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How Responsible Are You For Your Actions?

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ABSTRACT
In a world where our sense of responsibility rests solely on the existence of a notion of morality and free will, how do we make sense of responsibility when neuroscientific findings have been shown to trim morality and free will? How can a civil society held together by justice emanating from a retributive sense of responsibility keep running when the basis of retribution has been undermined? This paper examines the relationship between morality, free will, responsibility, and neuroscience so as to determine whether we can justifiably attribute moral responsibility. In this paper, I argue that moral responsibility can still be attributed, but only through a lens of free will skepticism. How would such a responsibility materialize in our contemporary society? What problems will it encounter? My research seeks to draw a comprehensive plan for acting on this new sense of moral responsibility through an examination of findings in philosophy, neuroscience and psychology.

KEYWORDS
Basic Desert Responsibility, Free Will, Free Will Skepticism, Morality, Moral Enhancement, Neuroscience, Retributive Justice, Rehabilitation System, Take-Charge Moral Responsibility

DEFINITION OF KEY TERMS

Basic desert sense of responsibility: The notion that an agent deserves punishment or reward for his actions because he acted out of free will.

Existentialism: A philosophical expression of the anxiety that there are no secure foundations for meaning and morality, no deep reasons that make sense of the human predicament.

Free will: The notion that we are in charge of our actions, and the ability to have done otherwise in a given situation. This endorses the basic desert sense of moral responsibility.

Free Will Skepticism: The idea that punishment cannot be justified by the mere possibility of free will or the feeling of freedom.

Morality: The domain of human life where we evaluate of character and action in accordance with rules that license condemnation and punishment.

Moral Sedimentation: The past patterns of proscription that shape present attitudes and guide current behavior.

Sedimentation: The phenomenon of experiencing the world and acting in it through a filter of the past without necessarily realizing it.

Take-Charge Moral Responsibility: The capacity to change one's future behavior when given the necessary means.

PART I

Introduction

For as long as humans have existed, there have been questions, both subtle and direct, on the essence of human existence and the source of the morality we hold up our actions against. This anxiety that there are no secure foundations for meaning and morality and no deep reasons that make sense of the human predicament has been termed as existentialism by various neuroscientists, philosophers and experts in relevant fields. Authors Gregg D. Caruso and Owen Flanagan have divided the concept of existentialism into three waves—the first wave dealing with the anxiety that there is no God, from which the sense of human essence was derived; the second with the anxiety that the concept of human good from which essence was deemed to come from during the European Enlightenment; and the third with anxiety the that the findings of science with regards to evolution and neuroscience nullify our concept of having the ability to conceive human essence (Caruso and Flanagan 2018).

According to Caruso and Flanagan, the first wave of existentialism was dominated by philosophers such as Kierkegaard, Dostoevsky and Nietzsche. This wave, according to Flanagan and Caruso, was "characterized as the displacement of ecclesiastical authority and a consequent anxiety over how to justify moral and personal norms without theological foundations" (Caruso and Flanagan 2018, 3). During this period, anxiety over human essence and the source of morality started to spread among people because there was a significant shift from total ecclesiasticism to visible signs of traits of atheism and nihilism. With the increase in questions as to whether or not human life and our notion of morality have any essence outside of the belief in God, there was a panic to grapple some form of meaning and associate it to humans. This then led to the second wave of existentialism in the eighteenth century, where the concept of morality and human essence being derived from God were nonexistent.

The second wave of existentialism is said to have emerged during the European Enlightenment, and moved from the idea of morality stemming from God to the idea of morality stemming from the notion of a common good. In this period, this notion of common good had to do with the fact that "we could count on human goodness and human rationality to make sense of meaning of morals" so as to give purpose to humans and guide human action as a result

(Caruso and Flanagan 2018, 3). According to Caruso and Flanagan, the works of philosophers Jean-Paul Sartre and Albert Camus lean very much towards the ideals of the second wave of existentialism. The idea in this period was that even if there was no God, we could still count on the existence of the common good to be the source of morality and human essence. Just like the view on God being the source of morality and essence couldn't stand, this notion of morality and essence stemming from the common good was also brought down. It was seen that this notion couldn't stand when human actions resulting in colonialism and holocausts came to light. Philosophers such as Sartre and Camus were horrified that humans could do this to other humans, and hence, the anxiety that essence and morality did not stem from this notion of common good arose.

The third and most recent wave of existentialism has to do with the findings of science, more specifically, neuroscience. Existential anxiety in this wave has been brought about by the findings of neuroscience providing evidence to the Darwinian claim that humans are just animals, basically nullifying the humanistic image of persons. The third wave of existentialism has been defined by Caruso and Flanagan as the "twenty-first century anxiety over how contemporary neuroscience helps secure in a partially vivid way the message of Darwin" that humans are indeed not special in any way, but rather, are merely "one kind of primate among the two hundred or so species of primates" (Caruso and Flanagan 2018, 5). This affirmation by neuroscience has led to questions surrounding the existence of free will, the relationship between the mind and the brain, the transcendence of morality and meaning and the difference between humans and animals.

For the purposes of being concise, I will only pay attention to the third wave of existentialism—neuroexistentialism. In this paper, I will examine the relationship between morality, free will, responsibility, and neuroscience so as to determine whether we can justifiably attribute moral responsibility. This paper will show that although neuroscience trims morality and free will, it affirms that we ought to be held responsible for our actions so as to preserve justice. It also shows that human behavior can be remodeled, although the thought of such remodeling can be unethical.

Morality

Due to the various existentialisms, especially the third wave, there has been a vigorous search into the source of morality. What then is this morality? In this

paper, I deem a moral person to be one who knows what is right from what is wrong, and follows rules to do the right thing, even if they do not will to do so. When we look at human behavior, the act of caring for others, even where it will be a disadvantage to the actor, seems to be tightly woven into our thinking because we see it to be the morally right thing to do. How then is this notion of caring for others woven into human existence? How does it fit in a world where survival depends on competition? Well many philosophers such as Patricia Churchland have considered these same questions and have come up with possible sources of morality as well as objections as to why morality cannot stem from some of these sources.

According to Churchland, evolutionary biologists attributed the source of morality to altruism, which is the "disinterested or selfless concern for the wellbeing of others, especially as a principle of action" per the Oxford English Dictionary. The reasoning behind this was that since morality entails performing actions for others which could be disadvantageous to the actor—it embodies traits of altruism. The main objection to this line of reasoning is that humans are wired to care about our own survival and well-being and hence, having altruistic genes from inception would have been a disadvantage to those who bore them, so, altruism could not have been a by-product of evolution. The argument here is that if some organisms had altruistic genes, they would have been killed off because organisms with non-altruistic genes would have taken advantage of the former since survival was contingent upon an organism's ability to care for itself regardless of the means. Patricia Churchland then argues that if this is the case, then morality could not have come from evolution; it must have been taught (Churchland 2018).

Churchland then talks about how religion has been thought to be the "watershed of moral values" (Churchland 2018, 27). This proposed source of morality was also received with much criticism, although it seemed to be plausible on the surface. Like Christianity, most religions have a set of rules by which they act, and from which such actions should be moral. With Christianity, one of such set of rules of conduct is the Ten Commandments found in the Holy Bible. Christians believe that if one wants to live a moral life, one ought to live by the Ten Commandments, and hence, people believe that rules of conduct such as this must be the source of morality. Churchland outlines two main objections to the notion of religion as the source of morality: the disparities between the emergence

of religion and the existence of humanity and the existence of humans whose view of God differs from that required for religion to be the source of morality. With the first objection, Churchland highlights that religion has only existed for about 10,000 years, and humans have existed for about 250,000 years, and the concept of morality is thought to have existed longer than that; hence, religion cannot be the source of morality. With the second objection, she points out that in order for religion to be the fountainhead of morality, God or whatever deity is being worshipped must be seen as a law giver and a punisher. There however exist certain groups such as the hunter-gatherer groups that are highly moral, but do not see God as a law giver and a punisher. Hence, with this objection also, morality could not have emerged from religion (Churchland 2018, 27).

If neither altruism nor religion could have given rise to morality, what then is the source of morality? Churchland answers this question in her consideration of neural connections in the brain as a possible source of morality. Here, Churchland considers the state of brains as at the dawn of existence: from the time period where warm-blooded organisms had to compete with cold-blooded organisms for survival. During this period, warm-blooded organisms already had some sort of advantage over the others because they could still search for food when the sun had gone down. They were however also at a disadvantage because they needed much more food than the cold-blooded animals did to survive. Hence, there must have been a way in which warm-blooded organisms could have survived in the competition. Churchland suggests that these organisms could have survived "by ramping up their postnatal learning abilities", which included rigging the brain of mature animals to care for the infants until they were mature enough to survive on their own. With this then, the mature animals were made parental by changing their sense of self-survival that had to do with a "care of me" to a "care of me-and-mine" (Churchland 2018, 30). According to Churchland, the ability to rig an animal's brain for it to start caring for other animals than itself on its own demonstrates clearly that the bonds we form and the love we feel are embodied in the neural circuitry. Even from this point in Churchland's argument, we can see that neuroscience seems to support the notion of morality of some sort (Churchland 2018, 30).

What exactly in the brain then is responsible for this development of parental capabilities? Patricia Churchland answers that oxytocin and vasopressin receptors in certain crucial parts of the brain are what adjust the circuitry in the brain to

facilitate parental behavior, which entails bonding. Churchland argues that this bonding pattern, regulated by oxytocin and a palette of other neurochemical and neurohormones working in their proprietary circuitry, is the basic platform for morality, where morality has to do with for caring for others. If that is the case then, circuitry supporting this cluster of behaviors is the neural platform for morality.

Relationship between Neuroscience and Morality

How are neuroscience and morality connected? If they are connected, does neuroscience affirm the concept of morality or does it deny the concept? These are pressing questions that have been asked and taken on by philosophers, neuroscientists and psychologists alike. In this section, I will look at the work of philosophers Paul Henne and Walter Sinnott-Armstrong. The first established question to be addressed in this sub-section is how neuroscientific findings and the concept of morality as applies to human actions are connected. In "Does Neuroscience Undermine Morality?" by Henne and Sinnott-Armstrong, the philosophers talk about how neuroscience does not necessarily undermine all moral judgments. In this work, the authors start by considering the main reason why people think that neuroscience undermines all moral judgments: that all moral beliefs have supposedly been shown to stem from an unreliable source. Here, Henne and Sinnott-Armstrong affirm that yes, some moral judgments have been shown to come from unreliable processes. With this affirmation, the main argument now takes this form: if moral judgments are shown to come from an unreliable process, then the agent of the moral judgments does not know whether or not the judgments are correct, and if the agent does not know that the judgments are correct, they cannot be assumed to be so. They further argue that we cannot generalize neuroscientific findings with all moral judgments since there are different kinds of moral judgments which result in activities in different parts of the brain. Personal moral judgments, for instance, give rise to activity in that part of the brain responsible for social and emotional processing while impersonal moral judgments activate the part responsible for working memory (Henne and Sinnott-Armstrong 2018, 58). Greene et al., in an experiment on the emotional engagement in moral actions, come up with two scenarios—the trolley and the footbridge scenarios—both in which one person is sacrificed to save five people. What the research showed was that people were more willing to redirect a trolley headed for five people in the direction of a single person than pushing one person

off a footbridge to prevent five people from dying. The explanation given by Greene et al. for this discrepancy is that the footbridge scenario produces much more emotion, while the trolley scenario is more distant and feels void of emotion, thereby resembling a nonmoral judgment more than a moral judgment (Greene et al. 2001). Just from the observation of this experiment, we can see the reasoning behind the argument that the sample of moral judgments researched on by neuroscience cannot be representative of all moral judgments. The philosophers argue that these findings about different parts of the brain being activated for both actions that seem to be similar bring more understanding to our conception of pain that it is not a blanket emotion to which we should have the same response in each case. Rather, this shows that even within our conception of pain, there is a heavy variance, and hence, decisions in every situation should be catered to the specific kind of pain corresponded in the brain.

It is with Greene's analogy that Henne and Sinnott-Armstrong argue that neuroscience trims morality by reshaping our understanding of the concept since it shows which parts of the brain are activated during the formation of certain moral judgments. They argue that neuroscience trims our judgments in the sense that if it has been shown that judgments on inequity and those on homosexuality activate the same parts of the brain, then we cannot say judgments on inequity come from a reliable source while those on homosexuality do not. Neuroscientific findings basically help us to categorize the reliable and unreliable moral judgments (Henne and Sinnott-Armstrong 2018, 64). Henne and Sinnott-Armstrong then propose a solution to show which moral judgments are true and which are not—the use of higher order principles such as Order Effects Undermine Reliability (OEUR) and higher order inclinations. With OEUR, the philosophers explain that those judgments that are altered when the line-up of evidence leading up to an action are presented in different orders cannot be true, and those that remain the same regardless of the order the evidence is provided are true. With the higher order inclinations, they suggest that these can also be used to tell the reliability of a moral judgment. Before doing so however, Henne and Sinnott-Armstrong suggest that the difference between conservatives and revisionists be drawn. With the conservatives, the philosophers argue that such people believe that moral judgments are for the most part right, and hence should be followed even if there have been cases where those judgments have led us astray. Contrary to the conservative, the revisionist argues that moral judgments "often deviate from

what theories give us reason to believe is correct, [so] moral judgments should be revised to bring them in line with theory" (Henne and Sinnott-Armstrong 2018, 62). With this then, the reliability of a moral judgment will depend on whether conservatives or revisionists are in play. Henne and Sinnott-Armstrong however argue that we do not know enough about higher order beliefs to know whether or not neuroscience undermines moral judgments, hence, we can only deduce from our findings that neuroscience merely trims and categorizes moral theory.

Free Will

A question that often accompanies existentialism is whether or not we are really free. Do we freely choose to act in certain ways, or do we simply carry out what is dictated to us? If we do, what impact should our will have on our owning of those actions? Although the relevance of this question to the topic might not be evident at the stage, we will see how morality, free will and responsibility work hand-in-hand to construct the notion of justice we hold. There are speculations as to what controls our actions—we ourselves, some neurons in the brain over which we have no control, and even some supreme deity of some sort. However, for concision sake, I will only address those arguments regarding neuroscientific findings.

Relationship between Neuroscience and Free Will

How much free will do humans actually have in their actions? Philosopher Jesse Prinz argues in his work titled "Moral Sedimentation" that humans do not really have free will in moral decisions because we do not formulate the moral values according to which our actions are carried out (Prinz 2018). Prinz relies on the understanding of sedimentation as put out by Edmund Husserl and Maurice Merleau-Ponty to finally come up with his notion of moral sedimentation. The main claim in Prinz's work here is that morality is sedimented in that it is socially conditioned. With this, he explains that none of the values according to which we judge the morality of an action are actually freely formed by us because all our views and traditions are sedimented. With the sedimentation here, Prinz means that whatever knowledge and views we have are influenced by prior knowledge—"prior knowledge informs present encounters with the world, shaping how we interpret things, and gives us the impression of a pregiven order" (Prinz 2018, 88). If one is applying previous knowledge onto a present encounter, wouldn't one be

aware of this? Prinz answers that with sedimented values, they are so hammered into our daily lives that they almost feel as though they are innate so one will not be aware of the influence of sedimented values on current encounters. As to how this occurs, Prinz explains that "sedimented traditions extend enduringly through time since all new acquisitions are in turn sedimented and become working materials" (Prinz 2018, 88) by being enshrined in language and getting accepted passively through enculturation. On enculturation, Prinz argues that it has gone so far that "we do not just inhabit a natural world; we also inhabit a cultural world", as the natural world comes with the cultural view on how to relate to it. At the end of his analysis, Prinz comes to the conclusion that we only feel like we are free agents, but we are actually not free since all the values according to which we act are subtly imposed on us by societal constructions. Apart from this imposition jeopardizing the notion of free will we have, Prinz also points out that moral judgments have been shown to prompt emotional activity in the brain through neuroimaging studies, and these emotions we use to process moral judgments are imbibed through social constructs (Prinz 2018, 95-96). Hence, whether we look at psychology or neuroscience for the existence of free will, human beings do not actually have free will.

Taking a more generous stance than Jesse Prinz is philosopher Walter Glannon in his work titled "Behavior Control, Meaning and Neuroscience". In his work, Glannon specifically narrows down on an experiment conducted by Libet on the decision-making process in the brain. Libet's experiment features the use of electroencephalography to prove that a subject's awareness of the intention to perform an action is preceded by neural activity by hundreds of milliseconds. That is, before a subject is aware of a decision he is about to take, this decision is formulated by the neurons. Libet stands on this and argues that we have no causal role in our actions and decisions, and consequently, no free will (Glannon 2018, 148). Glannon grants that yes, Libet is right about the fact that neural activity precedes awareness in some actions, but he disagrees that we do not have any causal role in our actions—that we merely carry out what is dictated to us by neural activity. Glannon distinguishes between what Alfred Mele calls the proximal and the distal intentions. He argues that the difference between these two and the components of the latter are what we need to observe when evaluating the role we play in determining our actions, because the actions used in Libet's experiment do not have to do with the everyday moral decisions we

take. According to Glannon, "distal intentions are long-range conscious plans that may precede the performance of an action by days, weeks, months, or even years. Actions performed at a particular time may have a physical and psychological history that extends into the past" (Glannon 2018, 149). With this then, we can see that our decisions may be swayed one way or the other in response to the historical and social connotation we associate with it. It is based on this foundation that Glannon argues that although our actions may be initiated by neural activity, they are ultimately determined by us based on the meaning we attribute to certain things. Therefore, this is how neuroscience trims free will—it shows us to what extent we play a role in our actions, and in which situations we do not have a say in the actions we take.

PART II

Implication of Relationship between Neuroscience, Free Will and Morality

Findings from the preceding sections show that the relationship between neuroscience, free will and morality is not fundamental to the pursuit of justice. On the surface, it seems as though free will is a necessary condition for determining responsibility, and the fact that neuroscience seems to deny the fact that such free will exists will seal the deal on responsibility. That is, it will make all things permissible as the excuse-extensionist model advocates. But this is far from the case because morality, which has been shown to be trimmed by neuroscience, conveys a sense of responsibility that can be independent of guilt. What then does this mean for the various justice systems adopted by mankind?

On what basis do we determine whether or not a person is responsible for their actions? What implications do our judgments from these bases gave rise to? There are so many factors that contribute to our current belief in retribution and our concept of guilt and justice. What we do not do is sit down to carefully analyze these factors that go into our systemic practices. There have been several speculations and theories as to how human behavior can be explained: reductionists claim that human interaction can be explained with scientific findings, while existentialists who tend to be more philosophical claim that human behavior should be explained in accordance with philosophy. With our current system of justice, there is an emphasis on responsibility where an agent is supposed to be blamed and punished for actions that are deemed to be morally wrong and praised

and rewarded for those that are deemed to be morally right. In such a system, we see justice to go hand-in-hand with free will, responsibility and retribution.

Focquaert et al., in their work titled "Free Will Skepticism, Freedom, and Criminal Behavior", argue against the basic desert sense of responsibility which advocates that blame and punishment and praise and reward is deserved. Being free will skeptics themselves, Focquaert et al. argue that although the notion of guilt is fully embedded in our societal functions, there are strong moral and scientific reasons to abandon the basic desert sense of moral responsibility and adopt a sense of responsibility which pursues justice without retributivism (Focquaert et al. 2018). Retributive punishment and free will skepticism are heavily opposed because retributivism has to do with the punishment being justified on the grounds that the person deserves to be harmed because he knowingly did the wrong thing, and free will skepticism says that we do not in fact have the choice to decide the course of our actions. Rather than relying on the flawed basic desert sense of responsibility, these free will skeptics have come up with the take-charge responsibility to determine whether or not particular agents are responsible for certain actions and what measure will be employed to remedy the source of the action. With this form of responsibility, we see that having or lacking human agency and a capacity for take-charge responsibility implies having or lacking the freedom to change one's future behavior if given the means to do so. Although this take-charge responsibility rejects the idea that free will should play a role in the attribution of responsibility, it places a rather heavy emphasis on human agency—the capacity for an agent to do otherwise in the future given the necessary means to do so—as this is the only way to determine whether the supposedly responsible person's actions were influenced by factors outside of his control. Hence, rather than advocating for retribution because a person deserves punishment in a desert sense, this method vouches for rehabilitation and leading a crime-free life. As opposed to retribution which merely punishes agents and possibly causes more harm to them than good, this take-charge responsibility addresses structural impediments, encourages reformation and offers better solutions to the problems arising from structural impediments.

With our current justice system, the only motive behind holding people responsible for their actions is to punish them because they supposedly deserve such punishment by virtue of acting out of their free will—this is otherwise known as retribution. This way of going about the justice system has been argued to be

flawed by specialists such as Focquaert et al. because studies have shown that we do not have the free will needed to act and be responsible in the sense. In fact, it has been observed that the genetic brain structure of criminals is substantially different from that of non-criminals. With this then, how can you deem a person "guilty" and deserving of punishment when he has no control over the cause of his actions? The level of absurdity of thinking a person deserves punishment for performing an action is the same as that of blaming an epileptic patient for having a seizure and thinking they deserve a certain consequence as a result. It has also been shown that environmental factors contribute immensely to criminal behavior. With this then, how can we say a person deserves punishment for something that was caused by factors beyond their control in the first place?

Since we cannot deem people responsible based on a basic desert sense of moral responsibility, and hence cannot allow retribution to dominate the justice system, do we then just let people who perform immoral actions go scot-free? No. For the purposes of preserving justice, Focquaert et al. have come up with systems that recognize responsibility while promoting justice by attending to the emotional needs of victims (Focquaert et al. 2018). These systems, deemed as psychological and behavioral interventions, can actually help restructure the brain. Under the psychological and behavioral interventions, we can have mindfulness training and attention training whose practice have been shown to increase amygdala functioning, especially after love and compassion meditations. Moving to more scientific solutions, we have what has been termed as moral enhancement. This system, as has been adopted by the Defense Advanced Research Projects Agency (DARPA), has to do with physically tweaking parts of the brain to produce desired actions from an agent. With these systems, the agent is not being deemed as deserving some sort of punishment, but rather, he is seen as having or not having the capacity to change his actions given the necessary conditions, and is worked on from there. This is a system that will promote the general welfare of society as it looks into even the smallest causes undesirable actions and eliminates those causes so as permanently rid the society of vices in the long run.

With the attention training, it is designed to rectify psychological disorders initiated by the Cognitive Attention Syndrome (CAS). According to the MCT Institute, CAS is linked to internal metacognitions that "control thinking and attention which is biased in psychological disorder and lock the individual into persistent patterns of negative thinking and attention that are difficult to control

and contribute to anxiety and depression" (MCT Institute 2018). Attention training then aims at helping the individuals in question to focus on negative thinking so as to redirect their thoughts to more positive things. This redirection of thoughts in turn reduces the individual's anxiety and depression which plays a key role in criminal indulgences. Mindfulness meditation takes a similar route in that it seeks to enable the individual in question catch himself in his thoughts and control those thoughts, steering away from the negative ones and engaging all thoughts in an impartial way.

Other than the ethical question behind retributive justice, why would we want to adopt a new system of justice when the system in effect now seems to serve its purpose? Well when we take a closer look at the workings of our current justice system, we see that it does not actually cater to any problems with issues on justice. The first flaw with the status quo is that it does not even cater to justice at all. Justice is seen to be the egalitarian treatment of all actors in a specific situation. From this definition, we can deduce that there are three groups of agents whatever justice system that is in place has to cater to—the accused, the accusers and the general public. Our current retributive justice system only seems to cater to the emotional needs of the accusers, and ignores the justice supposed to be catered to the accused and the general society. According to the United Nations Office on Drugs and Crime (UNODC), people who go into prisons mostly come out with health issues such as "Psychiatric disorders, HIV infection, tuberculosis, hepatitis B and C, sexually transmitted diseases, skin diseases, malaria, malnutrition, diarrhea and injuries including self-mutilation" due to the poor conditions in the prison environment (UNODC 2019). Apart from health implications, the current prison system also leads to social implications. UNDOC reports that family structures are disrupted as a result of the time spent locked up. Ex-convicts also face social implications in the form of stigmatization. It is no surprise that those who have gone through the prison system are stigmatized in the sense that it is even difficult for them to land a decent job upon their release. This in turn does not motivate them to lead a crime-free life, as they tend to fall back to their old ways to survive. With this then, we can see that the current justice system does not cater to the needs of the accused.

Data from the Bureau of Justice Statistics also shows that people who have served time in prison have an eighty-three percent (83%) chance of being rearrested (Alper et al. 2018). Of course, these figures might be altered when

we consider the severity of the crimes, the role of environmental factors in the crime, as well as the role psychological factors play. However, when examined without respect to these differences, the 2018 update of the Bureau of Justice Statistics found, by keeping tabs on 401,288 prisoners over a course of nine years, that forty-four percent (44%) of ex-convicts were rearrested within a year after being released, sixty-eight percent (68%) within three years, seventy-nine percent (79%) within six years and eighty-three percent (83%) within nine years (Alper et al. 2018). With this data then, we see that the so-call "prison reform" we have in effect now does not actually reform criminals, but just ends up holding convicts captive for a given period of time, making them worse than they came in in most cases, and releasing them back into the public. With these facts then, we can see why there is an urgent need to replace our current justice system with one that actually caters to justice and reforms convicts.

Possible Counterarguments against the Findings

The first counterargument that will arise is the supposed restructuring of the brain in the name of moral enhancement as a preventative measure. If this restructuring of the brain is even possible, how ethical will such a practice be? Who will be in charge of this restructuring? All these questions amount to substantial counterarguments that could weaken the very foundations on which the implications of the relationship between neuroscience, free will and morality lie. In the article titled "The Pentagon's Push to Program Soldiers' Brains: The Military Wants Super-Soldiers to Control Roots with Their Thoughts" by Michael Joseph Gross, the author goes more into detail about how DARPA projects started and where they are now. Gross points out that the DARPA projects started with the purpose of healing injury and curing sickness (Gross 2018). Of course, healing injury and curing sickness, just like moral enhancement, look more like they will benefit the society than hurt it. The problem here is that the actions of the agency are not impeded by bureaucratic oversight and scientific preview, as any other activity that has this high of a risk will be. Hence, there is no guarantee that the agency only works on those projects they tell the general public. In fact, Gross points out in the article that public support is drawn for DARPA projects by hiding the true projects from the public and showcasing those that the public genuinely needs. For instance, the agency draws support by advertising bionic arms and hammering on their importance, but they do not tell the public about

their intention to make super humans such as the proposed 24/7 soldier who could go for a week without sleep. DARPA also has The Restoring Active Memory Program where neuroprosthetics are developed to alter memory formation so as to counteract traumatic brain injury (Gross 2018). This program seems beneficial, even to our moral enhancement such that criminals with traumatic experiences that dictate their actions can be rehabilitated and reformed. But how far is too far? This is almost like wiping out a part of an agent and fitting that with new memories. At what point, will this modified agent stop being a human being? These projects such as those carried out by DARPA and moral enhancement all aim at making the perfect human. But doesn't this perfect human resemble a robot more than a human? Does that mean that robots can also be considered as human?

Who will be in charge of this power-wielding process? The findings of Michael Joseph Gross on the DARPA projects have clearly demonstrated that if this process is left in the hands of the government, the military or any such body that will have an interest in mooching off agents' superhuman tendencies, then the experiments and actions could spiral out of control. In fact, Gross also revealed that according to a Silicon Valley recruit, DARPA is not only interested in damaged bodies, but also in healthy bodies, which questions their purpose to merely cure illness and heal injuries. He points out that the driving goal for DARPA has now become "to make human beings something other than what we are, with powers beyond what we are born with" (Gross 2018). By our desire for moral enhancement, are we then giving the go-ahead for the government to create robots and pose them off as humans?

Another objection has to do with the slippery-slope that this restructuring can give rise to, and how difficult it might be to put an end to it. Such an instance is vividly depicted in the movie Gattaca directed by Andrew Niccol. This movie has to do with the use of genetic engineering to modify zygotes to make "perfect" human beings called "valids" whose entire life stories are known before birth. This genetic engineering gained so much popularity which led to the unmodified humans, known as "invalids", to be seen as inferior and hence not have access to certain opportunities. In this movie, the "valids" were always preferred to the "invalids" since they were seen as more efficient and more suited for all respectable roles (Gattaca 1997). The situation depicted in the movie seems to be where humanity is headed now with its development and research, especially in trying to eliminate imperfections in human beings. How sure are we that this

moral enhancement will not create a ripple effect that will end up making the superhuman dominate the actual human, since humans are known very well for their greed for perfection and immunity?

Bouncing off the issue of a slippery slope, wouldn't the suggestion for moral enhancement just pave way for genetic modifications? Since the concept of moral enhancement already involves invading in an agent's brain to physically alter some parts of the brain to make them moral, why then wouldn't we just suggest genetic modifications such as those the Clusters for Regularly Interspaced Short Palindromic Repeats (CRISPR) technology make for? While we are at it, why don't we just skip the mindfulness and attention training and move straight up to moral enhancement since it has been shown to be more accurate with a low risk of relapse? If the thought of surgery seems too extreme, then why don't we just advocate for the use of medication to increase the level of oxytocin in the hypothalamus of the human brain? Since oxytocin makes people cooperate more, wouldn't it be easier to just administer medication to improve this cooperation which will in turn make us more moral? The last and most disturbing counterargument to the proposition to fall to mindfulness and attention training as ways to improve morality is the belief that these practices are analogous to brainwashing. Would we really find it morally acceptable and ethical to brainwash agents into becoming moral?

Response to Counterarguments

Looking at the counterarguments outlined above against the moral enhancement, it is evident that proponents of these arguments did not take the fact that each of the proposed neural restructuring into account differs in its extent into consideration—they all do not have the same level of invasion, nor the same degree of effect, nor the same risks. Unlike the surgical restructuring of the brain as DARPA does, mindfulness training and attention training are not as radical. After all, the mindfulness training and attention training are similar to parents training their children according to some morals. Why don't we find it terrifying that society tries to change our way of thinking and relating to some things through laws and commonly held societal beliefs? If the proponents of the counterarguments observe the various systems proposed carefully, they will notice that the only system taking a step ahead of humanity's comfort zone is the one that has to do with surgically altering the brain. Hence, from the face value, proponents of the counterargument cannot raise any comprehensive objections

to the use of mindfulness meditation and attention training as moral enhancement forums.

Even with the DARPA style of moral enhancement, we can still respond that operations will be handled by an independent group of experts made up of neuroscientists, psychologists, philosophers and other relevant experts. It can be agreed on that such a delicate operation cannot be left in the hands of the government, the military or any other organized body that could have ulterior motives to just morally enhancing agents. If we have a trustworthy group managing such operations, then the fear of the slippery-slope as enacted through Gattaca should not exist.

The issues with CRISPR and opting for moral enhancement to be the only form of criminal reformation are very difficult to argue against since these processes they have been shown to be more accurate and effective than mindfulness and attention training. Tempting as it may be to just give in and accept these processes as our go-to solution to eradicate crime, we cannot do so because of the heavy ethical implications they come with. Hence, I can only suggest that CRISPR technology and moral enhancement should only be turned to when all else fails. With the CRISPR technology and its germline editing which has to do with altering the genetic modification of sperms and eggs, we can only permit such altering in extreme cases where we are absolutely sure that the child born from the fusion of such a sperm and egg will be born being disposed to indulge in criminal activity regardless of the environmental factors (Vidyasagar 2018). As to the issue with having moral enhancement be the prime way of eradicating crime, we cannot accept this because it will lead to the use of unnecessary invasion. If we were to only fall to moral enhancement to eradicate crime, then it would mean that an agent accused of lying or petty theft will have to have their brain surgically altered since this method is guaranteed to not lead to any relapse whatsoever. With this, I will stand my ground that moral enhancement only be used in cases where it will be pointless to try to use mindfulness and attention training to alter the brain. I will however permit a stipulation that moral enhancement be mandated for those agents who relapse to their old ways more than two times after being rehabilitated through mindfulness and attention training.

Should we just forgo all the technicalities with moral enhancement, mindfulness and adopt a system where agents can take medication to be moral? I will answer no. my main argument against the use of medication to morally enhance people

is the high risk of abuse. Drug abuse is an epidemic that has swept through many countries and claimed millions of lives while doing so. From experiences with drugs such as antidepressants, we can tell right from the get-go that placing a "morally enhancing" medication in the hands of people will immediately spiral out of control and cause more harm than the benefits it was intended to bring. Another objection to this easy way out is that taking medication to be moral does not reform the agent in any way. Here, the agent's morality is contingent on him taking the required medication, and if this is not done, all things will go bonkers. In talking about suggestions to make people moral so as to completely eradicate society of crime, the main purpose is to actually rehabilitate agents and reform their characters so that they do not relapse into their old ways. With this then, we can see that having one's moral state be dependent on a pill of some sort will not cater to this goal—it could rather lead to more grave consequences.

With the last counterargument as to mindfulness and attention training merely being brainwashing by another name, it will beg to differ. The processes and goals for mindfulness and attention training starkly differ from those of brainwashing. According to HowStuffWorks, brainwashing typically occurs in three stages—breaking down the sense of self, giving a possibility of salvation and rebuilding the self in a new, radical image (Layton 2009). According to the website, "mind-clouding techniques" such as starvation and sleep-deprivation are used to force an agent to deconstruct whatever image or beliefs he holds about himself or something. The agent is then guilt-tripped and led to question all he believes in—he is basically left with deep angst as to what to believe and what not to believe—and it is at this stage that the brainwasher offers a way out. With this way out being the only thing the agent can grasp on to, he then rebuilds his conceptions and beliefs through the new lenses that he has acquired (Layton 2009). Even from examining the process of brainwashing, we can see how starkly different it is from mindfulness and attention training—these processes do not seek to lead an agent to build an entire new conception of his self. Mindfulness and attention training rather focus on empowering the agent in question to take charge of his thoughts and actions where it might be difficult to do so. During the brainwashing process also, the brainwasher has absolute control over the functioning of the agent. With mindfulness meditation and attention training however, the agent has control over the entire process and only receives guidance on how to take charge of his thoughts and direct them. With this then, we can see that both the

purpose and the process involved in mindfulness and attention training bear no similarity to those of brainwashing, and hence, the two groups of practices cannot be measured up against each other.

CONCLUSION

In this paper, we have considered what morality and free will are and their sources. We have also looked at the relationship between neuroscience and morality, where it was shown that morality does exist and neuroscience simply defines and categorizes it. The relationship between free will and neuroscience was probably the most substantial part of the research, and it turned out that our free will is actually trimmed. With this information in hand then, we drew the relationship between the three and looked at what this relationship might mean. Here, we saw various arguments as to the role free will should play in the determination of responsibility of actions. We concentrated on free will skepticism which argued that although we might not have free will, that does not mean there can be no sense of responsibility, and hence, no justice. This theory showed that we can actually preserve justice without attributing guilt, which naturally comes along with blame and the notion that an agent deserves to reap the consequences of his actions. With free will skepticism, the proposed ways of dealing with agents who engage in immoral acts turned out to be more constructive as opposed to how our justice system works now—through retribution. Although neuroscience and the law seem to be miles apart, findings from neuroscience can actually help humans craft laws that will serve the good of all human beings as a whole, hence the uncanny relationship. With this then I will suggest that the various judicial systems around the world look into the free will skeptic view of responsibility as well as their suggestions for reformation.

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