

# Free Will, Neuroethics, Psychology and Theology

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***To My Wife***

*Debbie*

*You are my inspiration*



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# Introduction

What is free will and do we possess it? Where did we get it? Are our choices determined or do we have freedom to make our own decisions? If we do not possess free will, are we responsible for our actions? What role does God play in our decision making if God plays a role at all? If God is all knowing, then how can we have free will if God knows beforehand what our decisions will be? Does God allow us to have free will in order that we will be held responsible and accountable for our actions? Could it be that a new theology of free will is necessary to resolve the issues that science raises?

Let's be certain we are talking about the same thing because the term "free will" has multiple meanings depending on which perspective one adopts. On the one hand, free will is understood as the freedom to choose a course of action that is not predetermined by biological and genetic forces or some cause external to the will. The agent freely chooses an action free from any influence whatsoever and there can be no external cause and no divine cause that is understood as God's foreknowledge which determines in advance what human actions will be. Stated quite simply, an act of free will is not the cause of an action but is understood to be the cause itself.

At the same time, there are numerous theories that dispute the idea of free will. The doctrine of determinism states that decisions are not the product of free will but the result of external forces, causes or processes over which a person has no control. Those external events are understood from a religious standpoint as the foreknowledge of God or divine predestination. Evolutionary psychologists understand it as the natural evolutionary process which combines biological, genetic, cultural, behavioral and intellectual processes in shaping our unconscious will. Some philosophers maintain that a cause underlies all choices and have formulated a number of theories regarding the idea of free will, many of which have been linked to the idea of a First Cause.

The question of absolute free will revolves around the issue whether it is an act that is independent of a cause and effect relationship. In a sense, free will is contradictory to the idea of a rational universe because it does not adhere to any known laws of physics. The will simply acts independently of physical principles and chooses actions independently. Con-

sequently, the central question is raised whether humans have the capacity and freedom to choose actions that are free from and independent of the control of external causes. Do humans make decisions based on their desires or in response to rational considerations?

Depending on which viewpoint one adopts there are questions regarding the impact on ethics and responsibility. One viewpoint seeks a definition of the relationship of ethics to individual responsibility when it comes to implementing action. If a person has free will, then the argument can be made that the person should be held morally responsible for their actions. However, if one's actions are foreordained, how can one be expected to be held morally responsible for actions over which they seemingly have no control? It is obvious that free will discussions necessitate an investigation into metaphysics, epistemology, meta-ethics and the philosophy of the science of human nature. Although it may seem "up to us" in decision making, the conflict regarding free will is far more complex than that.

In the realm of theology, we encounter one of its staunchest teachings. Theology maintains that an omniscient and omnipotent God possesses foreknowledge of every human decision and may even have predestined humans to make those decisions. The idea that one can be held morally responsible can be called into question if God in fact predestined or foreordained the decisions that humans make. Many theologians point to the concept of original sin as the first instance of a free will decision when Adam chose to disobey God's command not to eat forbidden fruit. If God predestined Adam to disobey, then the concept of free will can be challenged. Theologians have grappled with this contradiction but no consensus of opinion has been reached. Many believe that God did bestow the freedom of choice on humans within the context of predestination. However, this raises a number of questions that are similar to those in philosophy.

Several other disciplines that have become involved in the free will problem are biology, social science, neuroscience and evolutionary psychology, and even economists have offered opinions. Psychologists struggle in particular to balance scientific law with the question of whether the spontaneity of the brain lies outside such laws. The disciplines we will examine in this book include philosophy, theology, biology, physics, evolutionary psychology, social psychology, evolutionary psychology of religion, neuroscience, and neuroethics.

I first became interested in the topic of free will when I was introduced to the concept of neuroethics and various experiments that had been conducted using the fMRI approach which had examined the relationship

of neural responses to moral dilemmas. Research had determined that subjects who responded in a non-utilitarian manner did so from areas of the brain associated with emotion. Additional studies revealed that people have a tendency to rationalize moral decisions after the decisions have been put into action. Research studies have also shown that virtue ethics was not really a consideration in decision making and that opposition to consequentialism was based primarily on emotions and not on sound reasoning.

The idea that science could provide answers to the free will issue was intriguing. As I began my research I discovered there were more questions raised than there were answers given: What is the nature of the unconscious? What processes function in the unconscious brain? What influence does genetics have on free will? What about biological determinism? What causes brain activation prior to conscious awareness of a decision? It was confusing, on the one hand, to talk about free will and on the other to construct modifications of determinism to accommodate free will. Folklore maintains that we are conscious individuals whose actions are the result of our ability to make choices that are not limited by anything except our self-imposed restrictions. Any idea that biological determinism plays a role in decision making seemed to be without merit.

A word about methodology is in order. It seems that a logical sequence of inquiry should begin with a philosophical investigation into the free will issue and then proceed to a review of the Judaeo-Christian theological position. Such an inquiry leads to an investigation of the discoveries of neuroscience and genetics and the challenges that are presented within the context of unconscious and conscious action. Following that, we will examine evolutionary and social psychology to obtain a perspective on the psychological development of the brain functions that have evolved in the history of humanity. Furthering our knowledge we explore the field of neuroethics and fMRI studies that speak to the thought processes that occur in ethical decisions. Rounding out the inquiry is an investigation into the claims of theology regarding the question of original sin, the existence of God and perception and belief. Consequently, we develop the foundation for a new theology from discoveries in our chosen fields of study. Lastly, we are concerned about the future of free will and the direction current studies are leading us.

What are the various philosophical theories regarding the issue of free will? Traditionally philosophy has advanced the theories of determinism, indeterminism, compatibilism, incompatibilism and libertarianism. It believes some form of control or non-control over the unconscious mind

leads to conscious decisions and seeks to understand the nature of that control. There are a number of dominant theories of the nature of the will that address the question of the relationship between free will and causal determinism. Questions arise that seek to explain whether determinism implies that there is no free will (the incompatibilists argument) or does it allow for free will (the compatibilists position)? Additionally, the question regarding the relationship of free will to logical determinism presents itself.

What is the role of philosophy of science in the issue of free will and can the discipline provide conclusive evidence of free will? One topic of debate centers on whether free will is an illusion since much of the evidence points to the work of evolutionary forces that operate independently of our conscious will. Although we may feel we have control over our conscious will, the concern regards that which we are really experiencing could be simply the awareness of performing an action over which we may have no control. We will investigate if there is a clear understanding between metaphysical and mythological claims in scientific studies.

An inquiry into free will from a theological perspective raises numerous questions relative to determinism, compatibilism, and indeterminism. Underlying it all is an investigation of the role God plays in free will. Theological determinism maintains that every event that happens in history is due to the omniscience and omnipotence of God. Theological compatibilism holds that determinism does not rule out free will to the extent that one finds no impediment in doing what they will. Theological inquiry into free will is concerned with the “who” behind it and is based on the belief that God is the first cause of everything that exists. Underlying the entire theological inquiry is determining the involvement and extent to which an omnipotent and omniscient God plays in free will.

The field of neuroscience provides relevant insight into the workings of the unconscious and conscious will. Neuroscience has conducted numerous experiments into the question whether brain waves occur before a conscious decision is translated into action. Experiments by Benjamin Libet, John-Dylan Haynes, Gabriel Kreiman and other scientists calculated that split seconds separated unconscious brain activity and conscious action in a repeated number of test subjects. Although explanations have not been forthcoming that define exactly what happens in that activity, it is certain that sensory information is sent via neural pathway that culminates in physical action. Despite the evidence many believe that these observed brain activity measures have been incomplete and that more

testing is required before any definitive conclusions can be reached. What is the status of such studies and are they any closer to finding an answer?

We will examine the findings of evolutionary psychology, an exciting field that combines a number of the sciences such as genetics, zoology, anthropology, archaeology, biology, and neuropsychology. The birth of evolutionary psychology was a natural consequence of the theories of Charles Darwin regarding the matter of natural selection. The primary assumption made by evolutionary psychologists is that human physiology and psychology are the consequences of genes which passed from one generation to the next and form the basic composition of humans. Consequently, physical and psychological traits are preprogrammed in human development and emerge independent of one's environment and culture.

What role does society play in free will? Social psychologists have entered the discussion and center their debate around the psychological causes of action that an autonomous entity chooses in deciding to act. Free will is understood in terms of the different processes that control human action. Given the complexity of the mind and its myriad mental faculties, the question becomes one of asking "free" from what and "free" to do what. In assessing the nuances of what is usually meant by "free" and "will," we are reminded that humans are organisms whose actions are the consequence of a complex sequence of cause and effect that may or may not be under their control.

One of the most exciting and promising fields is the discipline of neuroethics. In the quest to discover answers, neuroethics is confronted with a number of questions: What is the nature of morality? What does it mean to be human and to make ethical decisions? How do we know that our ethical decisions are based on sound reasoning and value oriented theories of ethics? What does it mean to be morally responsible? Does brain imaging provide indisputable evidence of the nature of moral responsibility? When are beliefs justified? Do the moral decisions we make originate in our brain or are they the result of evolutionary considerations? What does new evidence offer to medicine, philosophy, psychiatry, sociology, theology, and law? Will we ever find answers to these questions?

Neuroethics is making great strides in explaining how the brain operates and offers immense potential in changing the way people interact. The ultimate challenge would be to determine what a person was thinking and then be able to make corrections from a moral perspective. The fact that no two brains are alike makes the investigation more complex and untrustworthy, but foreknowledge of action would have a tremendous impact on moral responsibility.

The chapter entitled “Toward A New Theology” investigates perception, belief, and humanity’s affirmation of the existence of God. Cultures of which we have recorded history practiced some form of religion and harbored the belief that there was something or someone beyond their experience of reality. Characteristic of numerous religions was the propensity to create the god(s) that resembled their images. Anthropomorphic projectionism, which is the assignment of human characteristics to god(s), was commonplace among developing religions and continues today in established as well as in the development of new religions. It is counterproductive for theology to be asking questions and discussing the nature of “who” since theology affirms the existence of an entity it cannot prove exists. Speculation as to whether God does or does not exist has been debated not only by theologians but by philosophers and scientists. Obviously, the real question that should confront a theological inquiry is not “who” but the “how” and “why” of free will and moral responsibility.

Another theological issue concerns the nature of the god(s) of these religions. The history of early religions is of people who entertained theologies of monotheism as well as polytheism, transmitted stories about the creation of the humans and the world, provided an explanation of life after death and a path for attaining life beyond the temporal world, identified the god(s) with a concept of eternity and detailed the place of humans in the world. Perception is a critical issue and we place great emphasis on the human ability to understand and explain the workings of the universe and the known world. Unfortunately, the task becomes more difficult as we transition from understanding the natural world to establishing belief in a deity of which we have no evidence beyond sensory perception. We want knowledge of those things which we may never have.

Thus our research leads us in the direction of a reasoned new theology that includes articles of belief, principles of morality and expectations of moral responsibility. The challenge is to make sense of scientific discoveries and their impact on theological assertions. As science makes new discoveries it raises questions about the claims of theology that were developed hundreds of years ago in a mindset that possessed very little scientific knowledge. The knowledge of scientific discoveries is not a threat to religion nor is science an enemy of religion although religion perceives a threat. New findings often are taken as a threat to religion because new knowledge may contradict or call into question theological teachings. Science is in the business of searching for truth, seeking to discover what is real, investigating the nature of existence and engaging in a quest for knowledge. In that search, science makes the assumption that truth exists and we are able to obtain knowledge of it.

Frequently theology finds it difficult to engage in new searches for truth because it claims that God's truth has already been revealed in scripture. Theological truth is not objective truth but is the subjective truth of divine revelation and spiritual insight that rarely questions the paradigm on which it is built. It is incumbent upon the contemporary mind to seek knowledge for the foundation of new paradigms of theological truth. In so doing we must accept the relative nature of theological truth and become aware that objective and absolute truth may not exist.

Although proposing a new theology may seem heretical and downright insane, the idea of combining free will, philosophy, theology, neuroethics, evolutionary psychology, and evolutionary psychology of religion in such a way that reflects our current knowledge is an exciting and honest endeavor. Thus we forge ahead with Aristotle's famous dictum in mind, "It is the mark of an educated mind to be able to entertain a thought without accepting it" and affirm that truth is often found in the acceptance of thoughts previously believed to be anathema.

Finally, we look to the future to provide answers to the question: Do we really have free will?



## Chapter 1

# Philosophy and Free Will

From the time of the early Greek philosophers, humans have maintained a firm belief that they possessed free will. Among the first Greek philosophers, Plato and Aristotle based their theories of free will on the concept that humans are free agents who possessed the intellect and the necessary free will to make decisions. This concept of free will, also known as the volitional faculty, was viewed as inherently good and utilized rational activity as that which processed thoughts into action. Aristotle reasoned that free will was present wherever there was intellect. The interaction of intellect and free will there exists the freedom to engage in the goodness that free will offered.

Immanuel Kant captured the concept of freedom as a universal concept in his categorical imperative: “Act only according to that maxim by which you can at the same time will that it should become a universal law.” To Kant, free will was one of the three most significant metaphysical problems he believed were of the utmost concern to humanity, immortality and God being the other two. He was well aware that a rich and religious background influenced the debate on these topics. However, concerned with the foundation of moral actions, Kant believed the imperative should be applied because of his belief in free will. He maintained that moral law was valid for all rational beings because of the property of human freedom.

The history of inquiry into the nature of free will is one of the major thematic areas of philosophy. As David Hume surmised, the subject is a most contentious one. Hume underscored the problem by noting there is no evidence for a purpose in nature and no evidence for efficient causes. Causality is a most difficult process to identify and the causes and effects that we perceive in nature are nothing more than observations of the way in which things happen. Hume was a compatibilist who maintained that freedom and moral responsibility could be reconciled with causal determinism.

The question is whether humans have the capacity and freedom to choose a course of action that results from the control of individual choices and actions. One of those “contentious” questions is whether we make

decisions based on our desires or do we act in response to rational considerations.

First, we begin with the concept of determinism and ask whether one has the ability to act otherwise. We then move on to an overview of compatibilism, incompatibilism, libertarianism, indeterminism and the charge that free will is an illusion. In the process we will touch on some of the recent studies in the philosophy of science. Our investigation is general by design and is intended to serve as an overview of the history of the main theories of free will.

## Determinism

In his monumental work *The Principia: Mathematical Principles of Natural Philosophy*<sup>1</sup>, Isaac Newton wrote extensively on universal gravitation and the laws of motion that established the validity of the heliocentric model of the universe. Newton's scientific and mathematical discoveries influenced philosophers who wondered if the mathematical theory of motion, which used starting points to predict motion, could be predictors of the forces in our minds. Unfortunately, he was unable to move any further than constructing the hypothesis.

From the fourth century CE to the Age of Enlightenment the Roman Catholic Church held all thinking hostage by developing the concept of causation of behavior from a theological viewpoint. With the dawn of the Protestant Reformation and the Age of Enlightenment, the focus gravitated from the Church's belief in religious determinism to a philosophical foundation of determinism that had been expressed years before in the Greek philosophy of Anaximander, Heraclitus, Leucippus, Democritus, Pythagoreans, Socrates, Plato, and Aristotle.

Rene Descartes identified freedom of action to be not of a predetermined nature even if one could affirm the existence of divine foreknowledge. To him, human will is free and incompatible with determinism even though he maintained that God is the universal cause of everything and nothing happens without God having knowledge of it happening. We consider ourselves independent free will decision makers, but free will is not exempt from dependence on God's foreknowledge. Freedom of choice

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<sup>1</sup> Isaac Newton. *The Principia: Mathematical Principles of Natural Philosophy*. Dallas: Snowball Publishing, 2010.

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