

Re-evaluation of the Nature of Free Will: A Response to Libet's Experiments

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I. Introduction

“Do human-beings have free will?” From Ancient Greeks to the contemporary world, the question has never been ceased asking and answering. However, the answers are still far from satisfaction. Free will, remarked by the recent history of philosophy, “perhaps [is] the most voluminously debated of all philosophical problems”. (Matson 158) Why are there endless debates over this free will? What makes it significant? Robert Kane, an American philosopher, suggested in his book *The Significance of Free Will*, that free will is significant for “genuine creativity, . . . , [individual] achievements, . . . , dignity or self-worth, a true sense of individuality or uniqueness as persons, . . . , love and friendship”. (1) Immanuel Kant, one of the greatest German philosophers, even considered free will as a necessary condition of morality. If free will is not presupposed, there will be no moral responsibility. (Kant 63) Therefore, the existence of free will is significant enough to challenge or consolidate the law and order of human society.

If free will, as we agreed above, is worth discussing, the next question is how to begin the discussion. Philosophically or scientifically, there are two central issues upon free will: the nature of it and whether we process it. Unless we clarify the two questions, we are unable to respond to the scientific challenges from the results of Benjamin Libet, the neurologist's experiments. (Kandel 193–194)¹ Prior to the second question, we should address the first.

II. Background: Traditional Approach

Traditionally, free will is defined as a rational and conscious decision. Given that free will is a philosophical term, when we ask what it is, philosophical background is needed. As early as Plato, he already proposed a similar concept. The ground of Plato's philosophy is of dualism between intelligible realm and material realm.² Based on this ground, he proposed the dualism between soul and body. (Lindberg 12–13) St. Thomas Aquinas and Rene Descartes also stated that soul is independent of and superior to body. (Kandel 183–184) Being independent of body, soul can be free from body. It establishes a foundation for free will. In Plato's tripartite theory of soul, he claimed that the rational part can govern the appetitive part. (Cahn 148–154) During the Age of Enlightenment, philosophers finally started to confront the issues of human freedom and tried to define freedom systematically. Inheriting the path of Plato, Aquinas and Descartes, Kant, as illustrated in *Justice: What's the Right Thing to Do?*, defined freedom stringently:

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- 1 The experiment, carried out in 1983 at the University of California, instructed research participants to move a finger when they felt the impulse. The result shows that the readiness potential, generated by unconscious neurotic activities, is faster than the conscious decision of lifting a finger.
 - 2 Intelligible realms are superior to material realms. Attributes of the former are incorporeal, insensible, intangible and changeless, the latter vice versa.

an autonomy from appetitive desires. He deemed that the satisfaction of personal preference, i.e. the cliché do what you want, was heteronomous rather than autonomous because you merely obeyed to appetitive desires which were basically driven by natural laws. (Sandel 108–109) From the above, it shows that the conception of free will in philosophy lies on i. the voluntary use of reasoning, and ii. against the involuntary and appetitive impulses from body. Though unnecessarily, free will closely associates with moral freedom from appetitive desires. Given that reasoning is a conscious act, free will is a rational and conscious decision from various alternatives. (O'Connor, "Free Will")

For the second question, the possession of free will is generally accepted in two levels. First, through daily experience, we are conscious of making various rational decisions, from studying, working to judicial trials. We think we have free will because i. externally no forces determine our decision and ii. internally we know why we decide "that". External forces no doubt subject to socio-political, economic, biological variations, like dictatorship, norms, poverty and disabled body limiting our alternatives. Yet internally, we know what we desire for. Even if we have no choices due to external constraints, we know why we choose the only option. Therefore, we accept we have free will because we are free to desire in mind and conscious of our decision. Second, the acceptance of free will largely is an Aristotelian empirical epistemology. The freedom of desiring in mind is a feeling. We judge whether we have free will mainly by sense experience. Since what we observe by sense experience is empirically true, it is difficult to deny the possession of free will. (Lindberg 19–20)

III. Debate: Challenges from Scientific Evidence

However, scientific evidence disagrees with the above perception by

providing a Platonic epistemological account of free will.³ First, insensible physical laws limit our possibilities. For example, Newtonian law of gravity applies to all physical matters in the universe. (Cohen 61) Therefore, despite how strong our desire, we cannot jump without falling. Second, insensible natural laws also greatly influence our decision. For example, the principle of natural selection lies on the preservation of variations that are useful to survival and procreation. (Darwin 73–74) If it is right, it implies the decision of human, as a part of nature, aims at these two outcomes. We are thus not free. However, as mentioned above, the absence of external forces is not the necessary cause of free will because we are free to decide in mind, despite not being acted out. Yet, genetic and neurotic views want to apply the concept of Newtonian laws to our mind, i.e. we are not free internally. Genetically, they claim that many aspects of us are already pre-determined by genes. For example, DNA determines most biological features, e.g. appearance, intelligence, character traits of us while they are hereditary. It means it is not us to decide who we are but our ancestors. (Watson 141) Although it is uncertain whether genes determine our behaviors, thoughts and decisions, the emergence of Eugenics⁴ illustrates a possibility. (110–114) It casts a doubt whether we are free in mind, or our thoughts are already programmed. Plus, Libet's experiment neurotically further doubts if there is free will. The result of the experiment shows that the readiness potential, generated by unconscious neurotic activities, is faster than the conscious decision of lifting a finger by 200 milliseconds. (Kandel 193–194)

3 Platonic epistemology: insensible, incorporeal, intangible

4 Initiated by Francis Galton, the belief of improving the quality of human race by applying the principle of natural selection to humans

Technically, some may argue the data of the time of conscious decision may be false, for it is uncertain whether the participants knew the precise time of consciousness. Also, the detection of the readiness potential may be inaccurate due to possible errors of the machines. Metaphysically, the recorded data might not be true because the sensible things are imperfect compared to the realm of forms. (Lindberg 13) However, if the results are true by not doubting experimental errors and metaphysical ground, do we still have free will? As defined previously, free will is a conscious decision. However, Libet's experiment proves that unconscious activities in brain have already determined our upcoming actions. It means conscious decision is just an illusion. If so, we hold no moral responsibility because the ground of morality is we are free to decide actions, i.e. to commit crimes or not to commit. (Sartre 1194) If we are not free, no one will be responsible for his actions. That is unacceptable and problematic in our experience. Therefore, we need to re-interpret the genetic and neurotic arguments, and clarify the nature of free will.

IV. Re-evaluation: Responses from Philosophical Reflection

First, the subject matter of Libet's experiment is an arbitrary act instead of a deliberative act, which fails to address the nature of free will. As defined previously, free will is a rational decision which requires well-thought process, e.g. weighing pros and cons. It requires sufficient reasons to substantiate the decision. However, the participants in Libet's experiment were only required to perform simple movements when they felt the urge. (Kandel 193–194) The act involves no rational processes, e.g. deduction, calculation and weighing, to differentiate one's decision from other alternatives. They decided that moment merely because they felt

the “urge” which is by nature intuitive. As mentioned before, we have free will because we know why we decide. However, the participants needed no reasons to make decisions. Therefore, the acts were made randomly rather than deliberately. Even the experiment proves that unconscious neurotic activities initiate before a consciously voluntary decision, it does not directly address the essence of free will. For arbitrary acts are not the results of free will, the experiment fails to deny the existence of free will.

Second, genes merely provide a framework for developing life instead of a programmed life, which leaves room for free will. Doubtlessly, genes hereditarily determine most biological features of us. Even if genes influence our characters, our decisions in life are not entirely determined. The development of human not only is shaped by genetic nature, but also by environmental nurture. Human minds are continuously influenced by habits, experiences and education during personal growth. An obvious example illustrates that. Intelligence is the product of both nature and nurture, for environment plays a significant role in shaping our mind. (Kendler *et al.*, “IQ and Schizophrenia”) Similarly, our characters, thoughts and behaviors can be nurtured and shaped by ourselves. Since the use of rational faculty relies on our independent thoughts which can be nurtured, the rational faculty thus can be nurtured. For the premise of free will is that we can decide rationally, the above implies free will is possible. Therefore, there is a room for free will even within the genetic framework.

Third, free will should be differentiated from “free want”. By common sense, free will is understood as the freedom of wanting according to our desires and values. Although free will is also based on desires and values, it requires a deliberative will to approve whereas “free want” does not. While both share voluntary and conscious attributes, only free will requires

rational deliberation. Therefore, it explains why Libet's experiment was commonly understood as the successful challenge to free will, although the subject matter was "free want" instead of free will. It shows that we have an ambiguous understanding of free will because we fail to grasp the rational essence of it. However, it is not the philosophical definition of free will fails, it is we who neglect the philosophical background misunderstand the concept. Instead of being absolutely free as "free want", free will maximizes the freedom of human in decision under the scientific constraints mentioned above. While many aspects are determined, the voluntary use of reasoning is free. The rational decision is free because i. genetically it does not rely on nature but nurture and ii. neurotically it does not rely on intuition but deliberation. However, free will is not in born or instinctive. Whether you have it or not largely depends on how strong your rational faculty is. In short, it is possible to have free will but not necessarily because it is by nurture rather than by nature.

V. Conclusion: Free Will—A Philosophical or Scientific Subject?

To conclude, free will is a rational decision which human-beings are possible, though not necessary, to have. If the results of Libet's experiments are presumably correct, not only do they not shake the ground of free will, on the contrary, they clarify and consolidate the concept of free will. The strong reaction towards the results revealed that there was deep misunderstanding of the nature of free will. While many believed the results would challenge our faith in free will, and threaten the law and order in our society, only a few realised the subject matter in Libet's experiments was our natural impulses instead of free will. Free will, a deliberative, thoughtful and rational action, should be differentiated from "free want"

which is arbitrary, impulsive and intuitive action. Therefore, if the accuracy of the results of Libet's experiments is given, they only reject the possibility of "free want" which is biologically determined, but not free will.

Free will is an extremely complex subject. Some philosophers might deem that free will, a philosophical topic, should not subject to scientific intervention, while some scientists might argue that philosophical reflection, lacking substantial evidence, is loosely founded. Michael J. Sandel, like the mentioned philosophers, tried to dismiss scientific intervention by expressing that, "freedom of the will is not the kind of thing that science can prove or disprove". (126) Kant admitted that there were two standpoints to understand ourselves: one is through the realm of empirical study, i.e. science; one is through the realm of "intelligible" reasoning, i.e. philosophy. (qtd. in Sandel 126) While Kant's ideas were cited to support the dismissal of scientific intervention, the same passage, ironically, will be cited by the paper to support the opposite arguments. The paper will interpret Kant's ideas as the openness of philosophical issues to scientific challenges, or vice versa, due to the availability of two ways to understand ourselves. The above discussion exactly shows that it is possible to be interdisciplinary between science and philosophy. Despite being a philosophical topic, free will is open to scientific challenges. Philosophy is unnecessarily the enemy of science, but mutually complementary. The scientific counter-arguments above help clarify the nature of free will. In fact, challenge-response is a good way to advance knowledge in both fields because it re-evaluates, clarifies and refreshes traditional concepts such as free will.

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Teacher's comment:

Whether we have free will or not is a long debated issue, and it became a more intriguing one in the light of Benjamin Libet's set of seminal experiments in 1983. While this is an extremely complicated question, Cheuk Ho managed to articulate a clear and logical argument for his conclusion. Starting with a discussion of the traditional approach, he reflected on the very concept of free will and determined to investigate the meaning of Libet's experiments from both a philosophical and

a scientific (neurological) point of view. In the end he argued that what was challenged by the experiments is “free want” instead of “free will”. The presentation of the step-by-step argument is absolutely remarkable and the essay is beautifully written. Incidentally Cheuk Ho also demonstrated that a music major student, contrary to what some may think, is also capable of presenting a systematic, logical and thought-provoking investigation of a scientific problem. Bravo, Cheuk Ho! (Lai Chi Wai Kevin)

