not just when we are visible, as we are to our contemporaries, but also when we are invisible, as we are, for the most part, to those who come after us. If ethics really is something objectively valuable we must ensure that it continues to exist after we have gone.

5.2 Hans Jonas' The Imperative of Responsibility

The suggestion, then, is that ethics in our technological age requires an affirmation that we are obligated to ensure the continued existence of humanity in the future.[37] Any theory of intergenerational justice which holds that we owe something to future generations but stops short of affirming our obligation to ensure the continued existence of humanity is committed to a strange proposition. On such a view, we fail in our obligation to future generations when we

[37] We attempt to demonstrate this in the second chapter—here it remains just a suggestion.

leave a depleted world, but if our degradation of the world is such that future generations cannot come into being then we have not failed in our obligation.

In this investigation, we examine the possibility of an obligation to ensure the continued existence of humanity. Investigating this possible obligation involves considering three basic questions: (1) Are we obligated to ensure the continued existence of humanity? (2) If so, what is the nature of this obligation? (3) Finally, how should we attempt to meet this obligation? In this pursuit, we are guided by Hans Jonas' pioneering work *The Imperative of Responsibility: In Search of an Ethics for the Technological Age*. In this work, Jonas attempts to demonstrate that we are obligated to ensure the continued existence of humanity and then proceeds to outline some of the practical consequences of this obligation. In the first chapter of our investigation, we reconstruct and critique Jonas' arguments in defense of our obligation to ensure the continued existence of humanity. In the second chapter, we attempt to overcome the difficulties that arise in Jonas' account in the hopes that we can still demonstrate that we are obligated to ensure the continued existence of humanity. In the third chapter, we begin with the assumption that we are obligated to ensure the continued existence of humanity and then proceed to investigate the nature of this obligation. In the fourth chapter, we consider to what extent existing political and economic systems are consistent with our obligation to ensure the continued existence of humanity in attempt to address the question of "how should we meet this obligation?" With the conclusion of the fourth chapter, we are finished examining the three questions that guide this investigation. As a conclusion, in the fifth and final chapter, we consider Jonas' question of whether we may be "inhumane so humans continue to inhabit the earth."[3839]

[38] Hans Jonas, *Mortality and Morality: A Search for the Good after Auschwitz* (Evanston: Northwestern University Press, 1996), 55.

[39] Before explicitly beginning our investigation, I want to briefly explain the title of our investigation: "On the Outcry of Mute Things: Hans Jonas and the Imperative of Responsibility." Six days before his death, Jonas gave a

talk while accepting the *Premino Nonino,* honoring *The Imperative of Responsibility* as the best book translated into Italian in 1992. Jonas concluded the talk as follows: "Let me close with this symbolic appraisal of the altered 'human condition.' It was once religion which told us we were all sinners because of original sin. It is now the ecology of our planet which pronounces us all sinners because of the excessive exploits of human inventiveness. It was once religion which threatened us with a last judgment at the end of days. It is now our tortured planet which predicts the arrival of such a day without any heavenly intervention. The latest revelation—from no Mount Sinai, from no Mount of the Sermon, from no Bo (tree of Buddha)—is the outcry of mute things themselves that we must heed by curbing our powers over creation, lest we perish together on a wasteland of what was creation" (Hans Jonas, *Mortality and Morality: A Search for the Good after Auschwitz* (Evanston: Northwestern University Press, 1996), 201-202). For Jonas, the possibility of humanity in the future is chief among these "mute things." One way to understand Jonas' *The Imperative of Responsibility* is as an attempt to give voice to the silent plea that future humanity is not yet able to formulate.

CHAPTER 1:

HANS JONAS' IMPERATIVE OF RESPONSIBILITY

For Hans Jonas, modern technology has increased the reach of our actions beyond the traditional scope of ethics, which in the past could focus on what was close at hand in an attempt to evaluate conduct. The latter half of Jonas' career is dominated by the pursuit of an ethical principle that is equal to the new scope of our power. Within Jonas' work from this period it is possible to identify three distinct arguments in support of his favored ethical principle, the imperative of responsibility. The first is published under the title, "Socio-Economic Knowledge and Ignorance of Goals," in a collection of essays called *Philosophical Essays: From Ancient Creed to Technological Man.* The second argument forms the bulk of the first half of Jonas' book *The Imperative of Responsibility*. The final argument is published under the title, "Towards an Ontological Grounding of An Ethics For the Future" and appears in the posthumous collection of Jonas' essays, *Mortality and Morality: A Search for the Good after Auschwitz*. In this chapter, I briefly reconstruct each of these arguments and consider to what extent they are able to provide grounds for our obligation to ensure the continued existence of humanity.

I. The First Argument

1.1 *The Context of the Problem*

Jonas first derives the imperative of responsibility in an economic context. The problem that leads him to this imperative is posed by the economist, Adolph Lowe. According to Jonas' reading of Lowe, the primary inherent goal of the economic sphere is the provisioning of the members of society with the physical goods necessary to sustain their individual lives, or, at the very least, to sustain the collective life which composes the economic sphere.[1] The challenge that Lowe points to is that modern technology seems to assure a solution to this primary provisioning task and opens up a space for a range of economic goals, which are not determined by the dictates of natural necessity. On Jonas' reading of Lowe, former pressures endowed the economic process with a kind of quasi-mechanical determinacy that allowed economic theory to assume the form of natural science. In particular, if all economic activity is governed by natural necessity, economic theory can make predictions that approximate the kind of predictions that can be made in natural science. This primary inherent economic goal can also serve as an evaluative tool to determine whether or not a particular economic activity is worthwhile.[2]

According to Jonas' reading of Lowe, all of this changes with modern technology. If modern technology can guarantee that the economic sphere will meet its primary goal, then a whole realm of optional goals within the economic sphere become possible. Lowe argues that economic theory has no tools to determine which of these economic pursuits are legitimate.[3]

[1] Hans Jonas, *Philosophical Essays: From Ancient Creed to Technological Creed* (Chicago: University of Chicago Press, 1980), 90.
[2] Jonas, *Philosophical Essays*, 90.
[3] Jonas, *Philosophical Essays*, 83.

Since economic theory cannot provide a standard for determining legitimate pursuits, this standard must arise from outside of economic theory—Lowe suggests that the "political or social philosopher can alone vindicate the ends."[4]

The questions of whether Lowe's analysis of the situation is correct, or if Jonas' interpretation of Lowe is fair do not really concern us. For the purposes of this investigation, the important general question is what norms can be found to determine between legitimate and illegitimate economic activities? Specifically, what norm can be used to demonstrate that economic activity must not undercut the possibility of the continued existence of humanity in the future?

1.2 *The First Formulation of the Imperative of Responsibility*

In response to Lowe's call for an evaluative standard from outside of the economic sphere, Jonas attempts to show that the economic sphere already possesses a standard for evaluation of the types of economic goals Lowe is concerned with. Economics is an instituted system of human activities, and as such it has an inherent goal or goals and is subject to evaluation on the basis of its adequacy to these goals.[5] Economic theory, Jonas argues, has always recognized the inherent goal of providing the members of society the physical goods necessary to survive.

For Jonas this goal is grounded in two biological facts. The first is the fact of metabolism. Since human life, like all life, is only possible through the continuous exchange of material between the individual organism and its environment, human beings are creatures of

[4] Jonas, *Philosophical Essays*, 83.
[5] Jonas, *Philosophical Essays*, 90.

need. This biological necessity forms one half of the reason that economic activity arises for Jonas—if humans were not creatures of need, Jonas argues, then there would be no reason for an economy. However, as Jonas notes, it does not seem that an economy is necessary to obtain the physical goods necessary to survive. Jonas points to the example of Robinson Crusoe. If one is shipwrecked *alone* on an island, then it makes no sense to speak of economic life. Economic life, then, is not simply reducible to human metabolism. There must be an additional fact, Jonas reasons, that constitutes the economic sphere.

For this reason, Jonas argues that in addition to metabolism, the biological fact of reproduction also underlies economic life. Due to reproduction a horizon of self-transcendence is added to the reference of need and interest which arises due to the biological fact of metabolism.[6] Due to the biological fact of reproduction, needs beyond one's own become an important part of one's own concern. This concern for others stretches into the future beyond the individual's life-span because the descendants continue to live on even when the ancestor is gone.[7] Jonas argues that we can derive two basic economic principles from these two basic biological facts. From the fact of metabolism, we can derive the principle of self-interest so familiar in economic theory. From the fact of reproduction, we can derive the principle of responsibility, which tells us to "act so that the effects of your action are not destructive of the possibility of economic life in the future."[8]

Since reproduction is as constitutive of the economic sphere as metabolism, the principle of responsibility can serve as a standard for the economist for the evaluation of economic goals just as much as the principle of need.[9] For this reason, Jonas argues that economics possesses an

[6] Jonas, *Philosophical Essays*, 92.
[7] Jonas, *Philosophical Essays*, 92.
[8] Jonas, *Philosophical Essays*, 95.
[9] Jonas, *Philosophical Essays*, 94.

internal evaluative standard for determining the legitimacy of various optional economic projects—namely, we can evaluate economic goals on the basis of their impact on the possibility of the continued existence of the economic sphere.

In the context of economic possibilities that arise due to the power of modern technology, the principle of responsibility does not provide much in the way of positive prescription; instead it serves as a principle of restraint. In this way, Jonas arrives at his first formulation of the imperative of responsibility: "Act so that the effects of your action are not destructive of the possibility of economic life in the future."[10]

1.3 *Challenges to the First Formulation*

The difficulty with Jonas' first formulation is two-fold. First, it is not clear that reproduction is a truly a constitutive element of an economic sphere. Second, it is not clear that a natural approach to economics can supply any normative prescriptions.

If we consider a slight modification to the Robinson Crusoe example Jonas raises, it seems that the capacity for reproduction is not a necessary condition for economic relations. Imagine that instead of being shipwrecked alone, Crusoe washed ashore with twenty other male sailors. It seems completely plausible that the survivors could take property of various parts of the island and engage in exchange with one another. It's not clear why the islanders, despite being incapable of reproducing, could not develop a rudimentary economy in this situation.

Admittedly, the capacity for reproduction does serve as a precondition for human economy—if the parents of the sailors had not reproduced then there would, of course, be no

[10] Jonas, *Philosophical Essays*, 95.

beings to participate in the economy. Still, this basic fact of human existence does not support Jonas' claim that there would be no economic life without care for offspring.[11]

The second difficulty facing Jonas' first formulation is that it is not clear that any natural conception of economics can support a normative principle. The basic problem is that if economic relations are reduced to a facet of human physiology, be it in the form of metabolism or even reproduction, then economic relations underlie all human actions, be they good or evil.[12] If economic relations serve as a precondition for both good and evil action, it is not clear how economic relations can help us distinguish between the two. For this reason, if economic relations are merely a natural precondition of all human activity, then there seems to be no sense in talking about a normative principle arising from them.

In this essay, Jonas seems to criticize the economist for not recognizing that his discipline is different than physics. Economics, unlike physics, is an instituted system of human activities, and as such it has an inherent goal or goals and is subject to evaluation on the basis of its adequacy to these goals.[13] For this reason, it does seem that Jonas could be right to view economics as a normative sphere. But reducing economic activities to a natural condition seems to render talk of a just economy as meaningless as the notion of a just physics.

The manner in which Jonas criticizes the economist foreshadows Jonas' most ambitious attempt to ground our obligation to ensure the continued existence of humanity in *Imperative of Responsibility*. Jonas criticizes the economist for attempting to be "scientific" in the manner of the physicist. We assume that the central line of Jonas' critique will be that since economics is an area of freedom, it does not make sense to attempt to explain economics in terms of natural

[11] Jonas, *Philosophical Essays*, 92.
[12] Richard Dien Winfield argues this point at length in *The Just Economy* (New York: Routledge, Chapman, and Hall, Inc.:1988), 2.
[13] Jonas, *Philosophical Essays*, 82.

laws. However, Jonas makes it clear that this is not the heart of his critique. In attempting to be scientific, Jonas argues, the economist uncritically accepts the physicist's presupposition that *being is value-free*.[14] The radical position which Jonas points to in this essay, and which he explicitly argues for in *Imperative of Responsibility*, is that being is the ultimate authority which grounds normativity. In order to understand Jonas' attempted grounding from *Imperative of Responsibility*, it is necessary to consider what Jonas considers to be the source of nihilism in contemporary ethics.

II. Nihilism

2.1 The Problem of Nihilism for Contemporary Ethics

Jonas points to an "ethical vacuum," which he sees as the central problem for the technological age. It is not merely that traditional ethical theories lack the categories to adequately describe our obligation in the face of our increasing power. The great challenge facing us, Jonas argues, is that the very movement that has given us the power which must be regulated by norms—modern science—has at the same time eroded the foundations for normativity—indeed the very idea of a norm has been called into question.[15] For this reason, Jonas argues that defending our obligation to ensure the continued existence of humanity requires a more general defense of ethical obligation as such.

[14] Jonas, *Philosophical Essays*, 82-83.
[15] Jonas, *Imperative of Responsibility*, 22-23.

2.2 The Source of Modern Nihilism

In order to make sense of Jonas' attempt to provide foundations for our obligation to ensure the continued existence of humanity, it is necessary to sketch Jonas' account of the source of modern nihilism. On Jonas' view, early modern science largely followed Descartes in dividing the world into two categories: extended matter and mind. Extended matter is governed by the laws of matter in motion and is the proper subject for scientific investigation. Mental matter is characterized by an interiority not merely governed by the laws of matter in motion.

The deficiencies in the Cartesian account are well documented, but the advantage of Cartesian dualism is that it preserved the special status of humanity that was required by the religious authorities while opening up the rest of the world to 'objective' scientific inquiry. In other words, all of nature, save human nature, could be understood in terms of the measurable data that could be extracted from it. It is true that this dualism leaves the status of human nature, which is characterized by mind, as a bit of a mystery. However, from the standpoint of religious faith, this mystery can be seen as a kind of advantage rather than disadvantage. Human nature stands in a privileged position and possesses a value of its own, while the rest of nature only possesses value instrumentally.

For Jonas, the acceptance of Darwinian science is what finally pushes aside this early modern dualism. If humans share a common ancestor with other species, it is not clear how we can maintain a sharp dualism between human animals and non-human animals.[16] Eliminating this dualism allows us to investigate and understand human beings in terms of measurable data, and the great achievements of modern medicine are a testament to the advantages of this

[16] Hans Jonas, *The Phenomenon of Life: Toward a Philosophic Biography* (Chicago: University of Chicago Press, 1982, 41-45.

viewpoint. However, Jonas argues, the elimination of the old dualism threatens to undercut ethics. Humanity's privileged place as the sole possessor of intrinsic value is upset by the elimination of this dualism. If humanity is like the rest of the natural world, and the rest of the natural world does not possess intrinsic value, then what reason do we have to think humanity possesses intrinsic value? In this way, Jonas argues that the contemporary scientific worldview completely strips intrinsic value from its conception of being or nature.

According to Jonas, in stripping the world of intrinsic value, the contemporary scientific worldview is only able to recognize the possibility of value in the world if this value arises from the positing of some will. Jonas reasons that if all value proceeds from a willing, then, we are thrown onto the will as the only possible source of ethical value. This creates a problem for Jonas because he is unable to see how the will can bind itself in obligation.[17] The basic problem Jonas points to is that if the ethical good proceeds from the will it lacks the authority to bind the will—instead of determining the will's purpose the good is subject to the will, and changes as the will chooses.[18]

This, then, is the source of nihilism in the modern age for Jonas: the modern scientific worldview strips the world of any intrinsic value. The only value that enters the world is the result of human projection. But if value only enters the world through human choice that value appears arbitrary and always subject to change. If value is always provisional, then it does not seem there is any foundation on which to place our ethical theories. Jonas' strategy for overcoming this nihilism is to attempt to rehabilitate the concept of nature or being, so that it can

[17] Since Jonas' rejection of non-natural ethics rests on his view that the will cannot bind itself in obligation, in the following chapter I attempt to piece together exactly why Jonas has this view. There, I attempt to show that Jonas' view that the will cannot bind itself in obligation is based on presupposing a foundational model of justification.
[18] Jonas, *Imperative of Responsibility*, 84.

once again serve as an authority to bind the will in obligation. He then uses this standpoint to attempt to demonstrate that we are obligated to ensure the continued existence of humanity.

2.3 The Naturalistic Fallacy

Jonas recognizes that the attempt to ground his ethics in being runs afoul of the prohibition against deriving ought from is. So, at the outset of his account he attempts to undermine the basis for this prohibition. Jonas argues that it is impermissible to derive an ought from being only if we presuppose a conception of being that has been stripped of value. If we presuppose that being is value-neutral, Jonas argues, then it follows tautologically that an ought cannot be derived from being.[19]

Jonas concedes that the dominant scientific worldview does yield a view of being that is value-neutral. However, Jonas argues, the claim that it is, in principle, impossible to derive "ought" from "is" is tantamount to the claim that no other conception of being is possible. In his work, *The Phenomenon of Life*, Jonas provides a powerful critique of the materialism that he takes to be the dominant ontological view of contemporary science. A full examination of Jonas' arguments from *The Phenomenon of Life* would take us too far from our present task. For our present purposes it is sufficient to note that in this work, Jonas attempts to demonstrate that it is impossible to understand the phenomenon of life without recognizing its teleological character. This purposiveness can be seen at every level of the organic realm. It is evident from the metabolism of the most basic organism, which takes its own preservation as its purpose, to the free setting of ends of the human being.[20] Jonas argues that the purposive structure of organisms

[19] Jonas, *Imperative of Responsibility*, 44.
[20] Jonas, *Phenomenon of Life*, 90-91

allows us to think of value as being inherent in the activity of life itself. In sustaining itself, organic life shows that it affirms its existence, and in affirming its existence organic nature shows that its existence is valuable. In this way, Jonas thinks that the entire organic realm serves as a counterexample to the contemporary scientific materialist worldview and its credo that all value is the result of human subjectivity.

If multiple views of being are possible, and if not all of these views are inconsistent with the possibility of deriving ought from is, then, Jonas argues, it cannot be claimed that it is, in principle, impossible to derive ought from is. In this way, Jonas argues that the prohibition against deriving an ought from being is a kind of metaphysical prejudice, which only follows if we presuppose a very definite conception of being. For this reason, Jonas takes it that as long as the contemporary scientific ontology is not the only ontology possible, then it is permissible to provide an ontological grounding for our duty to ensure the continued existence of humanity in the future.

The difficulty with Jonas' analysis of the naturalistic fallacy is that it does not seem that this prohibition is merely based on a metaphysical presupposition. The problem with deriving an ought from being is that being makes possible both good and evil action. How can being help us differentiate between good action and evil action, if being makes each equally possible? [21] In the following sections we critically reconstruct Jonas' ontological grounding of our duty to ensure the continued existence of humanity in order to determine whether Jonas' account is truly able to overcome the prohibition against deriving ought from is.

[21] Vittorio Hosle "Ontology and Ethics in Hans Jonas," *Graduate Faculty Philosophical Journal* 23 (2001) 31-50.

III. Elements of Jonas' Account from *The Imperative of Responsibility*

3.1 Jonas on the Meaning of "Good-in-Itself"

Jonas' understanding of what "good-in-itself" means plays a key role in his argument. Jonas contrasts something which is good-in-itself with something which is good as a result of someone's desiring, needing or choosing. This latter instrumental value is the only type of value which Jonas thinks the dominant modern ontology recognizes. However, if it were possible that there is something which is good-in-itself, what would be the significance of this possibility?

Jonas claims that the notion of a good-in-itself, by its very concept, entails that a thing which is good-in-itself *ought to be*. According to Jonas, this is simply what good-in-itself means. For a thing which is good-in-itself, its mere possibility is also a demand to actualization. This characteristic does not hold for something which is valuable only instrumentally. We are 'required' to pursue instrumental goods just to the extent that we value the end that the instrumental good helps bring about. If we decide that the end, which the instrumental good is a means to, is no longer valuable, then we lose the reason to value the instrumental good as well. That which is good-in-itself, on the other hand, is good of its own accord, and as such its very possibility is also a demand to actualization. To ask *why* the good-in-itself ought to be seems to involve a confusion—such a question presupposes that things can only be valuable if value is conferred upon them by some external standard; but the good-in-itself is precisely that which is valuable of itself, without relying on any external standard. For this reason, to deny that the thing which is good-in-itself ought to be actualized is tantamount to claiming that the thing is not good-in-itself. In this way, Jonas argues that *if there were something which could be said to be*

good-in-itself, then we would have to say that thing ought to have existence—the good ought to be.

3.2 Ontological Ought and Ethical Ought: "Ought to Be" vs. "Ought to Do"

In this way, Jonas arrives at the notion of an "ontological ought." For Jonas, an ontological ought follows from the existence of something which is good-in-itself. If there is something good-in-itself, this good thing "ought to be"—this good thing ought to exist. This ontological ought of "ought to be" is distinguished from the more familiar ethical ought of "ought to do." For the ethical ought action is required—when an ethical principle tells me that I "ought to do X" I must take action in accordance with this principle.

When it comes to the ontological ought, the mere existence of the good-in-itself does not necessarily require action. Instead, Jonas tells us, that the ontological ought requires us to simply *recognize* that the thing which is good-in-itself "ought to be." In other words, the ontological ought is first and foremost a recognition that the thing which is good-in-itself has a legitimate claim to existence.

Jonas' account of the "ought to do" requires a being which is capable of recognizing the independent good. For Jonas, the only being, which we know of, which is capable of recognizing that which is good-in-itself is humanity. Jonas argues that a silent plea issues forth from that which is good-in-itself, demanding that this independent good "ought to be," and only humanity has the capacity to hear this plea. It is this capacity for recognizing the good, which makes humanity the potential caretaker of the good.

This abstract recognition of the good becomes concrete obligation in the case when the independent good comes under the power of a will. In the case that the good comes under the power of my will, Jonas argues, the general command that the good "ought to be" explicitly becomes my obligation. In this case the silent plea which issues forth from the good becomes an "ought to do" for me—if I have power over the good then, Jonas argues, I am obligated to preserve it.[22]

It is perhaps helpful to put it in the terms of our investigation. On Jonas' account, if we could demonstrate that humanity is good-in-itself, then we would have to say that humanity ought to be. Since modern technology has placed the existence of humanity under our power, the *general recognition that humanity ought to be becomes our concrete obligation*—we become obligated to ensure the continued existence of humanity.

The advantage of Jonas' account is two-fold. First, one of the puzzles of an ethics of the future is resolved. One of the basic challenges that any theory of intergenerational justice faces is the simple recognition that future generations do not exist. How can we be said to owe anything to that which does not exist? The puzzle is deepened, as Parfit argues, by the recognition that the very identity of future people is dependent upon our choices. If, for instance, our very decision to deplete resources leads to the existence of a particular set of future people, what basis do they have to blame us for our choice? If we had made a decision to conserve resources this population likely would not have come into being.[23] Jonas' account does not require us to ascribe rights or desires to still non-existent future people, and so is able to sidestep these types of problems. On Jonas' account, if humanity is good-in-itself, then humanity's very potentiality is at the same time a demand to actuality. It is this potentiality which calls to

[22] Jonas, *Mortality and Morality*, 100-103.
[23] Parfit, *Reasons and Persons*, 361.

contemporary humanity and commands that we are obligated to ensure the continued existence of humanity.

The second advantage that Jonas sees in his account is that it is able to avoid the challenging situation of how the will can bind itself in obligation. For Jonas, any theory of ethics which makes the good a creature of the will is unable to use this good to bind the will in obligation. The problem is that the created good does not determine the choice of the will but rather is subject to that choice—the good which is dependent on the will is always provisional and subject to change.[24] Realizing either of these advantages all hangs on the viability of Jonas' demonstration that humanity is good-in-itself.

3.3 Capacity for Purpose as Good-in-Itself

Jonas attempts to demonstrate that humanity is good-in-itself by arguing that the capacity for having a purpose is good-in-itself. Jonas admits that any particular purpose can be good or bad, but argues that the *capacity* to have any purpose at all is different. Jonas takes this as an ontological axiom, which does not really admit of a knock-down argument. However, he does argue that the denial of this axiom leads one into a paradox.

The view that the capacity for having a purpose is good-in-itself can only be opposed, Jonas argues, by a view, such as the doctrine of nirvana, which denies the value of having purpose but at the same time affirms the value of liberation from purpose. But in affirming the value of liberation from purpose, we make the liberation from purpose our purpose.[25] For this

[24] Jonas, *Imperative of Responsibility*, 84.
[25] Jonas, *Imperative of Responsibility*, 80.

reason, Jonas argues, we must either embrace the paradox of purpose-denying purpose or admit that the capacity for having a purpose is good-in-itself.

If the capacity for having a purpose is good-in-itself, then, based on Jonas' analysis of the meaning of good-in-itself, the capacity for having a purpose "ought-to-be." Jonas reasons that since the capacity for having a purpose ought-to-be, any time this capacity, in any of its individuations, comes under the power of will, it addresses an ought to this will. In this case, the general demand that the capacity for having a purpose ought-to-be becomes the concrete obligation for the individual which has power over this capacity—the individual is called to care for this capacity.[26]

3.4 What Possesses the Capacity for Having a Purpose?

If, as Jonas argues, the capacity for having a purpose, in any of its individuations, obligates us to care for beings that possess that capacity, we must attempt to understand precisely what beings possess this capacity. It might seem, for instance, that since every human artifact is constituted for a purpose every human artifact possesses this capacity. If Jonas' accounts commits us to the view that we are obligated to preserve every human artifact it seems straight-forwardly absurd. So, we must first distinguish between the purposive character of an artifact and the purposive character of the artificer.

The clock, as a human artifact, is constituted for an end. This is different than the momentary end orientation of the stick which is used to pull someone out of the mud. The end of "measuring time" belongs to the concept of a clock, whereas the end of pulling someone out of the mud does not belong to the concept of a stick. The clock's concept in this way precedes

[26] Jonas, *Imperative of Responsibility*, 80.

its existence and is the ground of its existence. So, in a sense, the clock certainly has a purpose. In another sense though, the purpose that the clock has is not its own, but is rather the purpose of the maker of the artifact. In this sense, artifacts are barren of purposes (even though they are constituted for the sake of that purpose)—the purpose is not their own, but rather the purpose of the maker.[27]

In this way, Jonas distinguishes between authentic and inauthentic having a purpose. In the case of the watch and watch-maker, this distinction is clear enough—the authentic purpose we see in the watch is the purpose of the watchmaker; the watch itself only possesses purpose in an inauthentic sense. In other instances, it is much more difficult to determine whether a being can truly be said to "have a purpose" in the relevant sense. Much of the difficulty in interpreting Jonas comes in untangling which beings have a purpose in the ethically relevant sense.

Jonas notes, for instance, that not all human artifacts are devoid of authentic purpose. The court of law is also an artifact; it was created for the sake of a human end to administer justice. But here the end must not only causally precede the thing, but rather the end must have entered into it in such a way that it can be said to animate the thing—the end is immanent in the thing. But how can the end operate within the artificial institution? It can do so because the acting parts, unlike in the clock, are also animated by the end. In other words, they will the end, and they act with a view towards it. In order to do this, the "parts" must be self-acting and ends-oriented beings themselves. In this case, the distinction between maker, which has the end in the authentic sense, and the made, which does not have the end in the authentic sense, does not obtain. Jonas identifies the founders of the court as the "maker" and identifies the product of their making as the court of law, the artificial societal institution, which is animated by individuals freely willing the end of the court. Specifically, he names judges as the animating

[27] Jonas, *Imperative of Responsibility*, 53.

part of the court.[28] Here, Jonas concludes, both the maker and the product have the end, namely the administration of justice, in the authentic sense. But, since in the court of law the distinction between maker and made does not obtain, distinguishing between the original founders of the court, as the maker, and the current court as the made, is not quite accurate. Rather, both the original court and the current court both possess the same characteristic of being both constituted for the sake of an end as well as being animated by that end. In other words, the current members of the court are "makers" in the same sense that the original founders of the court were "makers" of the court. The original court also possesses the same "made" character as the current court—the original members of the court are also animated by the end of justice.

In this way, we can say that there is a distinction between the court of law and the clock in answering the question whose end are we perceiving in the thing. Ultimately, the end we perceive in the clock is really the end of its maker. The end we perceive in the court of law is both the end of its maker as well as the court, which can be said to have the end itself.[29] Practically speaking, this means that the court of law can be a proper object of ethical responsibility while the clock cannot. Again, it is easy enough to see the distinction between authentic and inauthentic having a purpose in the realm of human artifacts.

The distinction becomes less clear when we expand into the broader realm of non-human life. In *The Phenomenon of Life*, Jonas argues that all life is governed by an internal teleology. Through its pursuit of sustenance and avoidance of predation, the living organism demonstrates that it has its own preservation as its purpose. Does this purpose constitute authentic having a purpose? If so, then based on Jonas' argument, all life would be good-in-itself, and as such a proper object of ethical responsibility. Jonas does not focus a lot of energy on this question, but

[28] Jonas, *Imperative of Responsibility*, 53.
[29] Jonas, *Imperative of Responsibility*, 54.

he does seem to affirm that the purposive character of living nature does constitute having a purpose in the relevant sense.[30] In "Contemporary Problems in Philosophy from a Jewish Perspective," he claims that we have a moral obligation to preserve the great whales because they are good-in-themselves.[31] In *The Imperative of Responsibility*, he suggests that the entire biosphere has become a human trust which has a moral claim on us, not because of what it provides for us but rather for its own sake.[32]

The notion that all living nature is good-in-itself presents a challenge for Jonas' primary goal of demonstrating our obligation to ensure the continued existence of humanity. If all of living nature is good-in-itself, then on Jonas' account a silent plea issues forth from all of living nature that claims that living nature ought to be. However, when we think through what this entails at the level of concrete obligation for the individual, we see that there is a danger that Jonas' argument proves too much.

Jonas argues that when the good, "in any of its individuations" comes under the power of a human will, that instantiation of the good places the will under obligation to care for that good thing.[33] If the capacity for having a purpose is the criteria for goodness, and if all of living nature possesses this capacity, then every single living thing is an instance of the good. As such, every single living thing has the capacity to place the human will under an obligation to care for it, when the human has power over that living thing.

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[30] Lawrence Vogel argues for this interpretation. See Lawrence Vogel, "Does Environmental Ethics Need a Metaphysical Grounding?" *The Hastings Center Report* 25 (1995): 35.

[31] "Care for the integrity of creation should restrain our greed. Even if it means forgoing some abundance or convenience, we must not reduce the wealth of kinds, must not create blanks in the great spectrum of life, nor needlessly extinguish any species. Even if it hurts the interest of the moment, we must, for instance, stop the murder of the great whales" Jonas, *Philosophical Essays*, 180.

[32] "A silent plea, for sparing its integrity seems to issue from the threatened plenitude of the living world. Should we heed this plea, should we recognize its claim as morally binding because sanctioned by the nature of things?" Jonas, *Imperative of Responsibility*, 8.

[33] Jonas, *Imperative of Responsibility*, 80.

IV. Challenges in Jonas' Second Account

4.1 Consequences of the Affirmation of the Goodness of All Living Nature

The standpoint that all of living nature is good-in-itself poses practical challenges. The basic problem is how should we adjudicate the competing claims of goodness? The reach of human activity in the modern world is vast. For this reason, we impact any number of living organisms with our actions. If, as Jonas claims, all of living nature is good-in-itself how do we determine which living organisms to impact and which to avoid?[34] Given that our investigation focuses on our possible obligation to ensure the continued existence of humanity in the future, there is one particular set of competing claims that we must focus on. Namely, if all of living nature is good-in-itself, as Jonas suggests, why should we privilege human nature?

For Jonas, humanity does not create the good, but rather participates in the goodness that is part and parcel of all organic life—humanity possesses the capacity for purpose and thus is good like every other being which possesses this capacity.[35] However, human purpose has a

[34] If one were to attempt to construct a full environmental ethic based on Jonas' thinking, this question of how to adjudicate competing claims among non-human living organisms cannot be avoided. Given the scope of our investigation is not really necessary to fully address the problem. Jonas never fully spells out the details of how he imagines adjudicating these competing claims. However, he does point to a kind of answer through the suggestion of a hierarchy of the capacity of purpose. (See *Jonas, Mortality and Morality*, 102) He does not spend much time developing this suggestion, but the basic idea seems to be that beings with the capacity for more sophisticated purposive projects win out over less sophisticated purposive beings in the case when we are forced to choose between preserving one or the other. Jonas recognizes Aristotle's distinction between nutritive, sensitive, and rational souls as important moments of increasing manifestations of organic freedom, and this seems to correspond with his notion of the ranking of values. In other words, in adjudicating between competing claims of goodness, animals count for more than plants, and human animals count for more than non-human animals. Something similar has been attempted by Gary Varner. See Gary Varner, *In nature's interests? : interests, animal rights, and environmental ethics* (New York : Oxford University Press, 1998).

[35] Jonas says, "Every living thing is its own end which needs no further justification. In this, man has nothing over other living beings—except that he alone can have responsibility also for them, that is, for guarding their self-purpose." *Imperative of Responsibility*, 98.

distinctly different character from all non-human organic purpose. Jonas tells us that with human freedom, the blind self-affirmation characteristic of all life "gains sight." This sight signifies first a recognition of the shared purposive character of all life. But more than that, we recognize in ourselves the ability to not merely pursue the implanted purpose of self-preservation in more sophisticated ways than other organisms—we recognize that we are not restricted to choosing among ends set by nature but are free to set our own ends.

For Jonas the significance of this capacity is three-fold. First this capacity allows for the notion of obligation to be meaningful. If non-human animals act in a manner which preserves the preconditions of life through instinct, it does not make sense to speak of these animals being obligated to preserve these preconditions. By instinct we mean an unconscious response implanted in the organic being by nature. When we say that organic beings act in an unconscious manner which is implanted by nature, we are saying that they are acting in the only manner that they can—in other words, they are not free to pursue another path.[36] If an organism is not capable of doing other than what it does, then it does not make much sense to speak of the organism being obligated to do that thing. The reason for this is that, as Kant notes, the study of the laws of obligation, in distinction with the study laws of nature, is a study of what ought to happen (and frequently does not happen).[37] If instinctual behavior entails a situation in which the chosen behavior could not have been otherwise, then it makes no sense to speak of obligation.

Second, the human capacity to set and pursue ends represents not only the height of capacity for having a purpose, it also represents the greatest threat to that capacity. For Jonas,

[36] To say that the animal is not free to pursue another path is *not* to identify instinct with the pre-programmed response of a machine. Rather, as Melvin Woody points out, animal instinct must involve some sort of element of choice within a given range of behaviors, otherwise the animal organism would be unable to react to any change in its environment. See J. Melvin Woody, *Freedom's Embrace* (University Park: The Pennsylvania State University Press, 1998), 262. Still, to recognize that instinct involves an element of choice does not mean that the living organism is free to choose to pursue none of the range of behaviors implanted by instinct.
[37] Immanuel Kant, *Groundwork for the Metaphysics of Morals* (Toronto: Broadview Press, 2005), 49.

human freedom is the highest form of the general goodness of organic life, but the goodness of life is made vulnerable because this goodness has become subject to human freedom. Jonas tells us that since the dawn of life, this goodness was protected by a general instinct for self-preservation, but as a result of our increased power, we have taken this burden upon ourselves—ethics must protect that which was previously protected by the life-instinct. This follows from Jonas' argument due to his claim that any time an instance of the good comes under the power of a human will, that good thing issues a command to the human will to preserve it. So, according to Jonas' argument, to the extent that the organic world is not threatened by our actions, we have no obligation to preserve it, but to the extent that the organic sphere has come under the mercy of our power we are obligated to preserve its goodness. In this way, Jonas can conclude that we are obligated to prevent the extinction of the great whales without having to conclude that we are obligated to preserve every species that is being outcompeted to the point of extinction. The distinction is that the great whales' survival is in doubt due to human action, whereas not every species which is threatened with extinction is in jeopardy due to our activity.

Finally, since the human capacity for setting ends represents the highest form of having a purpose, we are called to preserve humanity before any other good thing. This holds in the individual case, when a human and any other living being are both under my power, I must always put the needs of the human being first. It also holds in the general case which is the primary focus of our investigation—if the human capacity to set and pursue ends in the highest form of the good, then our first obligation is to ensure the continued existence of humanity in the future.

4.2 Ought and Is

At the outset of his grounding, Jonas attempts to demonstrate that the prohibition against deriving ought from is requires presupposing a definite conception of being. For this reason, Jonas argues this prohibition is the result of a kind of metaphysical prejudice that arises due to the uncritical acceptance of the materialism espoused by modern science. However, as we have already noted, the prohibition against deriving ought from is does not seem to require one to embrace any particular ontology. Even if Jonas is right to insist that due to its inherently purposive character an element of value is inherent to the very activity of life, it does not follow that it is permissible to derive an ought from being. The reason the derivation is considered impermissible is due to the recognition that any ontology, even an ontology that recognizes the teleological character of life, must admit that both good actions and evil actions exist.

This problem arises in the central move of Jonas' attempted grounding of our duty to ensure the continued existence of humanity in the future. As we have seen Jonas views the capacity for having a purpose as good-in-itself, and for this reason we are obligated to ensure that this capacity continues to be.[38] But the mere existence of this capacity cannot tell us

[38] As previously mentioned, there is an ambiguity in the way Jonas talks about "having a purpose." It seems that every living organism possesses the capacity for "having a purpose" in the relevant sense. For this reason, I agree with Lawrence Vogel when he reads Jonas as providing an account according to which, "the good-in-itself is living nature, including humanity as the highest expression of nature's purposiveness" (*Mortality and Morality*, 13-20). Still, Jonas does distinguish between the human capacity to set and pursue ends and the "blind and unfree" character of animal purpose. Jonas says, "since in him the principle of purposiveness has reached its highest and self-jeopardizing peak through the freedom to set ends and the power to carry them out, he himself becomes, in the name of the principle, the first object of his obligation, which we expressed in our 'first imperative': not to ruin (as he well can do) what nature has achieved in him by the way of his using it. Beyond this commitment to himself he becomes the custodian of every other end-in-itself that ever falls under the rule of his power" (*Imperative of Responsibility*, 129-130). In this section, I use the phrase "capacity to choose a purpose" to distinguish the human capacity to set and pursue ends from the more general capacity for "having a purpose," which seems to be shared with all of living nature. Ultimately, whether Jonas intends to embrace the broad claim that all of living nature is good-in-itself or the

anything about which purposes are right and which purposes are wrong. After all, the capacity for choosing a purpose is a precondition for any action at all, be it right action or wrong action.[39] If the capacity for choosing a purpose is good, this goodness seems to be expressed in any human purpose, regardless of whether this purpose is right or wrong.

4.3 What Has Jonas' Second Account Demonstrated?

Jonas insists again and again that the capacity for choosing a purpose is good-in-itself. If the capacity for choosing a purpose is good-in-itself, then Jonas reasons, we are obligated to preserve the capacity for choosing a purpose because the very notion of something which is good-in-itself entails that the thing which is good-in-itself ought-to-be.[40] Human beings, Jonas notes, possess this capacity. Hence, Jonas reasons that human beings "ought-to-be." For Jonas, the abstract recognition that something "ought-to-be" is not the same as a concrete obligation, an "ought to do." [41] The abstract "ought-to-be" becomes a concrete obligation only in the case when something which is good-in-itself comes under the power of a will. In this case, on Jonas' account, the thing which is good-in-itself issues a concrete obligation to the will—the thing which is good-in-itself puts the will under obligation to care for the thing which is good-in-itself. Jonas reasons further that since human purposiveness is good-in-itself, and since modern technology has increased the scope of human activity to such an extent that the very possibility of human existence in the future is now, at least conceivably, at the mercy of our power, we are obligated to ensure the continued existence of humanity in the future. In this way, Jonas derives

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more narrow claim that only the capacity to "choose a purpose" is good-in-itself, does not impact our critique. For this reason, in this section we restrict our investigation to the more modest claim.

[40] See above: Chapter 2 Section 3.1 "Jonas on the Meaning of Good-in-itself."
[41] See above: Chapter 2 Section 3.2 "Ought to Be," Abstract Recognition of Obligation, and "Ought to Do"

the second formulation of his imperative of responsibility: "Do not compromise the conditions for an indefinite continuation of humanity on earth."[42]

Given the structure of Jonas' argument, everything depends upon the premise that the capacity for choosing a purpose is good-in-itself. But *how can the capacity for choosing a purpose be good-in-itself if it makes possible not only good actions but also evil actions*? That is not to say that the capacity for choosing a purpose is not important for ethics. The capacity for choosing a purpose is a pre-condition for right action, and as such, this capacity could possess instrumental value. But if this capacity is only instrumentally valuable and not good-in-itself, then Jonas' grounding from *The Imperative of Responsibility* does not work, and his imperative is left unsubstantiated.

V. THE THIRD ACCOUNT

Following the publication of *The Imperative of Responsibility*, Jonas presented a paper at a conference themed "Industrial Society and an Ethics of the Future." A revised version of this lecture appears in the posthumous collection of Jonas essays, *Mortality and Morality: A Search for the Good after Auschwitz.* In this paper, Jonas approaches the problem of grounding our duty to ensure the continued existence of humanity from a slightly different angle—he begins with his conception of responsibility instead of trying to build towards it.

[42] Jonas, *Imperative of Responsibility*, 11.

5.1 Towards an Ontological Grounding

Jonas argues that humanity is the only being, which we know of, that is capable of assuming responsibility. This capacity is not merely an empirical fact; rather, Jonas argues that this capacity is a distinguishing and decisive feature of human existence.[43] The question continues to be how can we demonstrate that we are obligated to ensure the continued existence of this capacity? Here we might expect Jonas to recount his grounding of the principle of responsibility from his earlier work. Instead, he argues that we "intuitively recognize" that responsibility not only represents a distinguishing feature of humanity, but also represents a value. The value that responsibility possesses is not merely an additional value added to being, which, as we have seen, Jonas thinks is already full of value. Rather, the value that responsibility possesses "surpasses all that has gone before with something that generically transcends it." [44]

Since responsibility possesses this special value, Jonas reasons that we are obligated to ensure the continuation of responsibility in the world. This entails that we also preserve the continued existence of humanity since humanity in the only being which we know of which is capable of assuming responsibility.[45]

[43] Jonas, *Mortality and Morality*, 106.
[44] Jonas, *Mortality and Morality*, 106.
[45] Jonas, *Mortality and Morality*, 106.

5.2 Challenges with Jonas' Third Grounding

Jonas admits that this argument does not really constitute proof because of its appeal to intuition.[46] The basic challenge with appealing to any intuition is that there really is no way to refute someone who claims to not have the same intuition. We criticize Jan Narveson for his view that the continued existence of humans in the future as a matter of preference.[47] According to Narveson, we might prefer a future universe that has human beings in it to a future universe without humans, but there is no moral reason for this preference.[48] If we base a demonstration of our obligation to ensure the continued existence of humanity on an appeal to intuition, we must ask what distinguishes our intuition from preference. In other words, is there any distinction between claiming that I prefer that humanity continues to exist in the future and claiming that it is intuitively obvious that there ought to be human beings in the future? I do not mean to claim that an intuition and a preference are the identical phenomena. Rather, the point is simply that in terms of providing justification for a viewpoint they have the same status—namely, both have the status of not being able to respond when another person has another view, whether it be in the form of a preference or intuition. For this reason, we must reject Jonas' third attempt to provide support for the imperative of responsibility.

In this way, we are forced to conclude that none of Jonas' attempts to ground the imperative of responsibility are sufficient. In the following chapter, we attempt to determine what options remain open to us if we want to defend the imperative of responsibility.

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[46] Jonas, *Mortality and Morality*, 107.
[47] For a full critique of Narveson See Chapter 2, Section 3.1 "Narveson and the Existence of Future Generations as Subjective Preference"
[48] Narveson, "Utilitarianism and New Generations," 72.

CHAPTER 2:

IN DEFENSE OF THE IMPERATIVE OF RESPONSIBILTY

I. On the Necessity of Metaphysics for the Imperative of Responsibility

The failure of Jonas' attempts to ground the imperative of responsibility appears to leave us in a bind. Jonas insists on the necessity of "plunging into metaphysics" in pursuit of our obligation to ensure the continued existence of humanity. But, as we have seen, this very move seems to prevent Jonas from being able to accomplish his goal because attempting to ground our obligations in being leads Jonas into insoluble difficulties. In this way, the failure of Jonas' various attempts to demonstrate that we are obligated to ensure the continued existence of humanity naturally leads to the question of whether metaphysics is really necessary for our task.

In an attempt to answer this question we must determine why Jonas thinks metaphysics is necessary for the imperative of responsibility. The primary goal of this task is not really interpretative. In attempting to understand why Jonas thinks metaphysics is necessary for the imperative of responsibility, we are most interested in determining what problems are allegedly solved by grounding our obligations in being. For our investigation, it is necessary to identify these problems because we have already claimed that it is impossible to ground our obligations in being. If there is to be any hope of demonstrating that we are obligated to ensure the

continued existence of humanity, and it truly is impossible to derive our obligations from being, then we must demonstrate that the problems, which Jonas claims are solved by an ontological grounding, can also be addressed in another manner. In other words, in rejecting Jonas' grounding, we assume the burden of working through the problems his account hopes to solve. Why, then, does Jonas think metaphysics is required for demonstrating our obligation to ensure the continued existence of humanity?

1.1 Metaphysics and the Unique Character of the Investigated Situation

The first reason why Jonas insists on the necessity of metaphysics seems to flow from his understanding of the unique character of the situation we investigate. The most readily apparent challenge in understanding any possible obligations to future generations is simply that future generations do not exist. Our question is whether or not we are obligated to ensure that future humanity comes into being. Jonas claims that this question is first and foremost a metaphysical question because ethics concerns itself with right action whereas metaphysics concerns itself with being. According to Jonas, our question is first a question about the being of a particular entity, humanity, and whether or not there is anything about that being that obligates its existence.[1]

This viewpoint leads Jonas to distinguish between the traditional ethical ought of "ought to do" and the ontological ought of "ought to be."[2] If something is good-in-itself, then, Jonas claims, a silent command issues forth from that thing that it "ought to be." This silent claim becomes a concrete obligation only when the thing which is good-in-itself comes under the

[1] Jonas, *Imperative of Responsibility*, 45.
[2] See Above: Chapter 1 Section 3.2 Ontological Ought and Ethical Ought: "Ought to Be" vs. "Ought to Do"

power of some will. In that case, the abstract recognition that the good-in-itself "ought to be" becomes the familiar ethical "ought to do," namely we become obligated to preserve the thing that is good-in-itself. According to Jonas, if we are able to demonstrate that humanity is good-in-itself, then we will recognize that humanity "ought to be," and since the continued existence of humanity is, at least theoretically, now at the mercy of our power, we have a concrete obligation to ensure the continued existence of humanity.

According to Jonas it is the ought of "ought to be" which belongs to the realm of ontology. For this reason, Jonas claims that if we want to demonstrate that a particular being "ought to be" we cannot avoid attempting an ontological grounding. According to Jonas, the traditional ethical ought of "ought to do" is insufficient for our investigation because we do not stand in a traditional ethical relationship to future generations since these generations do not yet exist. In other words, we cannot take into account the rights, desires, or interests of future generations because all of these things presuppose their existence. Since we are precluded from entering into a traditional ethical relationship with particular future humans, Jonas reasons that we must instead consider the ontological "idea of Man."[3] We must demonstrate that there is something about this particular expression of being, humanity, that requires that this being "ought to be." This is the task that motivates Jonas' attempted ontological grounding from *The Imperative of Responsibility*, as well as "Towards an Ontological Grounding of an Ethics for the Future."[4]

[3] Jonas, *Imperative of Responsibility*, 42.
[4] See Chapter 1, Section III "Elements of Jonas' Account from *The Imperative of Responsibility*."

The Problematic Nature of Jonas' Conception of "Ought to be"

Jonas' insistence that only a being, like humanity, with the capacity for rational end-setting can recognize this ontological ought makes his conception of "ought to be" particularly puzzling. According to Jonas, this ontological ought lies hidden within being until the advent of humanity, who is able to recognize that, due to its inherently purposive character, living nature is good-in-itself and therefore "ought to be." In this way, according to Jonas, this ontological ought is not created by humanity rather it is discovered by humanity.

But the discovery of this ontological ought has no ethical significance in itself. In the course of his writings, Jonas variously claims that humanity, organic nature, and even being itself all "ought to be." The notion that being "ought to be" demonstrates that this ontological ought cannot have any ethical significance in itself. Whether or not being "ought to be" is completely irrelevant to the domain of human action because we do not have power to impact the existence of being itself.[5] According to Jonas, the situation with humanity is different because modern technology has now given us power over the continued existence of humanity. For this reason, Jonas tells us that this ontological ought, that humanity "ought to be," now has ethical significance.

For the purposes of this investigation, we have accepted Jonas' premise that modern technology, at least theoretically, threatens the potential existence of humanity in the future. But surely, modern technology is not the *only* thing that threatens the continued existence of humanity in the future. The earth could, for instance, be struck by a comet or an asteroid that

[5] Jonas recognizes this is the case with being. He says, "In general, concerning that which exists of itself and is in no way dependant on us, a possibly discerned ought-to-be can only have significance for our metaphysical consciousness—certainly when as here, it includes our existence—but not for our responsibility." *Imperative of Responsibility*, 132.

could cause an extinction level event for humanity. Surely, we have not failed in our obligation if some astronomical event, completely outside of our control, destroys humanity. I do not mean to claim that Jonas would disagree; there is ample evidence that he would agree with this claim. The point is that from the standpoint of Jonas' ontological ought, the abstract claim that humanity "ought to be," there is no distinction between the destruction of humanity through human action and the destruction of humanity through an astronomical event. If the future of humanity is destroyed through an unforeseeable natural event, outside of our control, then it might be a tragedy but we are not culpable.[6]

Jonas' account is able to distinguish between these two extinction scenarios when he moves into a discussion of human power. On Jonas' account, we can only be responsible for actions that are within the scope of our power. In this way, Jonas is only able to distinguish between these two scenarios when he reaches the level of human action, the proper domain of ethics. But if we can only make this distinction at the level of ethics, what is gained by a discussion of metaphysics?

[6] The scenario is different in the case of a catastrophic natural event that we can foresee. If we calculated that a comet would impact the earth in say, 100 years, then if we are obligated to ensure the continued existence of humanity, we would be required to take steps to attempt to preserve humanity. An even more extreme example is the case of the increasing luminosity of the sun. Astrophysicists tell us that in 3.5 billion years the sun will be 40 percent brighter than it is today. As a result, oceans will boil, water vapor will be lost to space, and life will be unable to survive anywhere on the planet (Fraser Cain, "Life of the Sun," *Universe Today*, March 10, 2012). In this way, science tells us that the Earth will not be capable of sustaining life forever. What does this indicate for our obligation to ensure the continued existence of humanity? If humanity is somehow able to avoid catastrophe and survive until the sun makes life on Earth impossible, then it seems future humanity would be obligated to attempt to colonize other planets. Indeed, as the character Colonel Graf argues in Orson Scott Card's classic science fiction series, *The Ender Saga*, it seems that our obligation to ensure the continued existence of humanity ultimately might require us to colonize several planets in order to minimize the risk that any single natural catastrophe eliminates the species. Still, despite all of our technological achievements, for now and for the foreseeable future our species remains inextricably Earthbound. For this reason our obligation to ensure the continued existence of humanity requires us to do what we can to ensure the Earth is capable of sustaining life for as long as possible.

The point is that our investigation is not, as Jonas suggests, first and foremost a metaphysical investigation into whether there is something about a particular being, humanity, which makes its existence obligatory. Rather, we are concerned with a particular action or set of actions and whether or not these actions are permissible. Namely, *we are focused on whether it is permissible for us to act in a way that is inconsistent with the possible continued existence of humanity.* This question seems very much in the domain of ethics. In this way, the unique character of the investigated situation does not require a metaphysical investigation.

1.2 The Problem of Authority

The second reason why Jonas seems to think an appeal to metaphysics is necessary stems from his claim in *The Imperative of Responsibility* that the will is unable to bind itself in obligation. If the good is a mere creature of the will then, Jonas tells us, the good lacks the authority to bind the will.[7] The obvious question, which Jonas leaves largely unanswered in *The Imperative of Responsibility,* is why does the good, as a creature of the will, lack this authority? Jonas elaborates on this problem of authority again in his later work, "Toward an Ontological Grounding of an Ethics for the Future." In this work, Jonas considers what authority provides sanction for his own favored principle, the imperative of responsibility.

According to Jonas, in addition to being responsible *for* something we are also responsible *to* something. On Jonas' account, the recognition that humanity possesses the capacity to knowingly and willingly act means that we are responsible *for* our actions. As free beings, we are responsible for the consequences of our actions in the sense that we are the cause

[7] Jonas, *Imperative of Responsibility*, 84.

of these actions. This formal responsibility need not have any ethical significance—on Jonas' account we are *responsible for* the consequences of even our actions which are ethically neutral.

Jonas distinguishes this formal responsibility from ethical responsibility, "responsibility to." For Jonas, formal responsibility becomes ethical responsibility when our actions impact some valuable being.[8] In this case, Jonas says that we are not only responsible for our actions but we are also *responsible to* some ultimate authority to which an accounting must be given.[9] The requirement for an ultimate authority to which we must give an account is interesting for our investigation because it helps shed light on why Jonas thinks that the good, when it is a construct of the will, lacks the authority to bind the will. What is this authority to which we must give an accounting?

If it is not permissible to appeal to divine authority, Jonas asks whether it is possible for the human conscience to serve as the final authority to which an accounting must be given. According to Jonas, the problem with appealing to this human conscience is that we simply move the problem of authority back one level. Namely, what authorizes the conscience's decisions—to what are we responsible in our conscience?[10] In other words, Jonas is worried that attempting to determine the source of authority generates a regress because each time we point to a source of authority we can ask what grants this source of authority its authority.

In her work *On Revolution*, Hannah Arendt makes explicit the challenge that Jonas is pointing towards. Arendt describes the problem in the context of what gives authority to human-made laws. As Arendt notes, if we begin with the assumption that all human-made laws require an external source to bestow legitimacy upon them, then we end up with a problem of

[8] Here, we set to the side all questions of what makes a being valuable in order to focus on the problem of authority.
[9] Jonas, *Mortality and Morality*, 101.
[10] Jonas, *Mortality and Morality*, 101.

authority.[11] If all normativity requires an external source to legitimate it, then we must follow Arendt and Jonas in making a distinction between that which bestows legitimacy and that which is legitimated.[12] The question, of course, is where does that which bestows legitimacy derive its own legitimacy? In pre-modern times, Arendt claims, this problem was mollified by the fact that the legitimating ground was some transcendent authority, such as the eternal law described by Augustine.

For Arendt the decline of religion in the modern age means it is no longer permissible to appeal to transcendent sources of authority, and as a result that which legitimates seems to be subject to the same logic as that which is legitimated.[13] In other words, it seems that if the law requires an external source of authority to bestow legitimacy, then that which bestows legitimacy also requires an external authority to legitimate it. If everything requires something external to legitimate it, then we seem to be caught in an infinite regress which renders nothing legitimate.[14]

If we accept the assumption that every law made by humans can only be legitimated from some external authority, then it does seem that we may be forced to cede the day to nihilism. If no normative principles can be legitimated then there is kind of plausibility to the view that all would-be normative principles are really nothing more than masks for a will to power. Jonas hopes to avoid this problem by searching for a legitimating principle in being. Grounding normativity in the nature of things would provide an authority outside of human activity to

[11] Hannah Arendt, *On Revolution,* (New York: Penguin, 1977): 152-153.
[12] Arendt, *On Revolution*, 153-154.
[13] On Arendt's view, the rise of absolute monarchy was the result of the secularization of the religious notion of external absolute authority. Arendt argues, "theoretically speaking, it is as though absolutism were attempting to solve the problem without having recourse to the revolutionary means of a new foundation. It solved the problems, in other words, within the given frame of reference in which the legitimacy of rule in general, and the authority of secular law and power in particular, had always been justified by relating them to an absolute source which itself was not of this world." *On Revolution*, 158.
[14] Arendt, *On Revolution*, 154-157.

legitimate conduct. However, even if we ignore our previous critique of Jonas, it is not clear that grounding normativity in being really avoids this problem of authority.

Even if we claim legitimacy for our normative principles because they are sanctioned by the nature of things, we can still ask what gives being/nature this authority. Jonas recognizes the potential for this objection and tries to answer it. He reasons that we can only legitimately dissent from nature if we appeal to a tribunal which is outside of it.[15] In other words, if normative prescriptions reside in being/nature then the only way to question the authority of these prescriptions is to appeal to a transcendent source, which we claim possesses the authority we deny to being. For this reason, on Jonas' view the only way to question the authority of being is to posit a transcendent realm outside it. Hence, Jonas reasons we must either accept the legitimate authority of being or commit to some sort of transcendent realm.

The basic problem of the foundationalist approach is that the distinction between that which confers value and that upon which value is conferred seems to generate a regress—what gives value to that which confers value? The general strategy to block this regress is to search for some privileged foundation which is valuable in itself and capable of conferring value. The question, of course, is whether it is possible to find such a foundation without merely dogmatically asserting that it is valuable in itself.

This challenge is part of what leads Jonas to attempt an ontological grounding in the first place. Jonas wants to argue that humanity is valuable, and ought to be preserved, on the basis of our capacity for responsibility, but then the question is what makes responsibility valuable? The foundationalist approach's basic distinction between legitimated and legitimating prevents considering the possibility that ethics might be self-legitimating. So, Jonas argues we must look outside of ethics in an attempt to demonstrate its value.

[15] Jonas, *Imperative of Responsibility*, 77.

To Jonas' credit, he commits to following this regress until it bottoms out. Following this line of thinking leads Jonas on a wild ride which ultimately requires him to take up the question of whether or not being is valuable.[16] In Jonas' account, the question of the value of being represents the extreme limit of the foundationalist logic. The only way to justify being on the basis of something outside of being would require an appeal to the transcendent, but such appeals are not permissible for philosophy.[17] This means that if being is valuable it cannot possibly be valuable on the basis of something that is outside of being—we must look within being, in an attempt to show that being is self-legitimating.

In this way, Jonas attempts to follow the regress until it bottoms out and ends up re-affirming the critique of foundationalism—justification requires the unity of legitimating and legitimated. But, if that is the case, our reason for following the regress all the way to being seems to disappear. In other words, we turned to being in an attempt to demonstrate the value of ethics because we assumed that ethics could not be self-legitimating. It is still possible that may be the case, but we cannot simply dismiss this possibility because we presuppose a foundational approach, which assumes a distinction between what legitimates and what is legitimated. For this reason, the problem of authority no more requires an appeal to ontology than the unique character of the situation we are investigating.

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[16] Jonas, *Imperative of Responsibility*, 47.

[17] Jonas says, "Religious belief has answers here which philosophy must still seek, and must do so with uncertain prospects of success. (e.g., from the 'order of creation,' faith can argue that according to God's will men should be there in his image and that the whole order should exist inviolate.) Faith in revealed truth thus can very well supply the foundation for ethics, but it is not there on command, and not even the strongest argument of need permits to resorting to a faith that is absent or discredited," (*The Imperative of Responsibility,* 45). The question of to what extent Jonas' theological commitments might slip into his conception of being present an interesting challenge for interpreters of Jonas' *The Imperative of Responsibility*. It might be tempting to conclude, as Christian Weise does, that, "the concept of creation, with its anthropological implications, indeed represents in Jonas' work the vanishing point at which the lines of his Jewish religious convictions and his philosophical arguments come into contact" (Christian Weise, "Introduction: Philosopher and Jew" in *The Life and Thought of Hans Jonas: Jewish Dimensions*, (Waltham: Brandeis University Press, 2007): xx). Still, Jonas insists again and again that he is not appealing to any theological commitments but is presenting a "rational metaphysics." For the purposes of this investigation, we take Jonas at his word, and, as such, these are the grounds on which we evaluate Jonas' arguments.

1.3 Is Metaphysics Necessary to Overcome the Problem of Subjective Preference?

The third problem which Jonas thinks requires an appeal to metaphysics is the view that ethics is nothing more than subjective preference. Jonas discusses this problem as a general problem for ethics, but for our purposes we are more focused on the view that the existence of humans in the future is a matter of subjective preference. In an attempt to overcome this problem Jonas analyzes the distinction between subjective value and objective value.

Jonas' Conception of Subjective and Objective Value

Throughout his work, Jonas uses the phrases "subjective value" and "objective value" in two senses. In the first sense, Jonas distinguishes between subjective value as personal preference, and objective value as the immanent standard of the object.[18] In order to see this distinction, consider the example of a clock, which is constituted for a specific end, namely to tell time. Once we recognize that the clock was constituted for this end, we can make an objective value judgment about the clock, based on its sufficiency to achieving its end—we say a good clock keeps time accurately and a bad clock does not. This value judgment is objective in the sense that it has nothing to do with my subjective preference. My preference may be that there were no clocks in the universe. Even so, once I recognize what a clock is, I recognize the distinction between a clock which is well-suited to its end and one which is not. In this way, Jonas thinks we can make an objective value judgment about a clock.

[18] Jonas, *Philosophical Essays*, 88.

We can make this same sort of objective value judgment about any end-oriented activity. I might, for instance, have the end of traveling from Austin to New York in as short of time as possible. Once someone recognizes that I have this end, she can make a value judgment about the sufficiency of the means I choose to achieve this end. Jonas calls this type of value judgment objective because it holds independently of whether or not one actually thinks the end is worthwhile. This first type of objective value is relative then to an existing goal.

But as Jonas notes this relative objective value is not sufficient for ethics because it says nothing about whether the ends themselves are worthwhile. For this reason, Jonas wants to distinguish between objective value and subjective value in a manner which indicates that subjective value refers to subjective preference while objective value refers to imperatives which are binding in all circumstances. Jonas describes this second sense of the distinction between subjective and objective value by claiming that subjective value is valuation by someone while objective value is value-in-itself.[19] He does not really ever provide an argument in defense of this definition, but defining the distinction between objective and subjective value this way has important ramifications. On the face of it, defining objective value as "value-in-itself" does not seem particularly strange. This quickly changes, however, when we realize that, due to the way Jonas defines subjective value, his definition of objective value precludes all "valuation by someone" as rising to the level of being valuable-in-itself. As we have seen, according to Jonas the only thing which can meet this definition of objective value is the ontological capacity to have any purposes at all.[20]

[19] Jonas says, "For real obligatory affirmation, the concept of the good is need, which is not identical with the concept of value, or if you will, signifies the distinction between objective and subjective status of value (or at its briefest: between value in itself and valuation by someone), *Imperative of Responsibility*, 77.
[20] See Chapter 2 Section 3.2 Ontological Ought and Ethical Ought: "Ought to Be" vs. "Ought to Do"

Difficulties with Jonas' Conception of Objective Value

But in insisting that ethical objective value can only come from outside of human willing, whether it be individual or collective, in the form of instituted systems of human activity, he seems to ensure that no human activity will ever rise to the level of ethical objective value—in other words it seems to ensure that no human activity can ever rise to the level of being truly valuable-in-itself. This problem is illustrated in Jonas' attempt to demonstrate that the economic sphere can be a sphere of normativity. Jonas notes that economics is an instituted system of human activities. But since Jonas claims that no such system can be the source of ethically relevant objective value, he is forced to look outside of the activity in an attempt to justify it. As we have seen, he appeals to the natural conditions of metabolism and reproduction in order to justify the economic sphere. Allegedly, economic activity is rendered legitimate due to its ability to provide for metabolic and reproductive needs. But if this is the case, then economics cannot be valuable in itself, but rather it is valuable only as a means to some end. In this way, Jonas' argument deprives economics of the feature that is supposedly characteristic of ethical spheres, namely ethical conduct is supposed to possess objective value—ethical activity is allegedly characterized by the fact that it is valuable-in-itself.

The same problem is seen in Jonas' explicit attempt to justify the imperative of responsibility in a more general ethical context. According to Jonas, responsibility is somehow justified by being.[21] If it is the general value of being which somehow justifies responsibility then again we must conclude that responsible conduct is not valuable-in-itself but rather has

[21] Jonas says, "Not only passively, then, as the changing object of my actions, but also actively as the permanent subject of a claim upon my duty, it is *Being* which responsibility has to do with, in every individual case and always. It is the being of this or that thing *for which* the individual act incurs responsibility; the Being of the whole in its integrity is the authority *to which* our act is responsible," *Mortality and Morality,* 102.

value only instrumentally. In both cases, the point is that in moving the source of objective value outside of the activity, Jonas deprives that activity of the possibility of being valuable in itself, which seems to undercut the possibility of that activity serving an authentic sphere of ethical activity.

1.4 Moving Forward

In light of the difficulties which face Jonas' various groundings, the guiding question of this chapter is to what extent is it possible to provide a defense for Jonas' imperative of responsibility. The pursuit of this guiding question inevitably leads to the question of why Jonas thinks that metaphysics is necessary for this task—in other words, what problem is the appeal to metaphysics allegedly solving. This question is required for our investigation because we have claimed that attempting to generate a normativity based in ontology is one major source of the difficulties which arise in Jonas' account. But in denying the possibility of an ontological grounding we assume the burden of demonstrating that something else can solve the problems which metaphysics allegedly solves in Jonas' account.

On Jonas' view, three basic problems are addressed by appealing to metaphysics. The first of these problems, Jonas claims, is unique to an investigation of our possible obligation to ensure the continued existence of humanity, whereas the latter two problems are broader and apply to ethics more generally. The first problem Jonas points to is based on the fact that future generations do not yet exist. Since future generations do not exist, Jonas reasons that our investigation is first and foremost a question about whether future generations "ought to be." Jonas takes it that this is not first a question of action but rather of ontology since we are

supposedly inquiring into the being of humanity and asking whether there is anything about that being which makes its existence obligatory. In the first section, we sought to demonstrate that our investigation is not really about ontology and whether a particular being's existence is obligatory—our investigation is instead concerned with whether a particular action or set of actions is permissible, namely whether it is permissible for us to act in a manner that is inconsistent with the continued existence of humanity in the future.

The second problem which Jonas points to is the problem of the authority of ethical judgments. Jonas presupposes that our ethical judgments can only be legitimated by an external source of authority, and Jonas claims that being can serve as this source of authority. In the second section we demonstrated that this presupposition is self-refuting. In this way, the first two problems which Jonas alleges are solved by appealing to metaphysics are actually created by faulty presuppositions. When we remove these presuppositions the problems go away. For this reason, our defense of the imperative of responsibility need not further consider these former two problems. The case is a little different with the final problem Jonas claims is solved by metaphysics.

The final problem which is allegedly solved by appealing to being is the general problem of ethical subjectivism, the view that ethical judgments are really nothing more than expressions of subjective preference. If ethical judgments are nothing more than subjective preference then these judgments seem to be always subject to change on a whim. If we could locate an ethical principle in being, then, Jonas claims, we would have an objective standard for evaluating conduct. At the end of the previous section, we demonstrated that appealing to being does nothing to solve this problem. Instead, the appeal to being as the source of objective normativity actually serves to undercut the legitimacy of Jonas' ethics.

From the perspective of this investigation, this final alleged benefit of an ontological grounding is more immediately relevant than the first two reasons Jonas provides. Once we recognize that our investigation is primarily about whether or not a particular action or set of actions is permissible, Jonas' first reason for appealing to ontology disappears. Once we recognize that the problem of authority, which Jonas raises, is based on an illegitimate presupposition, the need for appealing to being as a final source of authority is removed. Admittedly, due to the problem of authority, a general theory of ethics cannot avoid demonstrating how ethical conduct can possess self-determined normativity. Our investigation, however, does not seek a general defense of ethical legitimacy; it is sufficient for our purposes to note that the problem of authority does not require that we must look to being as a final authority for our ethical decisions. Our investigation cannot avoid the final problem Jonas indicates as easily as we avoided the previous two. Admittedly, as Jonas points out, the view that all ethical judgments are merely expressions of subjective preference is a general problem for ethics. But here we cannot leave the problem for a more general theory of ethics. Due to the unique character of our relationship to future generations some prominent thinkers have affirmed the objective legitimacy of ethics, while also claiming that there is no ethical reason for our obligation to ensure the continued existence of humanity—whether or not future generations come into being is a matter of preference not ethics. In the following section, I attempt to demonstrate that overcoming this view is the key to providing a defense for Jonas' imperative of responsibility, albeit in a less ambitious way than he attempts to defend it.

II. In Defense of the Imperative of Responsibility

2.1 Narveson and the Existence of Future Generations as Subjective Preference

Jan Narveson concludes his oft-cited paper, "Utilitarianism and Future Generations," with a brief consideration of our question from a utilitarian position. Is there any *moral* reason, Narveson asks, for the continued existence of humanity? [22] Narveson argues that while we might prefer a universe which contains humans there is no moral reason for this preference. This view presents a challenge for our current task. We seek grounds for humanity's obligation to ensure the continued existence of humanity in the future. But if ensuring the continued existence of humanity is merely a matter of personal taste, we can no more be obligated to ensure the continued existence of humanity than we can be obligated to prefer strawberry jelly to grape jelly.

Narveson reaches this conclusion by first arguing that there is no moral difference between a universe that contains a large population of happy humans and a universe that contains a smaller population of happy humans, as long as the *average* happiness of the humans inhabiting those two universes is the same. In other words, the utilitarian maxim, "the greatest happiness of the greatest number," does not entail that we are to aim at the greatest happiness *and* the greatest number. The greatest happiness principle, Narveson argues, requires us to attempt to increase the happiness of those who come into our sphere of action, but it does not require us to bring as many happy people into the world as possible. In other words, what matters

[22] Narveson, "Utilitarianism and New Generations," 72.

is not the total happiness in the universe, but rather the average happiness of the people populating the universe.

Narveson argues that the "more happiness the better" view goes far beyond what the utilitarian principle demands. On this view, we must increase the number of people in the universe because increasing the number of people in the universe gives us more opportunities to do our duty because we would have more people whose happiness we could increase. Narveson takes it that such a view is absurd—no view of morality, he claims, requires us to go out of our way to create duties for ourselves. He gives the example of promise keeping. We believe that it is our duty to keep promises, but it does not follow from this that we are required to make as many promises as possible.[23] For this reason, Narveson concludes that there is no moral difference between a universe with a large number of happy people and a universe with a smaller population whose average happiness is the same as the average happiness of the population in the larger universe. The desire for a larger or smaller population is a matter of taste not morality. Narveson then argues that the question of whether we are obligated to bring about humans in the future is analogous to the question of whether we are obligated to maximize the happy population of the universe.

If there are people in the universe then we can have duties to them, but if there are no people in the universe than questions of duty cannot arise. When we claim that we are required to ensure the continued existence of humanity, we are claiming that we are required to bring about duties for ourselves in the future. But no view of morality requires us to go out of our way to create duties for ourselves. Hence, the question of whether we ensure the continued existence of

[23] Narveson, "Utilitarianism and Future Generations," 67-68.

humanity is a matter of preference just as much as choosing between the two possible universes is a matter of taste.[24]

However, the two situations are disanalogous in at least one important way. When we claim that the population of the universe is a matter of preference, we are not calling into question the legitimacy of the moral universe. In both the universe with a larger moral population and the universe with a smaller moral population, there *is* a moral community. In preferring either of the two scenarios we are at the same time affirming the existence of moral community itself.

When we claim that the continued existence of humanity is a matter of preference, we threaten to undercut the very legitimacy of our moral principle. In order to see this, we simply need to recognize that the existence of human beings, or at least beings sufficiently similar to humans, is a precondition for morality. As Narveson readily admits, if the human species is eliminated morality goes as well.

It is perhaps tempting to conclude that the preconditions for morality are not the concern of morality. After all, it is easy enough to identify a whole host of physical, chemical, biological, and social factors which moral activity depends on. Inasmuch as these preconditions makes possible not only moral action but also immoral action, they are unable to serve as standard for differentiating between right and wrong. For this reason, at least some of the preconditions for morality seem to be normatively neutral.

Nevertheless, morality cannot be without these normatively neutral preconditions, and as such, morality must affirm the necessity of preserving these preconditions. Otherwise, we find ourselves in the strange quandary that Narveson is in. Narveson claims that the utilitarian principle is the supreme principle of morality, and that we are obligated to act in accordance with

[24] Narveson, "Utilitarianism and Future Generations," 72.

this principle. However, in holding that the continued existence of humanity is a matter of preference, he is also claiming that whether morality continues to exist is a matter of preference. If the existence of morality is a matter of taste why would we be obligated to follow the precepts of morality? A moral principle cannot maintain a neutral stance towards its own existence—instead of taking a neutral stance towards its own existence an ethical principle must affirm that it is legitimate in the present as well as in the future. Otherwise, it threatens to undercut its own legitimacy.

2.1 Defending the Imperative of Responsibility

In this way, the legitimacy of any ethical principle depends on the principle affirming its own validity. But it must proclaim its legitimacy not only in the present but also in the future. If an ethical principle does not affirm that it has legitimacy in the future, then this principle admits that there is nothing unconditionally valid about it. If a principle admits that it has no validity, then, needless to say, we have no reason to follow it. In other words, if a principle denies its validity in the future it also denies its validity in the present. In denying its validity in the present, the principle reveals that the alleged "obligations" which follow from it are no obligations at all, but are merely expressions of subjective preference. In this way, if there are to be any obligations at all, included among them must be the obligation to ensure the continued existence of obligation.

Once we come to this recognition it seems that we are in position to affirm a version of Jonas' imperative of responsibility. We can state this imperative of as follows: *Act so that the effects of your actions are compatible with the permanence of ethics.* This imperative must be

affirmed by any ethical theory or the ethical theory reveals itself to be illegitimate. Admittedly, our defense of this principle is not as expansive as Jonas' defense of his version of the principle. Jonas takes it that he must overcome nihilism in order to demonstrate the validity of his principle.[25] While it is likely true that a general defense of ethics cannot avoid this challenge, it is not necessary for our investigation. For our purposes, it is sufficient to demonstrate that if there are to be any obligations at all, among these obligations must be the duty to ensure the continued existence of obligation. We defend our version of the imperative of responsibility as a necessary condition for the possibility of conduct that is valuable-in-itself. In this way any defender of any ethical principle, which would claim the legitimacy that comes from prescribing conduct that is objectively valuable, must affirm our principle.

III. Questions Following from Our Principle

3.1 Connection of Our Principle to Ethics in General

Our defense of the imperative of responsibility is based on the recognition that any legitimate ethical principle must affirm its legitimacy in the future in order to maintain its legitimacy in the present—an ethical principle's legitimacy requires that it affirm that this principle ought to be preserved in the future. For this reason, it is a two way street between our version of the imperative of responsibility and ethics in general.

On the one hand if a given ethical principle in unable to affirm our reformulated imperative of responsibility, then it indicates that this principle does not have legitimacy in the present. The critic of utilitarianism, for instance, would be quick to point out that it is not a flaw

[25] Lawrence Vogel argues this point at length in his introduction to Jonas' *Mortality and Morality*, 4-19.

in Narveson's reasoning which leads him to the conclusion the existence of human beings in the future is a matter of preference. Instead, Narveson's is merely revealing what the critic of utilitarianism has maintained all along. Namely, that the utilitarian principle is not capable of offering any universal prescriptions because it is, in reality, based on subjective preference. Whether our hypothetical critic of utilitarianism is really being fair to the principle of utility is ultimately beyond the scope of our investigation. It is possible that the utilitarian could find a way to affirm our version of the imperative of responsibility, but for our purposes the key point is *that if utilitarianism, or any ethical principle, is unable to affirm the imperative of responsibility, then it undercuts its own legitimacy*. In this way, the imperative of responsibility can serve as a kind of evaluative tool for comparing various general ethical theories.

On the other hand, in the final analysis, our defense of the imperative of responsibility presupposes the existence of an ethical theory which is able to demonstrate the existence of objective normativity. If ethics does not prescribe conduct that is objectively valuable then our defense of the imperative of responsibility does not go through. Just because an ethical theory is capable of affirming our principle, does not mean that ethical theory is legitimate, it merely means that it is potentially legitimate. This is the basic situation that Jonas' own defense of the imperative of responsibility finds itself in. Jonas affirms the imperative of responsibility but he couples this affirmation with a general ethical theory which seeks to ground normativity in being. In so doing, Jonas' account of ethics undercuts the legitimacy of his ethics. Simply hanging the imperative of responsibility onto this overall argument does nothing to save it, but rather threatens to casts a shadow of suspicion on the imperative of responsibility. Ultimately, this suspicion can only be fully removed by a general demonstration of the objective validity of ethics. This task, however, is beyond the scope of our present investigation.

For this reason, we readily admit that our investigation is not as ambitious as the project Jonas lays out in *The Imperative of Responsibility*. Still, the recognition that any ethical principle that would claim objective validity must affirm our version of the imperative of responsibility is not a barren victory. In the next section, we demonstrate how this recognition entails that any ethical principle, which would claim the legitimacy that comes from prescribing conduct that is objectively valuable, must affirm that we are obligated to ensure the continued existence of humanity. So while it is true that our investigation will be unable convince the nihilist that we must ensure the continued existence of humanity, we can hope to win over the defenders of ethics who have claimed that ethics does not require us to ensure the continued existence of humanity.

We reiterate that our defense of the imperative of responsibility is *not* based on the view that the imperative of responsibility is a comprehensive ethical principle. Instead, our defense of the imperative of responsibility is based on presupposing the existence of such a principle. In other words, *if* there is an ethical principle that possesses objective validity, then this principle *must affirm our version of the imperative of responsibility*. If no such principle exists, then our defense of the imperative of responsibility does not go through. Admittedly, this means that our principle rests on a rather large un-discharged assumption—namely that an objective ethics is not impossible. Moreover, we refrain from making any claims about the content of the presupposed comprehensive ethical principle. Making no claims about the content of the comprehensive ethical principle allows us to avoid the traditional battles between competing moral theories so that our investigation can focus on the challenges that are specific to the imperative of responsibility.[26]

[26] We return to this question at the conclusion of our investigation: III. Conclusion: Defending the Imperative of Responsibility Once Again.

3.2 The Obligation to Preserve the Continued Existence of Humanity

At the outset of the investigation we asked whether it could be demonstrated that we are obligated to ensure the continued existence of humanity in the future. Does our modified imperative of responsibility, which says that we are obligated to preserve the possibility of obligation, accomplish this task? We admit that our defense of the imperative of responsibility presupposes the real existence of an objective ethics—an ethics that prescribes conduct that is valuable-in-itself. If ethical conduct is good-in-itself, then since the capacity to freely and knowingly set ends is a precondition for ethics this capacity possesses instrumental value. Depending on how one understands the meaning of "freely set ends" it might be said that this capacity is not truly good without qualification because this capacity allows for the setting of illegitimate ends as well as legitimate ends.[27] Still, this capacity is at least a necessary condition for ethics. Ethics presupposes the ability to freely set and pursue ends because if this ability did not exist, and all action were pre-determined, there would be no sense in saying that an action "ought" to occur—the action either would occur or not occur in accordance with whatever antecedent factors predetermined it. For this reason, this capacity, minimally, possesses an instrumental value as a precondition for an ethical principle, which *ex hypothesi*, prescribes conduct that is objectively valuable.

We recognize that human beings possess this capacity; what then does this recognition indicate for our investigation into our possible obligation to ensure the continued existence of humanity? Here we could follow Jonas and note that humans are the only known beings which

[27] Admittedly, some conceptions of "true freedom" preclude the possibility of choosing certain illegitimate ends. See Woody, *Freedom's Embrace*, 35-45.

possess this capacity which is indispensible for the possibility of ethics, i.e., action which is good-in-itself. From this perspective, we could be said to be obligated to preserve the future of humanity since humanity is the indispensable precondition for the existence of the objectively valuable. However, if we set the argument up in this fashion, we must presuppose not only that humanity is the only being in the universe with the capacity for rational end-setting currently, but also that humanity is the only being which will ever possess this capacity. If we follow Jonas in setting up the argument in this fashion, then we end up in a strange situation if we consider the possibility either that rational end-setters exist somewhere else in the universe or that some other terrestrial species could develop this capacity. This perhaps appears as the domain of science-fiction, but if we assume, as contemporary biology does, that human beings evolved this capacity, what is to prevent another species, be it terrestrial or extra-terrestrial, from also developing this capacity? In any event, if it is possible that another rational end-setter could exist either now or in the future, then basing our obligation to ensure the continued existence of humanity on humanity's *unique* role as the indispensible precondition for ethics does not go through. For this reason, we do not want to base our argument that we are obligated to ensure the continued existence of humanity on the presupposition that humanity is the unique possessor of the capacity for rational end-setting.

If ethical conduct truly possesses objective value, as we now presuppose, then each instantiation of ethical conduct, be it human conduct or otherwise, is objectively valuable and ought to be preserved. For this reason, whether or not the human species is sole possessor of this capacity is ultimately irrelevant for our investigation. If an ethical principle would claim to be legitimate, it must proclaim that it ought to be preserved in all times and in any context, terrestrial or otherwise. For this reason, if there are to be any obligations, included among those

obligations must be the obligation to not destroy the conditions for ethical conduct, wherever it be found.[28] In the context of the problem of the potential threat of the cumulative impacts associated with the collective use of modern technology, this means that we are obligated to ensure that we do not destroy the necessary conditions, natural or non-natural, for ethical conduct, wherever that conduct be found. This entails that we are obligated to ensure the continued existence of humanity, as well as whatever natural conditions are necessary for this continued existence.

With that we conclude our attempt to defend Jonas' imperative of responsibility from the challenges which we uncovered in our critical analysis of this imperative. In the second half of this investigation, we begin with the assumption that we are obligated to ensure the continued existence of humanity and attempt to determine what practical consequences follow from such an obligation.

[28] Incidentally, this means that despite the focus of our investigation on humanity, our defense cannot truly be called "anthropocentric."

CHAPTER 3:

ON THE NATURE OF OUR OBLIGATION TO ENSURE THE CONTINUED EXISTENCE OF HUMANITY

In this chapter we begin with the assumption that we are obligated to ensure the continued existence of humanity. From this starting point, we endeavor to investigate the nature of this obligation. An investigation into the nature of this obligation requires attempting to understand both the form of this obligation as well as determining the content of this obligation. However, the scope of the challenge associated with the cumulative impacts of the collective use of modern technology threatens to undermine any attempt to understand our duty to future generations. In brief, the problem is that the extended reach of our technological power has not, as yet, been matched by an extended sight of our predictive vision. This disparity between power and vision presents a series of epistemological challenges which must be overcome if we are to understand the nature of our obligation to ensure the continued existence of humanity.

I. Epistemological Challenges for an Ethic of the Future

1.1 The Problem of Uncertainty

Kant claimed that even the person of the commonest intelligence would be able grasp knowledge of what every man is bound to do.[1] Within the context of our investigation it is not clear that this is still the case. The increased scope of our power means that the consequences of our actions reach far into the future. Determining the long term cumulative and indirect impacts of our collective use of modern technology is surely no easy task. But if it is true that we are obligated to ensure the continued existence of humanity, then we are also duty bound to attempt to assess the long term cumulative and indirect impacts of our actions. If it is impermissible for us to act in manner which is inconsistent with the continued existence of humanity, then we must seek to know whether or not our actions are inconsistent with this continued existence. For this reason, Jonas calls for a new science of "comparative futurology" which would attempt to model the potential future environmental impacts of various policies.[2]

Attempting to model the cumulative impacts of the collective use of modern technology surely represents a daunting technical challenge. It must be determined which variables to take into account, and it must be determined to what extent to weigh these variables. In addition to the difficulty of constructing the model, there is also the physical challenge of collecting the real-world data to input into the models. Ultimately, these questions are not proper for philosophic investigation, and we must leave them for the positive sciences. For our purposes, we must note that our duty to ensure the continued existence of humanity requires extensive environmental

[1] Kant, *Groundwork for the Metaphysics of Morals,* 108.
[2] Jonas, *Imperative of Responsibility*, 26.

planning analysis in order to determine the potential impacts of our actions. While the technical details of constructing the model are not philosophic problems, the recognition that such a modeling will be incredibly difficult does present a challenge for our investigation.

The basic problem is that any modeling of the potential impacts will always contain an element of uncertainty. This uncertainty arises not only due the sheer complexity of the situation, but also due to the element unpredictability in all human action due to human freedom. Even if it were somehow possible to identify and accurately measure all the variables which constitute the future impacts of human action, a model could still not give projections with absolute certainty due to this element of unpredictability in human action. The fundamental uncertainty of future impacts presents a challenge for the view that we are obligated to ensure the continued existence of humanity.

The basic problem is that due to the uncertain character of the future we can never be absolutely certain that a particular policy decision will necessarily undercut the possibility of the continuance of human life in the future. This basic uncertainty generates problems for our investigation. We say that it is impermissible to act in a manner that is inconsistent with the continued existence of human life in the future, but due to this element of uncertainty, it seems that we can never be sure that our actions will actually undercut the possibility of future human existence. But if we are not sure that our actions will undercut the possibility of human existence in the future then it seems that we cannot know whether or not these actions are rendered impermissible by our principle. For this reason, when we say that it is impermissible to act in a manner that is inconsistent with the continued existence of humanity, we cannot mean that it is only impermissible to act in such a manner when we are *certain* that this action will undercut the possibility of humanity in the future.

Due to this fundamental uncertainty, we must acknowledge that there is always a risk associated with the widespread collective use of modern technology, and we must ask what level of risk it is permissible for us to accept for the undeniable benefits that are gained by using this same technology. Jonas addresses this problem by attempting to demonstrate that the existence of humanity must never be put at stake by the collective use of modern technology. According to Jonas, there are perhaps scenarios where it is permissible to risk the entire well-being of others for the sake of avoiding some evil. Jonas gives the example of the legitimacy of the statesman's decision to risk his nation's very existence, by going to war, to avoid some terrible evil.[3] However, for Jonas, the use of modern technology is not like the case of war because the use of technology is not required to preserve what exists, but rather the purpose of modern technology seems to be to improve upon what has already been achieved.[4] For this reason, on Jonas' view, if there is *any chance* that a set of actions will be inconsistent with the continued existence of humanity in the future, then that set of actions is impermissible.

Jonas' point is that no improvement in the human lot is worth even the slightest chance that the gain might actually undercut the continued existence of humanity. On the face of it, this point seems plausible. However, the problem of uncertainty faces us here on the path of caution just as much as it does on the path of boldness. In other words, it is not clear that we can be any more certain that a set of actions *certainly will not* undercut the possibility of humanity in the future than we can be certain that a set of actions certainly will undercut the possibility of humanity in the future.

It seems that only the elimination of the use of modern technology could provide absolute certainty that modern technology would pose *zero risk* to future generations—and even then that

[3] Jonas, *Imperative of Responsibility*, 36-37.
[4] Jonas, *Imperative of Responsibility*, 36.

would be giving up on the technological means that might save us from some future natural catastrophe.[5] Even if one were to take the extreme view that the elimination of modern technology were desirable, which Jonas certainly does not, it is by no means clear that such a thing is practically possible. For this reason, our investigation must seek to deal with this problem of uncertainty, from the perspective of a world in which the use of modern technology is widespread and the usage is much more likely to increase rather than decrease.

1.2 Environmental Planning

In light of this basic uncertainty, what observations can be made about our obligation to ensure the continued existence of humanity in the future? First, we are obligated to strive to understand what choices are truly permissible for us. This means that we must endeavor to minimize this basic uncertainty to the greatest extent possible. Through minimizing uncertainty, we are better able to understand which options available to us truly represent a threat to the future of humanity. Practically speaking, this means a world-wide commitment to what Jonas called a "comparative futurology," which is more commonly referred to as environmental planning. The first steps in this direction are already being taken. In the United States, for instance, the *National Environmental Policy Act* requires that every federal project must take into consideration the impacts that project has on the natural, cultural, and human environment.[6] In practice, this means that some level of environmental assessment is attempted for every federal project in the United States. If we are to truly understand what our obligation to ensure the

[5] We might hope for instance that some future technological innovation could help us fend off an approaching asteroid. For more on foreseeable natural catastrophes and our obligation to ensure the continued existence of humanity, see Chapter 2 footnote 6.
[6] *National Environmental Policy Act* (*NEPA*) [42 U.S.C. 4321 et seq.]

continued existence of humanity requires of us, we must expand this type of effort in attempt to ascertain the long term indirect and cumulative impacts of our various technological undertakings.

An expansion of this effort first requires that we should expand our models further into the future. Given the scope of our problem, it is not sufficient to consider merely the impacts a project will have in the next five, ten, or even twenty-five years in the future. Admittedly, as we attempt to project the impacts of our actions further and further into the future more and more uncertainty will creep into our long-range model. The only way to minimize this uncertainty is to continue to collect more data and continue to refine our collection data so the information we base our models on is as accurate as possible.

In addition to expanding the temporal scope of our modeling we must attempt to expand the scope of our modeling spatially as well. The problem which we face is the cumulative impacts associated with the long-term collective use of modern technology. These cumulative impacts are not somehow magically contained within national boundaries. For this reason, any hope of accurately modeling the long-term impacts of the use of modern technology will require international cooperation at least at the level of data collection and sharing. It goes without saying that there would be many practical political obstacles to such large scale international data sharing, but an accurate model of the impact of our actions is impossible without world-wide data sharing.

Admittedly, the great expansion of environmental planning that our problem requires will be costly, not only financially, but also in the increased time that every project will take to complete. Already, critics of environmental planning complain of the increased time that

assessing environmental impacts adds to project completion.[7] But consider the following anecdote to put things in perspective. Construction on the St.Vitus Cathedral in Prague began in 1377; the cathedral was not completed until the middle of the 19th century. While this example is admittedly extreme, it was not at all uncommon for the large scale projects of our ancestors to take multiple generations to complete. For comparison's sake, Burj Khalifa, currently the world's tallest building, took a mere five years to construct in Dubai. The point is simply that modern technology has increased the speed of construction in ways that were unimaginable in previous times—projects that once took generations can now be completed in years, if not faster.[8] Surely, it is not unreasonable to spend some fraction of the time saved on attempting to assess the impacts of that construction accurately as possible.

1.3 Skeptical Challenges Arising Due to Uncertainty of Modeling

In this way, our duty to ensure the continued existence of humanity also entails that we are obligated to attempt to assess the impacts of our actions as accurately as possible. But, as previously noted, these projections will always contain an irreducible element of uncertainty. This inevitable uncertainty opens the door to various skeptical challenges. The first skeptical challenge arises from the critic who notes that since we cannot be certain that a particular set of actions will actually undercut the future of humanity, we cannot be obligated to avoid any particular set of actions in the name of preserving the future of humanity. On this view, our obligation to ensure the continued existence of humanity is a fundamentally empty because it is

[7] For instance, in response to perceived delays created by environmental planning for energy projects, George W. Bush issued "Executive Order 13212: 66 FR 28357 (22 May 2001) --Actions To Expedite Energy-Related Projects."
[8] Indeed the Chinese Firm, Broad Group, has recently proposed constructing Sky City One, a skyscraper that will be 32 feet taller than Burj Khalifa. Broad Group claims that the project can be completed in a mere 90 days!

impossible to ascertain *with certainty* that any set of actions either will or will not undercut the continued existence of humanity in the future. This sort of skeptical challenge is not unique to our problem. Hannah Arendt, for instance, interprets Kant's emphasis on the internal form of volition as an attempt to escape precisely this type of problem, albeit in a much narrower scope. Once the volition enters into the visible world of human affairs as action, it is almost immediately outside of the agent's control because it becomes enmeshed in the web of actions of others and can easily lead to consequences never imagined by the agent. On Arendt's interpretation, in appealing to the form of volition in order to determine the goodness of an action Kant seeks to absolve the subject of the consequences of this volition.[9]

Arendt's own solution to this challenge, which the unpredictable character of human action presents to ethics, is found in two human capacities: the capacity for promise-keeping, and the capacity for forgiveness. The capacity to make and keep a promise helps to alleviate some element of the unpredictability of the consequences of human action because inasmuch as we trust someone to act in the manner which they have pledged to act we can better understand the way in which our actions will interact with their actions, and as such we can better predict the consequences of our actions. However, this capacity for promise-keeping can never truly eliminate the unpredictability of human action because our actions impact many more people than we could ever make agreements with and even those who have made a promise to us are always free to break that promise. For Arendt, this is where the power of forgiveness comes in. Humans possess the capacity to forgive someone when the consequences of that person's actions impact us. For Arendt, the knowledge that an individual's actions will have unintended consequences threatens to paralyze the individual into inaction, but the knowledge that these unintended consequences can be forgiven unburdens the individual and frees them to act.

[9] Arendt, *The Human Condition* , 234-247.

Arendt's solution of the power of forgiveness, however, cannot be the solution to our problem. Within the context of the obligation to ensure the continued existence of humanity, there can be no forgiveness if we fail in our duty. To undercut the possible continued existence of humanity in the future is quite literally *unforgivable*—if we eliminate the possibility of humanity who will be left to forgive us? The recognition that such an action is unforgiveable begins to point the way to addressing this first skeptical challenge.[10]

It is true that our modeling will never be able to determine with absolute certainty that our actions either will or will not undercut the possibility of humanity in the future. However, as Jonas points out, with sufficient planning we can at least sketch some of the possible outcomes of our actions. When we weigh the possible positive outcomes of our actions we must recognize that none of these positives can compare with the possible negative outcome of the unforgivable act of undercutting the possibility of humanity in the future. For this reason, in determining what course of action to follow we must always over-emphasize the side of caution and pessimism.

This same sort of response is appropriate for the second type of challenge which arises due to the fundamental uncertainty associated with complex modeling of the future. The second

[10] From whom must forgiveness be sought?—what is meant by unforgiveable? Since our transgressions are felt by not only the ones who are directly harmed, it is not surprising that human forgiveness comes in many forms and from many directions. In *Crime and Punishment*, Dostoevsky attempts to put us inside the mind of Raskolnikov, the murderer who is haunted by his evil deed. Dostoevsky makes clear that Raskolnikov's actions do not merely impact the murder victims. The ones who know the victims are impacted in that they have lost someone in their lives. The friends and family of Raskolnikov are impacted in that they now are close to someone who is capable of murder. The impact that Dostoevsky focuses most on, is the way in which the crime impacts the criminal, Raskolnikov, who is tormented by his actions. Forgiveness can be sought from any of these sources—the transgressor can be forgiven by the family of the victim, by his own friends, and can even endeavor to forgive himself. Indeed, in *Crime in Punishment*, Raskolnikov seems to achieve a kind of redemption—through his confession and punishment he is forgiven by Sonya, and is eventually able to forgive himself. In this way, there is a sense in which undercutting the continued existence of humanity can be forgiven. Namely, we can attempt to forgive ourselves for our actions. However, murder is distinguished from other crimes in that forgiveness cannot be given by the one who is directly impacted by the action, namely the murder victim. From this perspective, there is a kind of unforgiveable character to murder. This feature is shared by action that would undercut the possibility of the continuation of human existence.

challenger acknowledges that the scientific projections of doom and gloom about the future are likely accurate, but is a technological optimist who has faith that some future technological innovation will bring us back from the brink. To be sure, this technological optimist can point to many technological miracles which justify his faith. After all, at least as far back as Malthus, prophets of doom have been proclaiming that human resource consumption will result in a catastrophe in the not too distant future. In each case, some sort of technological advance has staved off the disaster, pushing it once again into the not too distant future.[11] The question the optimist poses is straight-forward enough: technology has saved us again and again in the past, what reason do we have to think it will not continue to do so in the future?

In responding to this type of objection, we once again appeal to the necessity of giving added weight to the negative possible outcomes over positive possible outcomes. We do not deny that some future technological innovation might allow us to consume at an even higher level at some point in the future. However, to consume at an unsustainable level based on the faith that a future technological innovation will arrive in time to push the danger once again into the not too distant future is reckless in the extreme.

II. On the Structure of Our Obligation to Future Generations

2.1 Reciprocal Power Relations among Contemporaries

Obligations that extend across generational boundaries seem to have a different character than more familiar obligations. Perhaps the most readily identifiable feature of our relationship

[11] For a review of the various ways a Malthusian crisis has been averted see Mark Sagoff, "Do We Consume Too Much?" *Atlantic Monthly* 279 (1997): 80-96.

to non-contemporary generations is that this relationship is profoundly non-reciprocal. It is common to conceive of rights and obligations in terms of reciprocal recognition. Rawls' first principle of justice, for instance, states that "each person has an equal right to a fully adequate scheme of equal basic liberties which is compatible with a similar scheme of liberties for all."[12] This principle expresses the commonplace notion that when I proclaim that I have the right to pursue a particular activity, I also recognize that I am obligated to not infringe on others' right to pursue this same activity. Similarly, in respecting others' right to perform a particular activity, I expect others to respect my own right to perform that same activity.

Even if there were no considerations of justice involved, basic prudence seems to dictate some sort of mutual recognition. Our contemporaries, at least potentially, have the capacity to exert power over us. For this reason, if I attempt to exert some power over the other in an attempt to prevent him from pursuing a particular activity, it is reasonable to expect that he will attempt to exert his own power over me. In this way, there is a kind of reciprocity in our relationship with our contemporaries. Admittedly, due to any number of contingent factors, the actual amount of power which can be brought to bear against contemporaries is not the same for each person. Still, at least potentially, every person has a kind of power over his contemporaries.

2.2 The Asymmetrical Relationship between Different Generations

This reciprocal power relationship does not seem to exist among non-contemporaries. For the purposes of the current investigation, we are primarily concerned with our relationship to future generations. We endeavor to understand what sort of power we exert over future generations in an attempt to understand the nature of our obligation to future generations. In this

[12] Rawls, *Theory of Justice*, 293.

pursuit, we begin with a consideration of our relationship to *past* generations. If we can understand what power previous generations have exerted over our current generations we should be in a position to understand what power we are capable of exerting over future generations. In this section, we will also consider to what extent, if any, we could be said to exert power over the past.

The Relationship between Current Generations and Past Generations

How do previous generations exert power over the current generation? Needless to say, we owe our very existence to these generations. More than that, we enter into a world that is in some very strong sense not our world but rather *their* world. As Arendt points out, we are each born into a world which we did not create.[13] The world we find ourselves in was constructed by previous generations. Virtually every city in the world has tangible illustrations of this fact in the form of buildings which are older than any living person. The influence that past generations have over us is not limited to the physical artifacts that they have left behind. The fingerprints of previous generations can be seen in the food we eat and the places on the globe we currently live. Indeed even our primary means of communications, the very meanings of the words we use was in large part determined by previous generations.

The point is simply that decisions made by past generations have an enormous influence on the present generation. These past determinations both open paths for present generations as well as close paths. We are able to use the accomplishments of past generations as a starting point for our projects and in this way we are able to accomplish projects that previous generations could not. Other decisions made by past generations close off potential projects for

[13] Arendt, *Human Condition,* 9.

us—it is impossible, for instance, to catch fish in a stream that is no longer capable of sustaining aquatic life.

It cannot really be denied that past generations have exerted enormous power upon the present generation, both in the sense of bringing the present generation into being as well as determining many of the ways in which the current generation lives. But is there any sense in speaking of the power the present generation has over past generations?

At the outset, we acknowledge our assumption that present generations have no ability to causally alter the past. For this reason, it is immediately apparent that the present generation does not have the *same* power over past generations that past generations have over the present generation. However, we sometimes speak of the present having a kind of power over the past.

First, the present generation has the capacity to interpret the past both in remembrance and forgetfulness. Homer tells us that Achilles was given the choice between a long quiet life, which would be forgotten, and a short life filled with glory, which would be remembered by future generations.[14] Achilles chooses the short glorious life, and this choice seems to be celebrated in the *Iliad*. Each generation has a kind of power over Achilles in that each generation carries his memory. Up to now at least, each generation has chosen to remember Achilles and pass his story on to the succeeding generation. In this way, the present generation has the power to allow the memory of Achilles to either fade into oblivion or remain alive.

But would Achilles be harmed by being forgotten? When Odysseus meets with Achilles in Hades, Odysseus tells Achilles that no one has ever been as fortunate as Achilles who is remembered by all and is a "great prince among the dead."[15] In this way, it seems clear that in Odysseus' view, the living benefit past generations by remembering them. But this view

[14] Homer, *The Iliad* (Boston, Houghton, Mifflin and Co., 1881), 571.
[15] Homer, *The Odyssey* (Boston, James R. Osgood and Company, 1871), 595.

presupposes another realm populated by the ghosts of the dead. Even with this presupposition, the Achilles of the *Odyssey* does not seem as happy to be remembered as Odysseus as expects. Achilles famously responds to Odysseus, "'Say not a word, in death's favor; I would rather be a paid servant in a poor man's house and be above ground than king of kings among the dead."[16]

If we do not assume that the soul of Achilles continues to exist in Hades, what sense does it make to say he is harmed in any way by being forgotten? If Achilles is truly gone, he is not impacted one way or the other by being remembered or forgotten.

The second way in which we sometimes speak of having a kind of power over the past is illustrated by the convention of making a last will and testament. The very existence of this convention is already a recognition that projects of past generations can extend beyond the life-span of the one who initiates the project. The person who makes a will attempts to retain a kind of control over the future direction that their projects will take after that person has died. This seems to illustrate a very tangible way in which the present generation impacts the past. The current generation is free to either respect the intention of previous generations or ignore this intention. In the case of the last will, the intention of the deceased is given legal protection in some places. Do we somehow harm the deceased if we do not act in accordance with her last will?

Admittedly, in most cases, it is easier to consider the harm that violating the terms of the will does to the beneficiaries of the will, rather than consider the harm done to the deceased person. Still, even though we recognize that violating the terms of the will harms the beneficiaries of the will, we do speak as though we are somehow harming the person who has died when we violate *their* will. The point is that the ability to violate or affirm the terms of a person's last will and testament does seems to represent a way in which the present generation

[16] Homer, *The Odyssey*, 600-605.

exercises a kind of power over the past generation. The example of the individual's projects can also be writ large in the examples the projects of a political community. The present generation does have a kind of power over the previous generation in that the present generation can choose to either continue the projects of previous generations or discontinue these projects.

The Asymmetrical Relationship between the Current Generation and the Future Generation

We attempted to consider the power relationships between past generations and the current generation in the hopes that in determining our relationship to previous generations we would also be determining our relationship to future generations. From this undertaking, it is clear that past generations exhibit enormous power over the present generation. We owe past generations not only our existence, but also many of the conditions of that existence. The case of the power the current generation has over past generations is less clear. It is perhaps not fair to say that the current generation has *no power* over previous generations, but surely the power which present generations has over previous generations is considerably less than the power previous generations have over the present generation. By analogy, we can conclude that we, the present generation, have considerably more power over future generations than future generations have over us. Our relationship to future generations is profoundly asymmetrical and non-reciprocal.

This feature of our relationship to future generations is noteworthy because it is considerably different than our relationship to our contemporaries. In other words, we tend to think of our relationships to our contemporaries, especially our ethical relationships, in terms of reciprocity. But if our relationship to future generations is asymmetrical and non-reciprocal,

then we cannot conceive of our duty to future generations in terms of reciprocity. Instead, we must attempt to conceive of this duty in terms which are sufficient to the non-reciprocal nature of the relationship.

2.3 Responsibility as the Form of Our Obligation to the Future

Due to the non-reciprocal nature of our relationship to the future, Jonas rejects any attempt to conceive of the nature of our obligation to future generations in terms of mutual recognition of rights, interests, or desires. Instead, Jonas insists, we must conceive of the nature of our obligation to future generations in terms of responsibility. Responsibility becomes central for understanding our obligation to future generations because a relationship of responsibility, at least as Jonas conceives of it, is an asymmetrical relationship. For Jonas, a relationship of responsibility is always a relationship in which one party is in a position of power over the other party.[17] In what follows, we critically investigate Jonas' account of responsibility in order to determine to what extent his account is able to adequately capture the nature of the obligation the present generation has to future generations. In an attempt to reconstruct Jonas' theory of responsibility we first consider Jonas' two "eminent paradigms" of responsibility, the responsibility of the statesman and the responsibility of the parent.

The Problematic Nature of Jonas' Account of Parental Responsibility

According to Jonas, the parent's responsibility for the child is an important example for our investigation because the relationship between the parent and the child is both asymmetrical

[17] Jonas, *Imperative of Responsibility*, 94.

and contains an element of obligation. The relationship is asymmetrical not only because the child is only brought into existence due to the parent, but also because the child is only able to remain alive through continuous activity by the parent. This relationship contains an element of obligation in that if the parent does not provide this continuous care, we say that the parent has failed in his duty to the child. In this way, in the case of parental responsibility, Jonas seems to have indentified an example of an asymmetrical moral relationship, and for this reason this relationship does seem to be relevant for our investigation.

However, Jonas' account of parental responsibility seems to undercut the possibility of this type of responsibility being a legitimate ethical relationship. The basic problem is that Jonas views parental responsibility as being instituted by nature. According to Jonas, this "natural responsibility" is independent of assent or choice—nature places this obligation upon all parents, and we recognize the pull of this natural obligation in the form of the parental instinct to care for their offspring.[18] It is likely not overly controversial to claim that humans, in most cases, possess an instinct for the preservation of their offspring, an instinct humans share with many social mammals. However, to equate this instinct with an ethical obligation is problematic. On the one hand, if nature has determined humanity in such a way that human parents cannot help but possess this "natural responsibility," what sense does it make to say that these parents are "obligated" to care for their child? On the other hand, what ethical grounds do we have to criticize the parent who shirks their parental responsibility? If nature did not implant this parental instinct, what grounds do we have for blaming the irresponsible parent? It seems that nature would be to blame for the irresponsible actions, rather than the irresponsible parent. For these reasons, Jonas' attempt to conceive of the parent's ethical responsibility to her child in terms of a natural instinct does not adequately capture this relationship.

[18] Jonas, *Imperative of Responsibility*, 94.

We cannot conceive of our responsibility to future generations in terms of some kind of "natural responsibility" for the same reasons that it is inappropriate to conceive of the ethical relationship between a parent and child in terms of a natural relation.[19] If we cannot conceive of our responsibility to future generations in terms of a natural relation perhaps Jonas' account of political responsibility, which as Jonas points out arises from "freest choice" rather than "dictate of nature," can serve as the model of our responsibility for future generations.

The Problematic Nature of Jonas' Account of Political Responsibility

As we have seen, on Jonas' account of responsibility only asymmetrical relationships are possible candidates for relationships of responsibility.[20] Accordingly, political responsibility is also characterized by a non-reciprocal relationship. In the parental relationship the individual parent has power over the individual child. In political responsibility the individual statesman has power over the many citizens. On Jonas' account, political responsibility is the burden of the "rare prominent individual only."[21] The individual politician freely chooses to seek power over the polis, and in gaining this power the politician bears the burden of responsibility for the care of the polis.

The problem of this account of political responsibility, as a one over many, is that it seems to preclude the possibility of genuine self-government. If we take the phrase "self-government" seriously, then the politician cannot be conceived of as some sort of parental-figure king. However, if we view the relationship between the politician and the state as analogous to

[19] To be fair to Jonas, he does not think that our responsibility to ensure the continued existence of humanity is *identical* to the parent's responsibility for the child. Specifically, he never claims that our responsibility for future generations is a "natural responsibility."
[20] Jonas, *Imperative of Responsibility*, 93-94.
[21] Jonas, *Imperative of Responsibility*, 97.

the relationship between a parent and a child, we have little choice but to conclude that self-government is impossible. On this account, the citizens of a state would no more govern themselves than a child rules herself.

In this way, there is a strong streak of political paternalism in Jonas' account of political responsibility. Why is this paternalism problematic? Admittedly, it is conceivable that self-government is an impossibility. However, if this is so, we would need another argument in support of this view—Jonas never provides such an argument.

In this way, Jonas' account of political responsibility seems to be problematic in that it is unable to accommodate one feature that is allegedly shared by many modern states, namely that these states are self-governed, and Jonas' account seems to preclude the possibility of self-government.

Responsibility for Future Generations

If Jonas' accounts of both parental responsibility and political responsibility are problematic, it might seem that these accounts are of no help for us in attempting to uncover the nature of our responsibility to future generations. However, as Jonas notes, the nature of our responsibility to future generations is fundamentally different than the nature of our responsibility to either our offspring or the nature of the statesman's responsibility to the state. For Jonas, these two relationships can help us to conceive of the nature of our obligation to future generations because both of these relationships are allegedly asymmetrical and non-reciprocal.

Admittedly, Jonas' problematic account of these two "archetypical paradigms" of responsibility does cloud the issue more than clarify it. However, it is possible that the unique character of our relationship to future generations will allow us to utilize some of Jonas' account of parental and political responsibility while avoiding the pitfalls that plague this account.

Unlike parental responsibility, Jonas does not claim that our responsibility to future generations is somehow a "natural responsibility." The problem with Jonas' account of political responsibility is that he seems to overstate the asymmetrical character of this relationship. However, as we attempted to demonstrate above, our relationship to future generations is profoundly non-reciprocal and asymmetrical. For this reason, it is more appropriate to think of the current generation as truly having the fate of future generations in our hands in a way that is disanalogous to the relationship the politician has to her constituents. After all, even the most repressive tyrant can theoretically be assassinated. There is no analogous possibility for future generations—as we have seen their power over us, if it exists at all, is extremely limited.

In this way, it seems that the problems which face Jonas' two paradigmatic examples of responsibility do not serve as stumbling blocks for our investigation into the nature of our obligation to ensure the continued existence of humanity in the future. Responsibility still seems to be a promising way to conceive of our obligation to future generations because of the non-reciprocal structure of responsibility.

III. On the Content of Our Duty to Future Generations

If it is true that the structure of our obligation to future generations is best conceived of in terms of responsibility, what is the content of this responsibility? The question of *what* the

current generation owes to future generations is the subject of a mountain of contemporary philosophic literature. However, for the purposes of this investigation, we are not focusing on the general question of what does the current generation owe the future generation. Instead, we focus on the following problem: if it is true that we are obligated to ensure the continued existence of humanity, does this obligation entail any additional obligation about the *condition* of this future existence? We have attempted to demonstrate that we are obligated to ensure the continued existence of humanity, but surely there are any number of possible future states that are consistent with the continued existence of the human species. Is our obligation to ensure the continued existence of humanity indifferent to the condition in which this future humanity exists? Here we note that even if it were to turn out that our obligation to ensure the continued existence of humanity told us nothing about the conditions we must provide for future humanity, it would not follow that we owe future generations *only* their existence. There could be, and likely are, other reasons we are obligated to provide certain conditions for future humans. The point is simply that, for our present purposes, we will set aside all other possible reasons that we might be obligated to provide certain conditions for future humans, in order to focus on what, if anything, our obligation to ensure the continued existence of humanity tells us about the conditions we must provide for this existence.

Before we can consider what possible conditions we might be required to provide for future generations we first affirm that we are obligated to ensure the continued existence of humanity. In the previous chapter, we provided an argument in support of the existence of this obligation. However, there is a prevalent view in the philosophic literature on intergenerational justice that far from being obligated to ensure the continued existence of humanity, we are actually obligated to ensure that we do *not* bring human beings into the world if it becomes clear

that our present actions would leave particularly harsh conditions for future generations. In *The Imperative of Responsibility*, Jonas recognizes the possibility of this type of argument and considers it a version of the view which he tells us was "common during the Hitler period" according to which parents claim that it would be wrong to bring a child into this type of world.[22]

If our argument from the preceding chapter goes through, then this type of view is undercut, but given the prevalence of this view it is worth considering one thinker's arguments in support of the "right to non-existence" in order to see the how our account interacts with such a viewpoint.

3.1 The Right to Non-Existence

Joel Feinberg and the Right to Non-Existence

Joel Feinberg takes up the question of our obligation to ensure the continued existence of humanity in his essay entitled "Is there a right to be born?" In this essay, Feinberg reaches the conclusion that far from there being a right to be born there is actually a right to *not* be born in certain cases. In order to reach this conclusion, Feinberg argues that the case of future generations is analogous to the case of the unborn fetus. In a previous essay, "On the Rights of Animals and Future Generations," Feinberg had identified the capacity to have rights with the capacity to have interests, and he relies on this alleged identity in this particular argument. In "Is There a Right to be Born," Feinberg lists any number of rights which the fetus will have contingent upon the fetus actually being born, but the central question of the essay is whether or not the fetus can be said to have any "non-contingent rights." In other words, can we ascribe any

[22] Jonas, *Imperative of Responsibility*, 41.

rights to the fetus which are not contingent upon the fetus being born? In particular, does the fetus have a right to be born?

Feinberg concludes that no such right exists; rather there is evidence that the opposite right exists, namely the right *not* to be born in the following way. According to Feinberg, the clearest cases of rights that a fetus does have are rights to the present protection of future interests, on the assumption that he will be born. To say that he has such a right to x is to say that x must be held for his arrival. Thus, Feinberg reasons, if the conditions for the eventual fulfillment of his future interests are destroyed before he is born, the child can claim, after he has been born, that his rights (his present rights) have been violated. But if, before the child has been born, we know that the conditions for the fulfillment of his most basic interests have already been destroyed, and we permit him nevertheless to be born, we become a party to the violation of his rights. On Feinberg's view, in such circumstances, a proxy for the fetus might plausibly claim on its behalf, a right not to be born. That right is based on his future rather than his present interests; but of course it is not contingent on his birth because he has it before birth, from the very moment that satisfaction of his most basic future interests is rendered impossible. In this way, Feinberg concludes that the only non-contingent rights fetuses ever have is the right not to be born.[23]

For Feinberg, future generations are in an analogous situation. Since future generations do not exist, we cannot ascribe rights, interests, or desires to them. However, we can assume that they will have interests once they actually come into existence. If we recognize that our actions will leave future generations a world in which these interests cannot be satisfied, we are obligated to ensure that there are no future generations. The only way to prevent from violating

[23] Joel Feinberg, *Rights, Justice, and the Bounds of Liberty* (Princeton: Princeton University Press, 1980), 207-220.

their interests is to prevent them from being born—the only way to avoid harming them is to prevent them from coming into being.

Refutation of the Right to Non-Existence

Even if one were to deny that our argument from the preceding chapter demonstrates that we are obligated to ensure the continued existence of humanity, an argument for the right to non-existence on the basis of future deplorable conditions is still implausible. The basic problem with this type of argument is determining exactly what constitutes conditions so deplorable that life is no longer worth living. In Feinberg's argument this shows up when he references "vital interests." On Feinberg's view, if certain vital interests are violated then we do a potential person or group of persons harm in bringing them into being.[24] The challenge arises in determining precisely what these vital interests are.

We can indentify some potential candidates for these vital interests. Access to clean water, healthy food, and reasonable shelter all could perhaps be considered vital interests. We might be tempted to conclude that a life without any of these conditions would not be worth living. The problem with attempting to determine whether a life is worth living on the basis of these types of material conditions is that such an attempt does not take into account the internal subjective dimension of human experience.

In the context of our problem, it seems that one crucial question for determining whether a life is worth living is the question the individual poses to herself—namely, "is *my* life worth

[24] In this section we assume, as Feinberg does, that future humans (to whom we leave deplorable conditions) are sufficiently similar to contemporary humans to still have the capacity to engage in ethical conduct. In other words, we imagine these future humans as rational agents who find themselves in deplorable conditions as a result of our actions.

living?" Surely an affirmative answer on the part of the individual counts for more than any sort of external analysis of the objective conditions of a particular existence. The philosopher must not be prejudiced by the Socratic maxim, "the unexamined life is not worth living," in this matter. Even for Socrates, the examined life is valuable as a means to an end. When Socrates tells Crito that is it not life, but rather the good life that is important, he immediately makes clear that the good life, "and the just life are the same."[25] Socrates further insists that all unjust actions occur due to a kind of ignorance because committing an injustice always harms the perpetrator and no one would willingly harm himself.[26] In this way, for Socrates, through examining our lives we are able to avoid harming ourselves by engaging in unethical conduct. Hence, the notion that the unexamined life is not worth living holds because the unjust life is not worth living and the unexamined life too easily becomes the unjust life. But when Feinberg argues for a right to non-existence, he does not do so on the fear that future humans will be some kind of automatons, incapable of rational agency. Instead, for Feinberg, we must not bring future humans into the world if their "interests cannot be satisfied." Within this context, we insist that the crucial question must be left to the individual, who asks herself, "is *my* life worth living, despite *my* interests not being satisfied." If a person does not believe that the deplorable conditions in which she lives makes her life not worth living, on what basis do we argue with her?

For this reason, any view that attempts to claim that future generations have a right *not* to be born if certain conditions are not met seems to falter. The problem is that since future generations do not exist we cannot ask them if their lives are worth living. But if we cannot ask them if their lives are worth living we are missing a crucial element in determining whether or

[25] Plato, *Five Dialogues*, 51.
[26] Plato, Five *Dialogues*, 30.

not their lives are worth living. How then can we claim that any future conditions, no matter how deplorable, would be such that future generations would wish that they had never been born? To make such a claim is to ignore the subjective element of experience that is crucial to making this determination.

3.2 What We Owe Future Generations

In this way, future deplorable conditions cannot override our obligation to ensure the continued existence of humanity.[27] The good human life presupposes the existence of human life, and we must ensure this existence before we can say anything about the conditions of this existence. But does this mean that our obligation to ensure the continued existence of humanity tells us nothing about the conditions we must provide for future generations?

As Jonas points out, we are able to determine, in part, *what* we owe future generations from the very reason *why* we are obligated to ensure the existence of future generations. To be sure, this is not the same as a full accounting of everything we might possibly owe future generations. Rather the claim is that if we consider why we are obligated to ensure the continued existence of humanity, we can begin to uncover some of what we owe to future generations. In other words, our duty to ensure the continued existence of humanity is not completely indifferent to the conditions of that future existence.

[27] Admittedly, the situation is different if the only way to preserve the human species is to undercut the possibility of rational agency. We cannot meet our obligation to ensure the continued existence of humanity if this future 'human' species does not possess the capacity to engage in ethical conduct. This follows straight-forwardly from our imperative which tells us "act so the effects of your actions are consistent with the permanence of ethics." If the human species we preserve is no longer capable engaging in ethical conduct, then we do not meet our obligation to ensure the continued existence of humanity. It is not really clear that such a species would still be "human." For this reason, the proposition in question holds: "future deplorable conditions cannot override our obligation to ensure the continued existence of humanity."

We have claimed that our obligation to ensure the continued existence of humanity is based on the recognition that if ethics is to have legitimacy in the present, then we must affirm the ethics should continue to exist in the future. But if we are obligated to ensure the continued existence of humanity on the basis of humanity's capacity to engage in ethical conduct, then as part of that obligation we are also obligated to attempt to provide for the preconditions of that activity to the greatest extent possible. Generating a complete list of these preconditions would require a systematic investigation of ethics in general. However, even from the narrow frame of the current investigation we can identify some of these preconditions, albeit in an unsystematic manner.

First and foremost life of rational agency is required for the appearance of ethical conduct. For this reason, our obligation requires us to ensure that the consequences of our activities do not undercut the possibility of human life in the future. The continuance of life requires any number of natural conditions, so we must ensure that the natural preconditions are not denigrated to such an extent that human life can no longer be sustained. Providing these basic necessary conditions for life is just directly entailed by our obligation to ensure the continued existence—if we are obligated to ensure the continued existence of humanity then we are required to ensure that the basic necessities for life are not too depleted to continue to sustain life.

It seems that our obligation to ensure the continued existence of humanity might require us to provide more than just these basic necessities though. The reason is connected to the general rule that when we weigh the possible positive outcomes of our actions we must recognize that none of these positives can compare with the possible negative outcome of the unforgivable act of undercutting the possibility of humanity in the future. This rule is relevant

for our current question of the conditions we must provide for future generations because we recognize that people in desperate situations are more likely to make desperate decisions.

If we leave future generations in a desperate situation, then it seems there is a greater likelihood that these generations will be willing to risk the survival of humanity for the sake of improving the lot of humanity. Of course, it is impossible to spell out all of these situations in advance, but Jonas does present one possible example of where desperate conditions could lead future humanity to risk the survival of the species for the sake of improving the conditions of one part of the human population. The situation Jonas imagines is one in which parties warring over dwindling resources turn to nuclear weapons to eliminate their enemies.[28]

If we are prohibited from risking the entire survival of humanity in order to improve the lot of humanity, then we must not place future generations in a situation in which such a risk seems reasonable. For this reason, we are obligated to leave sufficient natural resources for future generations so that they are not put into a desperate situation. Determining what constitutes "sufficient natural resources" is an empirical question which must be left to the positive sciences.

Additionally, our duty to collect extensive data and conduct possible alternatives analysis for all of our large scale projects impacts the content of what we owe future generations. Specifically, we are obligated to ensure that the data which we collect about the impacts of our actions is passed on to future generations. For any large project, we can compare the predictions provided by our model to the actual impacts caused by the project. Passing this kind of

[28] Jonas says, "Darkest of all is, of course, the possibility that one will lead to the other; that in the global mass misery of a failing biosphere where 'to have or have not' turns into 'to be or not to be' for whole populations and 'everyone for himself' becomes the common battle cry, one or the other desperate side will, in the fight for dwindling resources, resort to the *ultima ratio* of atomic war—that is, will be driven to it,." *Imperative of Responsibility*, 203.

information along to future generations ensures that their modeling can be more reliable than our own modeling.

In this way our obligation to ensure the continued existence of humanity requires us to leave both sufficient natural resources to avoid placing future humanity in a situation where risking the future of humanity appears as a good option, as well as requiring us to leave as much information as possible to future generations so that they are able to make fully informed decisions.

Beyond providing for preconditions, our general duty to future generations is just to leave the future as open as possible. Presumably, future generations will have even greater technological power than we do, and the more paths we leave open to future generations, the more ability future generations will have to improve the lot of humanity without putting the future of humanity at risk.[29]

[29] Admittedly, there is nothing necessary about the continual increase of the power of technology. It is conceivable that future generations will choose to reduce technological power or even forget how to construct the technology we currently possess. Indeed, we can point to historical examples of human culture losing technological "know-how." For instance, when the dome of the Santa Maria Del Fiore was designed no dome of that size had been constructed in over 1000 years. Brunelleschi is said to have studied ancient domes, such as the Pantheon, in an attempt to unlock the secret of their construction. Still, given the current state of the technological world, it is hard to imagine technological progress slowing any time in the near future.

CHAPTER FOUR:

EXISTING ECONOMIC AND POLITICAL SYSTEMS AND OUR OBLIGATION TO ENSURE THE CONTINUED EXISTENCE OF HUMANITY

We have said that we are obligated to ensure the continued existence of humanity. In this chapter we investigate the question of how we can meet this obligation. Attempting to determine how we can meet our obligation necessarily involves a consideration of whether existing political and economic structures will allow us to meet this obligation. This investigation is necessary because the potential threat to the continued existence of humanity arises due to the cumulative impacts of the collective use of modern technology. What collective uses of modern technology truly put the future of humanity at risk? As previously noted, evaluating the accuracy of various doomsday scenarios is not in the purview of a philosophic investigation. Still, broadly speaking, the threat to the future of humanity through the collective use of seemingly benign modern technology comes in primarily two forms.[1] First, we could potentially deplete resources in such a way that future generations would not have sufficient resources to survive. Second, we could potentially overburden the earth with the discharges of our technological use in such a way that the earth might not be able to continue to support human life. The first threat is the threat that comes from the overconsumption of scarce resources; the second threat is the threat of

[1] Here as elsewhere we focus on the use of seemingly benign mundane technology rather than the threat to humanity posed by apocalyptic weapons, which also arises due to modern technological power.

discharging excessive byproducts.[2] We will analyze existing political and economic systems with this dual threat in mind.

Since this challenge arises due to collective action, our investigation must consider the two most expansive forms of collective human activity—namely, economic activity and political activity. Undoubtedly, the question of what political and economic system is best for future generations has generated much philosophic literature. Again, our investigation views this problem from a much narrower lens. For our purposes, the relevant standard for evaluation is whether a political or economic system is inconsistent with the continued existence of humanity in the future. If a given system is inconsistent with the continued existence of humanity then, needless to say, our obligation requires us to reject that system. However, to say that a given system is consistent with the future existence of humanity does not mean that such a system necessarily has legitimacy. There are numerous other considerations that go into determining the legitimacy of a political and economic system that are beyond the scope of our investigation. In this way, our investigation can possibly identify some illegitimate systems, but does not possess the tools to affirm a given system as legitimate.

Additionally, even the most cursory consideration of existing states reveals that political and economic systems can be mixed and matched in a wide variety of ways. The question of whether these existing states are acting in a manner which is consistent with the future of humanity does likely also lend itself to empirical investigation. There are any number of measures which would be relevant to such an investigation. How much energy does a state consume? How much carbon does a state release into the atmosphere? However, our investigation concerns itself neither with these empirical questions, nor with the particularities of

[2] Depending on how we view the balance of various natural processes we could think of this as a single threat instead of two threats.

the political and economic systems of individual states. Instead we consider whether the systems possess any necessary features that render these systems inconsistent with the continued existence of humanity in the future.

I. Our Obligation to Ensure the Continued Existence of Humanity Presents a Challenge to the Free Market

What are the chances that a free market economy characterized by agents acting in accordance with the profit motive will allow us to meet our obligation to ensure the continued existence of humanity in the future? At the outset the profit motive seems to provide some advantages for meeting our obligations to future generations. As Jonas points out, the profit motive provides incentive for efficiency in the production of goods.[3] Any inefficiency in production will result in decreased profit for the producer. Inefficiency in production results in higher production costs. In order to maintain the same profit margin the producer can pass these increased costs onto the consumer, but doing this opens the door for a more efficient competitor to undercut the price of the good. In this way, the profit motive provides producers an incentive to be as efficient as possible in the production process.

1.1 How the Profit Motive Provides Incentive for Waste

However, the profit motive does not always provide incentive for maximal efficiency. As Jonas points out, the profit motive provides incentives for inefficiency on the consumption end. Producers motivated by profit always have incentive to move into new markets, and where

[3] Jonas, *Imperative of Responsibility*, 146.

markets do not exist to create new markets. In particular, Jonas notes that the profit motive provides incentives to attempt to create demand for frivolous products. Jonas seems to take it as self-evident that the profit motive provides incentive to create demand for frivolous products, but it is worth considering why this might be the case.

From one perspective, claiming that any particular market is frivolous appears nonsensical. The laws of the free market dictate that production will follow demand. In other words, the frivolous market will only continue to exist as long as there are consumers willing to buy the frivolous product. On what basis then do we call one product frivolous and another valuable? After all, if consumers deemed that the product was not valuable it would disappear. Jonas' point seems to be the following: from the perspective of the profit motive, markets are either profitable or unprofitable, there seems to be no way to distinguish between frivolous and serious products. Indeed, if an economy is governed by the profit motive, then producers seem to always have an incentive to create new markets for any profitable product, without regard for its frivolity.

Jonas is, of course, right to insist the profit motive will always provide incentive for the creation of new markets. But what is meant by "frivolous"? We have said that the danger associated with the collective use of modern technology comes from the overconsumption of finite resources as well as the discharge of excessive byproducts. Inasmuch as a market contributes to either of these two dangers we might say that a market is worse than frivolous it is truly unethical. However, the particulars here are tricky. For the sake of analysis, we assume that any market that provides for the vital needs of any of the earth's human inhabitants is non-frivolous. Admittedly, despite amazing technological advances we still do not provide for the vital needs of all of earth's inhabitants, but this possibility has always been among the great

promises of modern technology. In order to see the challenge in determining precisely what a frivolous market is, we imagine a world in which a free market, characterized by producers motivated by profit, has given access to the entire world population to those products that are necessary for them to maintain their lives.[4]

It is likely that the mere provisioning of the vital needs of all of the earth's human inhabitants would not result in the overconsumption of the finite resources or the discharge of excessive byproducts in a way that would threaten the continued existence of humanity in the future. If this is true, then there is additional space for non-vital markets. How can we determine which of these non-vital markets are frivolous and which are not frivolous? The challenge is that the carrying capacity of the earth is likely such that it can support some non-vital markets, but at some point the constant creation of new markets for non-vital products could exceed the carrying capacity of the earth.

An economy driven by the profit motive runs into this challenge, not only in providing incentive to create new "frivolous" markets, but also in that the profit motive provides incentive for producers to build in obsolescence to their products. The reason for this incentive is apparent enough: if a product lasts a lifetime, each time a consumer buys that product she is permanently removed from the market. If a product is constructed in such a way that it will break down, then the consumer must return to the market. Admittedly, competition works to alleviate this effect because presumably if one competitor makes a product that is more durable, then this producer will sell more products than her competitors. Still, all producers in a given market have incentive to produce goods which have built in obsolescence.

A similar phenomenon is seen in technological "gadget" markets. Producers entice consumers back into the market by adding one or two new features to the new version of the

[4] Here we ignore all the barriers to this possibility inherent in an unregulated market.

substantially similar product each year. The point is simply that the profit motive seems to provide incentive for a continual increase in production.

Indeed, endless growth seems to be inherent to the profit motive. Increasing competition in a given market reduces profit per unit sold. For this reason, if producers are to survive, they must accumulate capital so that they can expand their scales of output. Moreover, enterprises must continually invest more resources to increase productivity. Producers who do not continually invest to become ever more productive will eventually be overcome by competitors.[5] This continual increase in production threatens to overtax the carrying capacity of the earth through the excessive discharge of byproducts and the overconsumption of vital resources.

1.2 Ensuring Markets Receive Accurate Signals Alleviates Tendency to Waste

What tools does a free market economy possess to address these challenges? According to Paul Hawken, Amory Lovins, and L. Hunter Lovins, one reason that the free market seems to provide incentive for dangerously excessive overconsumption is because markets have not

[5] This feature of capitalism was already apparent to the classical economists. See for instance, Adam Smith, *Wealth of Nations: Part One* (New York: P.F Collier and Son: 1901) 120-151. This feature of capitalism has also been emphasized by researchers doing work in environmental sociology. Allan Schnaiberg, Kenneth A. Gould, and David N. Pellow refer to this feature of capitalism as the "treadmill of production." According to treadmill of production theory, "newer technologies were inevitably more energy intensive and chemical-intensive on the one hand, and less labor-intensive, on the other. Capital mobilization for these changes in production technology arose from a substantial postwar economic boom, which led to increased production and profits. Next, these profits were disproportionately used to develop and introduce new physical technologies. However, to amortize the fixed and operating costs of the new technology, production generally had to be substantially increased. In turn, this increased the demand for natural resources, both energy and other. Once in place, the expanded production of the new technologies substantially increased both the volume of production waste, and the toxicity of wastes (due to increased use of chemicals)." Kenneth A. Gould, David N. Pellow, Allan Schnaiberg, "Interrogating the Treadmill of Production: Everything You Wanted to Know about the Treadmill, but were Afraid to Ask" (paper presented at the Symposium on The Treadmill of Production, Madison Wisconsin, December 29, 2003).

always received the correct pricing signals with regards to natural resources.[6] One example of markets receiving incorrect signals is seen in the common practice of governments providing subsidies for the extraction of various raw materials. The result of these kinds of subsidies is that the price of the raw materials is artificially deflated. From this perspective, the incentive to excessively consume natural resources is not inherent to an economy governed by the profit motive, but rather the problem occurs due to the market receiving faulty pricing signals. On this view, overconsumption is, at least partially, the result of the price of products being artificially reduced due to the market receiving errant signals on the raw materials end. If the true scarcity of natural resources was adequately reflected in the price of goods, then goods would be more expensive and thereby consumed at a lower rate.

It does seem plausible enough that if the true extraction cost of natural resources is accurately reflected in the price of products that producers and consumers both will have incentive to be more careful in the consumption of those resources. Take the problem of built in obsolescence as an example. If products are more expensive consumers are motivated to demand that these products be more durable. Similarly, producers have incentive to not only reduce the natural resources required for the production of goods, but producers also have incentive to buy back old models of their products for the purpose of reusing the materials. This in turn, provides incentive for consumers to not simply throw away their old goods but rather recycle these goods. For this reason, it does seem plausible that if the market receives accurate information about the scarcity of resources, the profit motive provides powerful incentives for all participants in the market to conserve those resources.

[6] Paul Hawkens, Amory Lovins, and L. Hunter Lovins, *Natural Capitalism: The Next Industrial Revolution* (Boston: Little, Brown and Company, 1999), 5.

Needless to say, some resources are more important for the survival of the species than others. We have suggested that free market forces provide incentive to conserve any scarce resource (or seek a cheaper substitute), independent of whether or not that resource is vital for the continued existence of humanity. For the purposes of our investigation, we are, of course, focused on the resources that are necessary for the continued existence of the species.[7] From this perspective, the key point is that if markets receive adequate pricing signals then the profit motive seems to provide reason for consumers and producers to conserve vital resources.

1.3 The Problem of Discharging Waste Products

Even if an economy governed by the profit motive is able to overcome the challenge of providing incentive to excessively consume resources, it still faces the difficulty of ensuring that the discharged waste of economic activity does not overtax the filtering capacity of the earth. The byproducts of market activity come in various forms, and these varying forms provide different challenges in meeting our obligation to ensure the continued existence of humanity for an economy motivated by profit. For the sake of this investigation, we divide these discharges into two broad categories: solid waste and non-solid waste. Admittedly, this distinction is crude, and it is likely that an empirical investigation would identify any number of byproducts that do not neatly fit into either category. However, utilizing this rough distinction will allow us to begin to see the different kind of challenge that different types of discharges present to an economy motivated by profit.

[7] The question of exactly what resources are required for the continued existence of humanity is an empirical question and as such we set it aside.

Solid Waste and the Free Market

With regards to solid waste, as we have already seen, the profit motive does seem to provide incentive for the reduction of some of these discharges. In particular, producers and consumers both seem to have incentive to recycle materials which have become scarce—increasing scarcity increases the prices of these materials, thereby making it more likely that it will be profitable to recycle scarce materials. For this reason, we can expect that scarce materials will have a tendency to not become waste products at the end of the life of the product. However, it is less clear that the profit motive provides incentive to limit the discharge of materials which are not scarce. Moreover, in an economy motivated by profit, the increasing cost of scarce materials provides incentive to find substitutes for the scarce materials. If more plentiful substitutes can be found then a producer reduces production cost, which in turn allows her to increase profits. From the standpoint of not depleting the earth's resources this is good news. However, from the standpoint of not overtaxing the earth's filtering processes the incentive to find substitutes represents a challenge. The profit motive provides a producer powerful incentive to reduce the use of scarce materials, but there seems to be no profit to be made in reducing the total volume of solid waste discharged.

One possible means available to an economy motivated by profit to overcome this challenge is to ensure that solid waste is disposed of on private property. If disposal sites are privately owned then the forces of self-interest and competition again can provide an incentive to reduce the amount of solid waste discharged through market activity. This incentive arises because private owners of disposal sites will not allow their property to serve as a disposal site for free. For this reason, the disposal of solid waste comes to have a cost which can become

accounted for in market pricing mechanisms. There a few ways this could happen, but the most straight-forward example is the consumer who is considering purchasing a product. If the consumer knows that she will have to pay a fee to dispose of the product, then she has incentive to both buy longer lasting products as well as products with lower disposal costs. The disposal cost could be lowered in two basic ways. First, any part of the product which can be recycled would not need to go into a disposal site. So, consumers have additional incentive to recycle. Second, presumably the disposal cost would be tied to the amount of waste put into the disposal site. For this reason, consumers have additional incentive to purchase products which require the least amount of waste to go to the disposal site.

Non-Solid Waste Poses a Challenge to the Free Market

The archetypical category of non-solid waste is atmospheric discharge associated with market activity.[8] On the surface non-solid waste presents the same challenge for an economy motivated by profit as the challenge presented by solid waste. In other words, the problem seems to be that the profit motive provides no incentive to reduce these emissions because there is no market cost associated with discharging them. Moreover, inasmuch as reducing these emissions would be more expensive than not reducing emissions, the profit motive actively serves as a barrier to reducing these emissions. In the case of solid waste, it seems that privatizing disposal sites would allow the profit motive to provide incentive for reducing solid waste. However, the nature of non-solid waste as well as the nature of the "disposal sites" for non-solid waste seems to resist attempts to conceive of these sites in terms of private property. The challenge arises

[8] According to the Stockholm Resilience Center, climate change, atmospheric depletion, and atmospheric aerosol loading are all threats to the continued existence of humanity. Each of these challenges is associated with waste products that we include in our category of "non-solid waste."

because one necessary condition for the existence of private property is an identifiable boundary. In other words, private property requires that we can determine where the private property begins and ends.

It is not clear how we could conceive of atmosphere in terms of private property because there is no discernible boundary between 'my atmosphere' and 'your atmosphere.' It seems that the very nature of atmospheric discharge involves emitting waste products into a common space. But if the atmosphere cannot be conceived of in terms of private property then there is a worry that the profit motive will provide no incentive to reduce atmospheric discharge. In order to see this, we begin with the assumption that there is some economic benefit associated with discharging emissions into the atmosphere—for the sake of argument we consider the case that some product can be made more cheaply by increasing emissions. The basic problem, as Garrett Hardin points out, is that the division between costs and benefits is not equal. The burden of an atmosphere with higher emissions is born by everyone while the benefit of increasing emissions is reaped only by the individual producer.[9] An individual producer might recognize that increasing atmospheric emissions is bad for everyone, but what incentive does the profit motive provide to reduce emissions in this case? Every producer is motivated to increase profit and making products more cheaply by increasing emissions increases profits.

Is there any way for an economy motivated solely by profit to address the challenge that the problem of non-solid waste presents to our obligation to ensure the continued existence of humanity in the future? Earlier, we saw that Jonas criticizes the tendency of the profit motive to provide incentive to create markets for frivolous products because the profit motive is indifferent to what products are exchanged in markets—the profit motive provides incentive to create a market for anything that can be exchanged profitably. But this indifference to the nature of the

[9] Garrett Hardin, "The Tragedy of the Commons," *Science* 162 (1968): 1243–1248.

product sold in a given market, means that, at least at the outset, there is no prohibition to creating a secondary or derivative market for this very non-solid waste that potentially threatens the continued existence of humanity. For example, if there were profit to be made in a private carbon exchange market, the profit motive provides no barrier to the creation of such a market—in fact the profit motive would provide incentive for such a market, on the condition that it could be profitable.[10]

Admittedly, it is more common to conceive of these types of exchanges as being administered by some sort of governmental body, however, it seems that a private industry group could also set up a market for any emissions trading. For instance, an industry group could set targets for total industry emissions of carbon. Based on that target, the industry group would create shares of allowable carbon emissions. Then the industry group would need to find producers willing to enter this carbon market. A producer entering the market would be sold carbon shares. The producer then would have the choice to either use those shares through actually emitting the carbon or selling shares to other market participants who desired to emit more carbon than allowable based on the number of carbon shares that participant owned. If there were secondary markets for non-solid waste emissions, then the profit motive would provide incentive for all market participants to reduce emissions.

The basic problem with creating a private secondary market for emissions trading is finding sufficient market participants to ensure liquidity in the market. In other words, if there are to be any exchanges in an emission market there must be both market participants willing to sell shares as well as participants willing to purchase shares. In simplest terms, those who are selling shares are using less carbon than is permissible, and those who are buying shares are

[10] Our analysis of carbon exchange could equally apply to other non-solid waste.

using more carbon than is permissible.[11] But it is not clear how a private exchange could generate the required number of market participants. Specifically, it is apparent enough why a producer that believed it was an under-emitter would purchase the shares to enter the market—the under-emitter could achieve a profit by selling these shares to the over-emitters. But why would an over-emitter ever enter a voluntary exchange market?[12] After all, these over-emitters would be signing up to increase the cost of their operations. It seems that the profit motive provides over-emitters incentive to *not* enter voluntary emissions exchanges. If there are no over-emitters in the market, then there is no reason for under-emitters to enter the market. Under-emitters who enter an exchange with no over-emitters are purchasing shares which cannot be sold, and as such, under-emitters are also unable realize a profit in a voluntary emissions exchange.

For these reasons, there is little reason to think that private secondary markets are the solution to the challenge non-solid waste presents for our obligation to ensure the continued existence of humanity. Accordingly, it is not clear how the profit motive *alone* can address the problem of the emissions of non-solid waste. The basic problem is that the nature of non-solid waste is such that it resists attempts to conceive of disposal sites in terms of private property. If the profit motive is unable to overcome this challenge then we must conclude that an economy governed *solely* by the profit motive is inconsistent with our obligation to ensure the continued existence of humanity.

[11] Admittedly, in an actual market, there would be other reasons to buy and sell emissions shares, but we ignore these reasons for the sake of simplicity.

[12] Admittedly, it is possible that there are non-economic reasons why an over-emitter might want to enter such a market. Still, any enterprise which succumbs to non-economic concerns is put at risk of losing ground to its competitors. For this reason, in this section, we constrain our analysis to an examination of the profit motive.

II. Options for Overcoming the Challenges Our Obligation to Ensure the Continued Existence of Humanity Presents to the Free Market

From the perspective of our obligation to ensure the continued existence of humanity, the basic problem with the unregulated free market is that it does not automatically preserve the natural preconditions necessary for the continued existence of human life. Ensuring that the market receives the correct pricing signals with regards to both the scarcity of resources as well as disposal costs can mitigate some of these problems. However, the nature of some of the emissions associated with economic activity undercut the effectiveness of any possible private intervention. For this reason, we have little choice but to conclude that our obligation to ensure the continued existence of humanity requires some level of public intervention into the economic sphere.

2.1 Economy of Need and Our Obligation to Ensure the Continued Existence of Humanity

The challenges associated with the profit motive lead Jonas to the view that an economy governed by need likely has a greater chance of allowing us to meet our obligation to ensure the continued existence of humanity. By an economy of need he means an economy in which the production of goods is managed by an external agency that determines what goods to produce. As Jonas notes, the advantage of this type of economy is that a greater rationality is injected into the production of goods.[13]

This advantage can be seen in two of the problems we already mentioned: the problem of built in obsolescence, and the problem of the production of frivolous goods. If a producer does

[13] Jonas, *Imperative of Responsibility*, 145.

not have to be motivated by profit, she has no incentive to produce products with built in obsolescence. In a managed economy motivated by need, making products which are not as durable as possible simply means more work for the producer, but without any accompanying benefit. Similarly, the incentive for the creation of frivolous markets seems to fade away in a managed economy motivated by need. If there is no obvious benefit to the production of a good it will not be produced. In this way, an economy of need is able to avoid some of the perverse incentives that seem to arise in an economy of profit.

However, the elimination of these perverse incentives also means giving up on some of the positive incentives associated with the profit motive. In particular, the profit motive gives producers incentives to be as efficient as possible in the production process because efficiency in production can be realized as profit. As Jonas points out, there is no similar incentive for an economy of need.[14] This problem is likely not fatal inasmuch as an economy of need is immune to the drive for ever increasing expansion that might seem endemic to the profit motive. But is an economy of need really immune from the drive to endless expansion?

At least in the short term, an economy motivated by need must expand just as much as an economy of profit. Presumably, one reason to opt for an economy governed by the need standard is that every member of society is promised a decent standard of living. Needless to say, what constitutes a decent standard of living is subject to debate, but minimally this standard must exceed the standard of living of the lower classes of an economy motivated by profit. As Jonas points out, "equal poverty for all," guaranteed by the state, is hardly a winning slogan for the cause of socialism.[15] For this reason, an economy of need must expand at least until the point when an equitable distribution of the social product can provide a decent standard of living. In

[14] Jonas, *Imperative of Responsibility*, 145.
[15] Jonas, *Imperative of Responsibility*, 144.

principle, it seems that a managed economy might be able to restrict growth once this point was reached. The question is whether the body managing the economy would be politically able to restrict growth.[16]

Even if the managed economy is able to restrict growth internally, it is not clear the economy governed by the need-standard would really be immune to the drive to maximization associated with the profit motive. As Jonas notes, nothing precludes a managed economy of need from striving after a collective profit.[17] Jonas is specifically concerned about the possibility of an economic imperialism, in which a socialist economy exploits natural resources of a less developed states—a kind of socialist colonialism. We will explicitly take up this problem in the next chapter.

But even in the absence of imperial ambitions it is not clear that a nation with an economy of need can totally avoid the profit motive. The reason for this is that nations do not exist in isolation. Any exchange between nations seems that it will once again be subject to the forces of self-interest and competition. It seems that there will only be demand for a nation's exports if those exports are competitively priced. In this way, even a need-based economy is not immune to the forces of the profit motive.

Still, an economy of need is set up to address many of the challenges that our obligation to ensure the continued existence of humanity presents to an economy motivated by profit. In particular, the previous mentioned challenge of non-solid waste can be addressed in an economy of need by a government mandate limiting or even prohibiting the emission of harmful byproducts. Similarly, the challenge of excessive consumption of natural resources can again be met by government mandate. For these reasons, Jonas is likely correct in his view that a

[16] We take up this question later in the chapter.
[17] Jonas, *Imperative of Responsibility*, 152.

managed economy of need is consistent with the continued existence of humanity in a way that a non-regulated economy motivated by profit is not.[18] For our investigation, it is important to keep two points in mind.

First, many of the advantages we have associated with an economy of need are not necessarily exclusive to an economy of need. It seems, from the perspective of this investigation, the chief advantage of the economy of need is that, through external intervention, the economic sphere gains greater rationality than is associated with the logic of self-interest and competition. In other words, the economy of need can have the continued existence of humanity as an end, and it is not clear that this end is inherent in an unregulated economy of profit. But all this demonstrates is that there must be *some* level of external intervention into a free market economy. It does not follow that our obligation to ensure the continued existence of humanity requires a *completely* managed economy. In the following section, we consider whether our obligation to ensure the continued existence of humanity could also be met through *limited* external intervention into market activities.

Second, once it becomes clear that our obligation to ensure the continued existence of humanity requires external intervention into the economic realm we must determine if existing political systems are capable of providing the necessary intervention. In the third section of this chapter we consider whether representative democracy is capable of intervening in the economic sphere in a way that will allow us to meet our obligation to ensure the continued existence of humanity, or whether, as Jonas suggests, our obligation might require an autocratic regime.

[18] Jonas, *Imperative of Responsibility*, 151.

2.2 The Challenge of Endless Expansion Poses a Problem for Government Intervention into the Free Market

The possibility of government intervention into the free market does seem to offer some hope that a free market economy could allow us to meet our obligation to ensure the continued existence of humanity. One example of the benefits of this type of intervention can be seen in the problem of non-solid wastes we considered earlier. It is not clear how the profit motive gives producers any reason to reduce the emission of these types of waste because the nature of these byproducts is such that they defy attempts to conceive of them in terms of private property. This type of challenge can be overcome through external intervention into market activity. For instance, government can introduce incentives to reduce these emissions through taxing emissions or setting hard caps on the emission of certain waste products. In this way, it seems that government intervention into the free market can address many of the same challenges that the need based economy addresses. If this is so, then, from the perspective of our obligation to ensure the continued existence of humanity, there is no reason to prefer an economy of need over and economy motivated by profit, as well as no reason to prefer an economy motivated by profit over an economy of need. If there is nothing inherent in either economic system which makes it necessarily inconsistent with the continued existence of humanity, then our investigation must place them on equal footing.[19]

[19] This, of course, does not mean that there are no reasons to think that one of the systems might be normatively superior to the other. It merely means that these reasons do not appear at the level of our investigation. If both systems are consistent with the continued existence of humanity, it means we are free to pursue other avenues to determine which system is normatively superior.

However, critics of capitalism have argued that capitalism's need for endless growth creates a situation that cannot be maintained.[20] Various Marxist thinkers have expressed this problem in different ways, but the central move of the argument involves two basic premises.[21] First, the carrying capacity of the earth is finite. Second, capitalism can only survive through endless growth. Hence, any capitalist economy will eventually overflow the natural limits of the earth because the earth cannot sustain infinite growth. In this way, capitalism's need for endless growth is not compatible with the continued existence of humanity. If this argument goes through, then it does seem that our obligation to ensure the continued existence of humanity in the future does require us to do away with capitalism.

We consider the premises one at a time. First, we must be clear about the finitude of the earth. It is not as if the earth is a storehouse with *n* number of finite resources—where each item we use can never be replaced. Instead, the earth is characterized by numerous cyclical processes, some organic, some inorganic, that allow the earth to replenish the stocks of many of its natural resources and even cleanse itself of some pollutants. This point is, of course, recognized by Marxist thinkers, but it is important for our investigation because it allows for the possibility of the sustainable use of the earth. In other words, it is at least conceivable that we could use the earth's resources in a way that would allow the earth to replace what we use. The critics of capitalism do not deny this, but rather claim that the very nature of capitalism is such that it cannot constrain itself to a sustainable level of use.

There are two important questions assessing the sufficiency of this critique. First is endless growth necessarily incompatible with the finite nature of the earth? Second, does

[20] James Bellamy Foster, "Capitalism and the Accumulation of Catastrophe," *Monthly Review* 63 (2011): 3-18.
[21] See, for instance, James O'Conner "The Second Contradiction of Capitalism" *Capitalism, Nature, Socialism* 5 (1994): 105-131. Or Gunnar Skibekk, "Marxism and Ecology," in *The Greening of Marxism*, ed. Ted Benton (New York: The Guilford Press, 1996), 129-136.

capitalism really require endless growth? Admittedly, if we take current ecological assessments at face value, many nations with capitalist economies are not currently acting in a sustainable manner. It must be said that non-capitalist nations have not done much better.[22] But for our investigation, the question is not whether various economies have successfully instituted sustainable practices, but rather whether there is anything inherent to the system that makes it necessarily unsustainable.

Is endless economic growth incompatible with the finite character of the earth? Some have suggested that a capitalist economy can continue to expand through "qualitative development" without continuing to "quantitatively grow" in a way that is unsustainable.[23] Herman Daly, for instance, calls for government caps on non-biodegradable waste as well as non-renewable resource consumption.[24] It does not seem that such caps would necessarily spell the end of capitalism. With these caps in place, the most readily apparent way for a producer to gain competitive advantage is to become increasingly more efficient in the production of their goods. Within existing markets, the space for economically beneficial technological ingenuity would be restricted to new ways to increase efficiency. With regards to the creation of new markets, producers would only have incentive to create markets for those goods, deemed "frivolous" by Jonas, which can be produced *without exceeding the caps*. In principle, seemingly the only limit to the creation of markets for these sustainable activities is human ingenuity. For this reason, it is at least conceivable that economic expansion could continue even while eliminating unsustainable market activities.

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[22] For a review of the Soviet environmental record, see Arran Gare, "Soviet Environmentalism: The Path Not Taken" in *The Greening of Marxism*, ed. Ted Benton (New York: The Guilford Press, 1996), 111-129.
[23] For a nice overview of the central arguments in the steady state economy debate see Michael Benedikt and Michael Oden, "Better is Better than More: Complexity, Economic Progress, and Qualitative Growth," The Center for Sustainable Development Better Working Paper Series 2011 (01).
[24] Herman Daly, "A Steady State Economy" (paper presented to UK Sustainable Development Commission, April 24, 2008).

This brings us to our second question: is it really conceivable that a capitalist economy could exist without *quantitative* growth? As Richard Smith points out, the largest portion of capitalist economies are comprised of large corporations owned by shareholders.[25] According to Smith, the CEOs of these companies do not have the option of seeking to produce as little as they like because they are bound to attempt to maximize profits for their shareholders.[26] While Smith is surely correct that CEOs are required to attempt to maximize profits, they are not required to maximize profits by breaking the law. For this reason, if government caps were imposed, it is not clear why shareholders would hold CEOs responsible for acting in accordance with the law. It seems that the real challenge would be getting these kind of caps imposed in the first place, not making corporations follow the law once it is in place.[27]

The greater economic difficulty with the steady state economy is the problem of unemployment. In an economy where the primary means of increasing profits comes via increasing efficiency on the production end, producers will always have a motive to attempt to increase efficiency to the point where they can lay off employees. If a producer can produce the same amount of product with fewer employees, the profit motive dictates that the producer should lay-off employees.[28] In a normal situation, the producer might keep the extra employee onboard in order to increase production, but in a no-growth economy, that is not an option.[29] Likely, some of these workers could find jobs in newly created markets for sustainable activities. Whether these markets could really make up for all of the lost jobs is less clear. Still, while high unemployment surely counts as a mark against a steady-state capitalist economy, from the

[25] Richard Smith, "Beyond Growth or Beyond Capitalism?"*Real World Economics Review* 53 (2010): 28-42.
[26] Smith, "Beyond Growth or Beyond Capitalism?" 33.
[27] In other words, the challenge is a political challenge more than an economic challenge. We take up this political question in the next section.
[28] Smith, "Beyond Growth or Beyond Capitalism?" 34.
[29]If a society were truly characterized by an ethos of anti-consumerism, demand would likely be further reduced—good from the perspective of the environment and future generations, bad from the perspective of unemployment for the present generation.

perspective of our investigation it does not count as a disqualifying offense. In other words, a high-unemployment rate is not inconsistent with the continued existence of humanity.[30]

In any event, what is clear is that our obligation to ensure the continued existence of humanity will, at least at some point, require substantial political intervention into market activity. Once it becomes clear that our obligation to ensure the continued existence of humanity requires external intervention into the economic realm we must determine if existing political systems are capable of providing the necessary intervention.

III. Political Challenges and The Imperative of Responsibility

In the previous section, we saw that our obligation to ensure the continued existence of humanity requires some level of intervention into the economic sphere. However, while our obligation to ensure the continued existence of humanity does not disqualify a completely managed economy, our obligation does not seem to require us to opt for complete external control of the economy. In other words, both a managed economy as well a market economy (with some level of intervention) can be consistent with the continued existence of humanity, provided that the intervening political body is capable of having the end of preserving the continued existence of humanity. In this way, the question of whether we are able to meet our obligation to ensure the continued existence of humanity cannot help but be a political question. In this section, we take up the question of whether existing political systems are capable of providing the intervention into the economic sphere that is made necessary by our obligation to ensure the continued existence of humanity.

[30] To say it another way: whether these economic crises would eventually undermine capitalism is a different question than the question of whether or not capitalism is consistent with the continued existence of humanity in the future.

While it is somewhat common to link free market capitalism with a representative democracy and a socialist economy of need with an authoritarian political regime there is no necessary connection between these political systems and economic systems. It is quite possible to have either an authoritarian political system coupled with an economy motivated by profit as well as a democratic political system committed to distributing the social product solely according to need. For this reason, the political challenges that our obligation to ensure the continued existence of humanity pose to both representative democracy and autocratic government hold regardless of the economic systems these political systems happen to be coupled with.

3.1 Structural Challenges to Acting on the Future's Behalf in Representative Democracy

As we have seen, our obligation to ensure the continued existence of humanity in the future requires some level of intervention into the economic sphere. In particular, it seems likely that at some point our obligation to insure the continued existence of humanity will require a restriction of economic growth. Is a representative democracy capable of imposing such a limit? As noted by Ederer, Schuller, and Willms, there are structural obstacles within representative democracy that make imposing any burden on the present generation for the benefit of future generations challenging.[31]

Frequent elections can serve to hold elected leaders accountable to their respective constituencies. However, from the perspective of our obligation to ensure the continued existence of humanity, this kind of accountability might seem to be problematic. After all,

[31] Peer Ederer; Philipp Schuller; Stephan Willms, "The Economic Sustainability Indicator," in *Handbook of Intergenerational Justice*, ed. Joerg Chet Tremmel (Cheltenham: Edward Elger Publishing, 2006), 107-125.

leaders are elected by the current generation—future generations do not vote. For this reason, the leader who is responsive to the interests of her constituency has reason to value the interests of the current generation over the interests of future generations. Similarly, the elected official who is motivated only by re-election seems to have little reason to value what is best for future generations. In this way, the leader who cynically pursues re-election as her only goal as well as the leader who is genuinely concerned with the best interests of her constituents both have reason to value short term interests over long term interests. This holds as long as voters are motivated primarily by short-term interests. However, there is nothing inconceivable about voters who choose to value the long-term interests of humanity over their own short-term interests. If a sufficient number of voters recognize our obligation to ensure the continued existence of humanity, then even the most cynical politician, who pursues re-election as her only goal, will act in accordance with this obligation.

Still, our obligation to ensure the continued existence of humanity will likely require the restriction of economic growth, and this restriction will undoubtedly be felt by the existing generation. The worry is that candidates who deny the necessity of saving for future generations will have an advantage over candidates who insist on our obligation to future generations.

Another challenge our obligation to ensure the continued existence of humanity poses to representative democracy arises due to the recognition that meeting our obligation is not something that can be done all at once. Rather, meeting our obligation will require a long-term consistent commitment to pursue policies that are consistent with our obligation to ensure the continued existence of humanity. The worry is that in a representative democracy, each election brings a new crop of decision makers. This presents a challenge to pursuing a consistent continuing plan to meet our obligation to future generations. The worry is that each new crop of

leaders has the opportunity to change course and pursue policies that are not in the interests of future generations.

3.2 Jonas on the Advantages of Autocracy

These types of challenges lead Jonas to conclude that it is unlikely that a representative democracy will allow us to meet our obligation to ensure the continued existence of humanity. As Jonas notes, from the perspective of our obligation to ensure the continued existence of humanity, there are certain advantages to total government power.[32] In particular, Jonas focuses on the ability of an autocratic regime to institute measures which are not popular.[33] As previously noted, self-interest seems to provide a barrier to enacting policies that benefit future generations at the expense of the current generation in a representative democracy. On Jonas' view, this problem can be overcome in more autocratic regimes since there is no need to convince the majority of the necessity of economic restriction.

An autocratic regime also seems to have a potential advantage from the perspective of continuity of policies. Since the autocratic regime is not changing every two to six years, as is common in representative democracies, it seems more possible that an autocratic regime can consistently pursue policies necessitated by our obligation to ensure the continued existence of humanity.

The difficulty is that these seeming advantages of autocracy can just as quickly become disadvantages in the case when a leader comes to power who does not recognize that we are obligated to ensure the continued existence of humanity. In this case, the lack of impediment to

[32] Jonas, *Imperative of Responsibility*, 146-147.
[33] Jonas, *Imperative of Responsibility*, 146.

instituting policies appears as a big negative from the perspective of our obligation to ensure the continued existence of humanity. Moreover, we cannot help but wonder why we should think that the leader of an autocratic regime would be any more immune to the forces of self-interest than the voters in a representative democracy. After all, the leader of autocratic regime is a member of the present generation, and as such, benefits when the interests of the present generation are placed ahead of the interests of the future generation.

On the Necessity of the Popular Recognition of Our Obligation to Ensure the Continued Existence of Humanity

Jonas seems to imagine a situation where the statesperson is a voice in the wilderness, who alone is concerned with the future of humanity.[34] If this were so, then it is possibly true that if this lone voice were an autocratic leader she could be more effective in accomplishing her goals than a lone elected leader in a representative democracy. The lone voice is invested with more power in autocracy and therefore would face less resistance in implementing her policies than a lone elected leader in a representative democracy. However, to say that an autocratic regime faces *no barriers* to implementing policies is surely false. The threat to the future of humanity we investigate arises due to the cumulative impacts of the collective use of modern technology. Overcoming this threat will require a collective commitment to utilize modern technology in a way that is consistent with the continued existence of humanity in the future. Ultimately, the autocratic leader, just as the democratically elected leader, must convince the many to make sure their technological use conforms to this standard. Whereas the autocratic

[34] Jonas says, "The real problem is this: if, as we believe, only an elite can assume, ethically and intellectually, the kind of responsibility for the future which we have now postulated—how is such an elite generated and recruited, and how is it invested with the power for its exercise?" *Imperative of Responsibility*, 147.

leader may be able to more easily able to get this standard enshrined into law, there is still the question of whether the masses will follow this law. In other words, the autocrat must still convince the populace to not undertake a revolution in response to austerity measures.

In this way, all nations, regardless of their political system, are in a fundamentally similar situation—meeting our obligation to ensure the continued existence of humanity requires convincing the many that they must utilize modern technology in a way that is consistent with the continued existence of humanity in the future. It might seem that a regime that can impose this standard through the threat of violence would be more effective at convincing the many. But the many can respond to this threat of violence with a violent uprising of their own.

For this reason, it seems that meeting our obligation to ensure the continued existence of humanity will require some sort of mass movement that aims at a popular recognition of our obligation to ensure the continued existence of humanity. Leadership for this mass movement could originate from the top of the political system, but ultimately if there is to be any hope of meeting our obligation, the many must recognize the necessity of utilizing technology in a manner that is consistent with the continued humanity in the future.[35] For this reason, we must certainly hope that Jonas' assessment that only an elite can assume "ethically and intellectually" responsibility for the continued existence of humanity in the future is off target.[36]

Critique of Jonas' Appeal to an Elite

In several instances, Jonas puts forth the view that in order to meet our obligation to ensure the continued existence of humanity we will need an elite leadership who may need to

[35] It is equally possible that this movement could move from bottom-up in "grassroots" fashion.
[36] Jonas, *Imperative of Responsibility*, 147.

deceive the masses into believing that austerity is good for them.[37] He never explicitly puts forth an argument for why this is the case, but the necessity for a leadership of the elite seems to stem from the fact that technological problems are exceptionally complicated. In other words, in order to understand exactly what threatens the future of humanity we must take into consideration any number of variables coming from any number of different scientific disciplines. For this reason, Jonas tells us that only an "elite" can "intellectually" assume responsibility.[38]

The problem with Jonas' reasoning is that it seems to assume that in order to understand that we are obligated to ensure the continued existence of humanity one must also be able to understand the causal nexus which bring about the threat. However, it is not necessary to understand the details of the threat to humanity in order to recognize that we are obligated to ensure the continued existence of humanity. If a person recognizes that she is responsible for acting in a way that is consistent with the continued existence of humanity she can then rely on advice from experts to help her act in a manner that allows her to meet her duty. It is not necessary for the individual to understand the scientific details of the threat in order to both understand that she is obligated to ensure the continued existence of humanity as well as act in accordance with that obligation. This type of decision making procedure is incredibly common in a world filled with specialists. Consider the following mundane example: I have the end of maintaining healthy teeth. Experts tell us that in order to maintain healthy teeth, I should floss, brush, use mouthwash, etc. So, in order to achieve my end, I utilize the means suggested by the experts without having any real understanding of *why* these means are effective. I could take the time to understand why these means are effective, but in a world full of specialists, it is unlikely that I would have time to understand the underlying reasons for *all* of the means I use.

[37] He explicitly compares this to the "noble lie" in Plato's *Republic*. Jonas, *Imperative of Responsibility*, 149.
[38] Jonas, *Imperative of Responsibility*, 147.

For this reason, it is not necessary to possess scientific knowledge of the underlying causes of the threat to humanity to recognize that I am obligated to ensure the continued existence of humanity. Moreover, it is not even necessary for political leaders to possess this kind of knowledge. Political leaders can rely on predictive modeling from experts as a tool for decision making. It is not necessary for the leaders to understand the details of the construction of the model. For these reasons, there is no need to follow Jonas in the view that only an elite can assume responsibility for obligation to ensure the continued existence of humanity.

3.3 Meeting Our Obligation to Ensure the Continued Existence of Humanity in a Representative Democracy

Provided that an autocrat recognizes that she is obligated to ensure the continued existence of humanity, it does seem that Jonas is right to think that such a regime would be less susceptible to the pressures of valuing the short-term interests of the current generation over the long-term interests of future generation than the elected leadership of a representative democracy. What tools are available to a representative democracy to overcome this challenge?

Constitutional Amendment

One option available to representative democracy for addressing the challenge that elected leaders have incentive to value the short-term interests of their constituents over the longer term interest of future generations is constitutional amendment.[39] Including a provision

[39] Several nations have already enacted constitutional protections for "ecological intergenerational justice." See Joerg Chet Tremmel, "Establishing Intergenerational Justice in National Constitutions" in *Handbook of*

for the protection of future generations within national constitutions could potentially serve as a counterbalance to the tendency to value short-term interests over the long term interests of humanity.[40] Including a constitutional provision would make laws as well as government policies subject to judicial review on the basis of whether or not they are consistent with the continued existence of humanity. While judges are not immune to short term political interests, in nations where judges are not subject to re-election, they tend to be more insulated than elected officials.

Proving the charge that a given action is not consistent with the continued existence of humanity would be subject to all the epistemic challenges we brought up earlier.[41] In making their decisions, judges would have to rely on information provided by the environmental planning agency previously discussed.[42] Despite this challenge, instituting constitutional measures that acknowledge that we are obligated to ensure the continued existence of humanity is important for a representative democracy. Even the threat of judicial review is a powerful incentive for lawmakers to take into consideration long term interests in addition to short term interests.[43]

Intergenerational Justice, ed. Joerg Chet Tremmel (Cheltenham: Edward Elger Publishing, 2006), Table 10.2 for a list of constitutional provisions.

[40] Admittedly, achieving the political consensus necessary to institute constitutional measures in a nation that does not already recognize the threat modern technology poses to future generations would be next to impossible.

[41] See Chapter Four Section I. "Epistemological Challenges for an Ethic of the Future."

[42] See Chapter Four Section 1.2 "Environmental Planning."

[43] We can go further and note that just as the legitimacy of any ethical system requires that system to affirm its own legitimacy in the future, the constitution of the just state cannot help but affirm its legitimacy in the future. For this reason, once we accept that we have the power to undercut the continued existence of humanity, the just constitution must institute measures to prohibit this action.

IV. Concluding Thoughts on Economic and Political Systems and Our Duty to Ensure the Continued Existence of Humanity

In this chapter, our investigation is guided by the question of whether there is anything inherent in existing political and economic systems that makes these systems inconsistent with the continued existence of humanity. This standpoint does not allow us to establish the normative legitimacy of any particular economic or political system. Rather, it only allows us to disqualify a system if it is not consistent with the continued existence of humanity in the future.

Based on our analysis we found that an *unregulated* free market economic system possesses inherent systemic features which make it unlikely that such a system is consistent with the continued existence of humanity. Our obligation to ensure the continued existence of humanity presents challenges to a free market economy that can only be addressed through external intervention. In Jonas' view, these challenges suggest that we can best meet our obligation by opting for a fully managed socialist economy. Based on our analysis, we can say that while Jonas is right to say that a socialist economy can be consistent with continued existence of humanity, a market economy with sufficient external intervention can also allow us to meet our obligation. In other words, while our obligation to ensure the continued existence of humanity does require some intervention into economic activity, our obligation leaves permissible both a fully managed or market based economy—determining which of these systems is normatively superior must be done on the basis of other considerations.

From the perspective of this investigation, if sufficient external intervention into economic activity leaves both market based and managed economies permissible, the key question becomes what political system can provide the required intervention into the economic

sphere. Jonas points to the advantages of total government power as the primary reason for his view that an autocratic regime will likely be in a better position for meeting our obligations to future generations. Our investigation shows that while our obligation to ensure the continued existence of humanity does not preclude an autocratic political system it also does not preclude a representative democracy. Again, determining which of these political systems is normatively superior must be based on other considerations.

This is perhaps not an overly satisfying result—it might be nicer if our investigation could conclusively point to a definitive advantage for one system over the other. Still, if nothing else, our analysis in this chapter has demonstrated that our obligation to ensure the continued existence of humanity does not require us to leave representative democracy and market economics behind as Jonas sometimes seems to suggest.

In the next chapter, we consider whether our obligation to ensure the continued existence of humanity renders all means that serve this end legitimate by considering Jonas' provocative question of whether it is permissible to be inhumane in our attempt to preserve humanity in the future? This question inevitably requires us to investigate the international dimensions of our obligation to ensure the continued existence of humanity.

CHAPTER FIVE:

CONCLUDING THOUGHTS: IS IT PERMISSIBLE TO BE INHUMANE SO THAT HUMANS CAN CONTINUE TO LIVE ON THE EARTH?

At the outset of this investigation, we said that our investigation is guided by three basic questions: (1) Are we obligated to ensure the continued existence of humanity? (2) If so, what is the nature of this obligation? (3) Finally, how should we attempt to meet this obligation? With the conclusion of the previous chapter, we have addressed each of these questions. By way of conclusion we consider a question that Jonas poses but does not really attempt to answer—"is it permissible for us to be inhumane so that humans can continue to live on the Earth?"[1] This problem presents a natural way to conclude our investigation because it bears on each of the three basic questions which direct the project. This problem relates to the question of grounding the obligation because it seems that inhumane actions undermine the legitimacy of the claim that human existence must be ensured. If, as we suggest, it is the human capacity to engage in ethical conduct that makes human existence obligatory how can we square inhumane actions with the notion that humanity must be preserved? This problem relates to the question of the nature of the investigated obligation because it forces us to further clarify how this obligation is related to and distinct from other more familiar obligations. Finally, the problem Jonas raises is related to the question of how to best meet the considered obligation because it requires us to ask which means are legitimate in attempting to meet this obligation.

[1] Jonas, *Mortality and Morality*, 55.

Our attempt to address this question is divided into three sections. We first attempt to demonstrate that the dynamics of collective action require us to think through some of the implications of our investigation for international relations if we hope to address Jonas' question. Within this context, we identify two basic scenarios that pose a challenge to conceiving of the implications of our investigation for international relations. From the one side comes the challenge of the irresponsible nation—is it legitimate for nations to violate the sovereignty of the irresponsible nation in order to compel this state to act in a manner that is consistent with our obligation to ensure the continued existence of humanity? From the other side comes the worry that the imperative of responsibility will become a banner for oppression with powerful nations preventing weaker nations from developing in the name of our obligation to ensure the continued existence of humanity. Attempting to navigate through these twin challenges forms the bulk of the second and third sections.

I. The Problem of Collective Responsibility

1.1 Who is Responsible?

We have said that we are obligated to ensure the continued existence of humanity. But who is this "we?" In the broadest sense, when we say "we are responsible" we mean all of humanity is obligated to preserve the continued existence of humanity. Since the continued existence of humanity is threatened through the collective use of modern technology, it might be tempting to conclude that only abusers of modern technology are responsible for jeopardizing the continued existence of humanity. But such a view presupposes that the individual's use of

technology can somehow be separated from the collective use of modern technology. In order to see why this is the case we imagine a scenario in which the entire population of a closed biosphere system consists of five people. Four people consume resources at a rate such that if *everyone consumed at that rate*, the biosphere would continue to sustain life. However, the fifth person consumes resources at a rate that is inconsistent with the biosphere's carrying capacity. In this case, even though the four people seem to be consuming "responsibly" they do not meet their obligation to ensure the continued existence of humanity because their "responsible" consumption coupled with the "irresponsible" consumption of the one results in a situation where the biosphere cannot sustain life. Needless to say, the actual situation on the earth is considerably more complicated, but the central point of this example holds—*if any person, or more realistically, any group of persons is utilizing modern technology in a way that is not consistent with the continued existence of humanity, then we are all utilizing modern technology in a way that is not consistent with the continued existence of humanity.*

This is the challenge of collective responsibility—no one can meet their obligation unless we all do. For this reason, it might seem that our obligation to ensure the continued existence of humanity requires us to subscribe to the following maxim: only utilize technology in such a way that if everyone utilized technology in that same way the possibility of humanity in the future would not be undercut. However, the equal use of technology is not the only way for us to meet our obligation to ensure the continued existence of humanity. Consider again our simple example of five people living in a biosphere. It is true that the collective could meet their obligation if the one excessive resource user reduces consumption, but this is not the only way the collective can meet their responsibility. For instance, the collective could also meet their responsibility if the four "responsible" users further reduce their consumption such that their

level of consumption coupled with the excessive rate of consumption of the one would be consistent with biosphere's carrying capacity. The collective could also ensure that the carrying capacity of the biosphere is not exceeded through less savory measures—through murdering one of the inhabitants, the remaining four would be able to utilize more resources without overwhelming the carrying capacity of the biosphere.

From this example we can note two key points about our collective responsibility to ensure the continued existence of humanity. First, since our obligation to ensure the continued existence of humanity is a collective responsibility the actions of others directly impact whether or not I am meeting my obligation. Second, there are any number of technological use patterns which are consistent with the continued existence of humanity—our obligation does not require us to each use technology in the same way and at the same rate.

The world we inhabit does not consist of five autonomous individuals. Rather, we find ourselves in a world with billions of people organized into hundreds of states. Still, the basic points derived from our simple example also apply to the relations of these states—for any state to meet its obligation to ensure the continued existence of humanity every state must meet this obligation, and meeting this obligation does not require states to utilize resources at the same rate. For these reasons our investigation must endeavor to understand the implications of our obligation to ensure the continued existence of humanity for international relations. In light of Jonas' question of whether it is permissible to be inhumane so that humans continue to live on the Earth, we must also attempt to determine whether it is permissible for nations to utilize all means in pursuit of the goal of preserving the continued existence of humanity.

1.2 Differing Levels of Power and Collective Responsibility

In the broadest sense, then, *everyone* is responsible for ensuring the continued existence of humanity. Within the context of our investigation, which focuses on the threat the collective use of modern technology poses to the future of humanity, every user of modern technology has some share in the responsibility to ensure that this technology does not undercut the possibility of humanity in the future. Still, it must be admitted that not all states are equally capable of influencing our ability to meet our obligation to ensure the continued existence of humanity in the future. Existing states do not use modern technology at the same rates. Each state is responsible for ensuring that the cumulative impacts of the collective use of modern technology do not undercut the continued existence of humanity, and states that utilize modern technology at high rates have a greater capacity to immediately impact this obligation than states that consume at low rates. From a practical standpoint, every state has greater control over its own actions than over the actions of other states. For this reason, if a state that utilizes technology at a higher rate can make strides to reduce the impacts of its own technological use, then that state has placed all nations in a better position to meet our collective obligation to ensure the continued existence of humanity. Admittedly, the same is true of every state, be it a state of small technological impact or a state of great technological impact. Still, surely states that contribute more to worldwide technological impacts have the greatest ability to reduce this impact. For this reason, these states have a greater share of our obligation to ensure the continued existence of humanity.

Additionally, existing states are not equally capable of influencing other states. Accordingly, states with the capacity to influence other states must shoulder a greater share of

our obligation to ensure the continued existence of humanity because this very influence gives these states greater power over the future of humanity. States can exercise influence over each other in any numbers of ways. For instance, wealthy states can influence other states through threat of trade sanctions, and states with great military power can influence states to meet their obligation to ensure the continued existence of humanity through the threat of military intervention. In this way, states that possess great wealth or great military power have a greater responsibility to ensure the continued existence of humanity because the power these states possess also gives these states greater power over the continued existence of humanity.

That is not to say that states without great wealth and great military power cannot, in some instances, be called to shoulder a greater share of our collective responsibility to ensure the continued existence of humanity. For instance, a poor state with a weak military might be able to exert more influence over a neighboring state due to a shared cultural identity, than a state with a more powerful military but less similar culture. There are other instances where poor nations could potentially have the ability to greatly influence other states. For example, a poor state that is a large producer of some technological precursor can threaten to deny export of that precursor to a state that is not acting in accordance with its obligation to ensure the continued existence of humanity.

In this way, while all states are responsible for meeting our obligation to ensure the continued existence of humanity, some states must shoulder a greater share of that responsibility. States that have greater *power*, in whatever form, over our ability to ensure the continued existence of humanity are obligated to use that power in the service of our collective responsibility.

1.3 The Wretched of the Earth

The recognition that multiple technological use patterns are consistent with the future of humanity raises questions for our investigation. For the sake of example, we assume that the possible existence of the future of humanity is inconsistent with the global population consuming at the same rate as the population of the highest consuming nations but is consistent with the current actual world consumption rates. In other words, the existence of future humanity is consistent with everyone continuing to consume as they actually do—some at a high rate, others at a low rate. The difficulty is that it seems that highest consuming nations can fulfill their obligation of responsibility by preventing the rest of the world from increasing their consumption. The pursuit of industrialization in developing nations, for instance, involves massive carbon discharge. From the point of view of our obligation to ensure the continued existence of humanity, it might seem good to prevent the nations from going through this transition. The worry then is that responsibility could be used as a banner for exploitation—responsibility for preserving humanity in the future becomes an excuse to oppress actually existing humans.

We have not claimed that our obligation to ensure the continued existence of humanity is the *only* obligation. There are undoubtedly other normative considerations that bear on the question of whether one nation may prevent another from developing. Still, our investigation cannot truly sidestep this challenge. The guiding question of this chapter dictates that we determine if the normative considerations of our investigation override other normative considerations—is it permissible to be inhumane so that humans continue to inhabit the Earth?

1.4 The Problem of the Irresponsible Nation

Before explicitly attempting to overcome this challenge we consider another related problem. We have said that within the context of our investigation each state that utilizes modern technology is responsible for ensuring that this power does not undercut the future of humanity. What this means is that *each* state becomes responsible for the actions of *all* states when the future of humanity is at issue. Consider again the scenario in which each nation is acting in a sustainable manner that ensures the continued future of humanity—each nation is acting responsibly. What happens when an individual state begins to act irresponsibly? The irresponsible actions of a single state combined with the (formerly responsible) actions of the remainder of the states threaten future humanity's existence and now present humanity is violating its obligation to future humanity.

It is not enough for the previously responsible states to decry the actions of the irresponsible state. Their obligation to future humanity requires responsible nations to take action. In this case, responsible states could further reduce their consumption—thereby compensating for the activities of the irresponsible state.

Of course, this can only go on for so long, and eventually the only course left to the responsible states is to somehow compel the irresponsible state to reduce consumption. It is possible that the responsible states could compel the irresponsible state through trade sanctions that would deny the irresponsible state the means to continue the irresponsible behavior. However, in principle an individual state could be self-sufficient enough to continue to engage in irresponsible behavior even in the face of sanctions.

In this case, it seems that responsible nations could legitimately use force to compel the irresponsible nation, just as surely as if the responsible nation's territorial border had been violated by the irresponsible nation. Responsibility places the future of humanity "in the territory" of all nations, and in this way, all nations have sovereignty over this territory.

1.5 International Confederations and The Imperative of Responsibility

The transnational character of our obligation to ensure the continued existence of humanity immediately points to the possibility of appealing to an international confederation in the hopes of enforcing the imperative of responsibility. By international confederation we mean an organization consisting of multiple sovereign nations banding together for the purpose of acting in concert. There are certain advantages to utilizing an international confederation as the enforcing mechanism of the imperative of responsibility. As previously noted, as part of our obligation to ensure the continued existence of humanity we must commit to developing a comprehensive long range plan, which would model potential impacts of proposed projects.[2] The accuracy of the models would be dependent upon receiving as much data as possible. Since the threat we consider stems from the cumulative impacts of the collective use of technology, our models cannot pretend that these impacts are somehow magically contained within national boundaries. For this reason, the accuracy of our models will require large scale data sharing and cooperative planning by multiple sovereign states. One advantage of utilizing an international confederation is that the confederation could serve as a clearinghouse for this data sharing and cooperative planning.

[2] See Chapter Four Section 1.2 "Environmental Planning."

Still, relying on an international confederation to enforce the imperative of responsibility has limitations. As Winfield notes, states are unlikely to join an international confederation if their independence is not respected and the current regime does not receive assurances that it will not be subject to intervention.[3] But if the international confederation does not have the ability to intervene to ensure that member states act in accordance with their obligation to ensure the continued existence of humanity, then it appears that the confederation is powerless to help us meet our obligation. One option available, as Winfield also points out, is for the confederation to limit membership to states, which it deems to be acting responsibly.[4] In this way, a confederation of responsible nations could enjoy the benefits of collective planning, while also acting together, either through sanctions or through cooperative military intervention, to compel irresponsible nations to meet their obligation to ensure the continued existence of humanity.

Admittedly, it is possible that a member state of such a confederation could cease to act in a manner consistent with the continued existence of humanity. This presents a problem because, as previously mentioned, a state likely would only join such a league on the condition that the state will not be subject to intervention from the league. In such case, the league could vote to eject the rogue member and then take joint action against that nation.

Still, even if international confederations do represent one possible option for meeting our obligation to ensure the continued existence of humanity, we can only understand what means are legitimate for these confederations to utilize once we have answered the guiding question of this chapter—is it permissible to be inhumane so that humans continue to live on the Earth?

[3] Richard Dien Winfield, *The Just State*: *Rethinking Self-Government* (Amherst, NY: Humanities Books, 2005), 411.
[4] Winfield, *The Just State*, 411-412.

1.6 The Scope of Our Project Presents a Challenge to Evaluating Means

The question of determining what means may be legitimately used in pursuit of our obligation to ensure the continued existence of humanity is faced by two challenges. If our version of the imperative of responsibility can legitimate all means, we worry that it will become a banner for injustice in the form of more powerful states oppressing less powerful ones.[5] On the other hand, if avoiding this kind of injustice requires the imperative of responsibility to commit to a standpoint of non-interventionism, the worry is that we will be left without means to deal with the irresponsible nation.

Further, the way we have limited the scope of our investigation seems to restrict our ability to evaluate means. The scope of our investigation gives rise to a kind of tension because there are several instances where questions arise that seem to be endemic to our investigation while also overflowing the lens through which we investigate. In the previous chapter, for instance, we were forced to conclude that since neither a representative democracy nor an authoritarian regime is *necessarily inconsistent* with our obligation to ensure the continued existence of humanity, these two political systems have a kind of parity from the perspective of our investigation. This, of course, does not entail that these two political systems are normatively indistinguishable from the perspective of ethics more generally—instead, it means that we must rely on other normative considerations in order to differentiate between the two political systems.

What is it about the scope of our investigation that gives rise to this problem? Here it is important for us to be clear about what we have claimed that the imperative of responsibility is. We have argued that the legitimacy of any ethical principle depends on the principle affirming its

[5] For the sake of the discussion in this chapter we assume that the oppression is unjust.

own validity. But it must proclaim its legitimacy not only in the present but also in the future. If an ethical principle does not affirm that it has legitimacy in the future, then this principle admits that there is nothing unconditionally valid about it. If a principle admits that it has no validity, then, needless to say, we have no reason to follow it. For this reason, any ethical principle must affirm our imperative of responsibility—act so that the effects of your actions are compatible with the permanence of ethics. In this way the imperative of responsibility we have defended *is a necessary condition for the legitimacy of a comprehensive ethical principle but not a sufficient condition for the legitimacy of a comprehensive ethical principle*.

Attempting to determine the legitimacy of certain actions from the perspective of a necessary condition for ethical conduct cannot help but be limited. We can determine that actions that violate our principle are illegitimate, but since meeting our principle is not sufficient for conduct to be legitimate, we cannot guarantee that conduct that does not violate our principle is necessarily legitimate. Does this limitation render our version of the imperative of responsibility as impotent? Must our version of the imperative of responsibility stay silent in the face of injustice? What we seek ultimately is a rule for the application of the imperative of responsibility. Is it possible to draw this rule in such way that the imperative of responsibility justifies intervening in the case of the irresponsible nation while not simultaneous justifying all means in the name of our obligation to ensure the continued existence of humanity? Is such a rule implicit in the version of the imperative of responsibility we have defended or must we modify our principle in some way in order to avoid the charge that the imperative of responsibility is vacuous?

II. Inhumane Means and Our Obligation to Ensure the Continued Existence of Humanity

2.1 The Meaning of "Inhumane"

For this chapter, the question of whether it is permissible to be inhumane so that humans can continue to inhabit the Earth guides our investigation. What does "inhumane" mean in this context? We have said that humanity ought to be preserved due to the human capacity to engage in conduct that is objectively valuable—human beings can engage in ethical conduct. For this reason, given the context of our investigation, to deem conduct "inhumane" is tantamount to claiming that such conduct is unethical. In this way, we can restate the question of whether it is permissible to be inhumane so that humans can continue to inhabit the Earth as follows: *is it permissible to act unethically in order to preserve the possibility of ethics in the future?*

When we state the question in this way a kind of tension emerges. On the one hand, if we act unethically in pursuit of our obligation to ensure the continued existence of humanity, we seem to threaten to undercut the very reason why humanity must be preserved—if we can only preserve humanity through the perpetual oppression of humanity then we might wonder if what we are preserving is truly worth saving. On the other hand, if past unethical acts were sufficient to prevent the possibility of further ethical conduct in the future, then ethics would have already disappeared. In other words, inhumane conduct in the present does not guarantee inhumane conduct in the future.

2.2 Unjust Means and Desperate Situations

We have indicated that there is a challenge to evaluating the means utilized to meet our obligation to ensure the continued existence of humanity—namely, it seems that while our principle is capable of deeming action that is inconsistent with the continued existence of humanity as illegitimate, it is unable to independently affirm that a particular means is legitimate. In other words, there are any number of illegitimate actions that are consistent with the continued existence of humanity. However, there does seem to be one case in which our principle can independently legitimate conduct. This is the scenario that Jonas seems to have in mind when he poses the question of whether it is permissible for us to act inhumanely in an attempt to preserve humanity—namely, the situation of desperation where our *only* hope to preserve the possibility of human life in the future requires us to oppress existing human life. In this case, Jonas seems to suggest that we might be required to choose the path of oppression in order to allow for the continued existence of humanity in the future.[6]

If it were somehow possible to know that we were in that desperate situation then we must agree with Jonas that, in times of desperation, we can legitimately oppress living humanity in the hopes of preserving the possibility of ethical conduct in the future. We have argued that affirming the imperative of responsibility is a necessary condition for the legitimacy of any ethical principle.[7] If it could be demonstrated that the *only* way for us to meet our obligation to ensure the continued existence of humanity is to use means that would be otherwise illegitimate, then we would be obliged to use these means—in this desperate case, those otherwise illegitimate means would be legitimated because those means would be, in effect, a necessary

[6] Harvey Scodel, "An Interview with Professor Hans Jonas," *Social Research* 70 (2003): 365-367.
[7] See Chapter 3 Section 3 "In Defense of the Imperative of Responsibility."

condition for meeting our obligation to ensure the continued existence of humanity. We explore the implications of this recognition more fully in the following sections, but at present we emphasize one point—*in the case when there are multiple options that are consistent with the continued existence of humanity, the imperative of responsibility cannot independently legitimate any of those means*. When there are many options available, the imperative of responsibility can only mark options that are not consistent with the continued existence of humanity as illegitimate. In other words, the fact that an action is consistent with the continued existence of humanity is normally *not sufficient* for that action to be legitimate. The desperate situation we now consider is a special case, because, *ex hypothesi*, in this case there is only one set of actions that is consistent with the continued existence of humanity. In this extreme case, the imperative of responsibility would be capable of independently legitimating a course of action. This situation truly would be philosophizing from the abyss—our actions have left the natural preconditions of life deteriorated to such an extent that only the hope of saving ethics in the future is through oppressing humanity in the present.

2.3 Epistemological Challenges for the Desperate Situation

But here we are faced with all of the epistemological challenges we previously considered.[8] The basic problem is that due to the uncertain character of the future we can never be absolutely certain that we are in a situation that necessarily precludes the possibility of the continuance of human life in the future. Given this epistemological challenge, the worry is that our obligation to ensure the continued existence of humanity in the future could become a banner for oppression. If we allow that it is sometimes legitimate to oppress present humanity in order

[8] See Chapter Three Section I "Epistemological Challenges for an Ethics of the Future."

to preserve future humanity, the worry is that the tyrant will use our obligation to ensure the continued existence of humanity as a justification for tyrannical oppression. The epistemological challenges associated with our investigation seem to assist the tyrant's claim she must use oppressive means because we cannot be certain that we are not in the desperate situation.

On the other hand, these same epistemological challenges seem to prevent us from ever being able to say that we are ever truly in this abysmal situation. After all, it is still possible that some technological advance will pull us out of the desperate situation. In attempting to see our way through these epistemological challenges earlier, we appealed to Jonas' "heuristics of fear."[9] According to this heuristic, when making decisions we should give more weight to the prophecy of doom than to the prophecy of bliss because no improvement in the lot of humanity is worth risking the entire stake of humanity.[10] In the present context, Jonas' heuristics of fear seem to provide further encouragement for a would be tyrant, who can claim that while we may not be certain that oppression is necessary for the continued existence of humanity, we must not risk the course that attempts to avoid oppression.

Admittedly, this possibility is worrisome for a defender of the imperative of responsibility. Still, this abysmal possibility serves to underscore the importance of taking steps now to ensure that humanity never finds itself in this desperate situation.

2.4 When Multiple Means are Consistent with the Continued Existence of Humanity

In this way, there is one possible set of scenarios, in which, our version of the imperative of responsibility can independently legitimate means. Still, it seems much more likely that the

[9] Jonas, *Imperative of Responsibility*, 27.
[10] Jonas, *Imperative of Responsibility*, 202.

situation that faces us now (and will likely continue to face humanity in the future) is the situation where there are multiple means available to us in the pursuit of our obligation to ensure the continued existence of humanity. For the sake of example, consider the following scenario: Nation Z is an irresponsible nation that is acting in a manner that is inconsistent with the continued existence of humanity. Since the obligation to ensure the continued existence of humanity is the duty of all nations, responsible nations, which are capable of influencing Nation Z's actions, are obligated by the imperative of responsibility to attempt to compel Nation Z to act in accordance with our mutual responsibility. The specific means that responsible nations ought to utilize to compel Nation Z to act responsibly cannot be determined by reason in advance. Perhaps, Nation Y offers to apply diplomatic pressure, while Nation X offers to impose economic sanctions, and Nation W threatens military action. Depending on the circumstance, any of these options could be legitimate. Determining which of these options is best will depend on any number of contingent factors and cannot be determined in advance. This is, of course, not unique to our investigation—every ethical theory must rely on an act of judgment to correctly apply the general principle to the individual ethical situation, the details of which cannot be spelled out in advance. So the fact that our principle cannot distinguish between these types of means in advance is not problematic.

What *is worrisome* is that it is not clear that the principle we have defended can distinguish between what would ordinarily be considered legitimate means and what would ordinarily be considered illegitimate means. If we return to the above scenario, we can consider an, admittedly extreme, example: Nation Q proposes to slaughter the entire population of Nation Z. After all, Nation Q argues, if we eliminate Nation Z, it will no longer act in a manner that is inconsistent with the continued existence of humanity. The problem then is that our principle

seems to provide a broad justification to intervene into the affairs of the irresponsible nation, but seems to be unable to distinguish between the various options available for intervening. In other words, since slaughtering Nation Z allows us to meet our obligation to ensure the continued existence of humanity, our principle is incapable of marking this action as illegitimate.

This problem is not merely one that arises in the context of extreme thought experiments. Within our current context, at the heart of the question is the recognition that there are numerous scenarios that are consistent with the continued existence of humanity. We have already mentioned that powerful nations actively preventing weaker nations from going through the process of industrialization is one option that, at least potentially, would allow us to meet our obligation to ensure the continued existence of humanity. In addition to the possibility of direct oppression, there are examples where wealthy nations can afford to simply adapt to the cumulative impacts of the collective use of modern technology, but poor nations cannot. For instance, the challenge of rising sea levels threatens wealthy and poor nations alike, but wealthy nations have more options available to address this challenge. There are few financially feasible options available to the Micronesian nation, The Republic of the Marshall Islands, in the face of the rising sea levels that threaten to drown the nation.[11] Low lying areas in wealthy nations, such as New York City are also threatened by rising sea levels, but New York City's wealth provides it more options. In order to protect New York City from storm surge, the engineering firm, Arcadis, has proposed constructing a sea gate spanning the 6,000 feet distance between Staten Island and Brooklyn known as the Narrows at projected cost of 6.5 billion U.S. Dollars.[12] It is hard to imagine that the continued existence of humanity is threatened by the disappearance of

[11]Lindsay Christ, "Marshall Islands: Marshall Islands Disappearing Due to Global Warming?" *Long Island Press***,** December 7th, 2010.
[12] McKenzie Funk, "Deciding Where Future Disasters Strike" *New York Times*, November 3, 2012.

the Marshall Islands; does this mean that our investigation has nothing to say about these kinds of examples? To put it another way—is our obligation to ensure the continued existence of humanity indifferent to the means used to meet this obligation?

III. Conclusion: Defending the Imperative of Responsibility Once Again

As we come to the end of our investigation it would be a sad fate for the imperative of responsibility if it turns out that it can serve as a banner for injustice. What options are available to us if we hope to overcome this challenge?

3.1 The Relationship between the Imperative of Responsibility and Other Ethical Principles

We have defended the following formulation of the imperative of responsibility: *Act so that the effects of your actions are compatible with the permanence of ethics*. Given the focus of our investigation, we have also defended the following corollary of this principle: *Act so that the effects of your actions do not undercut the possibility of the continued existence of humanity in the future.* The problem that faces us now is that it seems that unethical means are compatible with the permanence of ethics and that inhumane means do not necessarily undercut the possibility of humanity in the future. For this reason, the worry is that preserving the continued existence of humanity will become an excuse for the unjust treatment of actually existing humans.

Here we reiterate the results of the previous sections. In the desperate case, where the *only possible* option for preserving the continued existence is the use of means that would

otherwise be illegitimate, the imperative of responsibility does legitimate the use of these means. However, in cases where our obligation to ensure the continued existence of humanity requires positive action, such as the example of the irresponsible nation, but where multiple means are available, the imperative of responsibility does not independently legitimate any of these particular means. In these cases, the imperative of responsibility obligates us to take *some action* to preserve the continued existence of humanity, but it does not specify the details of this action. In this context, the worry is that, in this case, the imperative of responsibility cannot distinguish between utilizing means that would normally be considered legitimate and means that would normally be considered illegitimate. How can we address this challenge?

Here we emphasize that we have not claimed that the imperative of responsibility is the only ethical principle, nor have we claimed that the imperative of responsibility is the supreme ethical principle. Instead we have argued that the imperative of responsibility follows from any ethical principle, which would lay claim to the legitimacy that comes with prescribing objectively valid conduct. Further, we have made no claims as to the content of such a comprehensive ethical principle—much less provided any justification for such a principle. Rather, we have argued that *if* there is such a principle, that principle must affirm our obligation to ensure the continued existence of humanity.[13] Moreover, we have insisted that our principle is only a necessary condition for an ethical principle that would claim the legitimacy that comes from prescribing conduct that is objectively valid, but our principle is certainly not a sufficient condition for this ethic. In other words, simply appending the imperative of responsibility to an illegitimate ethical principle does not somehow magically grant this principle legitimacy.

One option for overcoming the present challenge, that our principle seems to be unable to differentiate between unjust and just means when multiple means are available to meet our

[13] See Chapter 2 Section II. "In Defense of the Imperative of Responsibility."

obligation, is to affirm and defend some comprehensive ethical principle. If we had such a principle then we would have an additional standard for evaluating the various means available to us in pursuit of meeting our obligation to ensure the continued existence of humanity. Admittedly, in the end, there is probably no true substitute for having such a principle. Still, from the perspective of our investigation there are advantages to abstaining from making any claims about the content of a comprehensive ethical principle. On the one hand, making no claims about the content of a comprehensive ethical principle allows us to avoid getting bogged down in traditional turf-wars and focus on the challenges that are specific to our investigation. More than that, if we are to avoid, as Jonas puts it, perishing "together on a wasteland of what was creation," then we will need as many friends as possible. For this reason, if it turns out that our obligation to ensure the continued existence of humanity can be affirmed by, for instance, both utilitarian theorists and Kantians, so much the better. But if we avoid making commitments about the content of a comprehensive ethical principle how can we avoid the charge that the imperative of responsibility is indifferent to the means used to meet this obligation?

3.2 The Imperative of Responsibility Presupposes an Unconditionally Valid Ethical Principle

While refraining from committing to a broader ethical principle does somewhat limit our ability to evaluate the means utilized in pursuit of meeting our obligation to ensure the continued existence of humanity, it does not seem that we must be completely silent on this front. The key to addressing this challenge lies in the recognition that our defense of the imperative of responsibility presupposes the existence of an unconditionally valid ethical principle. Inasmuch as the imperative of responsibility is coupled to an illegitimate ethical principle it has no

validity—there can be no obligation to preserve an illegitimate ethical principle. In this way, our defense of the imperative of responsibility only follows from the existence of an unconditionally valid ethical principle. The downside of this presupposition is that our investigation rests on a significant assumption that we never discharge. The upside of this connection between the imperative of responsibility and a more comprehensive ethical principle is that we can appeal to this additional principle when evaluating the legitimacy of various means used in pursuit of meeting our obligation to ensure the continued existence of humanity.

Again, since we have refrained from commenting on the content of this larger ethical principle we can refer to it only in broad terms, but still appealing to the existence of this principle does allow us to provide an answer to Jonas' question of whether we may utilize inhumane means in order to ensure that humans continue to inhabit the earth. As we have already seen, the imperative of responsibility can legitimate otherwise illegitimate means in the case that these formerly illegitimate means are the only way to ensure the continued existence of humanity. Recognizing that our defense of the imperative of responsibility follows from an objectively valid ethical principle allows us to define "otherwise illegitimate" means as those means that are normally prohibited by this larger ethical principle. But since the imperative of responsibility can only *independently* legitimate means when those means are the *only means* available to meet our obligation to ensure the continued existence of humanity, means that are normally prohibited by the presupposed comprehensive ethical principle cannot be legitimated by the imperative of responsibility when there are other normally legitimate means available to us. Note that this *relationship* between the imperative of responsibility and the comprehensive ethical principle is not dependent upon the content of the favored ethical principle—inasmuch as this favored ethical principle prohibits a given action, the imperative of responsibility cannot

override this prohibition except in the case that this action is the only means available for us to ensure the continued existence of humanity.

This recognition allows us to provide an answer to Jonas' question of whether we are allowed to be inhumane so that human beings continue to inhabit the earth. The answer is yes; it is permissible for us to be inhumane so that human beings continue to exist, but only if this inhumane action is the only way to ensure the continued existence of humanity. In the case that we can ensure the continued existence of humanity without resorting to unethical means it is impermissible for us to act inhumanely in an attempt to meet our obligation.

On the one hand, the recognition that the imperative of responsibility cannot legitimate normally unjust means except in the case that these means are only means available to ensure the continued existence of humanity should serve to alleviate worries that the imperative of responsibility can be perverted into a banner for injustice. On the other hand, the horrifying thought, which thankfully still dwells in the happy realm of "mere possibility," that our only option for saving humanity might be the use of otherwise inhumane means should serve to emphasize the importance of proceeding with an excess of caution in utilizing our ever expanding technological prowess.

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