

An abstract painting with a vibrant red background and teal accents. The teal is applied in thick, expressive brushstrokes, creating a sense of movement and depth. The overall composition is dynamic and textured.

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EDITORS' PREFACE

The papers in this edition of *Fragments* speak for themselves in their superior and polished presentations of philosophy. I only wish to say a few humble words on the process and mission of this volume.

Undergraduate journals are often associated with the kind of amateur work which lacks the sophistication required of professional journal. It is therefore common that undergraduate journals emulate publishing clubs rather than rigorous research publications. Yet there is little about the quality of papers published in this volume which can be described as amateur. Our belief at *Fragments* is that undergraduates are capable of high-level research which can make meaningful contributions to philosophical discourse. I am proud that our commitment this year has been to publish papers which reflect a great effort to transcend the mundane and obvious. Each paper published here deserves a close and thoughtful reading.

Our team has not taken this process lightly. We received many papers in the initial submission process, most of which reflected the very best that McGill's undergraduates have to offer. I sincerely thank everyone who submitted a paper for consideration and welcome your continued engagement in our community.

With the help of an extremely dedicated co-Editor-in-Chief and editorial team we identified six papers which truly stood out for their scientific rigor and well researched theses. For the last few months, devoted editors and authors have revised again and again to produce the most crisp, clear, and concise, philosophical arguments.

Having been a member of Fragments for two years now, once as an Editor and now as a co-Editor-in-Chief, it has been a privilege to uphold the ongoing legacy of Fragments. This journal has played an important role in my academic experience at McGill, and I have a debt to the many editors I have worked with. Specific praise must be given to my co-Editor-in-Chief Florens Souza, without whom this year's volume would not have been possible. I have learned much from Florens about both philosophy and leadership this past year. I must extend a huge thank you to those who submitted a paper for review, to our editorial and publishing team, and to the authors who have worked so hard to polish their work. I hope the reader finds their final work as impressive as I do and that future engagement with Fragments at McGill continues with unending enthusiasm.

- Benjamin Ogden U3, co-Editor-in-Chief



Does Mill’s Simple Principle Truly “Forgo Any Advantage” From Natural Rights?

MAX ROSEN

I review the philosophical debate on the origin of political rights, engaging with Bentham’s critique of natural rights as “nonsense on stilts,” the attempt to resolve this problem in Mill’s simple principle itself, and Mill’s broader attempt to derive moral or legal rights from a utilitarian premise. I argue that Mill’s simple principle ultimately relies on natural rights, and it thus cannot be an entirely utilitarian justification for political liberty. It is therefore unable to explain exactly why the liberties of the minority cannot be overridden without an implicit reliance on natural rights.

Keywords: John Stuart Mill, natural rights, political liberty, utilitarianism, rights, Jeremy Bentham.

John Stuart Mill's *On Liberty*, written some 70 years after the publication of "Anarchical Fallacies" by Jeremy Bentham, attempts to reconcile a claim to political liberty with the ethical theory of utilitarianism. Mill aims to make it clear that he does not require the premises of natural rights to make what seemed like an argument for individual rights:

It is proper to state that I forgo any advantage which could be derived to my argument from the idea of abstract right as a thing independent of utility. I regard utility as the ultimate appeal on all ethical questions; but it must be utility in the largest sense, grounded on the permanent interests of man as a progressive being. (Mill 14)

Yet, an apparent tension emerges between Mill's subscription to the principle of liberty—of conscience, expression, tastes, and association—and the principle of utility or happiness. While Mill rejects that he explicitly relies on natural rights doctrine, an implicit reliance is possible. The natural rights tradition insists upon constraining one's pursuit of the best outcomes. These can be rules prohibiting particular behaviour, such as Kant's Categorical Imperative. Two modern forms of this view include Ronald Dworkin's perspective that individual rights (in the categorical or natural sense) are "trumps" on potential actions to maximise outcomes and Robert Nozick's notion of rights as "side constraints" on the pursuit of utility (Dworkin 154-157). By contrast, utilitarianism is a maximising doctrine that treats the outcome as primary, with duty or obligation as secondary; the duty under utilitarianism is to promote the outcome that maximises well-being.

I will begin by reviewing the substance of the debate, engaging with Bentham's critique of natural rights as "nonsense on stilts," Mill's attempt to resolve this problem through his "simple principle," as well as his broader attempt to derive moral or legal rights from a utilitarian premise. I will then argue that Mill's simple principle fails in the absence of natural rights doctrine for two primary reasons: that a true utilitarian can have no justifiable reason to forgo utility for liberty, and that we cannot assume utilitarianism to show a special preference towards liberty, which is a specific conception of "the good life." Mill can only succeed by redefining utilitarianism so it can never conflict with liberty. He makes a highly particular defence of the instrumental value of liberty, which fails to apply in a sufficient number of cases because it focuses narrowly on the deliberative value of certain basic liberties. Furthermore, without an implicit reliance on natural rights as a form of justice, Mill cannot demonstrate why his utility principle would not entail limitations on the basic liberties of the minority for the benefit of the majority, even if the liberties of the minority were instrumentally valuable. I will next consider, but ultimately reject, a significant counterargument: that Mill rationally differentiates between different types of liberties and in the process, recognizes these rights are not intrinsic without tacitly relying on natural

rights as the glue to hold his argument together.

Mill's project is to reconcile a defence of liberty with a commitment to utilitarianism and a rejection of natural rights. Mill aims to build on Jeremy Bentham's earlier criticism of natural rights, specifically of the French Declaration of Rights of 1789 in "Anarchical Fallacies". Bentham's criticism points out a problem of indeterminacy: that natural rights are dangerous fictions which encourage social unrest, and only positive rights granted by law can have any determinate meaning (Bentham). This intimates a rejection of thinkers such as Locke, who grounds his political philosophy on the claim that persons are born with natural rights to life, liberty, and property (Locke 4-10). If Bentham's criticism of natural rights holds, a challenge emerges to create a utilitarian justification of liberty if any appeal to natural rights is off the table. It is from within this vacuum that Mill's simple principle emerges. The substance of Mill's two-part simple principle is that: 1. The only justification for man to interfere with another person's liberty is self-protection; and 2. Power can only be rightfully exercised on a person against their will for the prevention of harm to others (Mill 13). This claim is categorical; in other words, Mill rejects the restriction of liberty for paternalistic (for one's own benefit) or moralistic (to ensure compliance with perceived morality) reasons, allowing only for harm as a justification (Mill 13). He makes it clear that the prevention of harm on its own is not sufficient to restrict liberty, but that the benefits of regulation must outweigh the harms: "As soon as any part of a person's conduct affects prejudicially the interests of others, society has jurisdiction over it, and the question whether the general welfare will or will not be promoted by interfering with it, becomes open to discussion" (Mill 69). Mill uses the case of free speech as a starting point, arguing that censorship would risk restricting true opinions and partially true opinions, while enshrining presently true opinions as dogma (Mill 34). Collectively, these arguments claim both an instrumental value to truth-seeking (although whether truth-seeking could meaningfully interfere with utility is not sufficiently entertained by Mill) and an instrumental benefit to free and open discussion and freedom of lifestyle. He argues that expanding the number of options available to people is a social good insofar as it expands the number of options society as a collective may consider (Mill 55).

Mill's willingness to embrace two fundamental principles—the principle of liberty and the principle of utility—already presents problems that may only be resolved through implicit reliance on natural rights. Because Mill posits that individualism and personal liberty are beneficial towards the net utility in the long-term, his defence of liberty is derivative of the original justification for utilitarianism. When we hold the harm principle true in a given case, we are thus put in the unintuitive position of weighing a derivative principle of utility over utility itself. Mill

is therefore met with the onerous burden to demonstrate that, in essentially all cases, the harm principle is more important than primary utility, otherwise the former cannot outweigh the latter. Of course, Mill does significant work to reconcile this by characterising other rules, including liberty's essence as secondary to and derived from utility (Mill 13). In this way, principles such as liberty can be considered guideposts to knowing which path is utility-maximising. The relevant question then becomes: is the utilitarian justification of preserving liberty through the harm principle, as a rule, utilitarian maxim sufficient? If it is insufficient, then some other implicit justification for prioritising liberty (natural rights) may be doing the real explanatory work for Mill.

Mill's justification for rejecting paternalism or moralism as reasons to restrict rights in all cases is rooted in a probabilistic claim: actions that restrict those of another man within the separate private sphere (paternalism) are ultimately more restrictive to liberty, and thus disutile. The private sphere covers freedom of conscience and opinion, for example, and is argued to be of no direct interest to society in general (Mill 15). The probabilistic element of this claim in favour of freedom of action emerges because Mill points to the general dangers of tyrannical government or social control; he argues that it would require excessive coercion to restrict what people could think in the private sphere, relative to any pragmatic benefits this would confer. This cannot be a successful utilitarian defence of the private sphere, since it is contingent on the particular status of the government and society—that is, the efficacy of any given policy to instrumentalize the few for the benefit of the many. If we possessed the technology and state power to force the most intelligent students to think only of science and to study it constantly, dedicating all of their time to making technological advances, it would very likely be utility-maximising to enforce this technology as a state policy. Even the further Millian defence of freedom of expression and association as truth-maximising or dogma-preventing would fail to overcome the issue of contingency; such technology would create bounds on the range of their actions by instrumentalizing them for social good and depriving scientists of personal liberties, still allowing for the discursive benefits of free expression which Mill claims are the underlying justification for the liberty of expression and speech.

The problem this exposes for Mill is significant in that it suggests he relies on proof of liberty as intrinsically valuable. This would approach, and likely be subsumed into, the category of natural rights justifications for a given political philosophy. Mill's task for his claim that liberty should be accorded with extremely high priority as a type of rule utilitarian maxim is not fulfilled in *On Liberty*. This is because his utilitarianism suffers from a general lack of coherence in ordering the types of goods it seeks. While Mill clearly prioritizes happiness as the end good

in *On Liberty*, he also provides reasons why individual liberty should be given precedence. However, it is unclear whether a society designed to maximise happiness would rank liberty this way. Mill's rationale for why freedom of speech should be broadly permitted clarifies this issue.

It must be recalled that Mill's primary concerns are that censorship would risk restricting true opinions and partially true opinions while enshrining presently true opinions as dogma. This is construed as purely utilitarian reasoning as to why his choice to rank liberty highly on the list of possible utile outcomes is appropriate and is thus allegedly independent from any conception of freedom of speech as an inalienable right. However, Mill's defence of allowing for false statements such that the truth can emerge is weak. This is because it does not explain why censorship is wrong when there is good reason to believe in a claim's falseness (e.g., vaccines cause autism). Additionally, his defence does not sufficiently engage with the possibility of a genuinely fair censor who only restricts false statements. The second part of his argument—that freedom of speech is necessary to prevent dogma from becoming enshrined—is more important, as it attempts to systematically prove that censorship of only false beliefs is still instrumentally bad in the long run. It is worthwhile to note that Mill's argument here takes on what can be seen as a naturalistic or virtue-ethical tinge, meaning that rights are grounded in “man's permanent interests as a progressive being” (Mill 14) He believes that humans' capacity for discourse and deliberation is thus morally significant and that it is important that people be allowed to engage in deliberation freely, such that one can employ “observation to see, reasoning and judgement to foresee, activity to gather materials for decision, discrimination to decide, and when he has decided, firmness and self-control to hold his deliberate decision” (Mill 55). The question then becomes, why is the capacity for deliberation the unique factor that makes us progressive beings, and why should fulfilling our nature matter for the endpoint of human happiness that Mill's utilitarianism is rooted in?

Mill answers this question only partially, by claiming that discussion with others enlarges the range of options one can choose from and helps people to make better choices from a set of possible choices (Mill 55). Yet this still fails to overcome the criticism that engaging with false options does not lead to better decision-making on aggregate. For example, my choice to consume anti-vaccination media may, in some cases, improve my deliberative capacities as I consider their arguments, discuss them with others, and reach a conclusion to reject or accept their stances. However, if, through this process, I conclude that I should not take a life-saving vaccine, it is difficult to believe that the long-run benefit of mankind realising its progressive nature through deliberation outweighs the massive disutility of false ideas proliferating, whereas a

reliable censor could overcome this problem. Importantly, even if one were to accept the inverse of this argument in some cases, placing trust in the deliberative skills of mankind, it would likely not apply in a sufficient number of cases as a de facto rule. That is, we still become reliant on the idea of freedom of speech and expression as some type of intrinsic right in order to make Mill's argument apply in all of the relevant cases, even if these rights are dressed up in the trappings of rule utilitarianism in *On Liberty*.

The counterargument to this position reads Mill differently, accepting that he solves the problem of arbitrarily prioritising liberty over other values as a secondary rule within utilitarianism. This counterargument would look to the passage immediately above Mill's famous explicit statement that he will prove his arguments without relying on natural rights. Mill hedges his argument here, positing that liberty as a derivative principle of utility can only be weighed over utility itself when specific criteria have been met. He states that society must be at a place where mankind has reached a certain standard of social organisation to value liberty in the way that he does: "Liberty, as a principle, has no application to any state of things anterior to the time when mankind have become capable of being improved by free and equal discussion" (Mill 13-14). He clarifies that his principles are "meant to apply only to human beings in the maturity of their faculties... despotism is a legitimate mode of government in dealing with barbarians, provided the end be their improvement, and the means justified by actually affecting that end" (Mill 13-14).

As such, a defender of Mill's coherence without reliance on the "nonsense on stilts" of natural rights would argue that Mill would place no such restrictions on the applicability of his harm principle if he truly required the basic goods, which he defends as flowing from the original, intuitive defence of freedom of speech, to be intrinsic goods (natural rights). An extension of this counterargument would suggest that Mill can differentiate the importance of individual liberties by their role in the deliberation he describes in *On Liberty*. For example, Mill recognizes that even expressive liberties can be restricted given the appropriate context:

On the contrary, even opinions lose their immunity when the circumstances in which they are expressed are such as to constitute their expression a positive instigation to some mischievous act. An opinion that corn-dealers are starvers of the poor, or that private property is robbery, ought to be unmolested when simply circulated through the press, but may justly incur punishment when delivered orally to an excited mob assembled before the house of a corn dealer, or when handed about among the same mob in the form of a placard. (Mill 52)

Mill thus recognizes that speech can lead to harm insofar as speech is directly connected to a risk

of physical violence, as in the case of the mob in front of the corn dealer's home. Furthermore, an even stronger rule utilitarian case for Mill's argument could be emphasised by elaborating upon the impossibility of a reliable censor, and more concretely illustrating the long-term effects of a society that restricted freedom of speech and other liberties Mill argues stem from the same intuitive logic. This response would suggest that the harm principle does not apply to all restrictions on liberty, but rather only to the basic liberties most critical to deliberation (i.e. conscience and expression, association, tastes). Therefore, Mill could defend small restrictions of non-basic liberties to secure social goods that are extremely useful, such as security or education. He could, as such, still claim a utilitarian basis for preferencing these basic liberties rooted in rational argument.

Although this counterargument effectively challenges the idea that Mill intended to rely on natural rights, it is only partially effective at defending the coherence of Mill's simple principle, barring support from natural rights. The fundamental problem with this reasoning is such that, as absolute rule utilitarianism (and its associated problem of rule worship) becomes constructed to exclude the possibility of objection, it begins to seemingly replicate the logic of natural rights theories by making its rules so inflexible, that an appeal to utility itself could seemingly never outweigh its derivative rules. Paying close attention to the analysis behind Mill's argument indicates this.

Even excluding the types of pre-modern societies that Mill states have not yet reached the capacity to benefit from individual liberty, his argument is that most humans are born into modern societies with certain inherent capacities to reason and deliberate, which must be protected from being undermined by other individuals or by governments as a general rule. Some exceptions may exist—most obviously, the harm principle. Although Mill recognizes that rights may be restricted under this principle, he still has a tendency to implicitly rely on natural rights to support his argument. For example, natural rights could conflict while still constituting natural rights, as Ronald Dworkin, writing in "Rights as Trumps," states. Dworkin recognizes that some rights may have a higher priority than others in the same way that a stronger card beats a weaker one within a hand of poker (Dworkin 158). Additionally, Supreme Courts are often called upon to balance legal rights against each other, despite a recognition that these rights (such as privacy or association) have a deeper justification than their utility; they are owed to people and treated as essentially natural rights in political discourse. Therefore, the fact that Mill recognizes that liberty can be restricted under the harm principle does not undermine the possibility that he has construed liberty as a quasi-natural right; instead, it shows that natural rights could still come

into conflict and be traded off against each other, without ceasing to be natural rights.

Another significant problem with Mill's simple principle remains, for he derives the value of basic liberties based upon the aforementioned argument about deliberative value from the primary principle of utility. As such, it remains unclear how he could maintain, for example, that restricting the basic expressive liberties of a social minority is excluded from consideration under the harm principle without some reliance on natural rights. For example, using the exact same long-run, rule utilitarian logic of Mill's argument, significant protests for racial equality which incite chaos, akin to the earlier illustration of the corn-dealer mob in the counterargument, could be restricted, despite their connection to the basic liberties (which are also required for deliberation and human progress) of a social minority. Crucially, without a natural rights principle to explain why basic liberties should be evenly distributed across society, the simple aggregation of happiness under utilitarianism fails to protect the basic liberties of all, as promised by Mill.

Furthermore, Mill is not just concerned with any form of disutility in the harm principle; he excludes the possibility of regulating harm in business or via free trade, arguing that business constitutes "fair competition" and that free trade itself is beneficial (87-88). However, this is not a coherent distinction. Take, for example, a business that can cause losses to another, even within the confines of "fairness," which are grounded in reality and thus affect the everyday lives of its employees; if my business drives another to the ground, I have seemingly caused a real act of harm to their suddenly jobless workers. This gap suggests Mill's argument requires some other mechanism to differentiate harm within fair commerce from the type of harm, which is extremely palpable to an individual person, such as threats of violence or inciting a mob.

The consideration that Mill gives to the idea of consent in this question of commerce suggests that utilitarianism is not fully coherent as a justification for his simple principle: under utilitarianism, it should not matter that two businesses agreed to the rules of the game before one is run out of business, nor that harm was done to the now jobless, nor is it clear that any appeal to tacit consent is valid. Similarly, it should not matter to the harm principle, if it is truly motivated by utilitarianism without concern for natural morality, that one consents to the harm done to them; if I agree to let someone else break my legs, insofar as I derive more satisfaction from my preference to have legs broken than the pain I feel from the action, it is on balance disutile, and should thus be regulated, or at least be open to regulation, as Mill suggests in chapter II (Mill 15). Only an implicit reliance on natural rights can explain why Mill cares to limit the scope of the liberty principle to the individual capable of holding certain inherent rights.

Stripping away the simple principle's ability to implicitly rely on natural rights leaves it

unable to fulfil its goals. Mill uses flawed reasoning to support his claim that respecting basic liberties promotes the social good, for it is too reliant on particular moral judgments and social context to be a universal rule. Furthermore, his justifications to explain why basic liberties should be valued, and only restricted to prevent harm, rest on quasi-rule utilitarian justifications, which ultimately fold into natural rights theories when challenged. Barring natural rights reasoning to explain why basic liberties apply *equally* to all, the simple principle on its own risks undermining its rationale by leading to restrictions of basic liberties for the preservation of general utility. The modern challenge of reconciling a theory of individual rights with utilitarianism remains.

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Does Mill's Simple Principle Truly "Forgo Any Advantage" From Natural Rights?



Can We Save the Experience Machine?

CHENXI CAO

In *Anarchy, State, and Utopia*, Robert Nozick developed his now famous thought experiment, ‘The Experience Machine’. In the thought experiment, Nozick imagines a machine that immerses people in virtual realities that provide them with pleasurable experiences. The experiences in the machine are subjectively indistinguishable from those not in the machine. Intuitively, most people would refuse to live in such a machine, indicating that they value reality over their internal, subjective experiences. Nozick’s thought experiment has long been seen as a powerful criticism of hedonism. In this paper, I do not aim to evaluate the plausibility of hedonism, but rather to examine the philosophical utility of the experience machine as a thought experiment and whether it can provide either *prima facie* or *pro tanto* reason to reject normative hedonism. I argue that ordinary intuitions with respect to the experience machine thought experiment are unlikely to be free from the implicit association bias (notwithstanding other biases), and that the experience machine is therefore unable to generate legitimate philosophical evidence against normative hedonism. Thus, the experience machine thought experiment loses its philosophical utility.

Keywords: experience machine, Nozick, hedonism, experimental philosophy, philosophy of mind.

Introduction

In his book *Anarchy, State and Utopia*, Robert Nozick developed his famous thought experiment, ‘The Experience Machine’. In the thought experiment, Nozick imagines a machine that immerses people in virtual realities that provide them with pleasurable experiences. The experiences induced by the machine are subjectively indistinguishable from those not in the machine. Intuitively, most people would refuse to live in such a machine, indicating that they value reality over their internal experiences. Nozick then uses this intuition to criticize the hedonistic claim that pleasure is what we value most. David Sobel states that the “widely held negative intuition that people report having with respect to the experience machine strikes at the heart of hedonism” and other philosophical views like it (Sobel 10).

Opponents of Nozick’s thought experiment have challenged the philosophical import and value of ordinary intuitions about the experience machine. They suggest intuitions are skewed by irrelevant factors and various cognitive biases. Others argue that even if the ‘experience machine’ does not provide a *prima facie* (i.e., all-things-considered) reason to reject hedonism, it at least offers a *pro tanto* reason to do so. For example, in “How to Use the Experience Machine,” Edin Lin revises Nozick’s thought experiment to avoid “biased” intuitions and proposes what he calls the ‘comparison account’ (an updated formulation of the thought experiment) as an argument against normative hedonism. In this paper, I do not aim to evaluate the plausibility of hedonism, but rather to examine the philosophical utility of the ‘experience machine’ and whether it can provide either *prima facie* or *pro tanto* reason to reject normative hedonism. I argue that the experience machine thought experiment is unlikely to be free from the implicit association bias (notwithstanding other biases), and is therefore unable to generate legitimate philosophical evidence against normative hedonism. Thus, the experience machine thought experiment loses its philosophical utility.

The Original ‘Experience Machine’

Robert Nozick’s ‘experience machine’ has long been taken to seriously challenge hedonism. Hedonism comes in two varieties: psychological hedonism and normative hedonism. Psychological hedonism claims that pursuing pleasure and avoiding pain are the two fundamental human *motivations*. Psychological hedonists claim that we are inherently motivated to pursue pleasure because we believe it to be good for us, and we are motivated to avoid pain because we believe it to be bad. For example, someone who devotes his life to making money *may* say that money is his motivation, but psychological hedonism argues that the only reason he is motivated

to make money is that living a wealthy life is pleasurable, and pleasure is what *really* motivates him. Psychological hedonism is a descriptive claim. Normative hedonism, on the other hand, claims that only pleasure has intrinsic value and only pain intrinsic *dis*value. For psychological hedonists, since pleasure is the ultimate human motivation, people are unlikely to voluntarily forsake pursuing it. Normative hedonism, however, emphasizes the intrinsic value of pleasure and includes the possibility that ordinary people may fail to recognize things that are truly valuable. For example, a person may devote their life to pursuing power as an intrinsic good, even if power is ultimately intrinsically worthless.

In the experience machine thought experiment, Robert Nozick (113) imagines a machine that “would provide any experiences that you desire”. “Superduper scientists” could stimulate all kinds of experiences that you desire, such as reading a great novel, eating from an extravagant buffet, having a romantic relationship, or even being the president (114). While you are enjoying these unlimited experiences in the machine, you would be “floating in a tank, with electrodes attached to your brain” (115). Nozick uses this thought experiment to probe everyday moral intuitions. Hedonism recommends permanently plugging into the experience machine, as doing so maximizes pleasure. However, the choice recommended by hedonism is counterintuitive, as most people would be reluctant to plug into the machine.

In the contemporary philosophical literature, the ‘experience machine’ has remained a prominent objection to hedonism. In David Sobel’s paper “Varieties of Hedonism,” he claims that the widely held moral intuition against plugging into the experience machine “strikes at the heart of hedonism” (Sobel 10). According to Sobel, if a theory of well-being is counterintuitive and promotes goodness that no one regards as valuable, the theory should be rejected (13). In other words, the counterintuitiveness of the verdict proposed by hedonism in the thought experiment provides a *prima facie* reason to reject hedonism.

Pro tanto reasons are “to some extent” or “partial” reasons (Reisner 1). When I say I have a *pro tanto* reason for doing something, it does not imply that I have to do it in the end. It means that I have some reason to do it, but it does not exclude the possibility of other, more important reasons that could override my current reason. In contrast, *prima facie* reasons are much stronger than *pro tanto* reasons (2). They are so-called “all things considered” reasons. When I have a *prima facie* reason to do something, it means I should do it in the end, regardless of other reasons against it. In Sobel’s opinion, the counterintuitiveness of a value theory provides a *prima facie* reason to reject it, since the theory can only regain its plausibility in one of two ways: by showing that the moral intuition is not incompatible with the theory, or by attacking the credibility of

the moral intuition (Sobel 11). I now provide some background on how opponents of the experience machine have pushed back on the thought experiment.

The Irrelevance Objection

Sharon Hewitt—an opponent of the experience machine—adopts the first strategy proposed by Sobel; she argues that hedonism is compatible with our moral intuitions about the experience machine. Hewitt argues that our moral intuitions can challenge *psychological* hedonism but not *normative* hedonism (338). In the traditional experience machine thought experiment, people are required to choose between living in the machine or reality. Their choices reflect their most *desirable* life, but desirability does not equate to intrinsic value, since the things we desire—such as reality—may not have intrinsic value. The fact that most people would not plug into the machine at most demonstrates that most people do not *desire* the hedonically-ideal life, which remains consistent with normative hedonism and the claim that only pleasure has intrinsic value. Nozick’s original thought experiment asks the wrong question; the question shouldn’t be “Would you want to enter the experience machine?” Rather, it should be: “*Should* (normatively) you (or anybody) enter the experience machine?” Nozick’s original formulation confuses desirability and actual value, and so ends up probing the wrong intuitions. Nonetheless, the thought experiment can regain its plausibility via adjustments in framing—for example, by asking participants to choose the life that they think is most valuable. Such a worry about the experience machine can thus be easily addressed.

Hewitt is not satisfied with this partial rebuttal of the experience machine. She further gestures at *irrelevant* factors in the original thought experiment that may result in biased intuitions or judgments. Hewitt claims that there are some practical details that may influence people’s judgments. For example, some people may worry that a pre-programmed life in the machine will be boring in the future, since our desires change all the time (340). Again, this worry can be easily addressed by stipulating that the machine has a self-adaptive function that can accommodate users’ ever-changing desires by supplying experiences that people find the most pleasurable. Similarly, in one version of the experience machine thought experiment, everyone in the world is plugged into the machine. Hewitt argues that this may cause irrelevant concerns about how to supply nutrition to human bodies in the external world (333). Again, it is not difficult to imagine stipulations to deal with these worries.

So, while Hewitt’s objections are generally persuasive, they do not challenge the experience machine thought experiment *per se*—they only challenge Nozick’s original formulation of

the thought experiment, which suffers from uncaredful framing. Irrelevant factors can be controlled by requiring participants to justify their choice by having them provide the reasons lying behind their choices. Such a methodology is adopted in Dan Weijers' experiments (which I go on to discuss), which show that even if we control for irrelevant factors, the majority of participants still hold a negative belief against hedonism (Weijers 524). To conclude, the first part of Sharon Hewitt's argument seems to successfully demonstrate the inability of the 'experience machine' to provide a *prima facie* reason to reject hedonism, while a revised version of Nozick's experience machine thought experiment still seems to provide partial reason to reject the view.

A Second Objection: The Biased Belief Objection

While Brigard and Weijers suggest ways in which Hewitt's objections can be dealt with, they—in keeping with Hewitt—defend other ways of attacking the reliability of moral intuitions elicited by the 'experience machine'. Brigard and Weijers adopt the second solution proposed by Sobel to regain the plausibility of hedonism by attacking the unreliability of the moral intuitions generated in Nozick's 'experience machine'. Brigard points out that participants' choices are influenced by the status quo bias. The status quo bias is a psychological effect that "causes people to prefer the state of affairs they are currently in—their status quo—when facing a decision that could alter it" (Brigard 50). For example, many users are reluctant to update their software because they are used to their old software—even though they know the new software provides better service. Brigard and Weijers worry that this bias may be corruptive of intuitions in the 'experience machine' thought experiment.

To demonstrate the influence of the status quo bias, Brigard designs alternative experience machine thought experiments, which involve neutral, positive, and negative background conditions. Brigard's thought experiment in the neutral condition is described as follows:

Suppose on a regular morning of the week, you are woken up by rapid door knocks.

Government officials tell you that super-duper scientists have mistakenly connected you to the experience machine, and everything you have experienced so far is not real. You are now given a choice: you can either remain in the machine, experiencing a life much more pleasurable than reality, or you can be disconnected and return to reality. (47)

Brigard supplements the neutral scenario with two different real-life circumstances. In the positive version, you live a wealthy life as a well-known artist in New York. In the negative version, you are a prisoner sentenced to life-long imprisonment. The polling results are surprising: In the negative situation, 87% of the participants choose to stay connected to the machine; while in the

neutral situation, only 53% of the participants choose to go back to real life, which is much lower than the original thought experiment results (48). Brigard's experimental results provide empirical evidence for the influence of the status quo bias on intuitions with respect to the experience machine. They also provide intuitive support for hedonism insofar as in the negative condition, people's pursuit of reality as emphasized by Nozick can be easily forsaken by the pain they may avoid (47). Philosophers have (again) responded by adjusting the framing of the experience machine thought experiment so as to avoid influence of the status quo bias. For example, Dan Weijer resists the status quo bias in a thought experiment he calls the 'stranger scenario'. The 'stranger scenario' is described as follows:

A stranger, named Boris, has just found out that he has been regularly switched between real life and a life of machine-generated experiences (without ever being aware of the switches); 50% of his life has been spent in an Experience Machine, and 50% in reality. Nearly all of Boris' most enjoyable experiences occurred while he was in an experience machine and nearly all of his least enjoyable experiences occurred while he was in reality. Boris now has to decide between living the rest of his life in an Experience Machine or in reality (i.e., no more switching). Now, you yourself (i.e., this is what participants are told) have had a go in an Experience Machine before and know that they provide an unpredictable rollercoaster ride of remarkable experiences. When in the machine, it still felt like you made autonomous decisions and occasionally faced tough situations, such as striving for your goals and feeling grief, although you didn't *really* do these things. Your experiences were also vastly more enjoyable and varied in the machine than in real life. You also recall that, while you were in the Experience Machine, you had no idea that you had gotten into a machine or that your experiences were generated by a machine. So, to return to Boris: Boris' life will be the same length in the Experience Machine as it would be in reality. No matter which option Boris chooses, (1) Boris' life will be very different from his current life, and (2) Boris will have no memory of this choice and he will think that he is in reality. (Weijers 523)

The participants are asked to ignore any external influences (electricity, nutrition, and stability), and remember the machine will always function perfectly. They are asked to choose between the following:

- A. Boris should stay connected to the machine.
- B. Boris should go back to reality.

Weijers's results ended up being split. About 55% of participants thought Boris should

stay connected to the machine—much lower than the results of the original experiments (525). Again, in Weijers’ ‘stranger scenario’ thought experiment, Weijers attempts to eliminate status quo bias in two ways. First, Boris is not initially living in reality but has been frequently switching between the experience machine and reality. As a result, neither the experience machine nor reality will be somewhere that he is used to. Secondly, the experiment no longer involves a choice about oneself, but rather a choice concerning a stranger, which has been shown to influence our judgment less when it is a choice involving others (525). After controlling for the influence of status quo bias, one hopes that participants’ choices in the experiment will reflect their moral intuitions concerning the core issue of whether only pleasure is valuable. Weijers findings reveal that intuitions are split, and so it would seem that this revised experience machine thought experiment provides far from a strong *prima facie* reason to reject hedonism. At best, it provides a *pro tanto* reason to do so, which I further discuss in the next section.

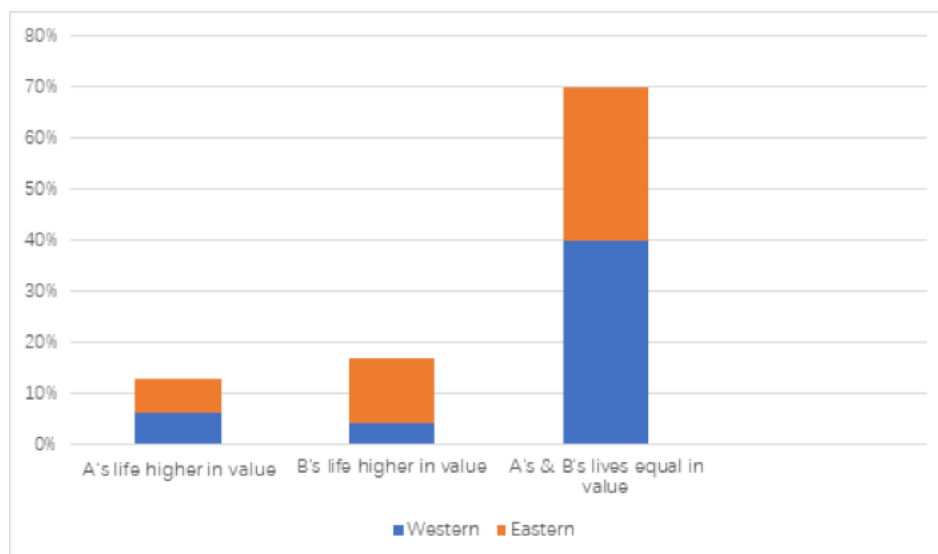
I. A Response: The Comparison Account

In “How to Use the Experience Machine,” Eden Lin argues for a moderate position: even though the original experience machine thought experiment does not provide sufficient reason to reject hedonism, it still offers a *pro tanto* reason to rule out hedonism—so long as it is presented in (once again) an alternative way (240). Lin acknowledges that the traditional Nozick experience machine does not threaten normative hedonism, but instead proposes a better way to use the experience machine (240). According to normative hedonism, pleasure is the only thing that is intrinsically valuable and constitutive of welfare. In Nozick’s original thought experiment, people are asked to choose the kind of life they desire, but—as I have discussed—desirability does not necessarily equate to intrinsic value. To address this issue, Lin revises Nozick’s thought experiment by *directly* surveying people’s ordinary intuitions about the welfare of life itself. In Lin’s new comparison experiment, A and B have identical lives with the same experiences and pleasures, but A lives in reality and B lives in the experience machine. Lin suggests that the majority of people will intuitively believe that A’s life has higher welfare, contrary to the implication of normative hedonism that A’s and B’s lives are of equal value (321). This would seem to provide at least a *pro tanto* reason to reject hedonism. Compared to the original thought experiment, Lin suggests that his comparison experiment is not vulnerable to the objections that I have discussed—namely, those related to the distorting effects of irrelevant factors and various other cognitive biases. The comparison experiment does not involve status quo bias, as instead of asking people to choose the life they desire, the comparison scenario asks people to decide which

life is more valuable, probing intuitions about normative hedonism directly. Lin therefore concludes that the comparison thought experiment offers at least *pro tanto* evidence to reject hedonism (332).

II. Discrepant Moral Intuitions Objection

I now argue that Lin’s argument against hedonism—despite its seemingly fruitful revisions—*still* fails to provide a compelling reason to reject hedonism. First, while Lin appeals to people’s moral intuitions to advance his objection and account, he does not actually provide any experimental evidence to support his claims. In order to confirm or challenge Lin’s intuitions about the empirical data (since that is—after all—all that they are), I conducted a quick poll with a sample size of approximately 70 people. Half of the participants were from Eastern cultural backgrounds, and the other half were from Western countries. The participants were aged between 20 and 60 years old. The results of the poll contradict Lin’s predictions, as 70% of participants chose the option that A and B’s lives are of equal value, and only 13% of participants chose A’s life as having a higher value. The results of the poll are shown in the following graph. While the poll cannot be considered a rigorous experiment and the participants’ intuitions cannot (necessarily) be generalized to all people, it does show that Lin cannot simply assume that peoples’ everyday moral intuitions about his ‘comparison account’ will match his own. More evidence is needed to support his conclusion. Simply, Lin’s comparison account does not enjoy the experimental data that Nozick’s thought experiment does; there is plenty of data to show that intuitions are widely held in the Nozick case—but this has yet to be shown in the Lin case.



III. Implicit Association Bias

Further, contrary to Lin's claim that his comparison experiment is (or would be) free from the influence of psychological bias, one possible source of bias that Lin overlooks is implicit bias association. Implicit association describes the subconscious associations between mental representations of objects (concepts) in memory). The best-known application is the assessment of implicit stereotypes held by test subjects, testing the associations between particular racial categories and stereotypes (Greenwald et al. 1465). The test has been applied to a variety of belief associations, whose mechanism is related to our unconscious belief formation (1467). To illustrate, if new reports and information from the media frequently portray Black people as violent and incompetent, and White people as nice and well-educated, these associations will gradually be formed and reinforced. When I am asked to interview two candidates for a job, even though I know that both candidates are equally qualified and well-educated, implicit association bias can lead me to believe that the Black candidate is less capable and, thus, cause me to choose the White candidate. When I am required to explain my choice, since people are inclined to rationalize their irrational beliefs, I will pretend to point out the incompetence of the black candidate (470).

To get to the point, in the experience machine thought experiment, participants who value real life over life in the machine may not be doing so because they place intrinsic value on factors other than experiences, but rather because they have formed an implicit belief (i.e., an association) that the experience of being *deceived* (an implication of being in the machine) is bad. How so? Well, deception naturally associates with bad and unpleasant experiences. In our everyday lives, deception often comes with consequences such as economic losses, failure in relationships, or betrayal by relatives. People have highly negative impressions of deception due to the pain so often brought about by deception in real life. The same can be said of *artificiality*—another implication of the experience machine. People associate artificiality with defects; for example, people take artificial flavouring to be worse than natural flavouring in foods. So, when it comes to the 'experience machine', even if (by stipulation) a *deceived* and *artificial* life in the machine would not actually bring about any bad consequences, peoples' negative implicit associations about deception and artificiality may persist and influence their selections and intuitions. In other words' participants may be misled by an implicit bias. Thus, the hedonist may claim that ordinary intuitions with respect to the 'experience machine' are skewed because they implicitly reflect concerns about the "deceptive" and "artificial" character of experiences within the machine, which are typically linked with bad consequences in everyday life.

IV. Can We Save the Experience Machine?

I would argue that, unlike the status quo bias, the implicit association bias is unlikely to be avoided by revising the thought experiment. Therefore, because of the existence of implicit association bias, we are unlikely to be in a position to derive reliable moral intuitions from the experience machine thought experiment.

To avoid implicit association bias, we should identify the specific criteria in the original thought experiment that elicit the bias. To illustrate, in the example of status quo bias, the bias is caused by the experiment's requirement that participants must give up their original lives. This bias can be avoided if the experience machine no longer asks participants to give up their original lives. What about the implicit association bias? The origin of the implicit association bias is peoples' pre-formed negative associations and impressions of 'the deceived life', which refers to the fact that when you enter the experience machine, even if you are living in a simulated world, you still regard it as reality and never be able to discover the truth.

There are two ways to avoid this bias: first, eliminate the negative impression of a deceived world; second, change the criteria of the experiment so that participants no longer live a 'deceived life'. The first way is unlikely to succeed, as it is not clear how we could eliminate the relevant implicit association; after all, deception usually does breed bad consequences in daily life. As for the second strategy: since the reason for such bias is caused by our false belief that we are living in the real world when we enter the experience machine, we can change the criteria so that people clearly know that they are in a virtual world when they enter the machine. The content of the experience machine thought experiment of Lin's comparative version can be revised as follows:

Consider two lives, A and B, that are experientially identical and thus identical with respect to the qualitative features, durations, and temporal distribution of the pleasures and pains they contain. The subject of A spends his life in the real world, whereas the subject of B lives in an experience machine for his entire life, and B clearly knows he does not live in the real world, but rather in a computer-simulated world. A and B's experiences mirror the traditional good life available to citizens of Western countries. In the experience machine, at no point does B interact with, or receive any care from, other human beings: thus, the experience machine runs entirely on its own, without any human intervention.

Now, three choices:

- A. A's life is higher in value.
- B. B's life is higher in value.
- C. A's and B's lives are equal in value.

There is an intuitive incoherence in this revised thought experiment because the criteria that A's and B's lives are experientially identical with respect to their pleasure and pain conflicts with B's knowledge that he does not live in the real world. People are unlikely to have the same subjective experiences once they know they are not living in reality. For example, the experiences of killing an NPC in a video game and killing a real person are very different. Similarly: In *The Truman Show*, after Truman realizes everything he has experienced is just a big reality show, he does not value his experiences like he used to. Once people know they are living in a simulated world, they will not have the same level of pleasure and pain as in reality. In other words, if the people in the machine are to have the same level of pleasure and pain as in reality, it requires them to be in deception, which would ultimately cause implicit association bias.

V. Conclusion

In this essay, I have surveyed objections to Robert Nozick's 'experience machine' having to do with the reliability of the moral intuitions that the thought experiment is expected to probe and elicit. I have surveyed Sharon Hewitt's objection to Nozick, arguing that her objection successfully shows that Nozick's thought experiment fails to provide prima facie reason to reject normative hedonism. I have also surveyed Brigard and Weijers' objections to the experiment, having to do with status quo bias. Finally, I have discussed Edin Lin's efforts to revise the thought experiment via his 'comparison account'. I have argued that intuitions generated by the 'comparison account' are vulnerable to implicit association bias. I have also argued that possible revisions of the account are unlikely to avoid the influence of this bias. I conclude that the prospects of success for the 'experience machine' are dim. Indeed, it may not be possible to save the experience machine.

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Skepticism Concerning Akrasia and Original Responsibility

CHELSEA WANG

In “Skepticism about Moral Responsibility,” Gideon Rosen argues that confident judgements of blameworthiness are unjustified since akrasia is the sole locus of original responsibility. An intermediate conclusion precedes this: every culpably bad action must be the causal upshot of a genuinely akratic act or omission. However, I argue that the notion of original responsibility itself is not adequately structured so that the origins of moral responsibility can be, to a reasonable degree of certainty, determined. Although it is unclear where else moral responsibility might be grounded, it is at least clear that original responsibility, if relevant at all, must be refined and reconsidered.

Keywords: moral responsibility, akrasia, moral ignorance, skepticism, blameworthiness.

Introduction

In “Skepticism about Moral Responsibility,” Gideon Rosen argues that confident positive judgements of blameworthiness are unjustified since every culpably bad action must be the causal upshot of a genuinely akratic act or omission. He arrives at this conclusion by arguing that akrasia is the only locus of original responsibility, yet I propose that the notion of original responsibility itself is not adequately defined and thus the origins of moral responsibility cannot be confidently determined. The relevance of original responsibility to the question of moral responsibility is dependent on one’s subjective interpretation of moral responsibility. As a result, our conception of ultimate moral responsibility ought to be grounded elsewhere. I first expound Rosen’s akratic conception of original responsibility but reject it by proposing that akrasia is a psychological phenomenon that may lead to morally wrong actions but, because it is a necessary for human cognition, it cannot source blame. One of Elizabeth Harman’s objections in “Does Moral Ignorance Exculpate?” claims that original responsibility does indeed have a coherent framework, and it derives not from akrasia but from false moral beliefs. However, I argue that a misunderstanding of the nature of original responsibility undermines the arguments of both philosophers, and that we ought to abandon the notion of original responsibility altogether. Finally, I underscore the way in which Harman’s distinction of ignorance and false belief remains inadequate to properly reject Rosen’s argument.

Rosen on Original Responsibility and Akrasia

Rosen’s argument requires that we differentiate between an act for which one is derivatively responsible and an act for which one is originally responsible. It claims that derivative responsibility presupposes original responsibility, and that if one is responsible for Y then either Y is itself a locus of original responsibility or the locus is located somewhere in Y’s causal history (Rosen 299). One has derivative responsibility for Y only when one is independently responsible for X, a prior act or omission that directly brings about or contributes to Y (299). Any other type of responsibility is termed original responsibility (299). Rosen then contends that one is responsible for an act done from ignorance if one is responsible for the thing that led to that ignorance; in other words, ignorance exculpates only when it is non-culpable (300). One is culpably ignorant only if her ignorance results from some prior culpable act or omission (301). Among such acts or omissions are violations of what Rosen calls procedural epistemic obligations (hereafter PEOs), which are basic measures that the “person of ordinary prudence” would take to remain adequately informed of moral and non-moral facts (301). Importantly, he notes that PEOs are impossible

to codify and do not require specific knowledge or beliefs; instead, they are obligations to take minimal steps to ensure that one will in fact know how to navigate the world in diverse circumstances when they so arise (301).

This is to say that responsibility for actions done from ignorance is doubly derivative: “the agent is responsible for the ignorant act only if he is responsible for the ignorance from which he acts; and he is responsible for the ignorance only if he is responsible for some prior failure to discharge one of his procedural epistemic obligations” (303). As all acts of ignorance are a matter of derivative responsibility, an intermediate conclusion is formed: acting from ignorance is not a locus of original responsibility (301). Indeed, Rosen argues that the only possible locus of original responsibility is from an *akratic* act, which is an act that an agent intentionally performs even with conscious knowledge of its utmost inappropriateness or wrongfulness, all things considered (307).

Rosen then argues for an *akratic* conception of blameworthiness with an illustration of the nature of an *akratic* act. He considers the case of Bill, who plans to lie to his wife to avoid a grave outcome despite his knowledge that lying is immoral. Now suppose that Bill had carefully gone through all relevant deliberations and did not violate any PEOs before landing on this erroneous conclusion—perhaps he had been badly taught or contracted a disease that clouded his moral judgement. In any case, insofar as Bill followed every procedural obligation, according to Rosen’s argument, he is not at fault for genuinely believing that he should lie. His action ultimately stems from ignorance that does not derive from a mismanagement of beliefs or prior recklessness. An expectation for him to do otherwise—like to tell the truth after systematically and honestly arriving at the opposite conclusion—would thus simply be unrealistic.

On this account, Bill is not blameworthy for his actions. For an agent to act wrongly then, she would have to act *akratically*, that is, act against her better judgement and do something that, all things considered, she knows is the worse thing to do. What follows from this, and Rosen’s previously outlined premises, is that the only locus of original responsibility is an *akratic* act. Therefore, every culpable bad action is the causal result of an instance of clear-eyed *akrasia* (307).

Rosen acknowledges that genuine *akrasia* is nearly impossible to identify from ordinary weakness of will. A victim of the former concludes that something is the correct action but does another thing with the original judgement still in mind, whereas a victim of the latter arrives at a judgement but loses confidence in it by the time they are to act on the judgment (309). He concedes that this poses a problem to the identification of *akrasia* and thus helps him to arrive at

his final conclusion: that confident judgements of blameworthiness are unjustified. By placing a narrower focus on his characterization of akrasia, it itself can be almost entirely explained away by appeal to the psychological phenomenon of cognitive dissonance, which occurs when one undergoes cognitive states of contradiction that produce mental discomfort, ultimately leading to a change in a belief or behaviour to restore psychological harmony (Dawson 60). For instance, upon being asked by her partner to move to a small town, Carol, a lover of urban life, is unwilling. But, because she wants her partner to be happy, she begins to reflect on the merits of living in a small town, rationalizing the move by thinking of the saved costs and smooth traffic. Psychological changes such as Carol's are mostly unconscious and are themselves catalysts of akrasia (Aaltola 11). "Thereby, perhaps akrasia is not always caused by an additional factor X (desire, opinion) influencing decision-making, but rather it may be inbuilt into various mental conditions, thereby being a phenomenon concerning the *structure* rather than the *content* of our mindedness" (Aaltola 11, italics added). That is, akrasia might very well be a mere product of basic human psychology over which an individual has no control in light of the pure irrationality of acting contrary to one's beliefs. The human psyche simply does not permit such jarring occurrences of dissonance.

Because of the psychological necessity of akrasia in human cognition, akrasia cannot ground any moral assessment or act as an origin point for moral blameworthiness. As a necessity for our very being and any subsequent moral deliberation, it is not a morally culpable situation into which one can fall. Yet Rosen himself claims that an act can be wrong but not legitimately blameworthy (Rosen 297). Akrasia, an ambiguous and mysterious phenomenon that has direct ties to fundamental psychological structures, ought to be considered as one such case. Moral responsibility thus cannot be found in this characterization of original responsibility, and the premise stating that the only possible locus of original responsibility is akrasia fails to hold true. Therefore, the intermediate conclusion that every culpable bad action must be the causal upshot of a genuinely akratic act or omission is rejected. The upshot of the rejection of akrasia as a locus of original responsibility effectively amounts to a rejection of moral responsibility altogether, though this paper does not pursue this line of argumentation. Instead, it claims that common understandings of moral responsibility as something to be found in original responsibility ought to be reframed.

Harman on Ignorance and False Belief

Elizabeth Harman denies Rosen's premise that acting out of ignorance is exculpatory and

not a locus of original responsibility by specifying a subtle variation between pure ignorance and false belief. Harman uses the example of Alice poisoning Bob to demarcate these concepts: Alice believes she spoons sugar into Bob's coffee, but the sugar is in fact cyanide, so she is blameless for her genuinely false belief (to aid in comprehension, she can alternatively be understood as being blameless for her lack of true belief). To Rosen, this exemplifies the way in which an action done from ignorance cannot be a locus of original responsibility. However, Harman maintains that this is the wrong lesson, for had Alice spooned cyanide into Bob's coffee with 0.5 credence that it was sugar and 0.5 credence that it was cyanide, she would have been originally responsible for acting on a her false belief and hence been blameworthy for the ensuing poisoning; she lacked the belief that the sugar was in fact cyanide, but did not have a *positively developed* belief of what was in the sugar bowl. Although she does not endorse this principle, Harman argues that it is exculpatory false belief that Rosen's argument amounts to, and not exculpatory ignorance (Harman 448). While this distinction appears trivial, its significance is demonstrated by its implication for Rosen's conclusion: considering these specifications, Rosen's claim that morally wrong behaviour arises from ignorance or akrasia must be adjusted to the following: "every instance of morally wrong behavior... is either a case of behavior from false belief in p , such that if p is true then the behavior is permissible, or a case of clear-eyed akrasia" (449). Consequently, Rosen's arguments fail to uphold his conclusion, and a more accurate one should state that it is false belief and not ignorance that exculpates.

Yet, even with this charitable reformulation of Rosen's argument, Harman rejects it. "Many instances of morally wrong behavior do not involve clear-eyed akrasia because the agent lacks a firm view about whether his behavior is wrong," she explains (449). "Such behavior involves lack of true moral belief—and hence, moral ignorance—without involving moral false belief" (449). Returning to the example of Alice, her uncertainty in distinguishing between cyanide and sugar does not relieve her original responsibility for the action. Generalizing from this, uncertainty regarding wrong action, then, does not alleviate original responsibility (449). Furthermore, Harman suggests that this narrower conclusion problematically implies that agents remain blameless even in ordinary cases that clearly merit blameworthiness, which disrupts the very concept of blame. In such a manner, Harman deduces that ignorance can in fact be a locus of original responsibility and is therefore morally inculpatory.

Resultantly, Harman argues that moral responsibility can stem from false belief, even if one has not been irresponsible with PEOs (459). She contends that without having acted badly in this procedural sense, one can nonetheless be blameworthy for having "violated some moral

norms *that apply to beliefs themselves*, not to the management of one's beliefs" (459, italics added). Her view simply entails that agents "morally ought to believe the moral truth" (459). That is, actions are not blameworthy because their motivating beliefs are blameworthy; rather, they are blameworthy when they fail to meet the obligations of moral truths.

Blameworthiness and Responsibility

A response to Harman emphasizes an implicit assumption embedded in both philosophers' texts that frames the entire debate in such a way that presupposes the foundations of moral responsibility. Specifically, they both assume that an agent cannot be held morally responsible for an action unless it either is or is the upshot of something for which she is originally responsible. In other words, moral responsibility only originates non-derivatively.

Interestingly, both philosophers interpret the concept of original responsibility differently. To Rosen, original responsibility sources blameworthiness as it can be located once an agent's historical causal chain is traced all the way down to something for which she is wholly responsible. But in this way, Rosen conflates cause and reason. While an originally blameworthy action from the very bottom of the chain of causality directs an agent to a subsequent action that ultimately amounts to some blameworthy action from ignorance, it is illogical to pursue this mode of attributing moral blameworthiness. This mode of attribution characterizes causation as singly linear and assumes each act's intention is interrelated. Causal responsibility does not entail moral responsibility, and normative theories of moral responsibility should not necessitate such a tracing of responsibility all the way down, for this results plainly in an infinite regress. And, while Rosen states that such a regress is stopped by akrasia, it cannot count as a morally culpable phenomenon and thus fails to do so.

Harman, though, construes original responsibility as something sourcing moral responsibility whenever it aligns with folk morality. She defends her stance with a heavy reliance on intuition through listing examples such as the 1950s father who saves money to send his sons to college but not his daughter, and a slave owner from ancient times; she claims that these scenarios are indeed morally blameworthy, but she is not able to explain exactly why. Her conclusion here rests on her differentiation of moral ignorance from moral belief and the subsequent argument detailing how an agent is morally blameworthy for his "[lack of] a firm view about whether his behaviour is wrong," yet this very lack of a firm view is exactly what amounts to the previously described philosophically problematic notion of akrasia (Harman 449). As philosopher Richard Holton points out: "it is in the *nature* of the putative cases of akratic action that judgment is con-

flicting, unclear, and unstable” (Holton 2).

Harman’s view that we are simply morally obligated to know moral truth cannot hold true, either. She effectively assumes her own conclusion by arguing that, to evade moral responsibility, we must simply know the moral truths to our actions (Harman 459). She does not explain how one might go about doing this. Such an expectation is demanding and impractical, and as her argument rests entirely on intuitive notions of right and wrong that are assessed with modern notions of good and bad, her argument is easily defeated.¹

As a result of both philosophers’ issues with formulating an accurate and unproblematic picture of original responsibility, original responsibility ought to be irrelevant to any discussion of moral responsibility. Considering Rosen’s statement that PEOs are impossible to codify, why might the origins of moral responsibility be any different? Though, a rejection of Rosen’s original premises does not entail an acceptance of Harman’s, as her arguments remain largely unreasoned and appeal to conventional dictates of moral thought. Instead, we ought to adjust our understandings of moral responsibility to reflect practical and social conventions of responsibility grounded in intention rather than causality or convention.

Conclusion

This paper has argued that the concept of original responsibility ought to either be defined more specifically or abandoned altogether in favour of a new form of acknowledgement of moral responsibility. Rosen’s intermediate conclusion that every culpable bad action must be the causal upshot of a genuinely akratic act or omission fails to hold; if original responsibility is in akrasia and akrasia is dissonance which cannot source moral accountability, moral responsibility cannot be found in akrasia or original responsibility. However, Elizabeth Harman’s objection disproves Rosen’s argument by underscoring the difference between false belief and ignorance that Rosen overlooks and contends instead that original responsibility derives from false moral beliefs. Yet, I contend that both philosophers obscure the notion of original responsibility which renders the entire debate ambiguous. Furthermore, two of Harman’s views, that ignorance and false belief have a great enough difference to warrant a distinction in moral responsibility and that individuals are morally obligated to know moral truth fail to hold. Absolute moral responsibility all the way down is impossible to determine, and hence we must abandon this endeavor. Though it is unclear where moral responsibility should be found, it is at least clear that original responsibility,

1. There would be considerable epistemic difficulties in grasping moral issues beyond presently available paradigms.

if relevant at all, must be refined and reconsidered.

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Artificial Intelligence as An Artistic Medium: Creativity and Computation

JULIA McLEAN

Following a boom in machine learning, artificial intelligence (AI) is now capable of producing artworks indistinguishable from those created by human artists. This development has sparked a variety of debates, including whether or not AI constitutes a new medium with its own unique aesthetic values concerning the production of art. This paper examines objections against AI systems' data sets and their computational nature, two aspects of AI which seem untenable to capturing intuitive conceptions of emotion and creativity. AI systems are nowhere near equivalent to that of a human mind; they cannot draw from visceral experience and intuition in order to create art. Rather, they are better suited for identifying and randomizing aesthetic patterns and styles within the artistic tradition. This synthesis, coupled with AI's computational abilities and large data sets, demonstrates an opportunity for this medium to supersede the limited capacities of human memory and inspiration. Drawing on various scholars of aesthetics and AI philosophy, I argue that AI systems present a medium that affirms its legitimacy and sets itself apart in the artistic sphere on account of the opportunities it provides.

Keywords: artificial intelligence, generative adversarial networks (GANs), creativity, aesthetics.

Introduction

Artificial intelligence (AI) has progressed tremendously over the past few decades, with systems whose assistance has become increasingly pervasive in everyday life. AI is premised on the idea that such systems can not only mimic and perform human-like tasks but, as Alan Turing famously proposed, can be equivalent to human intelligence (Arielli & Manovich, 2022; Maiocchi, 1991). In the 21st century, new efforts have been directed to the development of AI in the artistic realm, examining whether the artwork it produces merely mimics and reproduces pre-existing artistic values and properties or contributes to the creation of new ones. While various AI systems have demonstrated their ability to create content in writing, music, and visual arts, many detractors are skeptical of the idea that AI can be capable of the innate human ability of creativity (Arielli & Manovich, 2022; Paul & Kaufman, 2014). The following paper aims to explore AI systems in the realm of the arts, examining objections related to its computational nature, data inputs, and potential for creativity. I will argue that AI systems present a medium marked by a cognitive shift providing artists with the ability to create art using computational aesthetic and synthetic cultural environments.

Art and Creativity

Art is commonly perceived as an activity that is uniquely human. This is largely in virtue of innate human abilities combining creativity and skill in order to express a thought and/or elicit an emotion (Paul & Kaufman, 2014). A major component of art is creativity, a feature commonly attributed to artists, their artworks, and the mental processes involved in producing art (Paul & Kaufman, 2014). Creativity is thus integral in the arts domain as it drives artistic innovation, enabling the development of new aesthetic properties and conventions pertaining but not limited to form, content, and themes. Creativity not only defines the mechanisms through which individuals take up their subject, but the ways in which artists combine and transform their insight into visceral experiences (Paul & Kaufman, 2014). Many scholars remark that for art to be creative, it must be original, novel, and of unique value (Arielli & Manovich, 2022; Paul & Kaufman, 2014). Historically, it was characterized as a divine inspiration, a mystery that was unable to be taught nor learned. As will later be discussed, however, modern views suggest creativity may be more rational and computational than originally understood. What remains undetermined is whether AI produces art that can live up to this notion of creativity, how it might do so, and what makes such output artistically valuable.

The Problem with Creativity in AI

Before examining AI systems and the art they produce, it is worth noting why critics believe their inputs, processes, and outputs can not constitute genuine art and creativity. One body of research, conducted by Li Gu and Yong Li (2022), suggests that the bias resides less in the artwork and more in the AI processes that bring it about. In the case of visual arts, studies show that experts cannot distinguish between human or AI made artworks but alter their judgements of the artwork upon knowing AI was involved (Mazzone & Elgammal, 2019). Although this does not apply to all mediums, this suggests there exists a bias resulting from technophobia and a lack of understanding of how AI functions (Arielle & Manovich, 2022; Mazzone & Elgammal, 2019). The aversion is premised on the idea that intuition and emotion are perceived as distinct from the cognitive processes of logic (Maiocchi, 1991; Paul & Kaufman, 2014). Ultimately, critics take issue with the process of AI systems, as it is difficult to distinguish what is particularly creative in the functioning of synthesis and computation (Mazzone & Elgammal, 2019; Vold, 2022). As previously mentioned, art concerns a visceral experience, a feature that is integral to the creative process of artworks and its intended reception. On the one hand, art is a creative way of taking up the human condition and expressing this experience (Mazzone & Elgammal, 2019). On the other hand, art not only expresses a particular view on its subject but also conjures a particular way of experiencing the concepts it takes up. Detractors highlight that the nature of AI systems poses problems as an artistic medium, as the works that AI systems produce do not result from traditional ways of experiencing and understanding the subjects taken up (Hovagimyan, 2001; Mazzone & Elgammal, 2019). The idea is that there appears to be a disconnect between the visceral artworks produced by AI and the contexts in which they are brought about (Arielli & Manovich, 2022; Mazzone & Elgammal, 2019).

Ultimately, critics suggest that art produced by AI is not constitutive of high art. It is of a lesser caliber as that the process is so far removed from conventional notions of art creation (Arielli & Manovich, 2022; Gu & Li, 2022). Thus, for AI systems to constitute a medium for producing genuine art, one must establish two claims: where the creativity lies in the AI systems processes and how this process distinguishes itself from other mediums.

How AI Systems Function

Martin Mazzone and Ahmed Elgammal (2019, p. 8) describe an art medium as “the range of possibilities and limitations inherent to the conditions of creation in that area of art.” With this in mind, let us now examine how AI systems function and what makes them of artistic value,

focusing on visual art and the types of programs producing such images. The way AI systems produce visual art is through programming that emulates the neuron connections and synaptic functions of the brain (Hovagimyan, 2001, p. 454). This algorithmic architecture is employed by generative adversarial networks (GANs), a machine learning framework designed by Goodfellow in 2014. The system functions by inputting large amounts of data such as images into the algorithm, enabling the AI to “learn” the history and aesthetic values of art through pattern recognition and inference. This negates the need to write code that is specifically tailored to individual aesthetic styles and rules as the AI progressively alters its own parameters (Arielli & Manovich, 2022; Hovagimyan, 2001; Mazzone & Elgammal, 2019). Using word prompts, data, and detected aesthetic styles, GANs generate innovative images according to a program coded to mediate two functions. On the one hand, it must follow the aesthetic norms inputted, while on the other hand, it is penalized for emulating pre-existing styles. The result is an extensive array of novel images from which the artist can choose to curate their desired effect (Mazzone & Elgammal, 2019). Essentially, AI systems are employing pattern recognition and randomization by drawing from a dataset filled with relevant data and making sense of that information (categorizing it, matching it, etc.) in order to then produce the artwork. As will be argued in the following sections of this paper, this process is akin to that of the cognitive processes found in the brain and to which artists make use of in order to capture their inspiration and convey their art. The cognitive shift is the medium taking up a part of the mental process, providing a new process for artists to utilize and engage with.

Computation and Creativity

Creativity in art is often associated with imagination, originality, and randomness (Maiocchi, 1991; Mazzone & Elgammal, 2019). Stokes describes imagination as “non-truth bound” in that it does not involve an accurate representation but rather a manipulation of the information present (Paul & Kaufman, 2014). Similarly, randomness often concerns unexpected ideas through either new discoveries or the creation of something that did not previously exist. What might creativity mean, or look like, within a computation model?

As previously discussed, logic and computation are often perceived as separate from the artistic domain on account of their rules and structural nature. The idea is that following rules of this kind does not constitute creativity because this discourages originality (Paul & Kaufman, 2014). Karina Vold (2022) suggests that computational art can at best produce recreations which act as commentary or reflection of the aesthetic norms in a given period. Conversely, Hajek

contends that creativity is not only compatible with but enhanced by adherence to rules. Consider for instance the ways in which creativity is taught in philosophical argumentation, such as generating counterexamples or forming positive and negative arguments. These heuristics not only require following a particular structure and model, but also require a certain level of imitation to be of effect (Paul & Kaufman, 2014). Indeed, AI art is often referred to as “computation art”, a term that highlights a particular novelty of the medium and the motivations behind developing AI systems (Mazzone & Elgammal, 2019; Paul & Kaufman, 2014). AI systems are programmed to emulate certain cognitive abilities such as memory, logic, reasoning and processing (Arielli & Manovich, 2022; Maiocchi, 1991). Drawing from the ways in which AI systems function, their exploration of input data and ability to combine and transform it suggests AI fits the criteria of creativity. AI’s ability to follow rules can result in abstract creations, a characteristic that is ultimately intended by the way such systems are programmed. Moreover, in controlling input data in AI systems, researchers have identified that AI systems can predict the stylistic evolution in the visual arts. This highlights that even the development of new aesthetics contains an “algorithmic” character and follows a progression that is not bound by the historical context in which they reside (Arielli & Manovich, 2022). In this sense, AI systems are not only increasingly effective regarding computation and logic, but the art-hood of the work produced cannot be delegitimized in virtue of their way of operating. This highlights a cognitive shift in the creation of artworks such that artists must now share the skill with the medium and incorporate it into the artistic process. Although creativity has been historically perceived as distinct from such types of cognitive abilities, it turns out to be more mechanical than previously assumed (Arielli & Manovich, 2022; Paul & Kaufman, 2014).

An Alternate Environmental Context

This brings us to another important aspect challenging AI as a medium, which is the context grounding the creative process. The AI process lacks referent in the natural world and cannot create art in the same way human artists do (Mazzone & Elgammal, 2019). However, as previously noted, what is distinct about this medium is the artistic shift towards cognition. The point is that artists can utilize AI to maximize its unique abilities, such as its extensive data and capacities for synthesis (Hovagimyan, 2001; Maiocchi, 1991). Drawing on psychology, emotions and affective states appear to result from information gathered in our external environment. This suggests that it is not unlikely that emotions and mental states follow certain patterns and rules of inference like the very aesthetics previously noted (Paul & Kaufman, 2014). Moreover, Robert

Maiocchi (1991) highlights that, in this regard, AI merely has a different “cultural environment” in which it processes. Insofar that the AI system has access to an extensive and diverse compilation of data, it can combine them in ways which no longer resemble the previous norms and conceptions of the world. To this point, the medium’s capability to identify and contain so much data means that its computational ability has an increased capacity to detect new patterns and aesthetic styles. This presents an opportunity for artists to produce art that is radically different and not constrained by the norms influencing traditional aesthetic ideals. This brings up the last unique ability of the AI medium, that of randomization and originality. Some note that the randomness in art involves a judgment balancing between intangible ideas and aspects of the real world (Maiocchi, 1991). Insofar that AI is programmed to balance between abstracting from and imitating its inputs, its computational nature suggests it is more effective at randomization than human artists. This is not to suggest that AI systems have intentionality, but rather that their ability for randomization is in virtue of their programming, a feature which human artists can capitalize on.

In conclusion, AI systems are certainly nowhere near equivalent to that of the human mind, and cannot constitute a complete creative process in themselves. Although they cannot create works by drawing upon visceral experience, they are better suited for identifying aesthetic patterns and styles consistent with such experiences. This synthesis, coupled with AI computational abilities and large data sets, demonstrates an opportunity to reconfigure how art is made by presenting a cognitive shift. Ultimately, the medium affirms its legitimacy and sets itself apart in the artistic sphere on account of the opportunities it provides. AI’s lack of a contextual environment does not deny the ability for it to supplement creativity but rather enriches the novelty of artistic creation through its unique disposition. Its highly effective randomization and abstraction supersedes even the best of artistic ingenuity by allowing artists to push the boundaries of creativity past what they are typically capable of. AI as an artistic medium can thus enrich an artist’s creative process, reconciling a fine balance between synthetic creativity and genuine creative processes.

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Dasein in the Age of Enframing and the Self as Standing-Reserve

BEATTIE BERNFIELD-MILLMAN

In this analysis of Martin Heidegger's *The Question Concerning Technology*, I identify enframing as the essence of technology on his view and describe how in the age of enframing, man calls upon his own sense of self as an object for command: enframing gathers one to consider their own mind as an object of study first and something that is second. I show this by looking at how psychical language situates the mind as such, manifesting indicatively in neuroscientific psychiatry as a science of the mind. This should make clear how man, gathered to master his own notion of self as an orderable object, turns away from being-in-the-world and turns towards entities within-the-world, namely, the relations between entities as they form a 'picture-self' which expedites and dissolves a 'free relation' to being. Finally, I use this discussion to bridge the early and later Heidegger.

Keywords: Heidegger, phenomenology, technology, self, mind, enframing.

In this essay, I will concentrate on Martin Heidegger's notion of 'Enframing'¹ in *The Question Concerning Technology*. My specific concern is how "man in the realm of enframing" conceives of his own 'self' as standing-reserve. I intend to show that psychical language exemplifies our modern technological attitude towards the self. This attitude, which manifests indicatively in neuroscientific psychiatry as a science of the 'mind,' sees one's relation to one's own being as one of observer to thing. In short, man is gathered to master his own notion of self as an orderable object, turning away from himself as being-in-the-world and turning towards entities within-the-world, namely, the relations between entities as they form a 'picture-self' which expedites and dissolves a free relation to being.

The critical nature of Heidegger's essays on technology lends the work to mass application to the different 'ills of our time.' One will thus find no shortage of Heideggerian interpretations of this or that contemporary phenomenon. Our discussion of psychiatry should move beyond a project of this sort. Our path always travels towards the being of entities, and principally, the being of man. The 'real world' topics, not to be mistaken for 'applied Heidegger,' serve this inquiry.

§ 1

Upon reading Heidegger's *The Question Concerning Technology*, if one were expecting to find an analysis of various kinds of technological gadgets and their properties, they would be surprised. Heidegger's essay is about *being*, but as such it is no less about technology: it is not an object-oriented discussion of technology as ordinarily conceived, but an *ontological* discussion about the being of technology and its relation to the being of ourselves. To Heidegger, this current relationship is an unfree one, and the questioning that follows serves to understand this relationship which "chains" us (4)².

Heidegger initially asks, what is it that pervades technology? He observes that when we consider technology as the utilization of equipment, tools, and machines, it appears to be whatever serves as a means to an end (5). Indeed, this characteristic (the Latin "*instrumentum*") conforms with everything technological, so Heidegger finds it "uncannily correct," for modern jet aircrafts as much as primitive works of handicraft (5).

1. I have chosen to leave some words uncapitalized which are capitalized in the primary source because I am not referring to *things* or *entities* but to descriptions of the way we are. For example, we are not within 'the Frame' but we are rather *enframed*.

2. Page numbers refer to *The Question Concerning Technology* unless otherwise indicated. *Being and Time* is abbreviated as "BT"

“Correctness” (as opposed to “truth”) can be interpreted as pejorative in Heidegger’s work, but he dismisses that potential connotation here. For “the correct always fixes upon something pertinent in whatever is under consideration,” although it does not necessarily uncover what is actual in its essence (5). The correct makes agreement between entities, identifying a relation between them. But in identifying the relation as a correct relation, it conceals the *nature* of the relation, that original truth on which the assignment of correctness is based. There is a richness to the interactions between ourselves and the world that cannot be captured by merely mapping out a causal relationship between generally interchangeable objects. The image of statically related entities fails to capture the experience of their relatedness. In sum, “the merely correct is not yet the true”—and it is the true which brings man into free relation with technology. However, Heidegger seeks the true by way of the correct.

The instrumental definition of technology’s essence carries us forth to “cause,” since technology, a means, effects an end, and whatever has an effect is called a cause (6). But Heidegger presents cause under a different image. He identifies the *ancient Greek* notion of cause with “*aition*,” or “that to which something else is indebted” (*das, was ein anderes verschuldet*) (7). The four kinds of causes traditionally identified with Aristotle are then primordially the four ways of *being responsible* for something, a term that evokes care and relatedness. The four mutually dependent conceptions of cause can be understood through the creation of a silver chalice. The silver chalice is indebted to its matter (silver), its form (aspect of chaliceness), its bounds (circumscription as a sacrificial vessel), and, finally, the silversmith.³

The silversmith is co-responsible as that from whence the sacrificial vessel’s bringing forth and resting-in-self take and retain their first departure. The three previously mentioned ways of being responsible owe thanks to the pondering of the silversmith for the ‘that’ and the ‘how’ of their coming into appearance and into play for the production of the sacrificial vessel. (8)

This account of causality emphasizes the “how” of our interactions with entities, that is, the process through which we and the world are made intelligible. “Cause” is not simply what precedes an effect, but something that *involves* itself with an effect, allowing it to appear to us in a way that is unique and meaningful. Specifically, Heidegger claims that the four causes “are responsible for the silver chalice’s lying ready before us as a sacrificial vessel. Lying before and lying ready (*hypokeisthai*) characterize the presencing of something that presences. The four ways of

3. Heidegger deliberately conceives *telos* as “bounds” and not “purpose.”

being responsible bring something into appearance” (9).

If we imagine the silversmith pondering the “how” of the coming into appearance, we may feel that, along with the other three, being responsible towards the things we involve ourselves with precisely “brings something into appearance.” As such, being responsible is further described as “starting something on its way to arrival,” which is characterized succinctly as “*Ver-an-lassen*” —“to occasion,” “to bring about,” or “to call forth” (9, 9 n8).⁴ With reference to Plato, Heidegger writes that every instance of bringing into presence is a *poiesis*, or a *Her-vor-bringen*—“to bring forth hither,” or *bringing-forth* (10, 10 n9). In direct translation, he states: “Bringing-forth-hither brings hither out of concealment, forth into unconcealment” (10 n9).

Finally, under the scope of bringing-forth there is not only *poiesis* as traditionally thought of (bringing something into being that did not exist before), but also *physis*, commonly known as nature, but known to Heidegger ‘primordially’ as “the arising of something from out of itself” (10). He writes, “*Physis* is indeed *poiesis* in the highest sense. For what presences by means of *physis* has the bursting open belonging to bringing-forth, e.g., the bursting of a blossom into bloom, in itself” (10). Thus, both the handicraft of the artisan and nature running its course have the character of bringing-forth. A cascading avalanche and a spoken poem are both coming into being. And, the “*how*” of bringing-forth—the very “*how*” which is pondered by the silversmith—in bringing entities out of concealment and into the light of unconcealment, belongs to the event of “revealing” (*das Entbergen*) (11). The Greeks, writes Heidegger, call this “*aletheia*” (12).⁵

§ 2

Introducing the notion of technology as *revealing*, Heidegger asks: “What has the essence of technology to do with revealing? The answer: everything...The possibility of all productive manufacturing lies in revealing” (12). He scrutinizes the Greek term “*techne*” and announces that this is the name “not only for the activities and skills of the craftsman, but also for the arts of the mind and the fine arts. *Techne* belongs to bringing-forth, to *poiesis*; it is something *poietic*” (13). Furthermore, *techne* means, along with *episteme* (to which it is linked) “to be entirely at home in something, to understand and be expert in it. Such knowing provides an opening up. As an

4. According to William Lovitt, the “*ver*” in “*veranlassen*” denotes more activity and more of an ordering than the “*an*” in “*anlassen*” (9 n8). The hyphenation increases this effect.

5. Revealing as an event (*Ereignis*) is important. To Heidegger, we are beings who, as a factual aspect of our everyday comportment, experience entities revealed to us. The event is not static but rather always embedded in any given instance. “Revealing,” “unconcealing,” “presencing,” and “bringing-forth” are used more or less synonymously in this way.

opening up it is a revealing” (13). The suggestion that technology is a form of revealing seems foreign, but Heidegger demonstrates their proximity: “Whoever builds a house or a ship or forges a sacrificial chalice reveals what is to be brought forth,” and does so through the four modes of occasioning (the four causes) (13). He then concludes: “what is decisive in *techne* does not lie at all in making and manipulating nor in the using of means, but rather in the aforementioned revealing” (13).

But Heidegger claims that the essence of *modern* technology brings forth technological entities into the light in its own particular way. The hydroelectric plant on the Rhine and the airplane jet reveal the world differently than the peasant toiling in the field or the old windmill; these latter modes of revealing are characterized by responsibility. The peasant and the field are involved with each other in the moment of revealing, where the fruits of their mutual labor come to presence. The hydroelectric plant and the airplane jet, by contrast, reveal entities not as *poiesis* but as a “*Herausforderung*,” a “challenging-forth,” which “puts to nature the unreasonable demand that energy can be extracted and stored” (14, 24). When the earth is revealed as “*Bestand*” (“standing-reserve”), as it is by modern technology, it appears as something at our command (16). Characteristically nonautonomous, to be in the standing-reserve is to be in infinite supply (17).⁶ Entities no longer come to presence on their own terms: “Agriculture is now the mechanized food industry. Air is now set upon to yield nitrogen, the earth to yield ore, ore to yield uranium” (15).

These descriptions of modern technology all express a reductive attribute. The Greeks of course engaged with materials instrumentally in their handicraft, but instruments become standing-reserve through their designation to mere instrumentality. In pondering the silver, the silversmith involves himself with the possibility of transforming precious metals into a sacrificial chalice. But in deploying the hydroelectric plant, we see the Rhine as no longer the Rhine but as just a power supplier (16). As master of the Rhine, we cut ourselves off from its other possibilities which are latent in its being as a free-flowing river. When man engages with nature as *mere* quantity, “regulating and securing of standing-reserve mark all revealing” (27).

§ 3

Yet it is still unclear how this challenging nature leaves man unfree in technology. Heidegger understands bringing-forth as a ‘coming to pass’ (*sich ereignen*). This is an ‘event’ (*Ere-*

6. “*Bestand*” contrasts with “*Gegenstand*” (object; that which stands over against) to the effect that objects “indeed lose their character as objects when they are caught up in the ‘standing-reserve’” (17 n16).

ignis), something that occurs, and as such, *we are embedded in the process of revealing*. In short, to reveal in the modern age *is* to reveal technologically—technology is not something to “overcome” (Heidegger, *The Turning* 38 n4). The challenging-forth previously described (the antagonistic mode of bringing-forth that orders entities into the standing-reserve), now cast as something inescapable, suggests a greater danger than we might have otherwise thought. Rather than challenging by happenstance, man is *in* modern technology, in the sense that he is called upon to categorize entities and demand that they reveal themselves at once. Heidegger states, “Man does not have control over unconcealment itself, in which at any given time the real shows itself or withdraws” (18). Appropriated by, not in *control* of being, man orders nature as standing-reserve only to the extent that he is ‘gathered’ to reveal as such.

So, who or what does the gathering? What ‘destines’ man to reveal technologically is ‘*Ge-stell*,’ or ‘enframing.’ Enframing sends man upon a way to approach the world as an object of research (19). Thus, “man stands within the essential realm of Enframing” and “can never take up a relationship to it only subsequently” (24). It is enframing which conceals the process of revealing and is consequently more dangerous than the apparatuses of technology themselves because it has “already affected man in his essence” (28). From the realization that *enframing is the essence of technology*, we see that technology’s essence is not a thing but rather a mode of being which calls upon us to *think only instrumentally*.

This is where the modern understanding of “essence” misleads us—the essence of technology thought of as enframing is not technology’s “*essentia*,” as in its genus, or its ‘what-it-is-ness’ (29). Nor is enframing a framework for man’s thinking (19 n17). Rather, the “destining” of enframing suggests a challenging from being to man (Heidegger, *The Turning* 38 n4). It is characteristic of our modern age, writes Heidegger, that enframing holds sway in man’s being (24).

Yet Heidegger is not a fatalist. Enframing has a hold on man, but it is not unalterable (25). There is a “freeing claim,” a possibility that we might open ourselves to the essence of technology (26). In fact, Heidegger spends the last pages of his essay discussing a “saving power” which is found where enframing reigns most supremely (28). But we stop at this point to engage fully with the danger of enframing.

§ 4

We have identified enframing—which affects man in his essence—as the primary danger of our relationship with technology (28). My concern is the precise manifestation of this danger. Two of Heidegger’s comments are particularly relevant here: First, enframing conceals *poiesis*,

the revealing which lets entities come forth of their own accord, like the cascading snow in an avalanche (27). The imperial character of challenging-forth and man's "chained" relation to technology are enframing taking hold (4).

Second, enframing brings man to the point "where he himself will have to be taken as standing-reserve" (27). Identifying 'enframing' as the danger instead of individual cases in which we treat entities instrumentally suggests that our tendency to reveal entities as resources at our disposal is characteristic of *the way we think*. We are enframed. Thus, Heidegger believes that we may even conceive ourselves as things to order or objects to be fixed, and in the pages to follow, I pursue this suggestion by examining how modern psychiatry is a literal example of our self-instrumentalization. Through a reflection on the way that the essence of technology implants itself into the human self-image, we will bridge the early and later Heidegger, bringing out the significance of enframing to the being of 'Dasein'—this is the kind of being which is human being, whose analysis Heidegger pursues in his primary and early work, *Being and Time*.

The following discussion, which concerns modern psychiatry, may appear unfit for the tone of Heidegger's process. We are departing from the language used thus far, but it will become clear that the startling nature of this topic is precisely why it ought to be engaged with. Specifically, I claim that the limitations found in classifying psychiatric illnesses in an ontical manner reveal the derivative nature of such talk, as man considers that which is primordially circumspective concern to be merely standing-reserve. To put it in simpler terms, when modern psychiatry encounters 'limits' in trying to classify mental states and disorders, we view these limits as surmountable problems that are part of developing a refined science. However, I characterize this reaction as a symptom of the fact that we have forgotten what it means to *be*, and what it means to encounter our being in the unique way that it shows itself.

For examples of modern technology, Heidegger looks to the machinery of the industrial age. In the time of enframing, man has converted that which he once lived alongside and had to reckon with into mere supply. Having previously cut only enough trees to bring out the possibility of a wooden toolset, we now bring forth lumber as an anonymous quantity.

In the last century, the handicraft of young psychiatric science, previously dominated by non-falsifying psychoanalysis, has become a properly experimental field of biomedicine. The DSM-I, published two years before *The Question Concerning Technology*, now delimits the illnesses of the mind, including anxiety, phobia, and alcoholism (DSM 117). I suggest that this

modern science has established a relationship with man that is unfree in the sense of enframing.⁷

Why suggest that the apparatus of science applied to the mind is a particularly egregious instance of *enframing* (an unfree relation to technology) relative to the sciences of the liver, the skin, or the joints, which have pursued their subjects for centuries? The answer is that medicinal study of the latter transparently deals with the relations between entities. Instrumentalizing the corporeal and understanding it exclusively in terms of cause and effect does not necessarily prevent man from questioning concerning technology's essence. But does psychiatric medicine not take a corporeal subject? If we suppose the materiality of the brain, then the study of mental disorders is a study of functions in the body to the same extent as dermatology.⁸ However, the language of psychiatric illnesses seems different in nature. Anxiety, phobia, self-esteem—activities of the psychic—are also names for modes of existing.

Surely, this is a superficial distinction. And, once we obtain a closer understanding of the entities standing before us, a reasonable explanation will undoubtedly show itself. Psychiatric effects such as anxiety are uniquely inextricable from one's everyday life, which thus hands psychiatric classification the labor of untangling stubborn knots in the causal chain from world to man. And thus, a problem emerges. Dominic Murphy presents the challenges of being unable in some instances to separate illness from quotidian 'problems of living' or the intricacies of everyday existence.⁹ Whereas a deficiency of vitamin C relates to effects in the human body known as scurvy, the 'worm in the heart' does not offer itself easily for falsifiable study. Neurotransmitters effect occurrences in the mind, but they do not isolate themselves in the fashion of the variables studied by traditional biomedicine. There is no 'addiction vitamin,' which I say not to make a psychiatric claim or cast inexplicability onto illness, but only to describe the limits which bound the physical sciences of the mind.

To be fair, traditional biomedicine presents a complex picture of causality and even makes space for the possibility of overdetermination. However, nuanced as it may be, psychiatry misses part of the picture. The problems that sciences of the mind confront are taken as obstacles on the way to a closer understanding of ourselves, with the belief that if the field only persists for another century, it will finally reach a more *accurate* causal picture of our being. However, *enframing* suggests that as the field increases its accuracy, it strays further from the most originally

7. For reference on the details of this subject, I use Dominic Murphy's *Psychiatry in the Scientific Image*. However, in our talk of psychiatry, the topic at hand is always the being of entities.

8. According to Murphy, this is an uncontroversial view in modern psychiatry (23).

9. "Gene expression and long-term unemployment are different processes, even though being unemployed affects the brain" (Murphy 120).

encountered truth, that is, the phenomenal experience of being-in-the-world.¹⁰

The nature of an existence bound up inexplicably in a ‘world,’ a situation that makes classifying ourselves so difficult, could fortunately be explained quite easily as the social embeddedness of the self. Theorists are incorporating this, and current discourse explains ‘the effect of environmental causes’ which manifest in phenomena such as ‘feedback loops.’ These theories, as well as psychiatric classifications like anxiety and phobia, fix upon something pertinent in our discussion. Even computational analogies of the mind fix upon something correct, as the mind is a functioning entity. In fact, Heidegger’s *Being and Time* centers on what could be perhaps classified as a functional view of being in which Dasein is characterized by its compartments in the world, and the world is described by ‘worldhood.’ But is this the same as a ‘functional’ ontology of Dasein? Do the feedback loops and theories of environmental construction bring one’s being-in-the-world into the truth?

To posit a causal relation between ‘the social’ and ‘the mind’ is to make an assertion which relates one entity to another. Their correspondence is therefore what Heidegger calls in *Being and Time* a “Being-present-at-hand-together of Things that occur” (81). To conceive of ourselves and nature in the same way we conceive of the chair and the wall is to order ourselves into the standing-reserve. How do we reduce ourselves to mere things, or what Heidegger calls ‘present-at-hand’ entities?

The terms ‘mind,’ ‘function,’ and ‘social causation’—ideas missing in Heidegger’s writing—strike us as misplaced. For this reason, they can be easily overlooked. Yet this language draws us closer to the truth of our relationship with the essence of technology: being-in-the-world is concealed by enframing. Heidegger does not speak of the ‘social construction’ of the mind because this would isolate ‘the mind’ as an entity which we encounter, an entity that is present-at-hand, an independent object that gets shaped by social forces. However, our mind is not merely present-at-hand, nor does it have the mere instrumental being of a hydroelectric plant or a personality test. Heidegger’s insight is that before we are a ‘mind,’ we *are*. We are beings in a world—a world that matters to us. A truthful inquiry into one’s ‘mind’ or ‘self’ will not encounter it as an object to be studied by the apparatus of medicinal biology. Rather than describing our ‘having a mind,’ Heidegger describes our *being-there*; rather than our being affected by ‘the

10. Heidegger’s important notion of “being-in-the-world” emphasizes that our existence reveals itself to us as *essentially* embedded in a world (BT 78). But even more, this is a *unitary* phenomenon. He is telling us that the conceptual distinction we so often make between the ‘self’ and ‘the world’—which is used to draw causal relations between them—reflects an invention of our thought more than our experience of our ‘world.’ ‘Being-in-the-world’ is, moreover, the definition of ‘Dasein.’

environment', we are *concernful being-in-the-world*. In fact, by the time he writes *The Question Concerning Technology*, Heidegger has moved even past 'Dasein,' for perhaps the same reason he moved past 'intentionality' several decades earlier: these concepts are born from the effort to be free from the notion of a 'subject-thing.' But even when we use a term meant to describe our being as we experience it, our unfree relation to enframing pulls us towards subjectifying it.¹¹

Our concern with biomedical psychiatry has been to recognize the limits of our self-understanding in the age of enframing. Man as such, conceiving himself as a thing (be it under the name of 'subject' or 'object'), cannot separate his own Dasein from the present-at-hand corporeal thing. Psychiatric talk, which regards man as a calculable variable, is humanity's fleeing as such. In psychiatry's failure to hand man a complete and consistent portrait of himself—and its assumption that this portrait is even possible—the violent instrumentalization of one's own mind is shown in the gathering of the age of absolute explanation. In the age of theory, man explains the complexity and chaos of his own nature in the same way he previously handled the natural world, by hurrying to count relations of entities with the hope that explaining new relations will earn him mastery of his being as a thing stored for use.

Chained to his picture-self, man is severed from his revealing of *poiesis* because he only reveals himself as a functional object amongst other objects. Thus, one speaks of 'me time,' or 'catching up on relaxation' or productivity. Dasein no longer meets its involvements at their level but reveals its life only as an end. The 'Myers-Briggs type indicator' and the 'Big Five' personality traits aid man in the concealment of being-in-the-world. When one shrinks away from the world as world, what they face is entities within-the-world, which explain that if they are type *X*, then given *Y*, *Z* will transpire. This leads one to ask: 'Is this feeling healthy?' 'Does the work of art say what it ought to say, or convey the *right* message?' The reality is that *before* we make these judgments, we *feel* ourselves in existence. What we are precisely concealing is that the most truthful self-interpretation we make is our feeling of ourselves. We conceal that our 'self' is not *ideas* about our being, but *our being as it manifests*.

§ 5

Although the Heidegger who writes about technology and the Heidegger from *Being and Time* present different ways of thinking, each provides insight into our anonymization of our-

11. By 'subjectifying,' I mean turning our being into an agent that encounters present-at-hand entities (entities that just 'sit there'). For Heidegger, we are not 'subjects' because we cannot conceive of ourselves as being outside our world. In this sense, 'subjectifying' amounts to 'objectifying.'

selves. The ‘danger’ of enframing is what in *Being and Time* is called ‘levelling down,’ a process which takes the unique event of our being and reduces it to a being that is public and interchangeable. In this existence, one is not themselves in the sense that *they really could be anyone*.

By publicness everything gets obscured, and what has thus been covered up gets passed off as something familiar and accessible to everyone... Yet because the ‘they’ presents every judgement and decision as its own, it deprives the particular Dasein of its answerability... Thus the particular Dasein in its everydayness is disburdened by the ‘they’. Not only that; by thus disburdening it of its Being, the ‘they’ accommodates Dasein... Every one is the other, and no one is himself. The ‘they’, which supplies the answer to the question of the ‘who’ of everyday Dasein, is the ‘nobody’ to whom every Dasein has already surrendered itself in Being among-one-other. (BT 165-166)

Dasein’s they-self conceals its own nature; absorbed in its proximal world, and cut off from its being, Dasein must “find itself” (BT 167). Enframing, which puts Dasein in a picture-self, conceals the revealing of entities as *poiesis*. When we are no longer attuned to the way that entities reveal themselves and become intelligible, we become closed off to different possible ways of being-in-the-world. Levelling down is the concealment of possibilities, the “dimming down of the possible as such” (239). We previously mentioned a ‘saving power’ for man’s captivity in the age of enframing, which simply means remembering that we are. The saving power, as poietic revealing, is the opposing force to anonymity. Just as *poiesis* frees man in his relation to technology by allowing entities to show themselves in their true multiplicity,

If Dasein discovers the world in its own way [eigens] and brings it close, if it discloses to itself its own authentic Being, then this discovery of the ‘world’ and this disclosure of Dasein are always accomplished as a clearing away of concealments and obscurities, as a breaking up of the disguises with which Dasein bars its own way. (167)

Heidegger is urging man to seize his own being—not by mastery—but by bringing himself into a truthful relation with himself. There is freedom in concern: our original being encounters entities concernfully. We *care* about our dealings with the world, and it is freeing to not hide from ourselves by reducing our experience to psychical language. In this realization, we come to terms with Heidegger’s claim that it is not the apparatuses of technology themselves that are the problem, but the anonymizing that they enact.

If being-in-the-world, characterized by care, is our most fundamental existence, then what is brought forth and calculated by the scientific mastery of one’s mind is always derivative and contrived. This point is as lucid in *Being and Time* as it is in *The Question Concerning Tech-*

nology: mere assertions restrict that which manifests to a definite subject and predicate, however, this making-definite of ourselves is secondary to the way we encounter ourselves (BT 197). Furthermore, this derivative setting-to-predication is a levelling down. “In concerned circumspexion there are no such assertions ‘at first’,” writes Heidegger (200). To dim down poetic being into classification, to render one’s own existence as a sum of present-at-hand mental events, is to flee from exactly this.

However, *The Question Concerning Technology* in its own right adds to the notions familiar to us in *Being and Time*; in particular, it clarifies being-in-the-world as a unitary phenomenon. Seen within the frame, the invention of the ‘subject-thing’ and ‘object-thing’ appears not as a fortuitous mistake in the history of philosophy, but in fact philosophy at work. Indeed, the Heidegger of *Being and Time* calls Dasein’s fleeing from itself “its ownmost inertia,” but the essay on technology makes this activity precise. Splitting the self into two fields of study—the spiritual for theology and the corporeal for the natural sciences—is a means to expedite packaging.

The later Heidegger’s turn [Kehre] opens us to this way of understanding the content of his early writing. The concept of enframing, which seems distant to Dasein, rather reorients it. Furthermore, concepts such as ‘the mind,’ ‘social construction,’ and ‘intentionality’ are absent in *The Question Concerning Technology*. But this does not mean that we should limit ourselves to the language of the work. There is a freedom in looking clearly upon our language and grappling with what it conceals.

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Space and Time & Time and Space

GHAYAS OSSEIRAN

“Matter tells space-time how to curve, and space-time tells matter how to move”

- John Archibald Wheeler

“The mind is time, the mind is space

A horn rush, a bass flush for minds to taste”

- *It's Good to be Here*, Diggable Planets

This paper investigates the necessity of a dialogue between both the idealist and materialist views in offering a well-rounded inquiry into the nature of space and time. Utilizing Ibn Sina's floating person thought experiment, the paper isolates the person's intelligible experience from their empirical intuitions in order to determine whether a recognizable presentation of S&T will arise. The paper draws on Kant's transcendental aesthetic to provide an idealist's response, as well as poses challenges to Kant's view by drawing on materialist arguments. The first kind of challenge considers the dialectic between idealist and materialist views to be crucial in distinguishing the subject from nature in-itself. The second challenge proposes that if we can derive shared phenomenological conditions that all beings participating in the spatio-temporal Universe must accede to, then the material context of existence might also be responsible for structuring a-priori intuitions of S&T.

Keywords: Ibn Sina, Kant, idealism, materialism, floating man experiment, Aristotle.

Where and When is Nowhere?

Imagine a person suspended in the air with no sense experience. Ibn Sina's floating man experiment was originally posed to prove the existence of a self-aware immaterial soul without any empirical or sense-perceptible inferences. While idealism explains nature with reference to the constructions of the understanding and its experiences, materialism sees intelligence and its experience of space & time (hereafter S&T) as the product of their material facticity. By separating the intelligible knower from their empirical sensations and knowledge of both a body and a material world acting on them, the experiment isolates the idealist account of S&T from the materialist one. Isaac Newton's materialist approach to natural inquiries understands sense-perception of an outer world to be the generator of valid inferences on the nature of S&T, and would deny the floating person a cognizable experience of S&T. Immanuel Kant's strain of idealism understands S&T to be pure intuitions that filter in and would condition the floating person's sensible experiences in the first place (A26, A31). While Newton's classical mechanics based on an absolute conception of S&T remains useful in predicting the motions of large celestial bodies or your regular footballs, it falls short in describing the gravitational effects of high velocity particles and waves such as light. Albert Einstein's general and special theories of relativity revitalized physics with the conceptions of S&T as relative to possible experiences within inertial systems, much to the credit of Kant's conception of S&T as being sensible human modes of intuiting the actual world in which S&T are merely stubborn illusions (402). This paper will employ Ibn Sina's thought experiment in order to answer the following research question: **Can idealist views of nature offer the floating person an accurate relation to space and time without any experience of an outer world?**

The inquiry will be divided into four sections. The first outlines Ibn Sina, Kant and Newton's positions. The second considers space and spatial relations; the third, time and temporal relations. The fourth section outlines a singular fabric of space-time and the dialectic between idealism and materialism in natural philosophy. Over the course of the second and third sections, I submit two principle arguments against a puritan idealism and for the necessity of a dialogue with materialist approaches to the investigation of S&T. The first contention lies in the floating person's inability to differentiate between their inner intelligible world from the spatially extended void they float in and the temporal moment they are suspended in. This inability would offer the floating person inaccurate relations to space, whose limited sensory experience they would mistake as complete, and to time, whose linear and sequential experience of its passage would be confused as eternal and immanent. The second proposition is that if the pure intuitions of S&T

of all conscious beings participating in material creation share some consistent essential features of their experience, then any idealist conception of S&T must consider the role of the material world in structuring our intuited experiences of S&T. I propose two shared phenomenological features between conscious finite beings, the appeal to a-temporal concepts as a way of abstracting the underlying nature of things-in-themselves and the experience of time as sequential and linear. Finally, I will outline Schelling's program in his *First Outline of the Philosophy of Nature* as it seeks to reconcile and necessitate both the materialist and idealist's investigations of nature. In response to the research question, this paper will conclude that natural philosophy must convene both the idealist's theoretical inquiry into the mathematical formalism of nature, and the materialist's deference to empirical evidence when studying S&T.

Ibn Sina's Floating Person

Consider the following: a person appears suddenly in a void and is suspended from material experience. There is no light to see any objects nor their own body. The person is suspended in space to ensure they experience no physical forces such as gravity. The person has no memory of any sensory experience, but they have a rational faculty. To some, like Ibn Sina it seems self-evident that the floating person would nevertheless be continuously and basically self-aware of their existence. To others, like Aristotle, without an external world to sense, and "light (phos)" to offer the floating person's "imagination (phantasia)" sight (429a33-34), consciousness is "actually none of existing things [,] nothing before it thinks" (429a23). Ibn Sina affirms however, that despite having no intuition of a physical world or body, the floating person would have no accessible testimony to 'not being'. For the floating person this would mean that their conception of an existent self (wujūd dhāti-hi) isn't dependent on their experience of a material body or a material space under an absolute clock. In this respect, Ibn Sina, much like Aristotle (429b6) accepts an idealist duality of mind and body. However, he diverges from the ancients in treating knowledge of the soul and consciousness as existent prior and independently from a distinct and separate material creation.

Despite treating matter and form as distinct but inseparable, Ibn Sina takes place and time to be characteristic of the formal nature of things in-themselves. Time for Ibn Sina is the capacity of moving bodies to cover more or less distance at a fixed speed and is shared by the heavenly bodies and terrestrial observers alike (McGinnis 1). The motion of these bodies in S&T "reflect the organizational structure of the matter...not its material but its formal structure" as it derives these instructions from the World Soul (Goodman 150). It seems for Ibn Sina that the question of

whether the floating person's formal character holds the capacity for temporality, is not so much a question of their material composition, nor their a priori intuitions, but their form's provenance from a central Intelligence that acts either as a Prime Mover of causality, or as the living soul of an inhabited Universe that instructs the floating person's matter how to organize itself according to S&T. In this sense, Ibn Sina doesn't consider the matter of a person to imply their temporality, nor their conscious mind whose "conceptual knowledge and mystical experience" he takes to be functionally a-temporal (159). Rather it remains a feature of the forms in which things-in-themselves organize themselves in, so long as they remain in a Universe organized by forms, the floating person would receive the qualifications of S&T.

In contrast to Ibn Sina however, Kant holds that the floating person will have a pure intuition of S&T irrespective of their detachment from a World Soul. In Kant's *Transcendental Aesthetic*, he describes two sources of cognitions in the mind, sensuous intuitions and spontaneous concepts (A50/B74). Intuitions form through the human capacity to receive affective presentations from a world imparting information onto us. Concepts are universal presentations of objects of sensible intuition that we produce ourselves through our understanding (B75/A51). Kant's account of S&T places these filters of experience in the former category as pure a priori intuitions that precede and condition any sensory experience. Space is presented as "the subjective condition of sensibility" that makes outer intuitions possible for us in the first place (A26). While the pure intuition of time similarly shapes sensory experience as opposed to being derived through it (A31). Kant would undoubtedly ascribe the intuitions of S&T to the floating person despite being stripped from material reality.

While Ibn Sina takes the floating person's self-awareness to be self-evident despite the absence of empirical knowledge, Kant is committed to a dialect between empiricism and rationalism, to the synthesis of both sense-perceptible manifolds and concepts in the apperception of knowledge (B147). As a result, a priori intuitions of things such as the floating person's existence or even S&T, though universal and prior to experience, aren't observable on some Platonic plane. Instead, they're evidenced by the construction of reality by a knower's sensible and rational faculties. Kant takes issue with Descartes and Ibn Sina's "problematic idealism" in its supposition that "human consciousness is possible without awareness of an external world" (Goodman 158). Given that consciousness is ordered according to the pure intuition of time, its temporality is a sensible feature of its body rather than a self-sufficient consciousness. Thus, for Kant, and the floating person, whether consciousness claims awareness of the bodily object or not, its temporality remains a feature of its sensory intuitions. For Ibn Sina S&T remain accessible to the float-

ing person in the categories of pre-sensorial experiences alongside self-awareness, only insofar as they weren't floating at all and had intuitive access to a world of forms. In that respect, Kant stands apart from Ibn Sina in positing that time doesn't structure things in-themselves in the outer world by means of their formal character. Rather, it is a condition of the experience of representations in the inner world. Time would be incapable of spilling into the outer world "any more than space can be intuited as something within us" (A23). Thus, the floating person's distinction between their inner sense and the outer world is crucial for maintaining accurate descriptions of how persons relate to S&T.

Alternatively, to Ibn Sina and Kant's idealisms, the materialist and mathematical investigators of nature such as Newton view space and time to be "two eternal and infinite self-subsistent non-entities...which exist only in order to encompass everything actual" (B56/A40). In Newton's scholium of the *Philosophiæ Naturalis Principia Mathematica* he distinguishes between absolute time and relative time. Much like a star has an absolute luminosity that determines its actual output of energy over time and an apparent luminosity that measures how bright the star appears to us, Newton considered time to have an objective and absolute measure of duration independent of any relation to the terrestrial observer (9). Similarly, Newton considered space to be absolute, an immobile cartesian space which contains parts of space that are movable and have measures relative to the position of the observer in absolute space (10). Under Newton's materialist conception of natural philosophy, the floating person would not have access to any relative experience of S&T given that they have been stripped from the absolute space and time that encompasses this, Universe.

The View from No-Where

Firstly, is the floating person thought experiment compatible with Kant's conception of space? The floating person appears in a void, and yet for Kant there can't be a presentation of 'no space' even if there are "no objects encountered in it" (B39). Even with no material objects to perceive and forces to succumb to, Kant would hold that the floating person would have an intuition of space. This idealist account considers space not as an empirical concept (B38) but rather an "a-priori presentation that underlies all outer intuitions" (A24). Despite appearing in a motionless void, the floating person's mere existence as something other than what is outside of itself (B38) signals their presence in "one all-encompassing space" that precedes this person's arrival (A25). In this respect, Kant distinguishes between space as it figures as an a priori pure intuition of space, and material or relative space. While material space is subject to motion, it

“presupposes a larger material space for it to move in...and so on to infinity” (Kant 8). For Kant space is neither absolute as Newton would take it (A40), nor exclusively relational as Leibniz views it (B57). Rather, space “represents no property of any things in themselves” (A26), for it is only through the perspective of human experience, as forms of our sensibilities, that talk of S&T gain substance. The conceptual extension of space as the unified housing of contiguous objects capable of interacting on the same causal plane (A25) “is in itself nothing” but the condition on which movable spaces, and the floating person’s experience, are predicated on (Kant 9).

The floating person doesn’t need to experience any empirical intuitions in order to have an intuition of pure space. Instead, this intuition acts as the condition of possibility for their sensuous experience of outer objects in the first place (B38). This awareness of a pure space that fields the walls of the floating person’s existence requires a distinction between their outer and inner worlds. Space is the condition for the extension of objects that “appear to us externally” rather than to all possible objects of intuition, or even the intuitions of different subjects (A27). Given that the floating person is unaware of their body as being distinct from the space around it, if they conflate their inner sense with the spatially extended world that houses it, the nature of pure space would be mischaracterized. They would take imagined objects and concepts to be actual and spatially extended. However, for Kant “space represents no property whatsoever of any things in themselves” (A26/B42). The floating person’s subjective experience of the pure intuition of space taken as objective and material space, would on the other hand, make that exact claim. An idealist is first introduced to material reality through the bodily object that is profoundly or artificially distinct from the immaterial subject poking and prodding its own matter. By distinguishing between the inner world from the outer material world, and in turn situating their essence in a bodily object, the floating person gains a sense-perceptible experience of S&T.

The idealist view of space-time allows human imagination to depart from its limited sensibilities when abstracting from and hypothesizing on the nature of empirical events. A dialogue between idealism and materialism grounds natural philosophers in their experience of nature when abstracting from their senses by means of logical and mathematical formalism. It also orients investigators as subjects investigating the nature of objects in the world, rather than assigning too much authority to either the materialists’ limited inductive reasoning, or the idealist’s ambitious deductive inferences on the nature of S&T. Drawing claims from our inductive reasoning of empirical experience limits our experience of space to three dimensions (A25). Neither Kant nor the materialist could disagree that this experience provides an incomplete account for the whole of space-time. What instead we must reach is a view which recognizes the value of

both idealist and materialist perspectives. One of the chief missions of modern speculative physics is to reconcile the mathematical inconsistencies between quantum mechanics and Einstein's theory of relativity. String theory provides a solution for these inconsistencies by positing that the most irreducible form of matter is composed of strings that vibrate along 10 or 11 dimensions. A purely empirical approach to space-time would be incapable of deriving these claims from empirical observation without acknowledging the observer's limited three-dimensional experience of space. The purely idealist view on the other hand would neglect to conferr with the empirical reality of material nature when speculating on the characteristics of space-time that our sensibilities can only narrowly view.

Indeed, Kant acknowledges that our pure intuitions of S&T are not wholly authoritative on the nature of S&T, simply that they're the relevant starting point in their investigation. Kant argues that despite our pure intuitions of S&T being "valid for us universally", we can't make any judgment "about the intuitions of other thinking beings" nor their limitations (A27). Without a human subject, our particular mode of space-time "would vanish" (A42). From the ideal perspective, S&T don't exist in themselves, rather they're conditions of our perceptions. If the floating person were to shrink to the subquantum level, they would still be incapable of experiencing a 10-dimensional string given the limited view of three-dimensional space that their senses impose. An empiricist would therefore be limited in claiming that their experience of space as three dimensional reflects the nature of absolute space. Instead, such a though experiment commits us to the notion that subjective experience is limited by of our pure intuition of space. If the floating person were an extraterrestrial equipped with radically different sensibilities, their pure intuitions of S&T might offer alternative empirical insights through an experience humans can only hope to dream of. Alternatively, the extraterrestrial's experience might very well fail to offer novel insight due to some conditions that their existence within the spatio-temporal and material confines of this Universe imposes on their sensible intuitions. If that is the case, then the idealist view must necessarily contend with a material form of space-time which itself structures pure a-priori intuitions as the condition of possibility for our subjective experience of S&T.

If we can arrive at some material conditions that all conscious beings in the Universe are constricted by in their experience of S&T, the idea of pure intuitions of S&T would have to give way to an explanation which takes account of the material environment. offer some credence to the environment they're formed in. In Thomas Nagel's paper "What is it like to Be a Bat" he considers foreign phenomenologies. Specifically, Nagel conceives of their overlap and impenetrable conceptions by our imaginations limited to our experiences (441). Nagel considers that

a Martian scientist “with no understanding of visual perception” could understand and verify physical phenomena external to them despite experiencing it differently from humans (443). A human and a Martian will both witness a star and have their unique intuition of this star, perhaps notice its color or luminosity. Now for an idealist such as Kant, “colors are not properties of the bodies to the intuition of which they attach” (B45). Rather, we perceive them as such because our presentations are formed through the sensory experience of light. A Martian that experiences S&T through echolocation for example, would hold a different qualitative experience of the star. Nevertheless, both the human and the Martian will eventually come to a consensus on the properties of the star. Kant poses that “appearance always has two sides”, the object in-itself, bereft from the pure intuitions of time and pure space, and the sensuous presentation our sensibilities provide as conditioned by S&T (B55/A39). While a floating Martian would hold sensibilities wholly different from ours, and experience S&T differently from humans, their description of the object’s nature in-itself would abstract from their subjective perception of it. Just as our concepts abstract from the intuitive conditions of time (B52), it can be argued that Martian concepts would have to necessarily be a-temporal as well. This would suggest the conceptual form of space-time in-themselves which all finite beings would accede to, is its absence.

The View from No-When

Kant argues that time is the form of our inner sense, “the intuiting we do of ourselves and our inner state” (B50), as well as the condition for consciousness and apperception. In so far as the floating person would be aware of their own existence and view their inner states as sequential rather than simultaneous (B47), they will have a conception of time. All concepts of change, whether internal or external, are possible only “through and in the presentation of time” (B48). The absence of external motion to intuit, does not take away from the floating person’s changes of inner representations. If time was not an a priori intuition, but rather solely an absolute measure of universal duration, the possibility of reconciling the floating person’s being and “not being in the same place” would disappear given that change is the only measure in which a person can become (B48). Consider time as Newton does: material, universally objective and self-subsistent. Despite abstracting from the “subjective conditions of our intuition of it”, we would misrepresent our inner sense of time as evidence for the existence of absolute time in a motionless void. Despite the absence of “an actual object [, time] would yet be actual” (A33). On the other hand, time loses meaning if all external events were reduced to simultaneous and indistinguishable frames of nothingness. In the static Universe of our thought experiment, the only instance of

change, and thus the presentation of time, is housed in the mind of the floating person.

In the previous section it was argued that the floating person's inability to access an 'outer world' would draw them to take their limited experience of space to be wholly authoritative on the nature of 'space-in-itself'. In the following section it is similarly argued that the floating person's seclusion from motion, not only localizes their experience of time to their inner sense of consciousness, but it runs the risk of taking itself to be eternal and immanent. In this endless void, the floating person's heartbeat is the first instance of being in this world of non-being. It cannot however, claim to be the First Cause of this world or of its own transportation to this void. Aristotle introduced the necessity of a self-subsistent Prime Mover on which the rest of material creation is merely accidental to in his *Metaphysics*. Aristotle posed that there cannot be an infinite regress of causes. There must be a first cause for all four types of causes, material, formal, efficient and final causes. If there is no first cause to initiate a causal series, all the parts become medial or intermediary causes, and consequently, "there is no cause at all" (994a19). If there was no determining principle for the floating person's first heart beat in the void, a principle that is distinct from the chain of material causes that generated the floating person, then the process of the person's creation would regress to infinity. For Aristotle something must have happened to originate creation, a Mover that is separate from perceptible things, indivisible and without parts, having neither an unlimited nor a finite magnitude. A Mover that is active, having the capacity to bring about all the movement posterior to it (1073a2-12) for an eternal duration of time (1072b24-25). How this First Cause – whether we consider it to be the essence on which nature-in-itself depends on, God or the philosopher conjuring this person into their thought experiment – experiences S&T from outside this void would differ greatly from how the person participating in its creation would. If the finite floating person, the sole inhabitant of this void, were to mistakenly consider themselves the First Cause of the void and their own creation, their presentation of time would inaccurately take itself to be immanent at the least, and eternal at most.

Aristotle poses a clarifying puzzle that is readdressed in Al-Ghazali's *Incoherence of the Philosophers*. When discussing this logically necessary and self-subsistent First Eternal Cause of being, Aristotle poses that everything that's active is capable of being active and not everything that's capable of being active is active. It seems that capacity for activity precedes activity (1071b23-26). If the First Mover initiated the act of creating the Universe, then at another 'time' prior to this creation, They must have held the capacity to create the Universe. In his first discussion concerning the eternity of the world, Al-Ghazali questions whether this First Mover, taken

to be God, could have created the Universe a few moments before it was created. If not than this would deny God the agency to create when They wish, if so then this would imply a change in the Mind of God which is impossible in this necessarily eternal and unchanging entity (Averroes 13). Was there a gap between the First Mover's instance of creation and its potential capacity to create? In more thoughtful terms, how can an immaterial and eternal entity cause a material and temporal creation? Where or when do such categorically antithetical entities meet? Al-Ghazali, much like Kant and Einstein, pushes back against the relevance of the terms 'where' and 'when' as considerations for the Principle on which nature-itself is dependent on. From the ruling perspective on the natural order which the First Cause assumes, time and space aren't real in themselves. From the outside of 'material reality' looking in, up and down, past and future, three or four dimensions, these tools that participants in creation use to situate themselves in it, are all respectively equivalent. Al-Ghazali argues, S&T only gain substance for an observer seeking to situate themselves in space relative to other objects and in the coursing time of their finite lives (67). By assuming the First Mover exists prior to material creation Al-Ghazali describes two historically prevalent attempts at reconciling the insolubility of these two mediums.

The first conclusion held by Aristotle and Averroes, assumes that both the First Cause and the Universe must in fact be eternal. The second attempt to work through this puzzle, held by Plato and Al-Ghazali, viewed the world as being generated in time. While the latter solution remains more sound given our intuition that all material objects, including the planets and stars will eventually perish, it requires a few adjustments to our understanding of 'reality' and its generative process to avoid the problem of insolubility. The former on the other hand, is the kind of objectionable implication I raise against the floating person's idealist conception of time when they are secluded from knowledge of their body, a changing material world and other subjective experiences of time.

Both the Martian and the human share in the material condition of their mortalities. They exist as beings locked in a transitive reality. They, just as the Universe they experience unfolding, have a beginning and a necessary end. The floating person's linear experience of time seems to be a condition of their finite environment rather than their ideal presentation of time that Kant takes to initially "be given as unlimited" until we experience time as a direct intuition (B48). Martian and human intuitions, in their respective sensible forms, are "dependent on the existence of the object" in the outer world (B72). Despite being the sole inhabitants of their own voids, both beings would be incapable of producing their own manifolds beyond the pure intuitions of S&T. As the original cause and final grounds of nature, only God has the capacity to intuit and

intelligize manifolds (B71). Kant poses that “time cannot be intuited outwardly” (A23) nor experienced empirically in a motionless void (B48/A33). Consequently, if the floating person were to take their inner sense of time as the sole and absolute clock of their personal voids, they would take their ideal subjective time to be material and objective. While this wouldn’t bother anyone, it would be an inaccurate illusion to view their linear and finite experience of time that they originally took to be unlimited (B48), as immanent and eternal.

Aristotle’s cosmology considered that this Universe was comprised of “eternal movement [that] must be caused by something eternal” (1073a27). Even if the floating person was correct in taking their presentation of time in the void to be unlimited, the mortality of their material bodies and the form of their intuition of time as sequential and linear would limit them to a sempiternal understanding of eternal time. Herder distinguishes between the sempiternity of time from its eternity, and in effect between transitive experience of S&T and an immanent one. Sempiternity is the conception of an indefinitely prolonged duration from the viewpoint of a linear experience of time (Herder 100). Eternity on the other hand is the a-temporal conception of infinite time. Whereas “the eternal can as little become time, as time become eternity, or the finite become the infinite” (99). The floating person, just as the world they inhabit would necessarily be transitive because they are “system[s] of things ordered in, and according to time” (100). In that respect, both an original presentation of time that takes itself to be unlimited (B48), and the transient and material world of empirical objects are taken to be in time. Contrastingly if God or a First Cause stood outside the confines of time, looking into the spatial and historical whole of this Universe like a book in Infinity’s Library, all spatio-temporal events would be simultaneous, pages in an old volume. All finite conscious beings would thus be unified in phenomenological experience in two respects. First in the appeal to a-temporal concepts as a means of determining the underlying nature of things in-themselves. Second in the sequential experience of time. This universal commonality of experiences, I conclude, implies that material reality is just as responsible in structuring the human a-priori intuitions of S&T, as the sense-perceptions of humans is responsible for reconstructing their experience of material reality.

It Takes Two to ‘Space – Time’

From the perspectives laid out in this paper on the mutual dependence of the idealist and materialist approaches in the investigation of S&T, Friedrich Schelling developed a concrete method for the shifting tides of natural philosophy. Schelling posits that a complete account of nature requires the interaction between the materialist and a transcendental idealist views. The

synthesis of knowledge on space and time involves both a subject to inquire, and an actual object for valid inquiry. Materialism views nature as a product and is concerned with the empirical study of its objects (Schelling 202). Thus for the philosophy of nature, the ideal is explained by the real (194). Nature invites consciousness to recognize a fabric of S&T that exists independently and outside of it. It aims at deriving theory from empirical observations of the “surface of Nature” and its observable forces through inductive reasoning (196). Idealism on the other hand, understands nature as productive and constructs theory to account for the internal clockwork and final grounds of matter (202). For transcendental philosophy, the ideal is subordinated by the real (194). This view begins the process of inquiry with an a priori hypothesis on a feature of space-time before testing it experimentally.

These two explanatory directions are “not only equally possible, but equally necessary” (194). The idealist part of the natural sciences story inquires into the “absolute cause of motion” (195). These a-priori judgements are the sole means of absolute knowledge in the sciences (197). The materialist view ensures that these judgements are based in empirical reality. We can say we know a clock by empirically observing the time on its surface, but knowledge of the clock in-itself lies with its maker. The Clockmaker constructed the clock and is thus aware of the “principles of their possibility”, the necessary conditions for its functionality (196). How each of its cogs relate to one another and the “soul of the work” are captured because they were imagined potentially before being brought into actuality (196). Newton’s materialist view of time envisioned it as a universal clock that ticks independently of who hears it. When Einstein inquired into the necessary conditions for the experience of time, he found time to be relative, and S&T to be warped by matter and energy (Hawking 2).

Under this model for the natural sciences, Albert Einstein’s general and special theories of relativity challenged how the natural sciences conceive of S&T as absolute and the materialist methodologies that lead to such conclusions. Einstein was deeply motivated to incorporate Kant’s discovery that our presentation of the real external world rests exclusively on sense impressions” (Einstein 402). Every day thinking for both Kant and Einstein was a matter of sense impressions, ordered by concepts, the relations between those concepts, and the synthesis of concepts and sense experiences (403). While Einstein was committed to the idealists’ conception of S&T as pure a-priori intuitions as well as the stubbornly persistent material qualification of time, he also called on traditional physicists to engage in the “critical contemplation of the theoretical foundations” of nature (401). There is an epistemological limit that humans hold in being observers of nature, the relativity of their frames of investigative reference precludes physicists

from directly experiencing the 'absolute' frame of reference of an inertial system, and thus from accurately and inductively inferring claims on its nature.

Where Newton conceived of space as absolute and unmoving, Einstein amended that "motion from the point of view of possible experience" is always relative to an object in the same system of experience. The speed of a swimmer is measured relative to their position in the pool, the position of the sun is determined relative to the milky way (385). When Newton conceived of time as an absolute clock, Einstein challenged the illusion of simultaneity of events in regular experience. Prior to Einstein an inertial system that tracked a meteorite flying across the sky would assume that the astral event is happening at the exact same time as the observer experiencing it, according to one absolute clock. When Einstein and Point Carré defined a fixed speed of light c , which was previously and arbitrarily assumed to have an infinite velocity, the relativity of time became more evident (386). The meteorite and the observer aren't encountering one another simultaneously, rather, light is taking a couple minutes to reach the observer from the meteorite. The further we look out into the cosmos, the further back we're looking into the history of the Universe.

This departure from the paradigm of empiricism unmitigated by idealism in the natural sciences is neither new nor without its merits. While Einstein held that no inductive methods "could lead to the fundamental concepts of physics" (418), many physicists such as Maxwell and philosophers like St. Mill and E. Mach were committed to the materialist explanatory direction and inductive inferences from experience given that the scientists' concepts were consistent with the 'reality' of their experiences (414). The real turn towards constructive speculation on the nature of reality that is both voided from and grounded in the sensible experience of the observer, occurred when Faraday and Maxwell developed their electric field theory on the shoulders of Huyghen's theory of a material ether to explain the undulatory nature of light (415). Although they were dealing with inobservable phenomenon, they drew on both deductive logical inferences and the world of experiences their senses could account for.

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Thanks for reading!



