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**Topic 4, (text 5, 7 and 8) The Illusion of Free Will and its Moral Implications**

# 1 Introduction

The problem of free will and consciousness has always been troubling great minds since Plato's[1] time. To possess free will is to be able to exert conscious effects on the world and become an active story writer on the universe's canvas. The existence of free will dictates that nothing is determined until we make a decision. Most would agree with its existence and attempt to justify it by arguing that humans have consciousness. The very fact that a discussion about consciousness is ongoing necessitates the existence of consciousness (Kandel ch. 28 par. 2). However, although free will is inseparable from consciousness, they are not entirely synonymous. This essay aims to propose that free will does not exist and discuss the moral implications that may arise.

# 2 The Nature of Free Will

## 2.1 Consciousness

Our consciousness is merely the surface of our mental apparatus, and most of our mental functions lie beneath the surface, inaccessible to our consciousness (Kandel ch. 4 par. 2). According to Freud's structural theory, our brain consists of the ego, superego, and id. Our consciousness is located within only part of the ego, which controls our perception and logical thinking, while the rest of our brain is purely unconscious[2], including the id, which embodies our aspirations in life (Kandel ch. 4 pars. 4-5). It suffices to say that subconsciousness is not within our control and cannot account for free will; however, it exerts so much control that even after receiving lobotomy[3], patients can mostly still respond to prompts and stimuli ("Lobotomy") despite being reverted to the primitive infant mind of the id. As observable, much of our body can function without consciousness, which entails that much of our typical functions are unconscious; thus, one can argue that free will does not exist.

To investigate the neurology of free will, Libet conducted an experiment where he told subjects to lift their fingers whenever they felt the urge to; he measured the electrical signals from the subjects' brains and consistently found a readiness potential 200 milliseconds before the subjects had the will to lift their fingers (Kandel ch. 28 pars. 41-42). By reading only the electrical measurements, Libet could predict when the subjects would lift their fingers before they even realised a decision had been made. He concluded that conscious actions are primarily initiated by

[1] Plato believed thoughts and consciousness originates from our soul (Kandel ch. 28 par. 5).
[2] Except for a small part of superego.
[3] The removal of the frontal cortex, where conscious thought and cognition take place.

unconscious parts of the brain. This implies that we merely only respond to stimuli of our subconsciousness instead of actually initiating thoughts and actions. As Poincaré (ch. 3 pars. 26-29) observed, most complex problems and insights are processed unconsciously. Our conscious mind only needs to verify the products of unconscious thought, otherwise known as intuition. He described the subliminal ego as a machine capable of countless combinations of thoughts and ideas; however, it also sifts and selects only the coherent thoughts to present to our conscious minds (Poincaré ch. 3 pars. 32-33). Although not a rigorous scientific research, it proved that the domain of subconsciousness is beyond trivial bodily functions. Furthermore, this observation perfectly coincided with Libet's experiment and further corroborated the nonexistence of free will.

## 2.2 Physiology

In Kandel's emotional stimuli experiment, subjects were shown faces with fearful expressions. Despite the fear-inducing images being shown too fast for the conscious mind to react, their amygdalas[4] were still stimulated, implying that they were stimulated unconsciously (Kandel ch. 28 pars. 33-34). He found that this unconscious neurological pathway is different from and bypasses the conscious network. More importantly, background anxiety levels heavily affect this unconscious pathway, which brings us to another perspective.

As Freud's theory proposed, aggressive instincts are regulated by unconscious parts of the ego (Kandel ch. 4 par. 4), and as Kandel's experiment proved, unconscious emotion stimulation is the first response to most stimuli. We can see that our emotions influence our thoughts more heavily than our logic, especially in impulsive decision-making. Furthermore, our emotions are regulated by an orchestra of hormones flowing through our bloodstreams. As biological beings, all information is coded within our DNA (Watson ch. 2 par. 50). Hormones are ultimately the manifestations of our gene expression, which is undeniably beyond our control. Additionally, a study has shown that others' hormones can also affect us physiologically[5] (Maner and McNulty). Nevertheless, they influence our subconsciousness to present more emotionally-biased thoughts to the conscious mind and play a significant role in our decision-making, arguably cheating us of free will. Moreover, our brains are themselves determined by DNA. The neurological patterns and neurotransmitter levels coded in our DNA can easily affect our mode of thinking, potentially making us more impulsive or mistake-prone. Even if we are free to think, this is merely an illusion since our genetics still dictate our vigilance to enhance or impair our thoughts without our knowledge.

## 2.3 Physics

Some may argue that matters as complex as consciousness and free will cannot be discussed physically or objectively in a reductivist manner since they are more than the sum of their parts. Nevertheless, humans are but a matter of chemistry and physics. We are made of molecules and atoms. Every thought can be condensed into the neurons firing and the neurotransmitters flowing. All things that exist must follow the laws of physics. In classical

[4] A structure in the brain that regulates fear.
[5] The study showed women can "smell" testosterone of other women and produce physiological responses.

physics, if given the same initial configuration of a system, the result would always be identical. One can argue that by collecting enough information about a brain: its atoms, their velocities and interactions, one can hypothetically simulate all brain processes and neural activities to predict its thoughts ahead of time. Therefore, our brains and consciousness are deterministic, as the universe is. The courses of our lives and decisions are pre-determined from the beginning of the universe. Nothing is really up for us to decide. Free will cannot exist in this regard.

Conversely, some argue that determinism does not apply. By the laws of quantum mechanics, every interaction between sub-atomic particles is said to be probabilistic. Parallel universes with minute variations might be created for every probabilistic event; hence there are infinitely many possibilities in front of us. Everything is random, and nothing is determined until the wave function collapses ("Quantum Mechanics"), or in this case, until one experiences it. This undecidedness could support the existence of free will since we can be the actual decision-maker under this model of the universe (Conway and Kochen). Nevertheless, this still does not equate to the existence of free will since it is still theoretically possible to calculate these probabilistic events with a mathematical model. Most notably, we still do not have any control over the universe's randomness. Therefore, it cannot be said that free will exists.

## 3 Moral Implications

The conclusion of determinism would necessarily arouse the question of morality. The most common concern for such conclusions is that it encourages the act of moral licensing, where one surrenders responsibility for their actions to be moral. As in Freud's theory, the largely unconscious superego is our moral agency (Kandel ch.4 par .5), and some might see its unconscious nature as a justification for immoral acts. In addition to the mentioned factors, our brains are undeniably prone to fault. False memories and false senses can mislead us into making the wrong decisions despite our minds being otherwise clear. Controversies arise when the boundaries between what is and is not an acceptable justification are discussed. Some even suggest that the modern-day justice system be rebuilt as the logical consequence of free will's nonexistence since it nullifies moral accountability.

Despite the discussion surrounding the existence of free will, one can argue that it does not affect us, whether it is merely an illusion or otherwise. I propose that discussing the existence of free will has implications as minuscule as the prisoners in the Allegory of the Cave[6] trying to discern the authenticity of the artefacts (Plato par. 7). For the sake of argument, let all the artefacts be inauthentic copies of the real ones. As far as the prisoners are concerned, they are as real as genuine artefacts. Even if they are merely illusions, this fact does not affect their lives since they can never learn the implications of such a fact due to their bondages. Similarly, we are prisoners bound by our mortality and nonomniscience. The fact that the discussions around free will exist proves that they are impossible to distinguish between. Hence, one can argue that it does not matter

[6] In the Allegory of the Cave, prisoners are bound such that they are only able to see shadows of artefacts projected onto a wall.

in any context and should not provide any justification for moral licensing. The alleged moral implications can be safely ignored.

As for existing cases of acting outside of free will, for example, being under the influence of chemicals or having severe cases of mental disorder, the current justice systems should already suffice to tackle them readily so as not to pose any concerns.

## 4 Conclusion

This essay propounded the nonexistence of free will and attempted to mitigate common concerns about the moral implications. The debate around illustrates a perfect culmination of both science and philosophy, the two greatest human achievements. Although a seemingly pessimistic conclusion, the nonexistence of free will might be reassuring for some regardless, to be freed of some weight in difficult decisions.

(1500 words)

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