

SOAR Research Proposal, Summer 2016

The Nature of Free Will in Light of Contemporary Neuroscience

Faculty: Dr. Arash Naraghi, Associate Professor of Religion and Philosophy

Student: Nathan Nocchi, Philosophy Major, 2017

Dates: 10 weeks, May 27 - August 1

Project Description

Background Information:

The nature of free will has been a question intriguing those whose minds are captivated by philosophical discourse. In fact, the notion of free will is one of the biggest problems in modern philosophy. Are we free to act as we wish? If not then “what” is making our decisions? This question has always gained momentum when there were scientific advances being made. For example, Newton’s equations dictated that the universe acted in a deterministic manner. The effect of this progression in scientific inquiry, has encouraged both philosophers and scientists to seek answers. Many have proposed different theories attempting to reconcile human freedom in a deterministic universe. These theories are Libertarianism, Compatibilism, and Determinism, with variations of each. In philosophical discourse, libertarianism is the view that one can in fact act freely. This view rests heavily on the intuition that we all believe decisions are up to us and we can deliberate between equally available alternative possibilities. The assertion of determinism is that we are not free at all. Our choices and who we are as people are necessitated by past events and the laws of nature according to this view. Compatibilism is the middle ground. This view says that all of the freedom we as people desire is fully compatible with determinism.

Today, the debate continues because of recent experiments in neuroscience. These experiments, such as the ones performed by Benjamin Libet and Marcel Brass (among others), have grave implications on how we view the cognitive process behind making decisions. For example, these experiments exhibit that there are unconscious neuronal processes that precede the decision and may actually be causing a person to act. These experiments insinuate that the decision to move a body part may not be “up to us.” Other experiments show that our conscious activity is not always a part of refraining from acting after a conscious decision has been made. Given these neuroscience experiments, what can we say is the most plausible view of free will? If our innate intuition that we have free will is wrong, what does that mean for us morally and legally? Are actions truly blameworthy or praiseworthy if we could not have done otherwise? The goal of this SOAR project is to philosophically analyze these fundamental questions surrounding the scientific literature. I will be analyzing the philosophical concepts with Dr. Naraghi and also corresponding with Dr. Cecilia Fox from the neuroscience department in order that a thorough investigation may be conducted.

SOAR PROJECT: Faculty and Student Collaborative Roles

During this SOAR project, Nathan will develop a well articulated thesis concerning the philosophical implications of some modern neuroscientific researches done on humans' "free" choices and actions. This will be a scholarly paper with my guidance. This project will entail a cohesive view considering free will and modern neuroscience experiments. Nathan will have to identify a position on free will. If he remains a libertarian with respect to free will, he must contend with all possible objections and analyze all other arguments, to insure strength in his position. Next he must delve into the scientific literature. He will have to identify whether or not these neuroscience experiments negate libertarian free will, and if not why? He will have to deal with philosophical principles and the neuroscience evidence. Finally, Nathan must then come to a conclusion concerning the scientific literature and identify the most plausible view of free will, if it exists. If, after thorough investigation and research, Nathan still affirms libertarian free will, he will then have to consider very strong objections to the position. After the final draft is completed, Nathan will be submitting his paper to undergraduate journals and will present his work at philosophy conferences.

Our collaboration for this project is extremely important because I have a background in both the medical field as well as philosophy. With my previous education qualifications, Nathan and I have been researching these ideas in an independent study. In our study of Philosophy of Mind we have discussed the basic views of free will and have been indirectly acquainted with the neuroscience through our research. It is also important to note that this project will entail a rigorous and challenging advanced level of philosophy. I believe that Nathan is capable of taking on this challenge, but will be greatly aided by both mine and Dr. Cecilia Fox's guidance and knowledge.

Roles and Responsibilities

Faculty Responsibilities:

- Guide the student towards the best sources of research.
- Share and critique research in progress.
- Engage the student in philosophical discussion.
- Meet regularly with the student.
- Verify proper understanding of views and arguments.
- Ensure that the project stays on schedule.
- Edit the student's written work.
- Establish scholarly standards for the student's work so that it may be disseminated in the best way possible (i.e., undergraduate conferences and journals).

Student Responsibilities:

- Read and Research: examine thoroughly ALL positions and their objections so as to be up to date with the most current research on the topic.
- Critical Discussion: by attending regular meetings with the SOAR advisor, the student will engage in rigorous philosophical discussions.
- Formulate Views: develop an original and strong thesis and outline for the project.
- Formulate Arguments: defending the intended position using well constructed and articulated arguments.
- Formulate Objections: identify and address all possible objections to the thesis. This will further strengthen the student's argument.
- Writing: the student will be expected to write a paper of scholarly worth with the aims of being published.

- Editing: the student will engage in multiple stages of editing to ensure the quality of the final paper.
- SOAR Meetings: the student will attend all SOAR meetings

SOAR PROJECT SCHEDULE

Week	Topic	Description
1	Free Will : The Views	Brief Recap of the views discussed during Independent Study.
2	Neuroscience Literature	Analyzing the general literature of neuroscience and the will
3	Neuroscience Literature	Analyzing the Libet Experiment's (amongst others)
4	Neuroscience Literature	Analyzing the Libet Experiment's / Moral and Free Will Psychology (Book)
5	Plausibility of Free Will	Identifying the plausibility of free will (or its negation) in light of the scientific literature
6	First Draft of Paper	Hand in first draft of paper to SOAR advisor. Begin the editing process.
7	Continuation of Research Begin editing	Editing intensive. Additional research will be performed where necessary in order to strengthen the paper.
8	Second Draft of Paper	Second draft of paper will be completed. Intensive editing.
9	Editing	A holistic evaluation of the project occur. Re-evaluate the view, arguments and conclusions. Re-examine opposing views and counter-arguments.
10	Final Draft	Finalize the project. Finish bibliography and ensure all in text citations are correct. Submit paper to undergraduate philosophy journals. Send submission to conferences.

SOAR Project: Free Will in Light of Modern Neuroscience

Faculty: Dr. Arash Naraghi, Associate Professor of Religion and Philosophy

Student: Nathan Nocchi, Philosophy Major, 2017

Dates: 10 weeks, May 27 - August 1

On Campus Housing: Housing Requested

Student Statement

I have had a great desire to research both philosophical and scientific literature for quite some time. If I had the opportunity to research throughout the summer, it will prepare me with the skills needed to be a formidable applicant for graduate programs. I was a pre-med major for two years before pursuing a degree in philosophy. This undergraduate research program is an excellent opportunity to employ both fields of knowledge that I have been acquainted with. Existential questions such as “who am I?” or “what exactly is the will?” have been in the back of my mind for quite some time. These lingering thoughts have only amplified after I was introduced to this material in my independent study on philosophy of mind with Dr. Naraghi.

Unlike philosophy, neuroscience is a new and developing field. It seems that the last major frontier in cognitive science is understanding consciousness and how it works. This is not a new topic of interest, however. Philosophical discourse in antiquity was even concerned with the notion of human freedom. Many philosophers believe that it is impossible to provide a coherent definition of free will. Others hold on to the intuition that we do in fact have free will because the implications of determinism would shatter our basic conception of justice and morality. With these advances in modern neuroscience, now is the time to investigate these issues with objective data. Working with both Dr. Cecilia Fox and Dr. Naraghi is an excellent opportunity to analyze the scientific literature and discern its implications philosophically.

EXPECTATIONS:

I expect to have a highly researched paper by the end of this summer program. After the programs completion, I intend on submitting my work to undergraduate philosophy journals. Also, I plan to present at Moravian’s philosophy conference and philosophy club. I am truly passionate about this field of research so it’s quite possible that this research will be used in my future career. Most importantly, I plan to articulate this research in an approachable way so that I could help further this philosophical discussion. Through conversations on campus with fellow classmates or professors, I plan to encourage others to consider their beliefs about how the mind works. When we know more about the mind and how it works, we learn more about who we are as people. Identifying who we are as people, being driven by curiosity and discovery, is one of the best tasks anyone can participate in.