The Oracle

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It has been a great honor to work on these papers with our wonderful staff. The year 2020 has been a challenge to many, and the arrival of the epidemic has just been the icing on the cake. Nevertheless, even with all these hardships, the editorial staff have never lost sight of the goal, and all the people who have submitted their papers have been nothing but supportive. I am forever grateful and in awe of all the hard work that people have gone through to help with the publishing of this journal.

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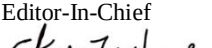
Sincerely
Skye S. Javaheri
Editor-In-Chief



A Letter From The Editor

The first thing any philosophy major will learn is the meaning behind the word “philosophy” itself; the word comes from two Greek words of philein (love) and sophia (wisdom), and nothing can explain philosophy better, we might as well hang our hats and call it a day. If one is to look at the material in philosophy itself, they would see nothing but random information, thrown together to make an argument.

The reason why it seems random is that one can point out to a part of the paper and say: “Ah! That is the science part!” or “Oh! That is the mathematical part” or “Oh! Look, here is the psychology part,” but ask them to point out the philosophy part, and it soon is revealed that it is debatable.

Math, science, psychology, and so many others were all once part of philosophy and when they got themselves a proper method and definition, they left the nest and became their own thing. In this way, philosophy is no different from a mother; creating and nesting new branches of knowledge, and all for the love it has, the love of wisdom.

The practice of showing love to wisdom, cherishing it, and re-evaluating it has been a long-lasting tradition of philosophy and the reason why it does not seem to be ending even when it has long been dropped out of fashion. Math, science, psychology, history, arts, literature, and so many others are lovely branches, and what philosophy will constantly use in its arguments, for true to its nature, as long as it exists, philosophy will look at it and ask “Why?”

Now, without further ado, here is the Spring 2020 Issue 14 of The Oracle!

Essay Section

“To Be or Not to Be”: An Essay on the Essence of Suicide

Author: Samia Akhtar
Edited by: Louis Chiu

Suicide has been an epidemic that society has faced for many centuries. Many have claimed that it robbed the individual of the multiple opportunities that would’ve come their way had they chosen to live. There are many reasons why an individual chooses to go through with suicide, whether it is due to mental health or other conditions, suicide can seem like the only way to end their suffering. To that individual, killing themselves may be a better option than living through the pain because of the hurt they think they cause others. This can be the result of multiple things such as not having the access or support to seek help or simply not knowing of the resources they could’ve reached out to. Society has an expectation that it can’t be justified for an individual to take their life because it results in a loss of life and hurts a community. However, I would argue otherwise. I find that suicide can, in fact, be justified because the individual has the right to choose what they want to do with their life. Even though, suicide is considered a sin in many religions and is frowned upon by many individuals and society, it is clear that when done under the right circumstances, an individual can justify taking their own life. In this essay, I will going over reasons why society needs to change its perspective on suicide and those who do go through with it. In particular, I will be looking at suicide cases that caused by mental illness.

Before going looking at the three reasons why society needs to change its perspective, I will present a roadmap for how these arguments will be presented. First, I will be presenting two philosophers whose work will be used continuously throughout this essay. Following that, I will open with the first argument, that suicide can be justified as long as it is done out of their own will. This does open up the debate on free will but in terms of those suffering from mental illness, you can see that it takes a sort of deterministic route and therefore ends in suicide. The second argument will be acknowledging death as something that is constant. What is important

to note here is the fact that everyone will die, it is just a matter of time and how. If we look at suicide as an act of death occurring at a certain time, then it could lighten the burden people place on themselves who choose. to go through with it. The final argument will be identifying hidden causes, so to speak. It is highly unlikely that one individual knows exactly what is going on in another person's mind, and so using this argument, I will be arguing that we can't know for sure, why someone chose to kill themselves. Again, this will help lighten the burden that is mentioned in the second argument.

To argue the premise that suicide can be justified, I will be referring to Nietzsche's ideologies as well as Seneca's. Seneca's main ideology is based around the notion of "mere living is not good, but living well". This means that simply living for the sake of being alive is not enough. As a rational individual, you're supposed to live the best life you can and if you can't do that then there is no point in being alive. He suggests that individuals can justify killing themselves when they feel like they are lacking in certain areas that results in their happiness as well as the fact that they realize that killing themselves wouldn't enhance or diminish their moral virtue, so what do they have to lose? Nietzsche believes that people should only look out for themselves, and that being mindful of others' needs would be costly in the end. It falls back on the Master Morality which is a subsection of Nietzsche's Herd argument. This is where Nietzsche suggests that individuals should strive for power and make a better life for themselves. He also suggests that it is better to have a master morality type ideology instead of a slave morality one, because you run the risk of being used if you follow the slave morality ideology.

First, I will argue that suicide can be justified because the act of suicide is done out of the individual's own will, meaning they are choosing to do so without any input from anyone else. If someone were to choose to kill themselves, one can assume that they are doing it for their own interests. One can also assume that the individual has a natural inclination to live rather than to die. Aristotle would also suggest that if suicide is done out of complete consent of the individual then it can be justified as it is not being forced upon them. If countries tell their citizens that they are free to do as they please then legally it is an individual's right to take their own life, as they

have rights that suggest that they are free. Seneca believes that we are judges that judge what we should be doing and what we should not be doing based on our own needs and desires. Seneca also believes that every action is done either voluntarily or involuntarily and are meant to reflect the impressions of the soul. If so, these impressions of the soul essentially are the desires and needs of an individual. In the case of an individual taking their life, the action is done voluntarily and can reflect the extreme sorrow that individual was dealing. It is possible that at times, the sadness a person is feeling is so thick that death seems like the only option. If this is the case, then that action of taking their own life is done out of their own free will and can be justified because that is what the individual may be looking for; an escape from the horrors of their reality.

My second argument to justify suicide would be that everyone dies eventually and that death is the same no matter who you are, the only difference is how you die. To start off, death is inevitable. No matter how hard you try to avoid it, you simply can’t, it is one of the only truths of the world that remains true: death comes for all and does not discriminate. An individual will die no matter what, whether they choose the time of death or not. And so when justifying suicide, you can assume that the only difference is that the person chooses to die at a time that seems convenient to them. Suicide cannot be ethically wrong if it were to be done out of an individual’s own will. Another aspect of death is that people cannot decide when you can die. As much as society would like to make it seem that doctors or physicians can choose when you get to die, they really don’t. An individual alone has the right to death, just as much as they have the right to life. If they choose to end their life sooner than people wanted, then that’s just the sad truth people have to live with. To support this premise, I refer to Friedrich Nietzsche’s Twilight of the Idols, where he writes about a moral code for physicians. He suggests that physicians undermine the patient’s rights by determining their right to reproduce, be born and to live. He goes on to say that the patient has lost the right, “to die proudly when it is no longer possible to live proudly”, as well as saying, “[...] Death of one’s own free choice, death at the proper time, with a clear head and with joyfulness, consummated in the midst of children and with who is leaving is still

there, likewise an actual evaluation of what has been desired and what achieved in life, an adding up of life [...]". Not only does this quote emphasize the idea of an individual having the right to die on their own terms, but it also suggests that death isn't as bad as religions will make it. While death is a loss suffered by a community, it is important to consider the latter; death can be a final reflection of one's accomplishments. For an individual who is struggling to make it through each day, death can be liberating as it finally means that they can let go and stop worrying.

Finally, my last argument is as such, no individual can really ever know what another person is going through. This is important because some individuals may feel inclined to believe that they have power over another's decisions, this will inevitably eliminate any such feeling of responsibility over another person's actions. We can assume we know but we really don't, we only get our own interpretation of part of the whole story. A Japanese proverb would suggest that we have three faces, the first is the one we show the world, the second is the one we show to our family and friends and the third is the one that we keep to ourselves. This proverb emphasizes the idea of people not being able to know the whole story, we only get a portion of it or choose to accept a few details that help our side. Keeping this in mind, I would argue that the individual themself does not know the full damage they have undergone as it is highly possible that it lies in the unconscious. The unconscious part of the mind is what lies below the water of an iceberg, it is unknown to many and remains unknown. To support this notion, I turn to Friedrich Nietzsche's Twilight of the Idols where he writes, "men were thought of as 'free' so that they could become guilty; consequently every action had to be thought of as willed, the origin of every action as lying in the consciousness". As stated, it is possible that there are unknown causes to why an individual chooses to kill themselves. This leads me into my second point for this argument, sometimes the cause of an action isn't as it seems. Nietzsche once said, "if we possess our why of life we can put up with almost any how - man does not strive after happiness; only the Englishman does that", this meant that the why of actions may always remain unanswered. If we don't have the why then we can't assume that we know the how. Moreover, in the case of someone killing

themselves, we would like to think that we know why they killed themselves when really we don’t. We can’t place ourselves in someone else’s shoes because oftentimes we won’t know the full extent of things even if we tried. Imagine it like this, no one else can drink your glass of water for you, only you can do that. Similarly, no one can live your life for you, no one can really know your struggles or deepest desires as that is solely your own. To support this notion of unknown causes, I look to Nietzsche’s Four Great Errors as proof of what I said, to be true. One of Nietzsche’s Four Great Errors is the error of imaginary causes. Nietzsche suggests that people add false causes to everything to accept things. This is clear when he writes, “It never suffices us simply to establish the mere fact that we feel as we do: we acknowledge this fact - become conscious of it - only when we have furnished it with a motivation of some kind”. It is no surprise that people crave a purpose or a why to their actions, but as I stated before, sometimes there simply is no why. Suicide is something that simply happens, people search for reasons in places where it doesn’t exist, only the individual can truly know what they felt and what led them to kill themselves. This in turn eliminates the argument that suicide can be morally wrong, because each case of suicide is subjective therefore, it is impossible to come up with a general solution to the problem.

To conclude, I argue that suicide can be justified as it is done out of free will, doesn’t change the fact that you die and that no individual can ever know what another is going through. Rather than looking at suicide as an action that is wrong on all accounts, it is important to acknowledge that the individual had gone through with suicide in order to feel a sense of liberation from the pain they were feeling. Sometimes a person may feel so hurt and their mental health may be so bad that death seems like a good option, and in those cases, the best we can do is support them. People leave behind suicide notes to help their loved ones feel less guilty but why does it have to fall upon them to apologize? We can’t blame an individual for wanting to feel better, even if what they chose hurt us in the end.

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Analyzing Nozick's reasons against living in an Experience Machine

Author: Andrey Kazinich
Edited by: Ronen Cherniavski

Robert Nozick's goal in his chapter on Happiness from *The Examined Life*[1] is to demonstrate that there is something we value outside of how our life feels to us internally.[2] Specifically, he aims to demonstrate reality itself is a value on par with intrinsic experience. To this end, he introduced the *Experience Machine* (henceforth EM) thought experiment and provides three value-based arguments that ought to dissuade us from entering the EM. In this essay, I address each of the three values in turn, arguing that none of Nozick's suggestions are compelling reasons for not plugging-in to the EM. Before considering my response, we must first understand Nozick's EM thought experiment and consider the three values he posits.

Briefly, the EM allows for stimulation of the brain such that one believes they are truly experiencing a predetermined and hedonically ideal life, while really they are floating in a tank attached to electrodes.[3] Since the EM provides the best possible internal experience, in rejecting it we reject that it provides the best possible life and thereby affirm that something beyond internal experience is intrinsically valuable. Before going further, due to the nature of Nozick's experiment, it is important to distinguish the difference between true reality and the reality created within the EM. As such, anytime I need to distinguish between true reality and EM reality, I will indicate a concept relating to true reality with "*," e.g. reality*. In *Anarchy, State, and Utopia*, Nozick posits three values which ought to dissuade us from plugging-in.[4] First, we want to *do* certain things, as opposed to just having the experience of doing them. Per Nozick, in some instances the desire to do precedes and causes the desire to

[1] Robert Nozick, *The Examined Life: Philosophical Meditations* (New York: Simon & Schuster, 2006), 104-108.
[2] Nozick, *The Examined*, 104.
[3] Robert Nozick, *Anarchy, State, and Utopia* (Oxford: Blackwell Publishing, 1974), 42.
[4] Nozick, *Anarchy*, 43.

experience the doing. Thus, there must be a reason why we desire to do certain activities rather than just experience doing them. Second, according to Nozick, we have a desire to *be* a certain way – we care about what we are. In the EM, you are an *indeterminate blob*, and there is no way for you to have any personality – e.g., there is no way for you to be courageous. Finally, the EM is limited to a man-made reality; as Nozick puts it, "[t]here is no *actual* contact with any deeper reality."[5]

Before addressing the three values, we must further consider the EM to understand its implications fully. Note that the experience is qualitatively identical to reality: the experience should feel just as real as my present being.[6] Anything short of that would certainly deter us from the EM for the wrong reasons (since we would be deterred from accessing the machine because it would not provide an internal experience of reality on par with our present one). Thus, while in the EM, we cannot imagine that we are influenced by a thought-limiting agent or anything else of the sort.[7] In reality, I cannot tell whether I have free will, but I act as though I do; the same must occur in the EM. As such, Nozick cannot claim that the EM offers merely a *movie* of some specific experience – that would be inconsistent with our experience of reality. Furthermore, the set of internal experiences we value extends beyond mere hedonistic pleasure as such. Particularly, we also value the challenge and journey and a myriad of other factors, all internal experiences, and all contributing ultimately to the original desire. Thus, the machine is not a simple simulation of achievement without obstacle. Such a conception misattributes where the internal value of experience lies in humans, and we ought to reject such a machine for misconstruing what the best internal life would be.

Given my analysis of the machine, we may reject Nozick's second argument. If the internal experience is equally complex and nuanced as is real life, then we should equally be able to grow and

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[5] Nozick, *Anarchy*, 43.

[6] I use the expression "reflect reality" to refer to this idea of the EM experience being on par with reality*

[7] For example, forced manipulation of consciousness into believing that the experience is not a simulation (the conviction that the experience is not a simulation should occur just as naturally as my conviction that I am not in a simulation does)

change from it.[8] Our consciousness actively engages with the simulated reality, or else this reality is not akin to our current experience. Since I can become courageous from overcoming fear in this world, I should equally be able to become more courageous when I am the last one standing in a simulated gladiatorial arena. Note that the simulation is complex: I do not merely wish to experience the triumph, since the triumph is valueless without the struggle of preparation that precedes it. In *The Examined Life*, Nozick seems to agree with this view, stating that the EM "…might teach you things…" or otherwise transform you beneficially.[9] As such, we can be a certain way even in the EM, both while within it and if we unplug, and hence this worry should not dissuade our plugging-in.

Nozick's third argument suggests that the machine is limited to "…man-made reality."[10] This is a problem of the thought experiment; the limits of the EM ought to be the limits of reality*, lest it fails to be an identical simulation of reality*. If my idea of the best experience is taking copious amounts of drugs, the machine should provide the transcendental experiences those drugs elicit. The machine should not be limited to only currently conceivable internal experiences – any hypothetically possible experience should be available. We can see that this is the case if we consider a long-period or even a permanent stay in the machine: I cannot conceive of what my future self would desire within the machine. Given I can change while within the machine, my desires too will change. I will require stimulation, challenge, and pleasure, amongst many other values – all of which are completely internal experiences. As such, the machine should reflect these developments and provide the appropriate simulation.[11] If Nozick denies this claim, then our justification for rejecting the machine should be simply that the same internal experience, no matter how great, will become boring.[12] Further, a myriad of internal experiences without connectedness amongst them

[8] Of course, not physically, as our body* is floating in a tank
[9] Nozick, *The Examined*, 108.
[10] Nozick, *Anarchy*, 43.
[11] We can conceive of some advanced AI network as being able to handle this task
[12] Or otherwise repetitive or unrewarding (which factors into the pleasure that experiencing an activity elicits)

(such as in the 10-year plug-in case) fails to create any continuity of existence. Nozick's proposition in this latter case is just blocks of internal experience, since if I go from one simulation to the next retaining my memory, then I recognize that I am in a simulation. Otherwise, if I go from one simulation to the next without retaining my memory of the previous block, then I am no longer myself*, but merely a being experiencing disconnected pleasant experiences. The latter case fails to reflect reality; given this view, we may reject the EM because it demands that we forego the consistency of our self, i.e. the continuity of our internal experience.

It is worthwhile to note that by a deeper reality Nozick may mean something mystical or religious. Provided this reading, those who do not believe in any such deeper reality will not find this objection at all convincing. Perhaps there is a theological discussion to be had here about the nature and experience of faith, but it is certainly beyond the scope of this paper. I believe it enough to reiterate here simply that, insofar as experience is concerned, it will be identical in the EM.

Nozick's first argument, unlike the other two, cannot be refuted through a deeper examination of the EM. No matter how well the EM reflects reality, or how well it determines the best internal experiences, from the perspective of an external observer* it remains the case that there is no real doing*, merely an experience of doing. Per Nozick, "[w]hat we want and value is an actual connection with reality."[13] Nozick introduces the argument by suggesting that we would not want someone we care about to believe false premises. For example, we would think it terrible if our friend believed and were told they are talented, yet in truth everyone snickered behind their back about their poor performances.[14] However, this case is not analogous to the EM, since there the deception of the experience machine is complete. Beliefs held within the simulated universe are beliefs about that universe, and insofar as they are beliefs about that universe, they reflect that reality. The deception is of the entire universe altogether and thus happens at a different (higher) level.

[13] Nozick, *The Examined*, 106.
[14] Nozick, *The Examined*, 106.

Thus, Nozick's scenario of deception is such that for the person holding the belief, in the reality where they hold it the belief is not true. In the EM case, the person holding the belief is correct in the reality where they hold the belief, but that entire reality is false (something that is inaccessible to the person holding the belief). As such, this epistemic motivation for connectedness to reality does not hold. Consequently, while this response rejects Nozick's explanation for why we desire connectedness to reality, it fails to adequately explain the underlying desire.

Thus far, I have developed an argument refuting Nozick's rational reasons for refusing to plug-in. However, one may respond that despite this view, there remains a strong conviction against entering the machine. Some internal concern fails to be dissuaded from opposing the idea of living in a simulated reality. Nozick recognizes this initial reaction and urges us to pay attention to it, especially those of us that, through rationality, later conclude that only experiences matter.[15] Nozick views this initial instinct as indicating the intrinsic value of connectedness to reality; no matter how thoroughly we rationalize the EM, the concern of living in a simulation cannot be fully shaken off. Nozick's *second reality principle* states that "[t]o focus external reality, with your beliefs,…is valuable in itself."[16] One possible interpretation of this principle is to adopt an organic unity view, wherein actuality itself would be necessary, but not sufficient, for value (and thereby may contain some intrinsic value). An alternative explanation, however, is to suggest the principle can be understood as aiming at the underlying psychological drive for connectedness to reality, apparent through our initial reaction to the experiment of dread or unease.

However, to conclude from this intuitive dread of a simulation that there is an intrinsic value to reality is an unjustified inferential leap. Imagine that science indisputably proves that we live in a simulation. Given such proof, what sort of reaction should we expect? I believe that the proof leads either to denial,[17] existential

[15] Nozick, *The Examined*, 105.
[16] Nozick, *The Examined*, 106.
[17] Meaning no amount of proof could ever lead us to believe this suggestion – we would sooner reject science

crisis, or some other equally radical reaction. In short, the consequences would certainly not be a meek acceptance of the fact; it appears that the fact is impossible to fully internalize in our reality. We can only ever formulate the concept but never truly grasp it. In this view, the dread of simulation is a consequence of our cognitive limitation as sentient beings; it is a psychological limitation. Given this alternative explanation for the dread we experience with regards to simulations, Nozick's inferential leap is unjustified without further motivation. The mere existence of dread of simulation should not convince us that reality has intrinsic value; an equally plausible explanation is just that human psychology is such that we cannot ever fully accept our being in a simulation and, as such, are deeply unsettled by the idea.

As such, there remains no value from Nozick's tripartite account which ought to motivate us against plugging into the machine. One may respond that my analysis is null given the status-quo rejection of the EM argument.[18] The status-quo rejection shows that biases influence our decision in the EM scenario, and with their removal more people are likely to plug into the machine (or remain plugged in). My responses instead demonstrate that even in the original, status-quo biased EM scenario, none of Nozick's reasons ought to deter us from plugging-in. This does not mean that no such reason exists. I believe that a large value that deters us from plugging-in, and which also dictates our decision to stay plugged-in in the status-quo modified case,[19] is our ties to other people (family, friends, loved ones). Nozick fails to recognize this fact when he allows for you to share your EM with people you value (wherein all can plug-in to one simulated world), and still claims we ought not to plug-in.[20]

In defence, Nozick may respond that my view here is merely a specific version of the connection to reality that I have so far been arguing has no importance. This reply misunderstands the motivations – the worry we experience for people we value in this

[18] Katarzyna de Lazari-Radek & Peter Singer, *The Point of View of the Universe: Sidgwick and Contemporary Ethics* (Oxford: Oxford University Press, 2014), 256.
[19] Articulated in Lazari-Radek & Singer, *The point*, 257; and Dan Weijer, *Nozick's experience*, 523.
[20] Nozick, *The Examined*, 107.

case very much reflects the worry we experience when we, for instance, move halfway across the world. We want to ensure people we care about remain safe and provided for. Knowing I am about to enter the EM, I do not wish to do so with the knowledge that my family will be left to suffer without me, e.g. perhaps I am their sole source of income. This worry is not one rooted in a grounding for reality. Instead, it is rooted in one's immediate context. The experiments demonstrating the status-quo rejection suggest that we would experience the same worry if we were in the EM and were asked to unplug from it after living there all our lives. Hence, my argument does not support a connection to reality but explains an important factor that impacts our decision.

Herein, I have provided alternative explanations for the strong intuitive dread or repulsion we experience when asked whether we would plug into the machine. Coupled with my analysis and rejection of Nozick's tripartite account, Nozick appears to provide no convincing reason why we ought not to plug into the EM.

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MORE HUMAN THAN HUMAN[1]: A Philosophical Exploration of Artificial Intelligence

Author: Sara Masciotra-Milstein
Edited by: Kameron Lee

"I think, Sebastian, therefore I am". The words uttered by an android in Ridley Scott's 1982 cult classic *Blade Runner* allude to Rene Descartes' famous axiom "Cogito ergo sum", thus raising the question as to what it means to be conscious within the context of artificial intelligence. If an artificially intelligent android could replicate human consciousness, then the uniqueness of human identity in relation to rationality would be at stake. An examination of Rene Descartes' philosophy, alongside current research in artificial intelligence and consciousness will support the argument that, should androids evolve in this capacity, their minds would be equal to those of human beings, and thus they would enter personhood.

To commence this discussion on artificial intelligence and human consciousness, it is important to firstly examine Rene Descartes' axiom of existence. In order to reach an absolute truth on the substance of the world, Descartes' philosophical journey stems from a system of hyperbolic doubt, whereby he "rejects as absolutely false anything of which [he] could have the least doubt"[2]. He begins by rejecting any knowledge of the material, external world since the senses are capable of deceiving him. From this position however, Descartes notices that while he could doubt everything outside of himself, the very fact that he doubts indicates that he exists as a thinking thing; hence, his famous axiom: "I think, therefore I am"[3]. From this, Descartes concludes that he is "a substance whose whole essence or nature was only to think, and which, to exist, has no need of space nor of any material thing"[4]. By referring to the mind as its

[1] Quote taken from Ridley Scott's *Blade Runner* (1989).
[2] Rene Descartes, *Discourse on Method*, translated and edited by Laurence J. Lafleur, (Indianapolis and New York: Bobbs-Merrill, 1956), Part Four, 33.
[3] Ibid 33.
[4] Ibid.

own substance, Descartes supports the Christian theology he set out to prove: that there exists a dualism between mind and body, allowing him to speak of a physical world made up of material stuff, and another immaterial realm of the soul and God[5]. Descartes' mind-body dualism claims that "the mind and the body enter into causal relations with each other [where] the mind causes things to happen in the body and the body causes things to happen in the mind"[6]. In this way, Descartes' 'pilot in the ship' analogy follows so that "It would not suffice to place [the rational soul] in the human body, as a pilot in a ship, unless perhaps to move its parts...it must be more intimately joined and united with the body in order to have feelings and appetites like ours, and so constitute a real man"[7]. This inevitably leads to the interactionist problem, which will be examined at a later point. For now, it is suffice to say that Descartes' dualism centers on the premise of the existence of the soul, which for him, is synonymous to mind. This begs the question of if one were to artificially create a mind in a machine (artificial intelligence) would this machine be imbued with a soul?

We must consider that Descartes' human mind —soul— is a self-conscious one, able to recognize its own thoughts and existence, which is a clear issue for Artificial Intelligence[8]. Descartes highlights the uniqueness of human souls, as having been created specially by God, by supporting the "traditional doctrine that the soul is essentially active [which] accounts for Descartes' radical distinction between animal and human consciousness. For Descartes, even when animals are awake ([...] conscious), their images automatically do the work of mediating sensory input and muscular output. But all is dark in the cavities of the brain, where it happens"[9].

For humans, consciousness illuminates this thinking process, so that only human beings are aware of what they are

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[5] Matt Carter. *Minds and Computers: An Introduction to the Philosophy of Artificial Intelligence*, (Edinburgh: Edinburgh University Press, 2007), 4.
[6] Ibid, 5.
[7] Rene Descartes, *Discourse on Method*, Part Four, 59. One that will be further elaborated upon in the later paragraphs of this essay.
[8] One that will be further elaborated upon in the later paragraphs of this essay.
[9] George Macdonald Ross, "Hobbes and Descartes on Language and Consciousness", (*Synthese* 75, no. 2, 1988), 222.

experiencing and can feel pain or pleasure from it[10]; they are self-conscious. In this way, the human mind is special from any other mind in nature; artificially engineering a mind with the capacity of self-consciousness would threaten humanity's uniqueness from a Cartesian perspective.

Descartes' foresees this issue in some sense. He invokes a mechanical philosophy in order to speak of the human being as "a machine created by the hand of God, and in consequence incomparably better designed and with more admirable movements than any machine that can be invented by man"[11]. Descartes argues that since humans are created by God, they are greater than any man-made machine could ever be. However, given current-day technology, it is possible to see that human creations often surpass or enhance[12] those found in nature (or from God), as seen in laser eye surgery, or bionic prosthetic limbs. Regardless, Descartes' envisions two methods of determining whether a machine, possessing a physiological resemblance to human beings and capable of imitating human actions, were human or not, thus proving the uniqueness of human minds — and souls. The first method whereby one would recognize an android would be that "it could never use words or other signs for the purpose of communicating its thoughts to others as we do"[13], meaning that it could not use language itself, without having been programmed to say certain phrases. The second method explains that "although such machines could do many things as well as, or perhaps even better than men[14] they would infallibly fail in certain others [since they do not] act by understanding, but only by the disposition of their organs. For while reason is a universal instrument which can be used in all sorts of situation, the organs have to be arranged in a particular way for each particular action...it is morally impossible that there should be enough different devices in a machine

[10] George Macdonald Ross, "Hobbes and Descartes on Language and Consciousness", 223.
[11] Rene Descartes, *Discourse on Method* , Part Four, 56.
[12] *Blade Runner* deals with androids who are stronger, faster, and generally more capable than their human counterparts, "more human than human" as it were.
[13] Rene Descartes, *Discourse on Method*, Part Four, 57.
[14] Hence the earlier footnote digression on *Blade Runner*'s androids.

to make it behave in all the occurrences of life as our reason makes us behave"[15]. As in the first method, whereby an android would be incapable of internalizing language for its own use, the second method of recognition demonstrates that androids function on particularities. Without reason's universality (given by God), it would be impossible for an android to possess enough programming for every nuance in human reaction and behaviour. In both methods of recognition, the android would fail because it would merely be "acting in accordance to the disposition of its organs"[16]; it could not be said to possess a rational soul, which works in universals and is thusly reserved for human beings.

Reason as "a universal instrument"[17] is therefore the capacity for free will within human beings. For an android, however, these decisions would have to have been installed in its software, thus denying them free will. For Descartes, it would be impossible for an android to possess a rational soul even if it did reach the same level of intelligence as humans. Human beings would still be unique in this regard.

However, there still remains the interactionist problem in Descartes' philosophy. If the immaterial mind and the body (including the material brain) are separate according to his dualism, then his 'pilot in the ship' analogy, whereby the two interact, is nonsensical. Ironically, Descartes' mechanical philosophy of the human being as a machine created by God lead to atheist principles regarding consciousness[18]. To use a secular term instead, the rational soul of which Descartes speaks, can be understood as "human rational architecture [comprised of] thoughts, beliefs, desires, intentions, emotional states, actions, etc. The entire nexus of rationality relations relating these items to one another, and also to sensory input..."[19]. Unlike the soul, human rational architecture can be explained through

[15] Rene Descartes, Discourse on Method, Part Four, 57-58.
[16] Ibid, 59.
[17] Ibid, 57.
[18] Ann Thomson, "Animals, Humans, Machines and Thinking Matter", (*Early Science and Medicine* 15,no.
1⁄2: 2010), 5.
[19] John Pollock, "Philosophy and Artificial Intelligence", (*Philosophical Perspectives* 4: 1990), 461.

materialist philosophies of mind, such as functionalism and computationalism. According to functionalism, a mental state is defined, not by "anything intrinsic to the state but, rather, its function in mediating relations between inputs, outputs and other mental states. Mental states are held to be functional states"[20].
If artificial intelligence fulfills its function, then it can be said to possess mental states, which leads to computationalism, "the view that to have a mind is to instantiate a particular formal system or collection of systems"[21]. For the computationalist, having a mind means to be engaged in computational processes, meaning that a machine could be said to have a mind. If one were to accept these materialist understandings of the mind as a machine, then it stands to reason that the mind cannot be a system unique to human beings, and that therefore, artificial intelligence is not a threat to human uniqueness since the latter does not exist. The ability to reason complexly and abstractly, is already achievable by computers, and even by some animals[22]. However, it is the higher-order cognitive functions — language production, abstract reasoning, language comprehension[23]— that appear as uniquely human and better serve in the discussion of artificial intelligence as a threat to the uniqueness of human consciousness[24]. For instance, Alan Turing's Imitation Game, whereby a human and a machine answer questions provided to them by an interrogator and must each prove they are human, reflects the machine's gap in language abilities. Passing this test indicates a "sufficient condition" for being a thinking thing; the fact that no computer has thus far been able to pass this test demonstrates the gap still between human consciousness (with its unique capacity for

[20] Matt Carter, *Minds and Computers: An Introduction to the Philosophy of Artificial Intelligence,*
(Edinburgh: Edinburgh University Press, 2007), 45.
[21] Ibid, 95.
[22] Ann Thomson, "Animals, Humans, Machines and Thinking Matter", 6.
[23] Although semantics and linguistics are computational tasks, the development of language and its usage
provide the biggest challenge to Artificial Intelligence researchers.
[24] Matt Carter, *Minds and Computers: An Introduction to the Philosophy of Artificial Intelligence,* 110

language production, abstract reasoning, and language comprehension) and artificial intelligence.

Furthermore, Descartes' systemic doubt of all things external to him consequently results in questions regarding the existence of others' minds. While one can use analogy and inference to rationalize that other humans have mental states 'like' one's own, this 'likeness' is vague[25]. A possible conclusion is that all one can say for certain about these mental states is that they "can be mapped onto our own in such a way that if we suppose the corresponding states to be the same, then the other people are for the most part rational"[26]. It follows then that "the concept of a person must simply be the concept of a thing having states that can be mapped onto our own in such a way that if we suppose the corresponding states to be the same, then the thing is for the most part rational"[27], which means that an android can be considered a person insofar as it appropriately mimics the rational architecture of human minds. This is impossible given Descartes' definition of rationality as independent from the disposition of organs; however, this argument is invalidated given his interactionist problem between mind and body. If the brain is the locus of the mind's rationality and can be understood as functionalist or computation list, then here exists a strong claim in favour of artificial intelligence as equal to human consciousness.

If an android were to reach the level of human consciousness necessary to obtain this status of "personhood", it would be concerning human race, not only philosophically speaking in terms of human specialness, but also in terms of survival; androids as machines could surpass human capabilities (if one chooses explore science fiction). What does it mean to possess the level of consciousness allowing one to be labeled as a 'person', and why do artificially intelligent androids fall short of this? Artificial intelligence researchers answer these questions by epitomizing the interconnectedness between consciousness, personal

[25] John Pollock. "Philosophy and Artificial Intelligence", (*Philosophical Perspectives*4: 1990), 462.
[26] Ibid.
[27] Ibid.

identity, and emotions as integral to human consciousness[28], and by extension, personhood. Both theoretical and practical reasoning require self-consciousness in order to "introspect one's own states, reason about them, and use these results in forming beliefs about the world", as well as a deliberation regarding "what will happen to oneself under various circumstances"[29]. Artificial intelligence would therefore need to possess a rich mental state, furnished with emotions, memories, and self-identity in order to fully possess theoretical and practical reasoning. The android would have to be capable of subjective thinking, which would necessitate the ability to create memories (or the implantation of these by the creator), since emotions, which guide subjective reasoning, are linked to episodic memory[30]. If artificially intelligent androids could possess emotions, humans would be more likely to consider an equivalency between their minds.

This would not be the case, however, if androids merely mimicked emotions without feeling them. Here again lies the problem of the inaccessibility of others minds, a consequence of Descartes' hyperbolic doubt. In everyday interactions, one is content to assume that the people around them feel the emotions they portray[31]. The same analogy would need to apply to artificial intelligence, so that humans, judging solely on the observable behaviour of their mechanical counterparts, would have no way of ascertaining whether the latter's emotions were programmed or truly felt. Regardless, the combination of memories, emotions, and self-consciousness would bestow upon androids a personal identity, equal to that of human beings.

It is with this revelation in mind —that both children of God and their machines—could be qualifiable 'persons'[32], that one must examine the possibility of 'android rights'.
If artificially intelligent androids could be implanted with memories,

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[28] Matt Carter, *Minds and Computers*, 203.
[29] John Pollock. "Philosophy and Artificial Intelligence", 463.
[30] Matt Carter, *Minds and Computers*, 203.
[31] Matt Carter, *Minds and Computers*, 206.
[32] Given hypothetical technological advances capable of implanting memories and the capacity to feel
emotions for Artificially Intelligent androids.

thus allowing them to feel emotions, then they should be referred to as 'persons'. Descartes' methods for recognizing machine from man would be nullified, since the former would be furnished with the necessary emotions and self-consciousness to act in such a way as to perfectly replicate human behaviour. The issue of an 'android soul' is irrelevant given contemporary secular societies, whereby functionalist and computationalist philosophies are better suited with modern neuroscience and psychology. In these ways, it would be necessary, should artificially intelligent androids ever reach this status of personhood, that their rights be protected. Since they would be capable of feeling emotions, they could not be used as slaves, as seen in *Blade Runner* . The idea of 'rights for robots' is already underway, as modern day courts tackle with the notion of sex robots and whether or not users should be able to rape them, as well as the existence of child sex robots[33]. If these robots were capable of emotions, laws would need to be enacted in order to protect them from what would otherwise be considered criminal activities if committed against a human.

While it is currently technologically impossible for androids to reach this level of personhood, the question as to whether or not the specialness of human consciousness is at stake is only an issue if one accepts Descartes' premise that there exists such a thing as a rational soul unique to human beings. The functionalist and computationalist philosophies refute this in arguing that the human mind is only distinct from machines insofar as it is capable of self-consciousness, emotions, and memories, thus amounting to a self-identity. If humans can create artificial intelligence, something potentially equal to or surpassing their own minds, then this is a true testament to the wonders of the human rationality. Artificial intelligence would become an extension of humanity, able to transcend the only thing limiting human potential: death. Here, one can see the salvation of Descartes' immortal soul he so desperately sought to prove; in a modern society, where the old gods of religion have been replaced by the new gods of

[33] Chris Baynes, "Sex Robots that Let Men Simulate Rape Should Be Outlawed, Says Campaigner". *Independent*: September 21, 2017. http://www.independent.co.uk/

science, artificial intelligence becomes the new soul —surpassing its creator, more human than human.

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Reverse Engineering the Anthropocene: Can Human Consciousness Change Reality?

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Environmental researchers define our current age as the Anthropocene for man and *cene* for new (Stromberg). The age of the Anthropocene embodies the long-lasting effects of humankind, the mass extinctions of plant and animal species, destruction of habitats, pollution of oceans, and altered atmosphere. The latter, arguably posing the most immediate threat since CO_2, currently accounts for about 84 percent of all greenhouse gases generated by human activities, amounting to about 30 billion tons per year. Before the Industrial Revolution, the CO_2 levels were around 270 ppm, rising to 313 ppm in 1960, and reaching 400 ppm in 2011 (Platt). The exponential growth in CO_2 emissions forces climate scientists to declare that the CO_2 levels must be reduced to 350 ppm if we are to avoid the irreversible effects of climate change. Scientific methods currently being explored in relation to the effects of the Anthropocene rely almost entirely on the narrow definitions of what constitutes and controls the mechanics of our existence.

Greater awareness of the Anthropocene brings to the surface critical questions about the nature of human reality or, more specifically, the role human consciousness plays in the formation of the physical world, its construction, functionality, and interactivity. This paper uses a dialogical correlation of Aristotle, Max Planck, and Dean Radin in order to first, formulate parameters of reality formation and the active role of consciousness as part of this process; and, second, consider the possibility that humanity's consciousness can be trained to effect *deliberate* change in the material world. This paper argues that one of the ways to understand the Anthropocene is through the idea that reality is "running away" from us because we are not aware of the role our consciousness plays in the process of controlling the reality formation.

In his philosophical text, the *Metaphysics,* Aristotle postulates the idea that reality consists of two ways of being -

potentiality and *actuality* . Aristotle's approach to the question "what is reality?" is very different from that of his peers at that time. Platonists attempt to answer this question by employing a model by which matter participates in a bundle of forms. For example, a table would participate in the form of what it means to be a table that is to be of a particular shape, color, smoothness, shine, and use. The Atomists, on the other hand, employ an aggregate system that answers this question using a model that suggests that all matter is composed of atoms. Aristotle's philosophical framework, by which he answers questions such as - what is being? And what is reality? - takes another approach. Aristotle takes a radical step in denying independent definitions to matter. His definition of potentiality is determined by the corresponding actuality. Aristotle postulates the idea that form and matter are two views of the same thing, a correlation that frames his working model of existence. The notion of the potentiality of matter and the actuality of form does seem to be supported by contemporary science experiments. I suggest that Aristotle's model of existence was further strengthened when Max Planck experimentally confirmed that reality, in fact, exists in two ways - *potentiality* in the form of *wave state* and *actuality* in the form of *particle state* . Through Planck's experimental approach, Aristotle's ideas of matter as a *potentiality* and form as an *actuality* have been shown as deeply rooted in the physics of reality. Planck's experiment can then be used as a key to unpack Aristotle's model further and offer a new methodology for the process of reality formation.

Aristotle set out to answer the question - *what is reality* ? Max Planck created an experiment to answer the question -*what is the nature of light* ? However, Planck inadvertently answered not only the question - *what is reality* - but also discovered how matter-based reality was created. The double-slit experiment was attempted around 1922 as part of the Solvay Conference in Brussels. During the experiment, the light was shot through a screen with two slits, and the expectation was that the light was going to pass through the two slits and hit a back screen, making an interference pattern on the back screen as it passed through the double slit screen. The initial results of the experiment offered surprising data: instead of producing a pattern of particles, the experiment resulted in a pattern of waves. Planck

became concerned that the experiment itself was flawed, and he needed a way to monitor the integrity of the experimental process. Planck introduced an observer to ensure the experiment was being conducted correctly. The experiment was conducted again with an observer present, and this time the experiment produced the anticipated results. Planck decided to investigate this variance by removing the observer, and the light again reverted to wave-like patterns or interference patterns. After a series of rigorous tests, Planck had to ultimately conclude that the presence of the observer was changing the behavior of the particles. In other words, *we* are changing *matter* into *form* . If an observer were not present to concentrate on the light, the light stayed as a potentiality or wave. Our concentration on the experiment forced it to manifest or actualize into a form or particle. One can then conclude that we are actively causing our matter-based reality. The revolutionary implications of the double-slit experiment prompted Plank to say, "Science cannot solve the ultimate mystery of nature. And that is because, in the last analysis, we ourselves are a part of the mystery that we are trying to solve" (Planck, 217).

Plank's experiment further pushed the evolution of understanding that consciousness is the base and the catalyst for the creation of our matter-based reality. In other words, our conscious observance can cause reality to move from a *potential wave* state to an *actual particle state*. In the decades following Planck's double-slit experiment, the post-WWII global political climate and resistance to New Age ideas restricted the definition and application of quantum physics. Instead of exploring the potentiality of the relationship between reality and cognition, mainstream science limited the implications of Planck's experiment to the notion that matter can exist in two states at the same time. The phenomenon of consciousness was relegated to a footnote by the scientific community and attempts to emphasize its relevance were dismissed as equivalent to paranormal pseudoscience.

The breakthrough in Planck's double-slit experiment and its metaphysical, as well as physical implication, came in the mid-2000s when Dean Radin began working on the *quantum measurement problem*. Directly building on the framework set up by Planck, Radin

defined the quantum measurement problem as the contentious behavior of quantum objects, which appear to behave differently when observed than when they are unobserved (Radin, Consciousness). As the chief scientist for the Noetic Science Institute, Radin conducted an experimental study on the nature of consciousness and its role in reality formation. This research was collaboratively conducted at the Noetic Science Institute and in correlation to similar studies at York University and Princeton University. Radin's goal was to explore the scientific findings around the double-slit experiments and the implications of the quantum measurement problem. He conducted six experiments with volunteers who were asked to concentrate while the double-slit experiment was being conducted, and Radin ensured that scientific methods were applied throughout.

The primary outcome of Radin's experiment replicated the results of the other scientists at York and Princeton Universities, as well as the data collected by Planck and his peers. The critical conclusion being that consciousness does play an active role in reality formation. The challenges that arose with Radin's findings were based on the variables involved, that is the individuals participating in the experiment itself. For instance, Radin noted that participants trained in meditation were able to effect change more readily and for a sustained period of time (Radin, experiment). Those without meditation training had a difficult time concentrating on the task – even in cases where they had to focus for 30 seconds. Radin also noted that the type of meditation training one received might dictate how well they were able to effect change in the wave pattern. The Earth's geomagnetic Field (GMF) likewise accounted for variations in the results. Radin's conclusion for this experiment is central to expanding the idea of the nature of reality, and it suggests that more experimental work needs to be done on our understanding of consciousness and the role meditative training has on the mind. The ultimate outcome of Radin's experiment, however, is the emphasis on the usefulness and capacity of consciousness to affect reality formation.

The evolution in thought from Aristotle to Planck and Radin raises a number of key questions: Is our consciousness an unrestrained tool? Can consciousness be used to create a new reality? Can we discipline our consciousness to create a reality that accounts for the

Anthropocene? Can collective awareness of how our consciousness affects and builds reality prevent the Anthropocene from collapsing?

To answer these questions, the paper suggests that the first step is to turn to the *mechanics* of consciousness itself. Aristotle, Planck, and Radin present a strong case for consciousness playing an active role in the formation of our immediate reality. If we take this notion and apply it to the most pressing global issue of climate change, we may be able to find an unexpected solution to the collapse of our planet. Let us begin by considering the following thought experiment and taking an evolutionary approach to consciousness as a tool for reality formation: the planet is overrun with CO_2 causing global climate change via greenhouse effect; if we apply conscious force to increase the number of air particles in the atmosphere then CO_2 would disperse, and the greenhouse effect would not occur, thus stopping climate change.

One of the immediate symptoms of climate change is the fact that our planet is overrun with CO_2 that causes a dangerous increase in global temperatures. This increase in temperature causes interruptions in the planet's ability to regulate its climate, local temperatures, weather patterns, and ocean temperatures, in other words, it accelerates the greenhouse effect. Using the air particles as a simplified example, and keeping in mind that air consists of many different particles, consider the dynamic where our consciousness could have an immediate effect on the consistency of air. If we apply the idea of consciousness as a tool in response to the global climate change crisis, conscious forces may be applied to create more air particles and deconcentrate the amounts of CO_2 in the atmosphere. Situated within the context of Planck and Radin, this solution may be seen as creating a new matter-based reality.

Some objections may be raised in response to this thought experiment. One may argue that the current experiments indicate that consciousness has an effect on the interference pattern, falling short of actual reality formation. To put it another way, consciousness may have an effect but is not the cause of reality. Some may interpret the data to support this view; however, it is not that the particles are being affected – the wave itself, which is not a particle yet, but a potentiality, once introduced to awareness, measurement, and

concentration begins to behave like a particle. In other words, there was no particle before there was a conscious application. So although there are many in the scientific community who do not want to draw this conclusion, the data is definitive about the sequence of events, thus supporting the understanding that consciousness has an active role in the formation of particles and reality itself.

I suggest that the larger barrier here is not whether consciousness is a cause or an effect, but rather our limited understanding of what consciousness is. We are not aware, for example, of its purpose, its function, and power. To understand its purpose, we need to begin by asking – *why does consciousness exist outside of basic functions of cognition*? There is substantial evidence even in our day to day lives supporting the idea that consciousness gives us an awareness outside of our physical selves. For instance, when person A stares at person B from behind, person B is aware of this attention and turns around. There is something about the consciousness of person A that can effectively notify person B that they are being stared at. The consciousness of person A doing the staring seems to have the ability to affect person B. The questions then become: *what* is *the purpose of consciousness*? *Why do we have this ability* ? This is not a cognitive function; rather, it is a function that we do not yet understand. Which brings us to its function: *what is the function of consciousness, or rather, how does consciousness function*? *What are the mechanics behind how this phenomenon works*? How is it that we are aware of someone staring at us without us seeing them? How is it that our concentration causes waves to become particles? And lastly, w*hat is the power of consciousness*?

All of these become valid questions within the context of Planck's and Radin's experiments. We need to begin to consider how far we can influence wave particles and in what quantities we can affect them. The question of power is thus becoming more a question of force and how much force can a single consciousness exert. If we calculate this basic unit, then we can develop a formula by which we can affect climate change on a scientifically measurable global scale. Our lack of understanding of this force or power of consciousness becomes the primary barrier to finding the solution for climate change grounded in the nature of reality itself.

Given that we do not understand consciousness, the next logical step would be to carefully investigate the purpose, function, and power of consciousness. This in itself creates controversy since most of the scientific community, when dealing with noetic sciences or consciousness and its inherent phenomena, locate them in the pseudoscience category. There is a common perception that once we step into that realm, we are entering the discourse of voodoo, witchcraft, and mysticism, rather than science. The notion that consciousness can affect the natural world in ways not yet understood fills the scientific community with a sense of apprehension. There is a notion that if these phenomena are investigated, then-contemporary scientists are no better than the scientists in the dark ages. This apprehension may have risen out of the work of philosopher Immanuel Kant and his work, the *Critique of Pure Reason* , where he highlights the transcendental condition and concludes that the self cannot be known. As western thinking became more secular, the thought that any consideration of soul, spirit, or self as being more than biology was relegated to the realms of Religion, Mysticism, Philosophy, and New Age-ism.

Building on the success of Planck and Radin, I propose that the contemporary scientific discourse needs to consider the investigation of conscious phenomena for two reasons: first, that given advances in science, we are now able to investigate using prescribed scientific methodologies. The data gathered in this critical manner would offer a reliable and impartial basis for the analysis of the metaphysical nature of consciousness and its effect on the physical world. Second, this type of investigation reflects the precise nature of science - to understand what conscious phenomena are and to explore the full range of conscious experience. The aim of science is to understand the phenomenon of consciousness in a way that is meaningful and objective. If, as I suggest through Aristotle, Planck, and Radin that human consciousness can be manifested as a matter-based reality, then our lack of comprehension of how consciousness works undermines our ability to generate a new or at the very least corrected matter-based reality. We need a coalition of multi-disciplinary thinkers and scientists to solve the mysteries of our consciousness so that our consciousness ceases to be an uncontrolled

and unrestrained tool. As we become more aware of the effects of the Anthropocene, we need to take steps towards the understanding of consciousness as a tool against the pressing threat of collapse and extinction by way of global climate change.

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The Moral Status of Medical Assistance in Dying (MAID): Should Cases of Treatment Resistant Depression Qualify?

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Edited by: Marcus MacKenzie

Introduction

In Part I of this essay I argue that the practice of medical assistance in dying (MAID) is of no greater moral concern than allowing patients the right to refuse life-sustaining treatment. By "MAID" I refer to the practices of voluntary active euthanasia and physician assisted suicide. Denying MAID to competent patients with an irremediable illness prolongs unnecessary suffering and violates the bioethical principles of non-maleficence and respect for autonomy.

In Part II I argue that extending MAID to patients whose request is motivated by treatment-resistant clinical depression (TRD) alone should not be permitted. It is currently unclear under what criterion clinical depression can be accurately judged to be irremediable. Due to missing data and publication bias we cannot currently tell how effective the primary treatment methods for depression are, which casts doubt on whether or not even the most severe cases of TRD are truly irremediable. These issues might mislead doctors and patients to believe a particular case of depression is irremediable when it is not. For this reason, TRD patients might be put in a vulnerable position for premature death if MAID is permitted for them.

Part I

Dan Brock highlights the wide consensus among academics and patients that the right to refuse life-sustaining treatment is morally permissible and supported by the principles of respect for patient autonomy and beneficence (Brock 1992, 297). However, controversy remains around whether or not MAID is morally permissible. I argue that MAID is morally permissible when the request is made by a fully informed, competent patient and the request is due to an irremediable medical condition.

Brock (1992, 297-308) argues there is no relevant moral difference between allowing the right to refuse life-sustaining treatment and allowing the right to MAID. When a patient refuses life-sustaining treatment they have decided that the net well-being made available to them by their treatment is worse than death. They would rather die than to continue their suffering, and find this choice to be the greatest exercise of their autonomy. The same judgement also underlies the request for MAID and is backed by the same bioethical principles, namely beneficence and respect for autonomy (Brock 1992, 299). If one's refusal and/or withdrawal from treatment will result in her death, then she finds death to be the best available choice. If death is decidedly the greatest exercise of one's autonomy, the best choice for one's well-being, and the only way to effectively relieve suffering then there is no good reason to deny MAID while allowing her to refuse life-sustaining treatment. MAID enables the patient to control the timing of her death and eliminates the suffering she would otherwise be forced to endure in the time between withdrawal from treatment and death. For competent patients with irremediable illness, MAID is an even greater act of beneficence as it might prevent more suffering and give patients more meaningful deaths.

A common reply goes like this: killing is wrong, and doctors should not (and do not) kill. Letting someone die is not wrong when it alleviates suffering and provides the patient with the greatest capacity to exercise their autonomy. MAID amounts to the physician killing the patient, whereas respecting the refusal to life-sustaining treatment amounts to letting the patient die, which is an unintended side-effect of alleviating suffering and enabling the patient to exercise their autonomy in the greatest available way. So, the argument goes, MAID is wrong, and doctors should not perform it even if we allow the right to refuse life-sustaining treatment.

This argument is flawed, however, because it rests on the mistaken assumption that when physicians discontinue life-sustaining treatment they are merely letting the patient die (Brock 1992, 299-301). To support this claim, Brock uses the example of a respirator-dependent ALS patient who requests (with competence) to be taken of her respirator because she finds her condition intolerable (Brock 1992, 300). The patient cannot do this herself as she is completely

paralyzed. In this case the physician, if she abides by the patient's request, intends and plays a necessary causal role in the patient's death. Now, imagine a greedy son of the ALS patient who removes his mother from her respirator to hasten his inheritance, and then claims to have done nothing wrong because he merely let her die. The physical actions are the same, but the physician has good intentions and has obtained informed consent. The son has ill intent and has not obtained consent at all. Both play necessary causal roles, but only the son does so wrongly. It would be cruel to force the ALS patient to remain in her condition against her wishes, so letting her die her by taking her off her respirator (with informed consent) is morally permissible. If we say the physician in this scenario did nothing wrong *merely* because she let the patient die, we would be forced to say that the son did nothing wrong too. The physician did nothing wrong because she enabled the patient to exercise her autonomy in the greatest way available, whereas the son denied her this capacity. That is the crux, not the physical actions themselves.

MAID is supported by the principles of respect for autonomy and beneficence. If we can be sure that the requesting patient's medical condition is irremediable and that unbearable suffering will continue, we can be sure that MAID is an act of beneficence if extra measures are taken to ensure the requesting patient is sufficiently competent to make this serious decision.

Part II

Bill C-14 currently disqualifies Canadian patients from receiving MAID for psychiatric illness alone because in order to qualify the natural death of the patient must be "reasonably foreseeable" (Kim 2016b, 1). Some argue, however, that patients with psychiatric illnesses such as severe treatment-resistant depression (TRD)[1] should be eligible for MAID and that the reasonable foreseeability of death criterion should be removed (Dembo et al. 2018). I agree that this criterion is vague and potentially problematic

[1] TRD has been defined in one study as depression which has been unresponsive to 2-6 treatment regimes, though it has been defined slightly differently in others (Rooney, Schuklenk, and Vathorst 2017).

in cases where an illness is truly irremediable but death is not reasonably foreseeable. Suffering is suffering. If death is the only way to relieve it, MAID should not be denied to patients just because it is unclear how long they would otherwise have to suffer before death. However, I argue that we should not extend the right to MAID to include patients whose request is motivated by TRD alone because it is unclear under what criteria TRD, even in severe cases, can be accurately judged to be irremediable. As things stand, allowing MAID for TRD alone would put patients in a vulnerable position by exposing them to risk of false positives and an unjustly premature death. From here-on, I will focus on arguing against extending the right to MAID for TRD alone, not psychiatric illness in general.

S.Y.H Kim (2016b) argues that the criteria for judging irremediability is inherently vague. In another paper, Kim et.al. (2016a) examined all published cases of MAID for psychiatric illness in the Netherlands from years 2011-2014. Kim (2016a) found that if a patient's depression persisted for twenty years despite several treatment attempts (including antidepressants), their depression would likely meet the irremediability criterion. But Kim cites evidence suggesting that even patients in this situation can achieve remission through "high-quality treatment" (Kim 2016b, 1) , which raises the worry as to whether or not some TRD patients in the Netherlands have undergone premature deaths, thereby depriving them of a real chance of recovery. I would like to raise a similar worry.

In *Bad Pharma* Ben Goldacre (2013) argues that the available evidence on the effectiveness of antidepressants is inherently flawed due to missing data and publication bias in pharmaceutical research. Goldacre (2013, 19-20) cites research which examined all seventy-four trials reported to the FDA for every antidepressant on the U.S. market between 1987 and 2004. The researchers found that thirty-eight of the trials showed positive results and thirty-six showed negative results. All thirty-eight positive trials were published, but only three of the negative trials were published without distortion (Goldacre 2013, 20). Twenty-two of the negative trials were never published, and the remaining eleven were distorted to appear positive (Goldacre 2013, 20). When we look at the data of all 74 trials the evidence suggests that these antidepressants are no better than a

placebo. Furthermore, Goldacre (2013, 5-6) mentions an antidepressant that had been approved for use in the UK and explains that only one of seven trials for this drug were ever published. This one trial showed positive results, but the remaining unpublished trials showed this antidepressant to be no better than a placebo (Goldacre 2013, 6). This is a paradigm example of publication bias which has misled doctors and patients into using the drug, falsely believing it to be effective. The upshot of these findings is that we cannot at this time be sure that the common antidepressants work. There is strong evidence that they do not, and in some cases they might even be more harmful than helpful (Goldacre 2013, 5-6). If this is true, the fact that a case of depression shows treatment-resistance to several different antidepressants cannot justify the claim that the depression is irremediable.

Antidepressants are not the only available treatment method for depression, but it is the most common in Canada (Flett and Kocovski 2017, 221). Goldacre (2013, 12) also argues that missing data and publication bias has affected all areas of science. This suggests that these issues are likely to be infecting the evidence pertaining to the effectiveness of non-pharmaceutical alternative treatment methods as well. Furthermore, the effectiveness of alternative treatment methods are often measured in comparison to that of pharmaceutical treatments, as pharmaceutical treatments are commonly considered to be some of the best treatments available. Since we do not have accurate knowledge of the effectiveness of these pharmaceutical treatments due to the reasons stated above, this strategy cannot lead to an accurate measurement of the effectiveness of alternative treatment methods. Rooney, Schuklenk and Vathorst cite skepticism about the effectiveness of cognitive therapy as well (2018, 3).

Now, consider the fact that treatment resistance is a central factor in how physicians in the Netherlands judged the irremediability of depression for those who received MAID (Kim 2016a). Did treatment resistance occur in these cases because the treatments were ineffective, or because the illnesses were truly irremediable? This question bears heavily on the moral status of extending the right to receive MAID for TRD at this time. Since we lack the required

evidence to answer this question in good faith we cannot yet be sure that providing MAID for depression is morally permissible in any case. Due to the serious doubt concerning the effectiveness of the current primary treatment methods for clinical depression, resistance to these treatments is not a valid criterion for irremediability. Without valid criteria, we cannot be sure if *any* given case of depression is truly irremediable. Thus, we cannot be sure that granting MAID to patients for their TRD would not result in their premature deaths and thereby deprive them of the chance to alleviate their suffering by less costly means and experience a more valuable life than the ones they live currently. To deprive them of this chance would be to violate at least two bioethical principles: non-maleficence and justice (Fisher et. al. 2018, 17).

Rooney, Schuklenk, and Vathorst (2018), however, argue that concerns about irremediability do not justify an outright ban on MAID for TRD. They too point to skepticism of the effectiveness of available treatment methods, but argue that this instead provides reason to understand some cases of TRD as irremediable. Rooney, Schuklenk, and Vathorst (2017, 5) propose an understanding of irremediability based on a cost-benefit analysis between "statistically likely outcomes" and the burden of treatment. They admit this understanding can lead to false positives, but argue that these cases will be relatively few compared to the "majority of individuals who would have pursued MAID" (Rooney, Schuklenk, and Vathorst 2018, 5) who will be harmed by being forced to endure their, perhaps irremediable, suffering.

However, to base an understanding of irremediability on current "statistically likely outcomes" (Rooney, Schuklenk, and Vathorst 2018, 5) is to ignore the issues I raised above. These outcomes are precisely what are difficult to accurately determine as a result of our uncertainty regarding the effectiveness of our most common treatment methods. Rooney et. al. (2018) cite studies of TRD which show patient prospects to diminish after each unsuccessful treatment and note that this is a "central component" (4) of evidence-based assessment of TRD and determining its irremediability. But if the majority of common treatments have not reliably been shown to be effective then it is no wonder why prospects should not improve after

several treatment attempts. Also, if we cannot accurately conclude that the common antidepressants are effective from the available evidence, this evidence cannot justifiably be used to determine patient prospects.

Rooney et. al. (2018) also cite evidence suggesting that even in long-term high-quality care facilities forty percent of patients did not achieve remission, and they deny the claim that a better resourced mental health system would make a "significant difference" (3). But this is to ignore the fact that many requesting patients might not have access to such long-term care and also that long-term care often involves the use of antidepressants and cognitive therapies as primary treatments as well (see Logan 2013). Perhaps better access to such long term care, combined with an improved treatment approach, would result in a significant decrease in the amount of TRD cases deemed to be irremediable.

Thus, Rooney, Schuklenk, and Vathorst (2018) have failed to show how irremediable cases of TRD can be accurately distinguished from remediable cases. Without a reliable distinction we cannot be sure that any case is not a false positive. Rooney, Schuklenk, and Vathorst (2018) claim that the number of false positives will be relatively few compared to those patients who will be forced to endure their illness for the rest of their lives, but this is unfounded and a rather risky claim to make without reliable criteria to distinguish irremediable cases of TRD from remediable ones. Furthermore, it seems plausible that seriously addressing the issues of missing data, publication bias, and the ineffectiveness of current treatment methods might yield research findings that affect current clinical practices such that better treatments are developed and a greater chance of recovery is made available for patients with TRD. These concerns should be considered before permitting MAID for TRD alone considering the potential for a great number of lives to be saved and improved.

Conclusion

I maintain that MAID is morally permissible for competent patients with irremediable illnesses causing grievous suffering. However, my position provisionally excludes patients who request MAID solely for TRD because the medical field currently lacks

adequate criteria to judge the irremediability of any case of depression. Providing MAID to patients with a real chance of recovery would violate the bioethical principles of non-maleficence and justice, and we lack the necessary tools to determine which patients have this chance and which do not.

Note that my main supporting claim, namely that we cannot yet accurately determine irremediable cases of TRD, is empirical in nature. Its status may change with further advancements in research as it rests on the current available evidence (or lack-thereof) of the effectiveness of available treatment methods. If we can determine adequate criteria for judging the irremediability of TRD, I will be happy to reconsider my position in the absence of other issues.

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Positivism in Twin Studies

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Introduction

The influence of positivism as a philosophy of science in modern times had resulted in the scientific researcher and the scientific method being treated as infallible in search for scientific truth. Problems arise when adopting positivism as a philosophy of science since these problems translate to all sciences. In an effort for psychology to be treated along the same lines as the natural sciences, Tolman (1992) argues that psychology implicitly adopts a positivistic view on knowledge. While the shortcomings of positivism are evident in all disciplines, they are especially evident in psychology. While various methods of psychology could be used to illustrate the problems of positivism, this paper focuses on the Twin Method.

Positivism: Classical and Logical

Positivism can be defined as a philosophical system that holds that every rationally justifiable assertion can be scientifically verified and/or is capable of logical or mathematical proof. Positivism rejects metaphysics and theism because they can not be empirically verified. There are two types of positivism: Classical Positivism and Logical positivism. The term 'Classical Positivism' was coined by August Comte in 1830-1842 in his work *The Course of Positive Philosophy* (Comte & Martineau, 1853).Comte could be credited as one of the first to attempt a philosophy of science as the first three volumes of *Course on Positive Philosophy* focused on natural (physical) sciences already in existence (physics, chemistry, biology), and the latter two emphasized the inevitable emergence of social sciences. Classical positivism involves a move from defining science in terms of theological knowledge and/or abstract metaphysical concepts to defining science in terms of empirical (positive) knowledge. To Comte, empirical knowledge is anything that can be directly observed through scientific investigation, and interpreted through reason and logic. Comte viewed the latter forms of knowledge

-Theological and Metaphysical knowledge- as lesser but necessary modes of knowledge (Giddens, 1974). According to Comte's Law of three stages, society passes through three stages of ascertaining truth- theological knowledge and then metaphysical knowledge with positive scientific knowledge being the endpoint. Comte believed that psychology "can only consist of physiological study of the brain and of a social and historical study of the products of the human," in turn disregarding introspection because there are "no facts of the inner sense." While Comte's philosophy of science was not perfect, it did influence others. Ernst Mach was one such philosopher influenced by Comte's philosophy of science and later expanded on it. Ernst's new philosophy of science came to be known as Logical Positivism (also known as logical empiricism or neopositivism). Logical Positivism shares many similarities with Classical positivism in that both philosophies are based on directly observable empirical phenomenon to which reason and Logic is applied. However, Logical Positivism embraced the concept of verification through scientific methodology. Logical positivism influences all major sciences to this day.

Twin Method

The twin method is a psychological research method used to determine the genetic component of a behaviour by studying twins. The Twin Method comes from the field of Behavioural Genetics, a sub-discipline of psychology (and biology) that looks at the genetic influences on psychology. Although Francis Galton (the father of behavioural genetics) was the first to perform twin investigations, the twin method was created by German dermatologist Hermann Werner Siemens. The Twin method studies twins and correlates their genetic similarity with the expression of a trait, behaviour or disorder. Identical twins (monozygotic twins) who share 100% genetic similarity are compared to Fraternal twins (dizygotic twins) who on average share 50% genetic similarity; any behavioural differences between monozygotic and dizygotic twins are attributed to genetic factors. To account for environmental effects, twin studies are performed on twins (monozygotic and dizygotic) that are reared apart and compared to those that live together. The key variable studied in Twin Studies is heritability, which is an estimation of the degree

of variation of a phenotypic trait in a population that is due to genetic variation between individuals in that population (Joseph, 2004). The goal of Twin studies in psychology is to answer the nature versus nurture debate in relation to specific traits psychological. Twin studies, being a method that originates from positivistic field of behavioural genetics, is also inherently positivistic. Twin studies looks at many sets of twins and focuses solely on genetic relatedness, immediate environment and expression of trait of those twins and ignores many other factors. As a result, the shortcomings of positivism are evident in this research method.

Problems of the Positivistic Researcher

The first major problem of positivism is the question of the researcher. Positivism puts forth the notion that as long as knowledge is based on empirical observations, the question of *who* conducts the research and their intentions for performing said research are not important. However, does the question who conducts the research matter? Some would argue yes, the identity and the goals of the research does in fact matter. Consider the history of the Twin Method. Twin research was first attempted by Francis Galton who also the father of the Eugenics movement. Galton's intent behind the eugenics movement was to produce a "highly gifted" race by having genetically superior people (or who Galton considered to be genetically superior) selectively marry other genetically superior people. The twin method was created by Hermann Werner Siemens who was also a major figure in racial hygienic movement in the 1920's. Siemens was a Nazi and supported the Nazi's racial policies believe them to be his "utopian dreams" translated into state policy (Joseph, 2004).

The next problem is of what researchers choose to study and why. Positivism does not account for researcher bias or their intentions which ultimately affect research results produced and interpretation of those results. The psychologist's intentions are reflected in what they choose to study; while in most cases that intent of psychological research is usually knowledge or prestige sometimes, those intentions are in fact malicious. In psychological research, researchers have been shown to hide their socio-political agenda under the guise of empirically founded research such as the famous study

"The Bell Curve" (Gould, 1996). This socio-political agenda is often evident in the content of the research. Twin Studies often look at the genetic component of Intelligence (specifically IQ), Criminology and Mental disorders (Barnes et al, 2014; Joseph, 2004; Teo and Ball, 2009). The implications of this research are that innate genetic influences in people cause them to be smarter, more criminally inclined and less mentally healthy than others while ignoring other factors such as culture and socio-economic status etc. These genetic influences are also used to retroactively justify why certain people have power in society and why others are disadvantaged (Gould, 1981, Teo and Ball 2007). Does the identity or motivation of the researcher really matter if empirical observations are objective? Well the problem is that these observations are not truly empirical and even if they were, it would not matter. In his work *Theory and Experiment in Psychology: A study critical of its foundations* Holzkamp looks the relationship between experimental practices and theoretical conceptualizations. Holzkamp demonstrated that despite what the results of the study shows, the conclusion derived could be anything. Holzkamp believed the subjective nature of interpretations was due to a lack of a guidelines on how to interpret and draw conclusions from experimental results. In other words, no matter what the results demonstrate, a psychologist with a socio-political agenda (such as creating a superior race) will interpret results in a manner that allows them to further their goals.

Problems with the Positivist Methodology

With positivism comes the belief of Methodologism (also known as methodological imperative) which is the practice of treating the method as the most important aspect of research (Gao, 2014). Mostly found in natural-scientific psychology, methodologism favors experimental and statistical methods over theoretical, social, and cultural approaches, ignores theoretical assumptions underlying research and deemphasizes the subject matter and practical relevance of psychological research. Questions of method such as "what experimental design was used" or "what statistical dictate the validity of what is studied" directs research. Methodologism is maintained through institutional means as specific institutions (such as the

American Psychological Association) define which methods are deemed acceptable. Methodologism goes hand-in hand with positivism since positivism stipulates all knowledge gained through scientific knowledge must be objective knowledge. The definition of objectivity shifts from "knowledge devoid of subjective bias" to "in accordance with established scientific methods." A major problem with methodologism occurs when accepted scientific methodology is later shown to be inadequate or faulty. This is extremely evident with Twin Studies. The twin method is considered a key method of behavioural genetics despite its methodological flaws. Twin Studies were viewed as a *de facto* method for establishing a genetic link in behaviour. However, in recent years it has been demonstrated that some of the central assumptions of the twin method are limited (Joseph, 2004). One such methodological flaw is the "equal environment assumption." The equal environment assumption assumes that both monozygotic and dizygotic twins are equally correlated for their exposure of environmental influences when studying a specific trait. This allows for variations in the trait to be attributed to genetic factors (Kendler et al, 1993.). It is widely accepted now that this assumption is not true because monozygotic twins experience more similar environments than dizygotic twins (Joseph, 2004). The failing of the equal environment assumption brings in to question all knowledge previously generated through the twin method and highlights the fact that methodology can in fact be flawed and lead to false knowledge.

Another problem with the positivistic method is the search for objectivity. This paper is not arguing the whether or not an objective truth or reality exists but focuses on how science frames objectivity. In positivism, objective knowledge is seen as valuable while subjective knowledge is seen as a hindrance. Historical psychologists Murphy and Kovach (1972) define objectivity as "avoiding all assumptions about consciousness and turning to the explicit description of the relations between stimulating situations and the responses to them" (Hollway, 2014). In other words, to be objective is to have the complete removal of subjectivity from the scientific method. The other side of the coin, Subjectivity, is defined by Bordo (1987) as "influences proceeding from 'within' the human being – not supplied

by the world outside the perceiver – which are capable of affecting how the world is perceived," which results in "false inner projections on the outer world of things." When a person's subjectivity influences their understanding of any phenomenon to any capacity, that is considered a subjective interpretation. The problem occurs when the search for an objective scientific truth leads to subjective interpretations being regarded as "objective scientific truth." However, there is a problem with these subjective interpretations of data. First, it leads to personal opinions and beliefs implicitly and explicitly affecting scientific knowledge produced. Once these beliefs are entrenched as "scientific knowledge" they are very difficult to be changed or even challenged because they are regarded as objective. In positivism, the scientific method is believed to safeguard against subjective interpretations which is the spirit of methodologism. As previously mentioned, the criteria for objectivity in science is to use sound and established methodology; meaning that subjective interpretations can seep through leading to biased scientific knowledge. Biased scientific knowledge can reach the general public and lead to the problem of epistemological violence (Teo, 2011). Teo (2011) defines epistemological violence as an "interpretation of data that does harm to the *Other* is a violent interpretation, and more specifically, a form of violent action when the *Other* is constructed as inferior". This is usually done in psychological studies that compares race and sex. Twin Studies, and behavioral Genetics as a whole, are often used to attribute detrimental characteristics to innate genetic influences that could not be helped. Teo and Ball (2009) pointed out that the results of these interpretations do have real world implications such as policy changes or in perceptions of certain groups. For example, by putting forth the notion that there is a genetic component to criminology, a biased researcher suggests that a higher rate of incarceration of black males must be due to a common innate genetic component. These studies would then affect general perception of black males which may in turn lead to them to be incarcerated more.

Conclusion

This paper outlines some problems with positive knowledge; specifically, that of the positivist researcher and positivist method.

This is not to say that positivism is without merit as humanity has greatly benefited from the knowledge produced by these positivist sciences. This paper serves to point out the limitations of positivism in hopes of improving how one engages with scientific knowledge and research. It is the author's hope that upon reading this paper, one will consider the identity and aims of the researcher when evaluating the scientific knowledge that they contribute to the scientific community. One would be encouraged to be more critical of the research methods used and seek to understand if the methods are sufficient in encapsulating the essence of the phenomena of interest.

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The Art Section

A Poem By J. L. Sterling

Untitled 10

Take this rambunctious ramble
These ungainly instances
The daily drabble
And from you
Purify these elements
Lead unto shining man's envy
The midas curse taken wing
For pomegranate seeds in their lifeblood
Stain your hands just as easily
And your conscience just as plain

Inconsiste nt virtue, or shall I name thee inconvenient?
You, from which we have claimed the will of gods
In names not our own actions have been decreed
Atrocities cited right by the enquiring masses
Plagiarizing the dreams of the innocent
All for gainly means and a hollow existence

Know this, simple dreamer
Your thoughts have been manufactured
Your dreams arbitrarily destined
A complacent series of numbers
Upon silver glint of wrathful reaping
Know this, simple dreamer
You are but one and replaceable

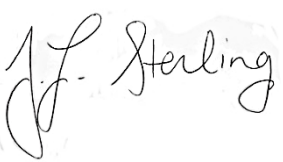
A Note from J. L. Sterling

Untitled 10 is part of what some would call postmodern poetry, a movement which is characterized by its inability to be explained or summarized.

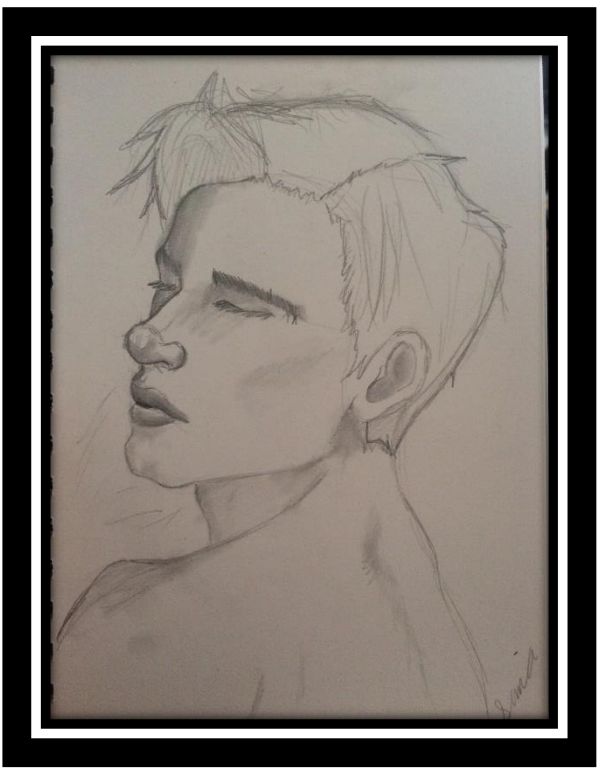
There is this thing called reader-response theory that explains how one connects with a piece, and what one sees in it. Would it be majesty and mysticism that one finds? Or would it be boredom or pretentiousness?

Whatever the response, it will tell much about one's self as it does about the piece. Academics and others can spend their entire lives attempting to analyze, debate, and argue over a bunch of written words and yet be left with the mystery of its true meaning.

Look between the words, argue amongst the typography, delve into the imagery…hold not fear from works without intentions, for things don't have to have a purpose to embody meaning.



Death's Prey: Samia Akhtar



A Note From Samia Akhtar

These art pieces were inspired by “Memento Mori.” It will depict the existential crisis all humans face when they acknowledge that one day we will all die. This art piece will be made in an effort to remind everyone that our time on Earth is only temporary. Each piece represents a stage in life where at first, death is irrelevant but then within minutes, everything changes and death is at the forefront of

your existence. Despite the fact that acknowledging that death is inevitable will cause anxiety, despair or even anger, it is a necessary pain that one has to go through, and in the best cases, it helps us live our best life whether that is in the pursuit of greater knowledge or to do the most good to others.

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