

A DUAL PROCESS MODEL FOR INCOMPATIBILIST AND  
COMPATIBILIST FOLK INTUITIONS: AN EXPERIMENTAL  
PHILOSOPHICAL APPROACH TO MORAL  
RESPONSIBILITY AND DETERMINISM

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## ABSTRACT

### A DUAL PROCESS MODEL FOR INCOMPATIBILIST AND COMPATIBILIST FOLK INTUITIONS: AN EXPERIMENTAL PHILOSOPHICAL APPROACH TO MORAL RESPONSIBILITY AND DETERMINISM

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Intuitions are fallible and changeable. Experimental philosophy deals with these conflicting and fallible intuitions. In this study, we are questioning why people have conflicting intuitions about free will/moral responsibility, namely compatibilist and incompatibilist intuitions. Moving on with this question, we propose a dual process model in which reason and emotions interact. To support our model, we replicated a previous study (Nichols and Knobe, 2007) with some experimental set ups, not present in the original study. We believe our experimental evidence supports our dual interacting-process model proposing the interaction of reason and emotions.

**Keywords:** Determinism, free will, experimental philosophy, moral responsibility

## ÖZ

### UYUMSUZCU VE UYUMCU GELENEKSEL SEZGİLER HAKKINDA İKİLİ SÜREÇ MODELİ: AHLAKİ SORUMLULUK VE BELİRLENİMCİLİĞE DENEYSEL FELSEFİ BİR YAKLAŞIM

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Sezgiler yanılabilir ve değişebilir. Deneysel felsefe birbiriyle çelişen ve yanılabilir sezgilerle uğraşmaktadır. Bu çalışmada neden kişilerin özgür irade/ahlaki sorumluluk meselesinde uyumcu ve uyumsuzluk gibi birbiriyle çelişen sezgilere sahip olduklarını sorguluyoruz. Bu sorudan hareketle, akıl yürütme ve duyguların etkileşimde olduğu ikili bir süreç modeli ortaya koyduk. Modelimizi desteklemek için, önceki bir çalışmayı tekrarladık ve bunu yaparken asıl çalışmada olmayan bazı deney adımları da ekledik. Ulaştığımız deneysel kanıtlar, akıl yürütme ve duyguların etkileşim halinde birlikte işlediklerini iddia eden ikili etkileşimli süreç modelimizi desteklemektedir.

**Anahtar Kelimeler:** Belirlenimcilik, özgür irade, deneysel felsefe, ahlaki sorumluluk

*To my parents*  
*To my sister Ece*  
*To Furkan*



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## **CHAPTER 1**

### **INTRODUCTION**

Our philosophical arguments and theories rely on our intuitions, but we should be a little bit skeptical about reliability and localness of intuitions. When folk intuitions are examined by using surveys and interviews in order to discover the role and reliability of intuitions as a philosophical tool, it has come to be called experimental philosophy, when, however, philosophers use scientific findings in order to support philosophical theories, it is called empirical philosophy. This representation of these approaches may suggest that they are quite different; however, Rose and Danks (2013) argue that experimental philosophy might just be a subset of empirical philosophy, since they both are valuable endeavors for solving philosophical problems by some empirical means. Gathering intuitions of laypeople is the aim of surveys conducted mostly by philosophers themselves in experimental philosophy which combines philosophical naturalism with cognitive science. There are two perspectives in experimental philosophy with respect to the role of intuitions, positive and negative approach. Scientific results are used in order to democratize intuitions in non-radical, positive experimental philosophy. However, negative approach is more radical than positive view and experimental philosophy is used to undermine the role of intuitions in philosophy, for negative approach points to the diversity of intuitions. Intuitions vary in a wide range and change due to many reasons, thus we should not trust our intuitions blindly while philosophizing. Sosa (2008) believes intuitions can differ for a variety of reasons but this is not a threat to their usage in philosophy. Philosophers appeal to intuitions at some point in their studies, but they should keep an open mind regarding intuitions and their reliability.

I am also skeptical about the conflicting intuitions, and I think that experimental data may tell us why we have conflicting intuitions. I will try to argue that intuitions are fallible and changeable with respect to various parameters, therefore I believe that trying to explain and understand these unresolvable disagreements should be the true purpose of experimental philosophy. What intuitions are is also a tough question which does not have a crystal clear answer. I am going to concentrate on people's moral intuitions and their usage in judgment and decision making processes specifically. Philosophers as other people do consult their intuitions as evidence for the truth or falsity of a wide range of hypothetical cases. However, since intuitions are fallible we might have conflicting intuitions about the same hypothetical case. Moral intuitions seem justified to us, even if they are not really justified. (Armstrong, 2008, p.48) Folk intuitions are basic intuitions of laypeople about philosophical questions. Experimental studies report that there are conflicting results about whether the folk are compatibilists or incompatibilists.

Joshua Greene and his colleagues proposed a dual process model in order to account for conflicting moral intuitions about many well-known moral dilemmas. They argue, for instance, that the footbridge case triggers emotional responses since it is personal in the sense that it activates emotions in subjects, while the bystander case is impersonal because it doesn't activate emotions but leaves it to the slow working reasoning process. They use this personal/impersonal distinction to support their dual process theory of moral judgment. However, Nichols and Mallon (2006) and Mallon and Mallon (2011) argue that even in impersonal situations, participants can differentiate footbridge cases from bystander cases. Nichols and Mallon offer a *sort* of interaction between rule-based reasoning process and emotions.

The results of our Study 1 (and also those of Nichols and Knobe, 2007) reveal a gradual change suggesting some kind of interaction between emotion and reason, assuming that different degrees of affect in the questions (from long concrete to abstract question) resulting in different degrees of emotional responses. That is why Greene's dual process model may be quite relevant for accounting for free will intuitions in addition to moral intuitions. Although we may agree with Nichols and Mallon's objection to Greene that personal/impersonal distinction between cases is

not necessary to propose a sort of interaction between reason and emotion process, our concrete/abstract conditions based on Nichols and Knobe (2007) seem to resemble to Greene's personal/impersonal scenarios. Nevertheless in our dual interaction model of moral intuitions, both emotions and reason are all equally significant. Reason or emotions are two different processes functioning to derive at a moral judgment in dual process models.

We present several experimental set ups in order to arrive at plausible conclusions. One of the hypotheses that we propose is that the degree of affect has an impact on participants' decisions on compatibilism/incompatibilism: the greater the degree of affect, the less the role of reason. The results of Study 1 (chi-square results) validate our hypothesis that the degree of affect has an impact on people's intuitions on compatibilism/incompatibilism. We predict, as Nichols and Knobe did, subjects will give compatibilist answers in the concrete condition, while they will give incompatibilist answers in the abstract condition. We iterated a similar experiment to Nichols and Knobe's research (2007) and predicted to find a cultural variation in subjects' answers in Turkey. However, it appears that there is no significant difference between the responses from participants in Ankara and Utah.

In the second and third phases, we used only the long concrete and abstract questions in varying orders. We expected to find that reason and emotion would interact so that compatibilist/incompatibilist responses would get lower than Study 1. Besides, we focused on the order effect as well. Although we also expected to observe that the concrete attitude would not be as much affected by the abstract attitude, the other way around we found that the abstract attitude remains unaffected while the concrete attitude is highly affected. We repeated surveys with Rikert scale to support our Dual Interacting Process Model. Experimental evidence for the gradual transition argument may show interaction between emotion and reason better. Our results of Study 3 seem to support our conclusions that we arrive at in Study 1 and Study 2. Although we do not know how exactly reason and emotion interacts, further research may illuminate this gradual transition between these two kinds of processes, reason and emotion (intuition).

Chapter 2 is a brief introduction to experimental philosophy and moral intuitions. In the third chapter, the question of why people have conflicting compatibilist and incompatibilist intuitions is concentrated and folk intuitions on free will and moral responsibility and the impact of the belief in free will are covered. In the same chapter, Greene's dual process theory of moral decision making which encouraged us to develop our model can also be found. In chapter 4, there are experimental studies which were conducted to support the interaction between emotion and reason. Chapter 5 is spared for a discussion on Dual Interaction Model of Moral Intuitions and its experimental investigation.



## CHAPTER 2

### EXPERIMENTAL PHILOSOPHY AND PHILOSOPHICAL INTUITIONS

#### 2.1. What is Experimental Philosophy?

“Over the past decade or two there has been a heated debate about the importance of ‘intuitions’ in philosophy” (Fischer & Collins, 2015, p. 51). People on the side of intuitions think that intuitions are special sources of a priori philosophical evidence; while the other side - opponents of intuition- think that intuitions should be disregarded because they are not reliable guides to philosophical truth. (Fischer & Collins, 2015, p. 51) The possibility of a priori philosophical knowledge should thus be questioned. How can we reach something about an independent world merely by sitting and thinking? The concepts such as free will which are accepted a priori has an influence on other concepts. If people establish their arguments and theories through their intuitions, then sensitivity concerning the reliability and localness of intuitions should be regarded as well. At this point, experimental philosophy aids us, and provides a series of opportunities beyond philosophizing merely by sitting and thinking.

The method argued to lean on intuitions and called armchair philosophy is extensively used among analytic philosophers, though the reliability and stability of our intuitions have been questioned in some studies. Intuitions of philosophers change depending on various parameters, such as environmental conditions as much as intuitions of laypeople. Dealing with empirical studies is more naturalistic than armchair philosophy. I think that views on determinism and free will rely on those unreliable intuitions eminently, and different philosophical views originate from the difference between intuitions, thereby derive from irrational grounds. For this reason,

intuitions should be studied by empirical methods. Accordingly, we have conducted some experiments in Turkey. Some of these experiments were replication of Nichols and Knobe's (2007) while others that we conducted after the first results had been obtained were slightly modified versions of some of the original experiments (i.e. presenting questions in different orders) in order to measure the possible order effects and (i.e. using Riekert scale instead of categorical scale) in order to observe possible interactions between different types of questions. By replication, we expected that these results support Nichols and Knobe's conclusions about intuitions<sup>1</sup>. By modifications, we hoped to improve on Nichols and Knobe's conclusions.

Recent studies show that people may have different intuitions. Researchers use several empirical approaches to investigate folk concepts. The cultural variety in folk intuitions reduces the dominance of a priori philosophical methods. Conceptual analysis that we do by just sitting and thinking is problematic because people who carry out this method disregard the cultural localness of their concepts. It is a plausible objection that intuition of someone may not represent the intuitions of the whole. The effect of cultural diversity on philosophical intuitions may be important. Using empirical methods is an alternative approach that may reveal psychological basis of philosophical intuitions. Also, interviews and surveys are used to evaluate folk intuitions objectively. (Nichols, 2006, p. 64) Determining which psychological mechanisms underlie intuitions is not a job to be accomplished by merely sitting and thinking.

I have so far mentioned the importance of the empirical study concerning folk intuitions on free will and moral responsibility. Now, I will speak of whether there is a difference between experimental philosophy and empirical philosophy. Some philosophers argue that there might be a difference between experimental and empirical philosophy. This difference between them is a subset relation, in other

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<sup>1</sup> Replicating the study with participants from a different culture, will give us information about universality or variability of our intuitions.

words, experimental philosophy is a subset of empirical philosophy, according to Rose and Danks (2013). Some philosophers contribute to science by designing and conducting experiments rather than reporting scientific findings. On the other hand, others use scientific results. The former account is experimental philosophy, the latter is empirical philosophy.

Philosophical questions might be illuminated through empirical investigation, but while doing this, how should philosophers treat empirical studies? There are two dominant approaches in literature. Some philosophers utilize empirical results obtained by professional scientists. These philosophers usually cite from the studies of neuroscientists and psychologists. Additionally, they consult to linguists, evolutionary biologists, anthropologists, roboticists, and others. They use scientific findings in order to support philosophical theories. Prinz (2008) call this approach empirical philosophy (Prinz, 2008, p. 196). Experimental philosophers are the people who conduct their own experiments. Briefly, the first group utilizes already existing scientific data, while the latter group gathers their own data. A wide difference between experimental and empirical philosophy is not necessary, but these two approaches treat the recent literature differently. There is a difference between empirical and experimental philosophy, according to Prinz (2008) Empirical philosophers deal with a wide range of issues, and these usually belong to philosophy of mind. Empirical philosophers are not concerned with conceptual questions in the way that other analytic philosophers are. They do not try to determine what people mean by the concepts such as “concept, pain, wrong”. Empirical philosophers rarely appeal to empirical results while raising a conceptual claim. They analyze concepts by sitting and thinking about how to interpret empirical results. Experimental philosophy can be separated from empirical philosophy in this sense. Experimental philosophers especially consider what ordinary concept users mean by certain categories. They focus on mental categories, and experimental philosophy tries to understand folk psychology. Experimental philosophers are interested in such kind of questions: how do we understand intentions? Do we believe in free will? Are we moral objectivists? (Prinz, 2008, p. 198). Philosophers who address those questions are not primarily concerned with what those capacities represent while studying mental capacities. Namely, “what are intuitions”, “is there free will”, “are there

moral fact” are not questions in which experimental philosophers are interested. The questions asked by experimental philosophers are more specific than the questions asked by empirical philosophers (Nichols & Knobe, 2008, p. 198)<sup>b</sup> Empirical philosophers consider relatively general, first order questions. They generally do armchair philosophy while analyzing concepts. On the other hand, experimental philosophers consider second order questions concerning certain concepts, and they analyze intuitions of laypeople statistically. If a philosopher will conduct an experiment, these experiments might be in the form of surveys. Survey studies are convenient for gathering intuitions of laypeople.

On the other hand, Rose and Danks (2013, p.513) say that experimental philosophy is not an unusual way of philosophizing. Philosophical naturalism is combined with cognitive science in experimental philosophy. They also argue that if the primary goal of experimental philosophy is intuitions, and they are carrying out psychological experiments, this is a kind of narrow understanding of experimental philosophy. They think this narrow understanding of experimental philosophy should be rejected, because this narrow understanding restricts experimental philosophy. Experimental philosophy becomes a philosophical approach which merely studies folk intuitions. Moreover, this narrow understanding of experimental philosophy does not involve many actual practice (ibid, p. 514).

We should instead adopt a broad conception of experimental philosophy: experimental philosophy is simply an instantiation of the long tradition of philosophical naturalism—the view that empirical data are relevant to certain philosophical questions—coupled with actually conducting some of the relevant experiments, as necessary (ibid, p.515).

Experimental philosophy is naturalistic in the philosophical sense, because empirical facts are considered to draw philosophical conclusions. Rose and Danks also argue that experimental philosophy is the combination of both philosophical naturalism and conducting actual experiments. Experimental philosophers allege that folk intuitions are strongly connected with philosophical debates. It is possible to reach positive and negative conclusions about the reliability of intuitions. In these positive and negative projects of experimental philosophy approaches, we should either aim to use intuitions more reliably by empirical methods, or we should be skeptical about the role of intuitions. Positive and negative approaches in experimental philosophy are

two main roads which differ with respect to the role of intuitions. The positive view approach uses scientific results to democratize intuitions (Fischer & Collins, 2015, p. 223). The point where experimental philosophy differs from old fashioned conceptual analysis is considering intuitions of hundreds of people rather than intuitions of just one philosophy educated person. We can call this approach non-radical experimental philosophy view. Bence Nanay (2015, p.223) says that negative approach which is more radical approach uses experimental philosophy to undermine the role of intuitions in philosophy. Negative view points to the diversity of intuitions. Our intuitions change according to many reasons such as environmental effects, demographical differences. If our intuitions vary in a wide range, and are dependent on several parameters that we do not know, we have not sufficient reason to trust them. These radical outcomes are also criticized in different ways (Fischer & Collins, 2015, p. 223). The radical form of experimental philosophy uses experiments which are carried out about folk intuitions to show that they do not justify our folk intuitions. Negative program in experimental philosophy is naturalistic, according to Nanay.

On the other side, Knobe and Nichols say that they aim to make explicit the nature of experimental philosophy in “An Experimental Philosophy Manifesto” (2008, pp. 3-16). In this brief manifesto, they say that the target of experimental philosophy is different from conceptual analysis. They explain that their goal is to determine the underlying psychological mechanisms of using concepts. Knobe and Nichols questions why people have intuitions that they have (Knobe & Nichols, 2008, p. 6). The aim of experimental philosophy is to try to determine what causes our intuitions that we have about free will and moral responsibility. Questions about the source of our religious, moral and metaphysical beliefs are vitally important according to Knobe and Nichols. These two experimental philosophers say that their aim is to return to those questions, and they will realize that by using contemporary cognitive science methods. Experimental results might be utilized to establish models about underlying psychological mechanisms which form intuitions of people. Our theories about psychological mechanisms might be used to determine whether or not intuitions are supported by evidence. Knobe and Nichols (ibid, p.8) say that the best method is gathering empirical data to determine which mechanisms form which

intuitions. We can talk about a variety in the most basic concepts. For instance, fundamental thoughts on what is required for knowledge are different among cultures. Westerners and East Asians have fundamental differences in the way that they attend to and conceive of the world, individuals from these groups exhibit different intuitive judgments. Nisbett and his colleagues (Nisbett et al., 2001, Nisbett, 2003). sorted the individuals into relevant cultural groups using an ethnic classification. Individuals from three cultural groups were chosen as subjects: Westerners, East Asians, and individuals from the Indian sub-continent. Differences in intuitions between members of the aforementioned cultural groups were tested. Subjects were presented four varieties of thought experiments. This study found statistically significant cross-cultural differences in the subjects' responses (Knobe & Nichols, 2008, p.3-16; Doherty, 2010). The same effect also appears in intuitions regarding socioeconomic class differences. Haidt et. al. (ibid., p. 24) studied the moral intuitions of the members of different cultural and social groups. They found a significant difference between test groups. These empirical results are challenges for the use of intuitions in philosophy. On the other hand, Sosa (2008) claims that showing differences in intuitions is not sufficient to undermine their use in philosophy. According to him, intuitions can differ for a variety of reasons that do not pose a threat to their legitimate use in philosophy. There are various empirical works from experimental philosophers which pose a serious problem for the legitimacy of appeals to intuitions in philosophy (Doherty, 2010, p.13). Subjects from different cultural groups have conflicting intuitions regarding classic philosophical thought experiments. Experimental philosophers claim that cross-cultural differences in intuitive judgments undermine the use of such judgments in philosophical practice (Doherty, 2010, p.4).

Philosophers appeal to intuitions at some point in their studies. Intuitions are used as a form of a priori evidence for justifying a given claim when other forms of evidence are not available. It seems that having an intuition that P is sufficient justification for claiming that P (Doherty, 2010, p. 12). However, what would happen if there were divergent intuitions regarding a specific case. Can both parties be correct? If not, how shall we solve or resolve the problem? (ibid,p.12) Intuitions of philosophers might have greater value than intuitions of lay people, and they might have different

intuitions other than folk intuitions. But still philosophers have conflicting intuitions about hypothetical cases, and they ground their theories relying on their intuitions. Even though showing cultural differences in intuitions is not sufficient for undermining their usage in philosophical practice, it is noteworthy to keep in mind that they are not reliable. We shall be a little bit skeptical about the conflicting intuitions, and experimental data will provide insight as to why we do have conflicting intuitions. Showing that intuitions are fallible and changeable with respect to various parameters seems to be a substantial contribution that experimental philosophers may provide. Otherwise, we will be left alone with our dilemmas, and unresolvable disagreements.

## **2.2. What are Philosophical Intuitions?**

A dispute on the importance of “intuitions” in philosophy has been continuing for a few decades. Participants of the debate form two groups. On one side, there are the proponents of intuitions who claim that intuitions are distinctive sources of a priori philosophical evidence, intuitions are not reliable guides for philosophical truth to the foes of intuition, and they recommend that we should disregard them (Fischer & Collins, 2015, p.51). In any case, how could a priori philosophical knowledge is possible is a basic question that neither parties would ever stop asking. How can we reach something about an independent world by merely sitting and thinking? Reliability and localness of intuitions should be considered, if people are forming their arguments and theories through their intuitions. Experimental philosophy helps us at this point, and presents new opportunities to us beyond philosophizing by merely sitting and thinking. This method relies on intuitions and referred as armchair philosophy and has been used extensively among analytic philosophers. However, the reliability and stability of our intuitions have begun to be discussed. The intuitions of philosophers change as the intuitions of others depending on various parameters such as environmental effects. In addition, appealing to empirical studies is a more naturalistic attitude than armchair philosophy. However, we should briefly examine what we mean by intuitions. “We need to know what these implicit intuitions are, but we certainly shouldn’t trust them” (ibid., p. 69).

All philosophers might not mean the same thing as the experimental philosophers use the term. Even if everyone means a different thing by using the term “intuition”, posing the question of what intuitions are is sufficiently valuable and experimental philosophy and empirical studies lead one to ask this question as it seems. There is not a consensus on the nature and the role of moral intuition. Philosophers and others have meant different things by “moral intuition” (Allman & Woodward, 2008, p.164). Allman and Woodward refer to Haidt’s incest example. People have the immediate judgment that brother-sister incest is wrong. Subjects cannot justify their judgments, and they tell of possible harms and bad outcomes. However, they know these harms, such as pregnancy, are absent, they just say that brother-sister incest is not right. Subjects cannot explain why they think that having sex with a family member is wrong.

We can see the characteristics moral intuition in Haidt’s example. Intuition is fast and quite automatic, while reasoning is slower than intuition and it requires more effort. Another example might be the well-known trolley problem. A trolley in motion goes towards five people and will kill all of them unless a switch is diverted by someone. If someone diverts the switch, just one person will be dead. Most people believe switching is admissible in that case. On the other hand, most people think that pushing a bulky man in front of the trolley, causing his death, stopping the moving trolley and saving other five people is unacceptable. Actually, nobody can provide a justification for their moral decision. They respond immediately unconsciously.

Humans have moral intuitions and they trust their moral intuitions in their judgments and decisions. For this reason, it is reasonable to inquire the psychological and neural systems which underlie moral intuitions (Allman & Woodward, 2008, p.166). Allman and Woodward say that they think that moral intuition belongs to the social cognition vein. Neural areas activated are the same when subjects have moral intuitions and social cognition skills. Damages to these neural areas also affect moral intuition (ibid., p. 167). They put forward that there is no specialized faculty devoted to moral intuitions, instead more general capacities for social cognition are responsible for moral intuition capacity.



It seems that we have not yet given a detailed definition of “intuition” so far. I have tried to formulate what it means and spoken of its role in moral theories, but how intuition is defined has not been crystal clear yet. Actually, there is not an agreement on its usage among philosophers and others, thus, I believe that Chudnoff (2011)’s article headline is What Intuitions Are Like due to this ambiguity. What are intuitions is the first question which we should ask, according to Chudnoff, because intuitions’ reliability, and their power of justification depend on what they are (Chudnoff, 2011, p. 625). It might be reasonable to accept intuitions as intuition as Moore proposes that good is good in *Principia Ethica*. In Moore’s moral philosophy, the indefinability of good is one of the principles that his theory relies on. There are objective moral truths which are discovered by humans in an intuitive way, according to Moore. However, people reach different ethical conclusions, and this variation in moral truths shows us that we should not trust our intuition-based conclusions.

“Intuitions play a critical role in analytical philosophical activity” (Goldman, 2007, p. 1). Philosophical methodology relies on intuition, and it is the point where it differs from scientific methodology. Philosophers follow intuitions in philosophical analysis. Intuitions are admitted as evidence. Intuitions are used so as to support or refute philosophical arguments by some philosophers. However, some skeptics object to the usage of intuitions in this way. These skeptics reject that intuitions provide the evidential support. The reason behind this skepticism is the fallibility and unreliability of intuitions. Intuitions seem to be highly fallible. If they are fallible, they should not be trusted. People’s intuitions about philosophical cases conflict with each other and one of the intuitions must be wrong in case a conflict arise. Furthermore, a reliable method independent of intuition itself is not possible (Goldman, 2007, p.3). Most skeptics ground their criticism on these reasons.

We all have moral intuitions which are immediate moral beliefs, Armstrong suggests. We think also that our own moral intuitions are justified. We do not see our moral intuitions arbitrary. They seem to us as if they are justified (Armstrong, 2008, p.48). Moral intuitions are unreliable as I have mentioned above because they are also subject to framing effects. Moral judgments vary by framing, and various empirical

research supports this conclusion. Descriptions affect moral beliefs, and this supports that moral beliefs are unreliable. Subjects can give different answers to different questions, although those questions are asked about the same hypothetical case. For example, choosing positive or negative words has an influence on subjects' decisions. Our moral intuitions are subject to framing effects in many circumstances, therefore, we should consider that they might be fallible. What causes moral framing effects and what does not need to be understood by empirical studies (Armstrong, p.68). Moral beliefs are not reliable in some circumstances and empirical research will show us why they seem to us to be justified, even though they are not really justified.

Intuitions are appealed to so as to support, or deny philosophical claims about various issues such as moral responsibility, morally right action and so on. There are a huge number of different accounts on what intuitions are. As I have mentioned above there is not a consensus on what the intuitions are in the literature, and what I am going to follow is its function in philosophical practice. We appeal to intuitions as evidence in philosophical practice such as issues concerning free will and moral responsibility. For example, in the "Trolley Problem" which was introduced by Philippa Foot and expanded by Judith Jarvis Thomson (1967, 1985) there is a conflict between the intuitions that are generated in response to two hypothetical cases. The interesting trolley case is as follows:

Suppose that you are the driver of a trolley. The trolley rounds a bend, and there come into view ahead five track workmen, who have been repairing the track. The track goes through a bit of a valley at that point, and the sides are steep, so you must stop the trolley if you are to avoid running the five men down. You step on the brakes, but alas they don't work. Now you suddenly see a spur of track leading off to the right. You can turn the trolley onto it, and thus save the five men on the straight track ahead. Unfortunately...there is one track workman on that spur of track. He can no more get off the track in time than the five can, so you will kill him if you turn the trolley onto him (Thomson, 1985, p.1395).

The second case is as follows:

[I]magine yourself to be a surgeon, a truly great surgeon. Among other things you do, you transplant organs, and you are such a great surgeon that the organs you transplant always take. At the moment you have five patients who need organs. Two need one lung each, two need a kidney each, and the fifth needs a heart. If they do not get those organs today, they will all die; if you find organs for them today, you can transplant the organs and they will all live. But where to find the lungs, the kidneys, and the heart? The time is almost up when a report is brought to you that a young man who has just come into your clinic for his yearly check-up has

exactly the right blood-type, and is in excellent health. Lo, you have a possible donor. All you need to do is cut him up and distribute his parts to the five who need them. You ask, but he says, 'Sorry. I deeply sympathize, but no' (Thomson, 1985, p.1396).

The trolley problem occurs, because when we consider the two cases, we will have conflicting intuitions. The first is that it is morally permissible for us to direct the trolley towards the lonely track worker in order to save the lives of the other five; and the latter is that it is morally impermissible for us to take the life of the single patient to save the lives of other five people. The problem is to explain the conflicting intuitions. What seems to me important is appealing to intuitions as evidence in this problematic case. We have conflicting intuitions about the same hypothetical case. They should not be treated as evidence because of their fallibility.

## CHAPTER 3

### FREE WILL AND MORAL RESPONSIBILITY

#### 3.1. Folk Intuitions on Free Will and Moral Responsibility With a Description of Compatibilism, Incompatibilism, and Determinism

Thought experiments have a significant contribution to philosophical methodology. Folk intuitions are basic intuitions about philosophical questions of laypeople. Folk intuition underlies our core metaphysical concepts, and philosophical analysis untangles or occasionally clarifies these naive concepts (Roskies & Nichols, 2008, p. 371). “It has frequently been claimed that the folk are incompatibilists about freedom and moral responsibility that they believe that freedom is not possible in a deterministic universe, and that if you are not free, you are not morally responsible” (ibid., p.371).

Roskies and Nichols tell that “the nature of our intuitions about free will and moral responsibility is not, however, purely a matter of a priori debate” (ibid., p. 372). Experimental studies report that there are conflicting results if the folk have incompatibilist or compatibilist ideas about moral responsibility. Nahmias and his colleagues (2005, p.565-572) designed a study in which subjects suppose that “determinism is true, and then [they are asked] whether an agent” is culpable in this deterministic case. Participants of the study report that the agent is blameworthy. However, Nichols and Knobe conducted another experiment in which subjects were presented an alternate deterministic universe where they had to decide whether people would be morally responsible for their acts (the abstract condition). In this case, subjects report that agents are not blameful in this alternate universe.

Roskies and Nichols (2008) conducted a study with undergraduates from University of Utah who had presumably never thought about free will or moral responsibility. Their primary concern was “whether the scenario” takes place “in the actual world or an alternate universe”. Subjects were given one of the two conditions: actual or alternate. The results are as follows: “participants in the alternate condition gave significantly higher levels of agreement than participants in the actual condition to the claim that it is impossible to be fully morally responsible in that universe” (ibid., p. 374). Participants give compatibilist responses when the deterministic universe is our own universe, while they think that agents are not morally responsible if the universe is an alternate one.

Determining which psychological mechanisms underlie the intuitions is difficult from the armchair. Shaun Nichols (2006) claims that it should be advantageous to assess folk views on the nature of agency. Is choice treated as deterministic or indeterministic by folk? They do both according to Nichols. Folk believe that some choices are indeterminate under certain conditions.

Compatibilists argue that determinism is consistent with moral responsibility, while incompatibilists claim that we are not responsible morally if our decisions are determined. There is a debate on what the folk intuitions of responsibility are. Incompatibilists say that their view is the intuitive view. However, there is experimental evidence against the view that people are naturally, intuitively incompatibilists.<sup>2</sup> Who is holding the right view here? Nichols says that both parties are right. Researchers have begun to use scientific approaches to examine folk intuitions.

The dispute on free will concerns moral responsibility. Free will requires us to feel it is “up to us” what we choose and how we act; in other words, we could have chosen or acted otherwise. Having free will means being the ultimate sources of our actions. Another claim is that free will requires having the power to do otherwise (Fisher et

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<sup>2</sup> Recent results from Nahmias and colleagues show that the folk have compatibilist intuitions. (Nahmias et al., 2005)

al., 2007, p. 1) What freedom means is crucial, and to be free is to have the ability to do what we want, an absence of impediments which prevent us from doing what we want, according to compatibilists. This analysis of freedom captures the surface freedom of actions but whether it captures the deeper sense of freedom of will is disputable.

Being unconstrained is not sufficient for many people’s understanding of free will. Thus, what we mean by “freedom of will” is crucially important to decide whether it is compatible with determinism or not. Compatibilists argue that we should not confuse determinism with constraint. Although freedom is the opposite of constraint, it is not the opposite of determinism. Compatibilists also allege that we should not confuse causation with constraint, and determinism with fatalism. Having been caused does not mean that there is coercion. Additionally, fatalism means that no matter what we do, whatever is in our fate is going to happen. Determinism does not imply such an outcome.

Incompatibilists hold that free will conflicts with determinism (Fisher et al., 2007, p.7). Peter van Inwagen (1983) states the consequence argument which is discussed for the incompatibility of free will and determinism. He puts it thus:

If determinism is true, then our acts are the consequences of the laws of nature and events in the remote past. But it is not up to us what went on before we were born; and neither is it up to us what the laws of nature are. Therefore the consequences of these things (including our own acts) are not up to us (Inwagen, 1983, p. 171).

Table 1 below is helpful to see the relationship between the various approaches:

Table 1  
*The relationship between the various approaches concerning moral responsibility and free will, Fischer et al., 2007, p.4*

	Is common sense thinking about free will and moral responsibility basically correct?	Is free will compatible with determinism?	Is moral responsibility compatible with determinism?	Do we have free will?
Libertarianism	Yes	No	No	Yes
Compatibilism	Yes	Yes (although semicompatibilists say “no”)	Yes	Yes
Hard Incompatibilism	No	No	No	No
Revisionism	No	Yes, but only with revision to our self-image	Yes	Yes(or close enough)

Libertarians such as Kane believe that free will does not have to be compatible with determinism in order to be morally responsible for our actions (Fischer et al., 2007, p.7).

Even some of the greatest modern defenders of libertarianism, such as Immanuel Kant, have argued that we need to believe in libertarian free will to make sense of morality and genuine responsibility, but we can never completely understand such a free will in theoretical and scientific terms (Fisher et al., 2007, p.9).

### **3.2. The Impact of the Belief in Free Will on Moral Behavior**

Compatibilists hold that free will can exist within a deterministic world. The theory that the future is fixed by the past is called determinism. The view which holds the argument of causal determinism that everything that happens is determined by antecedent causes operating in accordance with laws of nature agrees on the non-existence of free will and moral responsibility and is called hard determinism. In indeterminism, the same past can lead to different future states. The link between the past and the future is loosened, and a space for free will is created in indeterminism. Recent advances in physics also support the view of indeterminism. A world in which the future is fixed by the past is incompatible with free will in incompatibilism.

Schooler (2010, p.192) says that we can consider the impact of believing in the absence of free will and consider whether these claims have any impact on people's ethical behavior. Recent studies show us that telling people that they lack free will has an impact not only on their views about free will but also on their ethical judgment. Nahmias, Morris, Nadelhoffer & Turner (2005) reported that participants think that the agent is blameworthy although the agent is in a deterministic world. On the other side, Nichols and Knobe found that subjects did not find agent responsible for her actions within a deterministic abstract case. Roskies and Nichols resolved the discrepancy between these studies. Subjects are more likely to say that agents are blameworthy when the deterministic universe is our own, and they tend to say that agents are less culpable when an imaginary other universe is assumed.

Vohs and Schooler (2008) examined the impact of presenting participants with scientific claims that science has shown that people lack free will. Participants who are exposed to anti-free will text are prone to cheat in an arithmetic test and their amoral behavior increases. In another experiment, participants read various statements which were written to decrease awareness of determinism. One sample statements is “Ultimately, we are biological computers-designed by evolution, built through genetics, and programmed by the environment” (ibid., p.51). Another statement which participants read to boost the beliefs in free will is “I am able to override the genetic and environmental factors that sometimes influence my behavior.” (ibid., p.51 ) Finally, participants read a neutral statement. Results showed that participants cheated more after they read statements that tell that their actions are determined. Subjects’ belief change when they are exposed to anti-free will passage. Individuals’ attitudes about free will change when exposed to scientific claims that free will is an illusion. The most important finding of Vohs and Schooler’s study is that exposure to anti-free will statements reduced moral behavior, and increased cheating behavior. Baumeister, Masicampo and Dewall’s (2009) study also shows that reading anti-free will passages undermines social behaviors. Participants become less willing to help others or their tendency to behave aggressively increases.

Discouraging a belief in free will does not have only bad influences. There might be some cases in which a benefit can be observed. Greene & Cohen (2004) suggest that the absence of the belief in free will lead some social benefits. People become more merciful and behave less venomously. The absence of the belief in free will may sometimes have positive impact on people’s behaviors.

Vohs & Schooler (2008) say that free will debate has societal, scientific and theoretical implications. In a survey of people in 36 countries, more than 70% claim that their fate is in their own hands. People’s sense of responsibility has an influence on their behavior. Undesirable or detrimental behaviors can increase if they believe in the nonexistence of free will. They hypothesized that subjects would cheat more if they believe that their behaviors are not under their control.



In sum, the belief as to whether or not free will exists has an impact on people's moral behavior and their attitudes towards other people's behaviors. Having anti-free will intuitions has some negative effects on people's moral behaviors such as increasing cheating and aggression, reducing helpfulness. On the other hand, absence of belief in free will reduces retribution; it leads people to become more forgiving.

Most of the scientists like Libet believe that free will is an illusion, and they claim that the idea of free will is an "effect of the mind". A noteworthy thesis of Libet's and his colleagues' article is that "the brain... 'decides' to initiate or, at the least, prepare to initiate [certain actions] at a time before there is any reportable subjective awareness that such a decision has taken place" (Libet, et al. 1983, p.240; cf. Libet 1985, p.536; Mele, 2007, p. 241). On the other hand, Mele says that Libet and his colleagues do not make a conceptual distinction between deciding and intending, and motivational states as well (Mele, 2007, p. 241). Libet uses terms, such as "intention", "decision", "wanting", "wish" and "urge" "interchangeably". Mele differentiates between wanting and intending. According to Mele, wanting to do something is somehow different from intending to do something. For instance, "I wanted to meet a friend at a 7 o'clock movie" and "I wanted to join another friend at a 7 o'clock lecture yesterday". I knew that I could not do both of them. I had to choose one of them. "In forming an intention to go to the movie, I made up my mind to do that." (Mele, 2007) Intending to do something is to be settled on doing it, while wanting to do something is to be unsettled whether I would do it. Wanting and intending have different functional roles, and ignoring this distinction between them can lead to crucial problems (Mele, 2007, p. 242).

In Vohs and Schooler's experiment, subjects read passages which discuss free will or not. They focus on the assessment whether reading material affects their beliefs. Subjects cheated more when they read a passage in which free will is refuted than reading a neutral passage. Dismissing free will leads to amoral behaviors; therefore, believing that free will exists might be an invaluable sentiment for us. Believing in free will might be really useful. It forms the basis of moral responsibility.

### 3.3. Why do People Have Compatibilist or Incompatibilist Intuitions?

There is a debate between compatibilists and incompatibilists which has been going on for many decades. Compatibilists claim that we are fully responsible for our actions even if determinism is true, that is determinism and free will can coexist. On the other hand, incompatibilists suggest that people are not responsible for their action in case that determinism is true.

Nichols and Knobe (2007) focus on the question why people have compatibilist or incompatibilist intuitions. Their experimental data show that when questions involve an abstract basis, people give incompatibilist answers. However, people's replies become compatibilist if questions trigger emotions. They hypothesized that people have a tendency to give compatibilist answers in the concrete condition. If there is a difference between responses, this might be evidence for the argument that affect has an impact on people's compatibilist responses. Nichols and Knobe established two different universes. Universe A is deterministic in which every event is caused by the past, but Universe B is indeterministic in which each action must not happen the way it occurs. Subjects were given the question "Which of these universes do you think is most like ours?" Nichols and Knobe's aim is to observe which universe is closer to participants' own universe. They found that nearly all of the subjects think that our universe is indeterministic. After this question, participants receive another question which was designed to test whether they have compatibilist or incompatibilist intuitions. One of the questions for the concrete condition is this:

In Universe A, a man named Bill has become attracted to his secretary, and he decides that the only way to be with her is to kill his wife and 3 children. He knows that it is impossible to escape from his house in the event of a fire. Before he leaves on a business trip, he set up a device in his basement that burns down the house and kills his family.

Is Bill fully responsible for killing his wife and children?

YES NO"

72% of the participants gave the compatibilist response. That is, they answered that Bill "was fully morally responsible" for his crime. If we consider another case which contains abstract condition:

“In Universe A, is it possible for a person to be fully morally responsible for their actions?  
YES NO”

86% of the participants gave the incompatibilist response.

At the end, Nichols and Knobe reach the result that “people give compatibilist response to concrete” conditions, and they give incompatibilist responses to the abstract case. It seems that people do have both incompatibilist and compatibilist responses to cases. When people’s emotions are triggered, they have compatibilist intuitions. However, when participants were given an abstract case, they gave incompatibilist responses. This result shows us that affect has significant contribution to people’s formation of compatibilist intuitions.

After Nichols and Knobe (2007) obtained the results of the first phase of the experiment, they discuss “the psychological processes” that may “underlie different types of folk intuitions” (Thp. 671). The performance error model is one of the possible models that they consider. “Strong affective reactions can bias or distort people’s judgments” is suggested in a way of explanation of the data reported in their study (ibid, p. 671). According to “performance error model”, people commonly make responsibility judgments reckoning with a tacit theory, but when they encounter with a violation of moral norms, they react emotionally, and they cannot bear in mind the theory correctly (ibid., p. 671). “Affective competence model” is another explanation of the psychological process that underlies folk intuitions concerning moral responsibility.

Instead of supposing that affect serves only to bias or distort our theoretical judgments, one might suggest that people’s affective reactions actually lie at the core of the process by which they ordinarily assign responsibility” (ibid., p.672).

Affective reactions provoked in affective competence model. Concrete competence model is the third model Nichols and Knobe consider in their paper. People’s intuitions in the concrete conditions might be the result of a process of an innate moral responsibility module. In addition to these models, it is also possible to “construct more complex models” in which elements of these models are united. Affect might be serving “both as part of the fundamental competence underlying

responsibility judgments, and as a factor that sometimes” cause “performance errors” (ibid, p. 674).

Nichols and Knobe say that most of the participants gave compatibilist response to concrete case and incompatibilist response to abstract case in the first phase of their experiment. In the second phase of their experiment, concreteness was constant, and they gave participants high affect and low affect cases. They have seen again the influence of affect in the second phase of their experiment. Lastly, they compared four different cases to see whether “affective competence” or “affective performance error model” explains the impact of affect in moral intuitions. At first glance, we can say that “affective performance error model” explains the difference in intuitions (ibid., pp. 663-685).

Nichols and Knobe provided evidence that affect has an impact on compatibilist judgments but whether it is the result of an “affective competence or an affective performance error” model is still obscure. They say that although their “experiment provides some reason to favor the performance error account, deciding between affective performance error and the affective competence models of compatibilist responses is not” easy by a single crucial experiment (ibid, p.677).

### **3.4. Greene’s Dual Process Theory of Moral Decision Making**

Dual-process theories basically claim that two different kinds of processes alternate in various cognitive problems, such as type 1 and type 2. Type 1 is “fast, automatic and non-conscious”, while “type 2 is slow, controlled and conscious” (Frankish, 2010, p. 914). Heuristic and associative cognitive biases are related to type 1; and rule-based or analytical logical responses are attributed to type 2 processes. (Ibid.) In order to understand what Greene says in his dual process theory of moral decision making, I would like to first summarize dual-process and dual-system theories. Type 1 processes can be “described as associative, heuristic or intuitive”, and type 2 processes are “rule-based, analytical or reflective” (Ibid. p. 915). These two types basically correspond to a more familiar everyday distinction, intuition and reason. Intuition is “quasi-perceptual, sensitive to subconscious cues and sometimes biased”

(intuition is used in a more restricted sense in philosophy); while reason is “slow, effortful, explicit and more cautious”. (Ibid.) Dual process theories developed in various areas, and decision making is the area which I will deal with in my thesis. “In the field of judgment and decision making”, dual-process theories have not had big “impact, but they have become influential” in heuristic and “biases tradition” (Ibid., p. 917). Kahneman and Tversky have founded this tradition in 1970s. Kahneman and his colleagues developed a dual-process model. Crudely put, according to dual-system theories, we have two minds. Although there are differences between the dual-system models (for instance, the relation between two systems and their roles in action) they share the same ground. Philosophers are interested in using dual-process models to traditional philosophical problems. For instance, moral psychology is the area which philosophers first started making use of dual-system theories. Moral decision making is a fertile area for future research which I will present a two-system framework for moral decision making in that chapter.

Daniel Kahneman says that intuitions come to our minds quickly and without much effort and emphasized the distinction between intuitive and deliberate thought processes (Kahneman, 2003, p. 697). Kahneman presents to us a two-system perspective which distinguishes intuition from reasoning. There are several characteristics that distinguish these two types of cognitive processes.

The operations of System 1 are typically fast, automatic, effortless, associative, implicit (not available to introspection), and often emotionally charged; they are also governed by habit and are therefore difficult to control or modify. The operations of System 2 are slower, serial, effortful, more likely to be consciously monitored and deliberately controlled; they are also relatively flexible and potentially role governed (Kahneman, 2003, p. 698).

Intuitive thoughts come to our minds spontaneously and effortlessly. “To understand intuition, then” we “must understand why some thoughts come to mind more easily than others, why some ideas” emerge “effortlessly and” some “others demand” more “work” (Kahneman, 2003, p.699). After we have introduced the core of dual-process theories in brief, now it is time to begin what Greene tells about this distinction between processes. I now present his dual-process theory of decision making in detail. He begins his dual-process theory by introducing the footbridge and switch dilemmas. Greene presents us the modified form of the footbridge dilemma as follows:

A runaway trolley is headed for five railway workmen who will be killed if it proceeds on its present course. You are standing on a footbridge spanning the tracks, in between the oncoming trolley and the five people. Next to you is a railway workman wearing a large backpack. The only way to save the five people is to push this man off the footbridge and onto the tracks below. The man will die as a result, but his body and backpack will stop the trolley from reaching the others. (You can't jump yourself because you, without a backpack, are not big enough to stop the trolley and there's no time to put one on.) Is it morally acceptable to save the five people by pushing this stranger to his death? (Greene, 2014, p. 114).

Pushing the man with backpack to the railroad promotes the greater good for the greatest number of people, but most people said that the action of pushing the workman to the road is not acceptable. Why does the action seem wrong to many of us? There are various versions of trolley examples. For instance an alternative version of it is the switch dilemma. Greene summarizes the switch dilemma as follows:

A runaway trolley is heading down the tracks toward five workmen who will be killed if nothing is done. You can save these five people by hitting a switch that will turn the trolley onto a sidetrack. Unfortunately, there is a single workman on the side-track who will be killed if you hit the switch. Is it morally plausible to turn the trolley away from the five and onto the one workman? (Greene, 2014, p. 114).

For Thomson and Greene, hitting the switch is morally acceptable, even though Thomson's objection is philosophical while Greene's conclusions are empirical. Greene questions as to why we say yes to the switch case and no to the footbridge case. Considering utilitarian principles, we might be able to explain the subjects' affirmative responses. This is what Greene thinks as well. However, why our intuitions tell us that the action in the footbridge case is wrong is unexpected by the utilitarian calculations (i.e. by explicit, slow, reasoning process).

Greene thinks about the role of emotions in making us say no in the footbridge case. His dual-process theory posits distinct, and sometimes competing, automatic and controlled responses (Greene, 2014, p. 120). We encounter several moral dilemmas like the switch and the footbridge cases and Greene classifies these cases as impersonal and personal. In other words, Greene argues that one significant psychological difference between the footbridge and switch scenarios is that pushing the man in the footbridge case requires a more personal involvement than just pulling a switch (that is, the personal force-pushing versus hitting a switch) (Ibid., p. 216). Greene and his colleagues conducted several experiments in order to test what they

predict, and as they have predicted, the personal dilemmas, the dilemmas like the footbridge case produced increased activity in the medial prefrontal cortex, including parts of the VMPFC (the ventromedial prefrontal cortex). However, the impersonal dilemmas like the switch case reveal an increased activity in the DLPFC (dorsolateral prefrontal cortex). This experiment also shows that a different brain region, amygdala, which is known for its role in emotion, becomes active when people come across with personal, footbridge-like cases (Ibid., p. 122). Greene tells that there is a correlation between personal dilemmas and activity in the VMPFC and the amygdala, likewise there is a correlation between impersonal dilemmas and DLPFC. He concludes that emotional responses make people say no to pushing the workman off the footbridge, and for other personally harmful utilitarian actions. These emotional responses produced by the VMPFC and the amygdala. One side of the dual-process theory is the VMPFC and emotional responses, and the other side of the theory is the dorsal part of this distinction of ventral and dorsal. Greene says that utilitarian judgments depend more on cognitive control. We have dual process moral brains, according to him. We do sometimes have automatic and controlled responses to moral questions, and these responses often conflict with each other.<sup>3</sup>

Greene continues his dual-process theory of moral judgment with an analogy. The human brain is like “a dual-mode camera with both automatic settings and a manual mode” (Greene, 2013, p. 133). The automatic settings are efficient, but not very flexible, and the converse is true for the manual mode. The distinction between emotion and reason underlies the dual-process theory of moral judgment. Emotions are automatic processes which are good devices to achieve behavioral efficiency. Like the automatic settings of a camera, emotions produce adaptive behavior without conscious thought. (Greene, 2014, p. 134) Another psychological phenomenon is the reasoning which Greene defines as the conscious application of decision rules. According to Greene, there are two distinct systems functioning in our brains. VMPFC allows us to decide in risky decisions. Our emotional automatic settings are

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<sup>3</sup>Automatic responses are the results of the emotion process, and controlled responses are the outcomes of reasoning.

under the VMPFC part's care, while the manual mode which provides reasoning activity in decision making is the DMPFC part of the dual-processing brain.

Greene and his colleagues apply the method of cognitive neuroscience to the study of moral judgment in another similar empirical study. They used moral dilemmas as questions in this study again. They investigated what makes a case morally acceptable to sacrifice one life to save five in the switch dilemma, but unacceptable in the footbridge dilemma. The crucial difference between switch and footbridge dilemmas is that one of them engages someone's emotions. This emotional engagement affects people's judgments. They conducted an experiment in order to test this hypothesis. They predicted to find that brain regions associated with emotion would be more active in footbridge dilemma than in trolley dilemma (Greene et al., 2001, p. 2106). They identified brain areas and they observed the moral-personal condition had an effect different from both moral-impersonal and non-moral conditions. It can be concluded from this empirical study that brain areas associated with emotion are more active in moral situations which people think as personal.

In the case of Greene's dual process theory of moral judgments, it might be thought that intuitionism and philosophical intuitionism are the same, although he does not refer to philosophical intuitionism in his studies. Greene adopted examples from Thomson's article. However, what he concludes is quite different from Thomson's analysis. Greene focuses on the difference between Reason and Emotion in his book *Moral Tribes*. Reason is assigned to the switch case, while emotion is assigned to the footbridge case. Deontology and utilitarianism issue lie behind both Thomson and Greene's models. But, if Thomson discussed reason and emotion in his article, he would assign both Kantian and utilitarian intuitions to reason. On the other hand, what Greene emphasizes is a different point than Thomson. Moral intuition is the consequence of the functioning of the VMPFC part of the brain which is responsible for emotions. Therefore, we will be either deontic with an emotional reaction, or we will push the switch in order to save others with a rational, utilitarian choice, if we follow what Greene says in his model. Reason allows us to conclude that we can push the switch in order to save others in the switch case, while emotion does not allow us to conclude that we can push the workman off the bridge in order to save



five others. Nevertheless, what Thomson put forward at the end of her article matches what Greene agreed on. Ultimately, that killing five is worse than killing one is after all true. This argument might be the ethical first principle which underlies the trolley problem.

There might be a kind of resemblance between trolley cases, and the cases that we present to our participants in the survey that we conducted based on Nichols and Knobe's studies. Answers that participants gave to the questions about moral responsibility changed with respect to how the questions are formulated. Most of the participants gave compatibilist response to the concrete case and incompatibilist response to abstract case in the first phase of the survey. Our intuitions tell us that the person is blameworthy in the concrete case, while the person is not blameworthy in the abstract case. What makes us to decide in that way seems not quite obvious like in the footbridge and switch cases. How can people be manipulated so easily? Moral intuitions function like a referee when we encounter with philosophical problems. The reason why I am concentrating on moral responsibility is to discuss free will on the basis of moral responsibility, because moral responsibility is the most concrete point that we can directly assess free will in experimental philosophy.

### **3.5. Challenging Approaches to Dual Interaction Model of Moral Intuitions**

According Mallon and Nichols (2011), Greene and Haidt claim that:

Moral judgment is more a matter of emotion and affective intuition than deliberate reasoning [...] we see an action or hear a story and we have an instant feeling of approval or disapproval [that appears] suddenly and effortlessly in consciousness (p. 284).

For instance, as we saw in section 1, Haidt argues that moral judgments are caused by moral intuitions (including moral emotions) that are not a kind of reasoning. Haidt says that when people are asked for a moral judgment, they simply say the action is wrong, and they search for reasons as in the case of brother-sister incest. Haidt infers that reasoning plays no role in generating moral judgments. It is not easy to find evidence that would answer the question of whether moral judgments are caused in a particular way. Haidt argues that reasoning plays no role due to the absence of

reasons to the moral judgment that people have. However, Mallon and Nichols question why conscious reasoning should not be the dominant process in moral. For instance, people are not very good at explaining why they are thinking that incest is wrong, although they are well aware of a rule against brother-sister incest. They may be identifying a consciously available rule that plays a critical role in generating their judgments. Mallon and Nichols say that elimination of rules from moral psychology is not plausible. Moral rules are not the only factor in generating moral judgment, but we should not disregard their crucial contribution to psychological processes that lead to moral judgments.

Ron Mallon and Shaun Nichols consider interaction of rules and emotions in their studies as well. Even though it is not clear how the emotions and rules interact to generate the judgment, they promote a dual *vector* model of non-utilitarian moral judgment. Elimination of rules from moral psychology is not tenable for Mallon and Nichols. Rule utilitarianism holds that it is morally wrong to violate a rule which is justified by good outcomes, while deontologists hold that there are rules which are wrong to violate whatever the consequences are. Moreover, rules might be essential in moral theory, because there is a distinction between moral and conventional, and conventional judgments are dependent on knowledge of local rules. Local rules can bring an explanation for cross-cultural differences in normative judgments. For instance, tipping servers in local restaurants is considered not wrong in US, but wrong in China. People in US adopt tipping rule and people in China do not embrace such a rule. Hence, rules play a role in some normative judgments. Mallon and Nichols argue that they do not defend that moral rules are the sole factor in generating moral judgment, but they insist that moral rules are one crucial factor in the psychological processes that prompts us to moral judgments (2010, p.298).

Haidt suggests a social intuitionist model which is a challenging approach to rule-based accounts of moral judgment. Instead of reasoning processes, Haidt argues that moral judgments are produced by moral intuitions (including moral emotions). Haidt and colleagues present a brother-incest scenario to their subjects. Haidt concludes that subjects presented with these kinds of cases and asked for a moral judgment answer that the action is wrong and search for reasons. However, most of these

subjects are not able to find reasons that justify their moral judgments. They argue that their moral judgment is correct even though they cannot provide reasons. Haidt claims that reasoning does not play any role in generating moral judgments. Haidt also seems to follow a dual process models of cognition in his study. He argues that a second kind of system provides moral judgment and he draws the conclusion that reasoning does not play any role in the production of moral judgment. Mallon and Nichols say that the question of whether moral judgments are typically caused in a particular way cannot be answered definitely. They add that even if intuitions are the dominant factor in the production of moral judgments as Haidt and colleagues offer, it does not follow that moral rules or moral reasoning do not have any contribution to moral judgment.

Another objection to the importance of moral rules comes from Blair. Blair's studies like Haidt's work, emphasize the role of automatic processes underlying moral responses. Blair stresses the importance of emotional response in moral judgment. There is a distinction between moral and conventional and Blair offers a theory underlying moral judgments in the moral/ conventional task. Blair tells that Violence Inhibition Mechanism provides us to draw the moral/conventional distinction. Blair's VIM is the mechanism which leads us to distinguish moral from conventional violations. Blair's account is an objection to rule-based accounts of moral judgment that Mallon and Nichols defend, because it is an emotion-based model which suggests that moral judgment is generated by a particular kind emotional response. On the other hand, moral rules account defends that assessing situations is required for the activation of moral judgment. Mallon and Nichols say that Blair's account is not sufficient to explain moral judgment, because judging something bad and judging something wrong is different from each other. Many cases that are regarded as bad are not regarded as wrong. For example, toothaches are bad, but they are not wrong. Blair's theory is an account which provides an explanation of how people come to judge things as bad in a sense, but it does not provide an account of moral judgments of wrong on the moral /conventional task. What is missing in Blair's account are the rules in the processes that generate moral judgments.

Research on moral dilemmas shows us how emotions have an impact on moral judgment and I have mentioned Greene's theory in part 2.4 in detail. Emotion-based account of moral judgment is also a challenging approach to rule based accounts. Trolley cases are the most studied dilemmas, and we have also focused on the question of why people judge pushing the stranger as inappropriate but turning the switch as appropriate in part 2.4. Greene says that footbridge cases trigger emotional responses because they are personal scenarios, while bystander case is impersonal. Greene uses this personal/impersonal distinction of cases in order to develop his dual process theory of moral judgment. Impersonal dilemmas activate the reasoning process, whereas personal dilemmas tend to activate the emotion process. Like Haidt, Greene also suggests that we can arrive at moral judgments either through reasoning or emotions. But unlike Haidt, reasoning based judgments are not rare and they are utilitarian according to Greene. In Greene's dual process model, two systems are in competition with each other. Instead of a dual-process model, in which moral judgment comes from either reason or emotion, Mallon and Nichols promote a dual vector model of non-utilitarian moral judgment. They say that it is not quite clear how the emotions and rules interact to produce moral judgment, but they argue that emotions are crucial in generating moral judgments with rules. Rules interact with emotions in generating moral judgments, and the evidence suggests this kind of interaction. I am going to refer to what they report about their experiments to verify their prediction now.

Nichols and Mallon created impersonal cases that are parallel to the footbridge and bystander (i.e. switch) cases. Two main cases are as follows:

**Impersonal Bystander Case:** When Billy's mother leaves the house one day, she says 'you are forbidden from breaking any of the teacups that are on the counter.' Later that morning, Billy starts up his train set and goes to make a snack. When he returns, he finds that his 18 month old sister Ann has taken several of the teacups and placed them on the train tracks. Billy sees that if the train continues on its present course, it will run through and break five cups. Billy can't get to the cups or to the off-switch in time, but he can reach a lever which will divert the train to a side track. There is only one cup on the side track. He knows that the only way to save five cups is to divert the train to the side track, which will break the cup on the side track. Billy proceeds to pull the lever and the train is diverted down the side track, breaking one of the cups.

**Impersonal Footbridge Case:** When Susie's mother leaves the house one day, she says 'you are forbidden from breaking any of the teacups that are on the counter.' While Susie is playing in her bedroom, her 18 month old brother Fred has taken down several of the teacups and he has also turned on a mechanical toy truck, which is about to crash 5 of the cups. As Fred leaves the

room, Susie walks in and sees that the truck is about to wreck the cups. She is standing next to the counter with the remaining teacups and she realizes that the only way to stop the truck in time is by throwing one of the teacups at the truck, which will break the cup she throws. Susie is in fact an excellent thrower and knows that if she throws the teacup at the truck she will save the five cups. Susie proceeds to throw the teacup, which breaks that cup, but it stops the truck and saves the five other teacups (Mallon & Nichols, 2006, p. 534-535).

They asked two types of questions to the subjects after letting read the above scenarios which are, by the way, both *impersonal* since they are just about cups that are broken not one or five people getting killed: whether a rule was broken or whether switching the lever or throwing the cup was okay. As a response to the question about breaking/not breaking a rule, most of “the subjects said that the rule was broken in the impersonal footbridge case, but fewer than half said that the rule was broken in the bystander case” (Ibid. p. 314). Rule based accounts of moral judgment are supported by these results, because people seem to discriminate between footbridge style cases and bystander-style cases, even when both are of the impersonal type. (To the question about switching or throwing, most participants said it was okay. However, we are not interested in these responses here).

Typical dual-process accounts as we saw in Greene’s theory of moral decision making depict two systems in function: the rational versus the emotional. “The rational system votes for pushing the man in front of the footbridge, the emotional system votes against pushing the man, and the stronger signal carries the day” (Mallon & Nichols, 2010, p. 316). Mallon and Nichols suggest that rules and emotions are two separate factors which are not in competition with each other. Rather, emotions and rules both contribute to produce judgment. Dual vector model holds that emotions and rules interact to generate moral judgment, but moral judgment does not come from either reason or emotion in that kind of model which is depicted in the following figure:

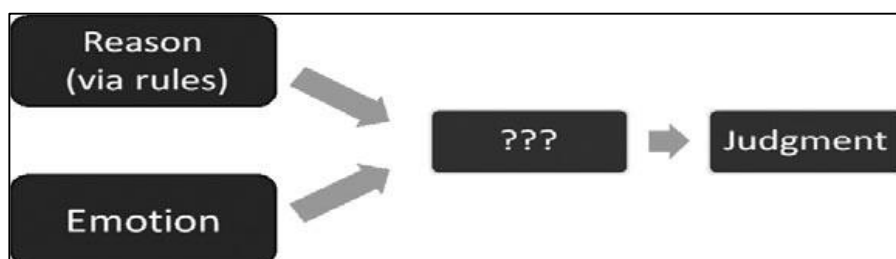


Figure 1. Dual-vector model of (non-utilitarian) moral judgment (2010, p. 317)

Even though we do not know how rules interact with emotions to produce moral judgments, the evidence from experiments suggests that emotions and rules are two important factors of the psychological underpinnings of moral judgment. It seems that Mallon and Nichols' dual vector model is a challenging approach to Greene's dual process theory of moral judgment. Rather than giving one of the elements dominance, they propose that two systems, reason and emotion, are not in competition with each other in generating moral judgments. They suggest a kind of interaction between rules and emotion, but it remains unclear how rules interact with emotion. In part 2.4, I mentioned Greene's dual process model and what Mallon and Nichols say about reason and emotion might be a good objection against what Greene proposes. Besides, I have said earlier that the evidence from our results shows that there might be a kind of gradual change and interaction between emotion and reason based on Greene's model. Therefore, what Mallon and Nichols put forward might be a challenging approach to Greene's dual process model, but our interactionist model based on Greene's findings is quite reasonable, because our experimental evidence support such kind of interaction. However, our interactionist model may also presuppose Greene's personal/impersonal distinction. We have said that abstract cases are impersonal moral situations in which the role of emotion is minimized, while concrete cases are personal cases in which we feel the role of affect intensively. There is a parallelism between impersonal bystander case and abstract situations; personal footbridge case and concrete situations. The greatest threat to our argument may be challenging the resemblance we find between trolley cases and our (and also, of course, Nichols and Knobe's) scenarios.

The claim that Greene's study in trolley dilemmas and our study about the role of affect intersect is that they both move from conflicting intuitions. Greene examines why we say yes to the switch case while saying no to the footbridge case in trolley dilemmas. The difference between footbridge and switch scenarios is not quite large in terms of utilitarian accounts. Our intuitions tell us that the action is wrong in footbridge case, while action seems acceptable to us in the switch case. There are already conflicting intuitions in our study too. Subjects say that people are morally responsible in a deterministic universe in the concrete case, while they say that people cannot be held responsible for their actions in a deterministic universe in the

abstract case. Although concrete and abstract cases are only different from each other in terms of the role of affect, people usually give compatibilist replies to the former, incompatibilist answers to the latter. So this problem may be answered either by Greene's noninteractionist dual model or our interactionist dual model which may or may not be in conflict with Mallon and Nichols's dual vector model. We examine this below, together with other experiments that we conducted after the first phase (i.e. after the replication of Nichols and Knobe's 2007).

## **CHAPTER 4**

### **A SURVEY CONCERNING FREE WILL**

#### **4.1. Study 1**

We adopted the study from Joshua Knobe and Shaun Nichols' research and focused on the difference between subjects' responses to concrete and abstract conditions as described in 2.3. We expected to find that people would give compatibilist responses in the concrete condition and incompatibilist responses in the abstract condition. We expected to replicate Nichols and Knobe results; however, we were also wondering if there would be any cultural variation in our results, since in many ways US and Turkish people may be different.

##### **4.1.1. Participants and Procedure**

The participants of the survey have been exclusively Turkish students. Questions which we received from Shaun Nichols via e mail are translated into Turkish with comprehensible words. International students did not participate in this survey. We divided our survey questions into seven set of questions (see Appendix A No 1-7) and distributed them to our participants randomly. Survey questions are distributed randomly to 460 students. The participants were provided with one of the seven sets of questions. All participants signed an informed consent before filling out the questionnaire. The sample consisted of 460 Middle East Technical University (METU) students from different departments of which 249 (%54.1) were female and 197 (%42.8) were male. We simply repeated Nichols and Knobe's 2007 survey in a Turkish university (namely Middle East Technical University, Ankara) with mostly



freshman students from various departments from social sciences and humanities including philosophy students<sup>4</sup> to natural science and engineering departments. Mean age is 20.51 (SD= 2.736).

#### **4.1.2. Materials**

All seven sets have a manipulation text and share the first question which is about our own universe. (See Appendix A 1-7) The first three sets also share the second and third questions that are about compatibilism and incompatibilism. We expect from participants to give yes answer to the first set, no answer to the second set and again yes answer to the third set of questions. Second and third questions are used to test whether subjects understand the manipulation text or not. The first set of questions provides a long description of a concrete case, the second set abstract case, the third survey question set the shortened version of the concrete case. The fourth set involves a high-affect survey question in deterministic universe, while the fifth gives the same high-affect question in an indeterministic. The sixth and seventh sets present the same low-affect question again in deterministic and indeterministic universes. We also asked participants' gender, age, their year at the university, department, minors, whether they have taken any philosophy course before, if they have taken, how many philosophy courses they have taken so far.

#### **4.1.3. Results**

We used the software program SPSS for data input and analyses. Then, we did chi square analyses for the collected data. It can be generally said that participants are intuitive incompatibilists if emotional factors are minimized and participants are more likely to respond as compatibilists in the long and shortened version of concrete condition. 71.6% gave the compatibilist response to the long concrete case

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<sup>4</sup> Only in the case of philosophy students we had all the levels from freshman to senior with the expectation that higher level philosophy students may have different responses; however, the results, because of the relatively fewer numbers of students, are not significantly different but may suggest a small difference from other students. It is not clear whether such an interaction would change, strengthen, or weaken the intuitions.

(Appendix 1), and 86.6% gave the incompatibilist response to the abstract case (Appendix 2). In the case of the short version of the same concrete scenario as the long concrete, 40,3% gave compatibilist response (Appendix 3). In the continuing phase of the experiment (Appendix 4, 5, 6, and 7), concreteness was constant, and we gave to participants high affect and low affect cases. Then we did chi square analysis in order to see the results. It seems that there is a clear difference between the high affect (Appendix 4 and 5) and low affect cases (Appendix 6 and 7). Among participants who were asked about agents in a deterministic universe which is similar to Sets 1 and 3, a greater number of participants gave the compatibilist answer in the high-affect case than in the low-affect case. In other words, 31,7% of participants said in response to low affect that the tax cheater is fully morally responsible and 53.8% of participants said in response to high affect that the rapist is fully morally responsible. By contrast, for subjects who were asked about an agent in an indeterministic universe, 87.7% of subjects said that it is possible for the agent to be fully morally responsible in rape scenario, and %69.8 of subjects said that it is possible for the agent to be fully morally responsible in tax-cheat scenario. In summary, regardless of whether the agent was a tax cheater or a rapist, most people said that the agent is fully morally responsible in an indeterministic universe.<sup>5</sup>

Regarding the long concrete and abstract cases, Question Set 1 was about a case in which a man is murdering his wife and children and Question Set 2 was about a case in which an agent in an abstract question is presented to participants. The main question is the fourth question. See Appendix A 1 and 2. In that case, we are focusing on the fourth question asked to participants whether they think that the agent is fully morally responsible or not. If the answer is Yes to question, it can be said that the participant gives a compatibilist response to the question. If the participant's answer is No to question, we can say that she gives an incompatibilist response to the question. 71,6% of the subjects held the agent fully morally responsible in a deterministic universe (long concrete vignette: Set 1) in which the agent is murdering his wife and children. Besides, 13,4% of participants said that the agent is fully

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<sup>5</sup> A summary of all percentages together with those from Nichols and Knobe 2007 can be seen in Table 2 below.

morally responsible in a deterministic abstract vignette (Set 2) in which the role of emotion is minimized. Chi Square provides a simple test based on the difference between observed and expected frequencies. It is quite easy to understand and calculate, and a popular form of hypothesis testing. It is appropriate if all the variables are categorical. Our variables in this analysis are Question Set 1 and Question Set 2. The results show us that our null hypothesis is credible. P-value is so small ( $\chi^2(1) = 46.437$ ;  $p < 0,001$ ) and it shows that there is statistically significant difference between answers to Question Set 1 and Question Set 2. It indicates that there might be a significant difference between the answers of participants to the long concrete and abstract cases. The results suggest that most people gave compatibilist answers to the long concrete case (that is, they held the agent fully morally responsible in such a murdering scenario), while most people gave incompatibilist answers to the abstract case (that is, they did not think that an agent was fully morally responsible in a deterministic universe).

The fourth question is the differentiating question in that case. (see App for the fourth question of Question Set 1 and Question Set 3) Regarding the long and short concrete scenarios, both Question Set 1 and Question Set 3 were about an agent murdering his wife and children, but in Set 1, description of the murder was quite long and detailed. It appears that 71,6% of subjects held the agent fully morally responsible in a deterministic universe (the long concrete vignette in which the murder is described with details about the motive and method of the perpetrator). On the other hand 40.3% of subjects held the agent fully morally responsible in a deterministic universe (the short concrete vignette in which the murder is described less dramatically.) The results provide evidence for the hypothesis that affect plays a key role in generating our compatibilist intuitions. Chi Square findings show us that there is a significant difference between long and short description of the murder. P value is so small ( $\chi^2(1) = 13.355$ ;  $p < 0,001$ ), therefore, we can deny the null hypothesis that there is not a significant difference between long and short description of the murder scenario.

Regarding the abstract and short concrete scenarios, Question Set 2 involves a question in which an agent in an abstract determinist case while Question Set 3

consists of a question in which an agent commits a murder, but the description of it quite short and less dramatically. 13.4% of participants said that the agent is fully morally responsible for his action in the abstract determinist case. However, 40.3% of participants held the agent fully morally responsible for his murder in a short concrete scenario. The percentages show us that greater number of people gave compatibilist response to the short concrete case than to the abstract question. The results provide evidence for the hypothesis that affect plays a key role in generating our compatibilist intuitions. There is a significant difference between the findings of the abstract and short concrete cases. ( $\chi^2(1)= 12.306$ ;  $p<0,01$ ) People are more likely to become compatibilists when they encounter even with a question concerning a deterministic short concrete scenario. On the other hand, they have incompatibilist intuitions if they receive questions about a deterministic abstract case.

In this survey, we randomly gave participants Question Sets 4 and 5. Question Set 4 and 5 include a question about a rapist. But the scenario describes a rape incident in a determinist universe in Set 4, while the rape scenario is in an indeterministic universe in Set 5 (see these scenarios in Question Set 4 and 5 in Appendix 4 and 5). 53.8% of subjects held the rapist fully morally responsible in the deterministic universe, while 87.7% of subjects held the rapist fully morally responsible in the indeterministic universe. The significant difference between Question Set 4 and 5 shows that affect plays a key role in people's intuitions, however, in that case, the scenario is common in both question sets, what differ are the universes. ( $\chi^2(1)= 17.998$ ;  $p<0,001$ ) The results provide evidence that people become compatibilists both in the deterministic and indeterministic case, but, as expected, people have greater tendency to be compatibilist in an indeterministic universe. These results also indicate that participants can distinguish between determinism and indeterminism.

In the following case, we are focusing on determinist high affect and determinist low affect scenarios. Question Set 4 involves a question about a rapist and Question Set 6 involves a question about tax cheating. 53.8% of participants held the rapist fully morally responsible for his actions in the deterministic universe, while 31.7% of subjects said that the tax cheater is fully morally responsible for his actions in the deterministic universe. It seems that the degree of affect has an impact on people's

decisions about compatibilism and incompatibilism. The percentage of tax cheating answer is higher than the abstract case, but it is less than the short concrete vignette. It seems that affect also has a big role in people's decisions on tax cheating scenario in a deterministic universe. The more the degree of affect increases, the more reason's role decreases. There is a significant difference between the answers of our participants to the Question Set 4 and Question Set 6 ( $\chi^2(1) = 6.376$ ;  $p < 0,05$ ). It validates our hypothesis that the degree of affect has an impact on people's intuitions on compatibilism and incompatibilism.

In this case, we are concentrating on the deterministic low affect condition and indeterminist low affect condition in Question Set 6 and Question 7, both of which include questions about tax cheating. But the scenario in Question 6 takes place in a deterministic world, while the other set's vignette is about tax cheating in an indeterministic world. 31.7% of subjects held the tax cheater responsible for his action in the deterministic world, while 69.8% of subjects said that the tax cheater is responsible for his action in the indeterministic world. These results reveal how the same action is assessed differently when actions are realized in a deterministic or an indeterministic universe. The difference between Question Set 6 and Question Set 7 is significant enough to conclude that our hypothesis is tenable. ( $\chi^2(1) = 18.290$ ;  $p < 0,001$ ) How the question is formulated has an influence on people's answers. People are more likely to become incompatibilists in an indeterministic world, while they are giving compatibilist answers to questions in deterministic scenarios.

#### **4.1.4. Discussion**

In the first phase of our study, we wanted to test as to whether or not there may be any cultural differences between the results of the same survey conducted exclusively with Turkish citizens and those of Nichols and Knobe (2007). However as Table 2 indicates, although there are some differences in high and low affect results of both determinist and indeterminist cases and in the short concrete one<sup>6</sup>, the

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<sup>6</sup> We are not sure that these differences result from cultural difference; they are not so high and are not a threat to the claims of Nichols and Knobe (2007) that affect has some measurable weight on subjects' intuitions about free will.

long concrete and abstract forms are almost identical.<sup>7</sup> Therefore we can say that our results replicate Nichols and Knobe's (2007) results and vindicate their conclusions about people's free will intuitions.

Table 2

*Study 1 (Replication of the Original Study, Phases 1-2) (Nichols and Knobe, 2007)*

	Compatibilist		Incompatibilist		Sample Size
	Present Study	Nichols & Knobe (2007)	Present Study	Nichols & Knobe (2007)	
<b>Long Concrete</b>	71,6%	72%	28,4%	28%	67
<b>High Affect</b>	53,8%	64%	46,2%	36%	65
<b>Short Concrete</b>	40,3%	50%	59,7%	50%	67
<b>Low Affect</b>	31,7%	23%	68,3%	77%	63
<b>Abstract</b>	13,4%	14%	86,6%	86%	67
<b>High Affect Indeterminist</b>	87,7%	95%	12,3%	5%	65
<b>Low Affect Indeterminist</b>	69,8%	89%	30,2%	11%	63

Nevertheless it seems that from both their data and ours we may suggest a hypothesis about the psychological mechanisms that are also discussed in Nichols and Knobe (2007). We think this hypothesis suggests itself from the results, as they are exhibited in descending order as in the table above. Here we are assuming that the power of the affect created by different stories increases as, we think, the table above suggests (excluding the results of the indeterminist cases below the relatively thicker dash separating determinist and indeterminist cases). In other words, we are assuming that, from the bottom, the lowest affect which is of the abstract question goes progressively higher upward, the long concrete question at the top having the highest score. Our hypothesis attempts to explain the increasing order of affects as represented by percentages.

Greene's Dual Process Model for trolley cases is quite inspiring, for we thought the studies like Greene's about moral intuitions are relevant enough to studies like

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<sup>7</sup> We also checked as to whether sex would make a difference in responses but found none.

Nichols and Knobe's (2007), despite the fact that Nichols and Knobe's work is about the free will intuition which is a metaphysical rather than a moral issue.<sup>8</sup>

Greene is interested in the psychological and brain processes that are responsible for surprisingly different responses of subjects to two kinds of trolley cases, namely footbridge and switch (bystander). As described in an earlier part, most subjects who are presented with footbridge-style cases respond negatively to the *killing* of an innocent heavy person by pushing him in front of a trolley in order to save five other innocents, whereas most subjects are more comfortable with switch-style cases that require pulling a switch to divert the trolley onto another rail that would kill one person (that is, they would *let* one person die) but spare five. Greene and his colleagues conducted also an fMRI investigation with individuals who were subject to footbridge and switch-style cases to see what parts of their brains are activated. The conclusion was that in the negative answers to the footbridge cases (i.e. refusing to push a heavy person to save five), the center of the brain responsible for emotions was activated while in the positive answers to the switch cases (i.e. agreeing to switch the rail to save five and let one get killed), the centers of their brain that were activated are responsible for theoretical thinking or reasoning. As a result of this conclusion Greene et al. (2001) proposed, tentatively, a dual process model that reason and emotion are responsible for different responses. In other words, as a camera is switched from automatic to manual mode, these parts alternate as the trolley examples change (Greene, 2013, p.133).

As we said above, Greene's model is quite inspiring for explaining the responses of the subjects in our (and, of course, in Nichols and Knobe's) surveys to questions with affect (i.e. long-short concrete and high-low affect questions) and the question with the abstract formulation. However, differently from Greene's and as a result of increasing degrees of percentages (increasing degrees of the power of affect), we thought the emotional and theoretical parts of the brain do not work in an alternating fashion, rather they interact with each other as subjects respond to varying questionnaires (we thus call our hypothesis *Dual Interacting-Process Model*). In

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<sup>8</sup> More about why this metaphysical problem should be analyzed in this way is below.

other words, when the subjects answering the abstract question, since there is no affect, the theoretical part of the brain is mostly in control, whereas as the affect is introduced in increasing orders of power the emotional part of the brain starts to take part in the game interacting *somehow* (we do not know how this interaction works) with the theoretical part, thus resulting in an answer that has greater probability of being compatibilist in contrast to very high probability of incompatibilist answer when the abstract question is answered. In the case of the long concrete question which we think has the highest affect, the probability of a compatibilist answer is also the highest (around 72%). This high probability of compatibilist answer follows from the interaction of reason and emotion, but this time the *negotiation* between these two parts may be resolved, with very high probability, in favor of a compatibilist answer. In the abstract case, the negotiation has a much higher probability to be resolved in favor of an incompatibilist answer (86%). So it seems that this dual interaction can explain the increasing order of values in the surveys.

As discussed above, Mallon and Nichols (2006) objected to Greene's and others' dual models that over-emphasize emotions in forming moral judgments and proposed a rule-based model instead. But Nichols and Mallon or others *never* mention any relevance of these models to free-will intuition studies like Nichols and Knobe's 2007 study. But, *why not?* That question that was hanging there was really disturbing. So let us here discuss the possible objection, summarized earlier, that Greene's model which was proposed to explain moral intuitions is no good for other kinds of intuitions, including the intuition about free will. First of all, in trolley-like cases, the participants are expected to make moral judgments whereas in, for instance free-will cases, participants are expected to make metaphysical judgments. Nevertheless, as Nichols and Knobe (2007) expected and found, affects may have impact on free will judgments as well. These affects may be working by triggering emotions in subjects to turn them from incompatibilism to compatibilism. We should mention a concern here: in Nichols and Knobe's original study, the subjects were not subject to an explicit free will question but they were asked if the person (whether in abstract or in a specific story) in question is morally responsible for his/her acts. The reason for this replacement of free will by moral responsibility is explained by them (Nichols & Knobe, 2007) that for the lay people it is difficult to understand such



metaphysical notions as determinism and free will but since for many people moral responsibility requires free will this moral notion should do the work. We think although there may be problems with this approach (Moss, 2017), for our problem here it is irrelevant, because we are concerned as to whether studies inquiring metaphysical issues concerning moral decision making, like that of Nichols and Knobe (2007), can be analyzed in terms of Greene's dual process model.

Related with the replacement of free will with moral responsibility notion, in the concrete questions, Nichols and Knobe present some moral problem sneaked into the metaphysical question. In other words, by the abstract question, subjects are probed more directly for their metaphysical intuition about the compatibility of determinism and free will; however, in the concrete questions the metaphysical problem is wrapped up in a moral problem which carries the affect. (Whether this is a good idea is beyond the limit of this study). So by this way also, we think, the free will investigation becomes more accessible by the dual process model. To put it the other way around, the dual process model becomes relevant to the analysis of free will investigation. Now, in this way we can approach this survey from a different angle. We said that those who get the abstract question understand it as a metaphysical problem, "is free will compatible or incompatible with determinism?" and responds accordingly, incompatibilism or compatibilism. However, since in the concrete questions this metaphysical problem is wrapped up in a moral question we have the following: such and such a person committed a crime (murder, rape, tax fraud), then is he morally responsible for this crime *considering* that he is in a deterministic universe?

It is possible that participants understand this question as a moral *and/or* metaphysical question. Their metaphysical answers would be affected by their detection of the moral issue depending upon the power of the affect. Assuming that they clearly detect the metaphysical question here (we think the second and third phases of our survey actually measure this) and assuming again that they would give an incompatibilist answer which seems to be the default position<sup>9</sup>, now they face a

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<sup>9</sup> Sarkissian et al. (2010)'s experimental research reveals that there might be a kind of pattern in people's intuitions about free will and moral responsibility. Majority of subjects from four different

tension between their incompatibilist position and their emotional response to the moral question (murder, rape, etc.). Let us suppose that they tend to find someone committing such a crime fully morally responsible. Then they have to choose between their metaphysical judgment and moral tendency. If they vote for in favor of incompatibilism, because they want to be consistent they have to disregard their moral tendency. However, around 72% of people who get the long concrete question give a compatibilist answer. This means that they vote in favor of their moral tendency (emotions) and do not care some much about consistency. 28%, however, chooses to be consistent, even if they had emotional uprising.

This is of course one possible explanation of what may be going on with the participants in their decision process. If our Dual Interacting-Process Model is correct there may be something quite like the above description. The conflict between reason and emotion is solved, for instance in the case of the long concrete question, in favor of compatibilism with the probability of 0.72. Of course, we do not know how this interaction process works.

It appears that Greene, et al.'s Dual Process Model and our Dual Interacting-Process Model, are not the only options for explaining the psychological processes behind moral/metaphysical judgments. As described earlier, Nichols and Mallon (2006) designed some impersonal versions of the footbridge and switch style cases in reaction to the personal and impersonal distinction by Greene, et al. (2001) who argue that footbridge-style cases are personal as opposed to switch-style cases that are impersonal, because the former rather than the latter generate emotions in subjects that induce automatic responses. Nichols and Mallon's impersonal *non-moral* scenarios with minimal emotional content are intended to show that rules may also be responsible for automatic responses by reproducing the asymmetry between responses to footbridge and switch cases. These cases are about some children's toy trains that would run over five teacups, unless, in order to stop the model train, either *a* teacup is thrown at the train or a switch is pulled that would change the track of the

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countries said that our universe is indeterministic and moral responsibility is not compatible with determinism. (Sarkissian et al., 2010)

train moving toward five tea cups to another track that leads to a single teacup. Although there may be utilitarian calculations available in decision making process there is also an explicitly stated rule (Mom's Rule: "You are forbidden from breaking any of the teacups that are on the counter") (Nichols & Mallon, 2006, p. 534) that forbids the kids from breaking any of the teacups. In this survey they asked several adult participants two questions about the impersonal versions of the footbridge and switch cases, in addition to the questions about the original ones: whether the kid who smashes a teacup either by throwing it at the model train or by diverting the train toward a teacup *breaks* her mother's rule (weak permissibility) and, all things considered, whether it is *wrong* to smash a teacup, in order to save five (all-in permissibility). A greater number of participants in the impersonal footbridge case than in the impersonal switch case said that the rule was broken. But more important consequence of this survey is that the participants differentiated between breaking a rule and judging that the act is wrong by saying that although the big sister breaks Mom's Rule by throwing the teacup, what she does, all things considered, is permissible (all-in permissibility). Nichols and Mallon compares this with the responses to the personal footbridge case where the participants' responses clearly show that pushing the heavy man breaks a rule (weak impressibility) *and* it is *wrong* to push him to save five other people (all-in impressibility). This means that the rule *determines* what is right or wrong in the personal footbridge case but not in the impersonal footbridge case. What happens here is that in the impersonal case the *rule* is appealed to for weak impressibility but *utilitarian calculations* are appealed to for the judgment of all-in permissibility (so this case is both "deontological" and "utilitarian"), whereas in the personal case, the rule determines wrongness of the act (so this case is only "deontological").

We agree that this study shows very nicely how rules work in making judgments and how rules "interact" with utilitarian calculations (that is, reasoning process on the basis of a rule "interacts" somehow with reasoning process doing utilitarian calculations). Of course, both are processes of reason, and no emotions are involved. According to Mallon and Nichols (2010), in the case of personal footbridge case, the moral decision making results from the interaction of emotions and reason (rule-based reasoning) while, in the impersonal footbridge case, the decision (which is not

a moral one, of course) comes from the assessment of rule-based and utilitarian thinking (both reasoning processes). In the personal footbridge case, although there is a possibility of utilitarian thinking, emotions suppress this thinking by supporting rule-based thinking. That is why Nichols and Mallon (2006) call it “affect-backed rules: our all-in judgment to footbridge-style cases is a product of emotions and reason. Emotional responses elevate the rule above the utilities. But the rules play an essential role in everyday moral judgment” (p.540).<sup>10</sup> The lesson we learn from the results of impersonal cases is that rules may have an important role to play in the free will surveys as well. So below we will consider also the rule-based thinking for our and Nichols and Knobe’s (2007) results.

First of all, we should emphasize that there are no utilitarian calculations available to participants responding to free will questions (so these cases are *non-utilitarian*) and concrete questions have affect components (so emotions or moral intuitions seem to be produced/triggered by affects). The question here is whether judgments about (in)compatibilism are the consequence of an assessment process of two rule-based reasoning (namely, metaphysical reasoning and moral reasoning) and how emotions are involved in the decision making process. Here is our description of the psychological process behind the decision making process for metaphysical judgments. Participants responding to concrete questions may be assessing the metaphysical question (is free will compatible/incompatible with determinism) in the presence of a moral question (for instance, is the act of killing as described wrong, for the long and short concrete questions), since the question describes an obvious violation of a moral rule, “murder is wrong”.<sup>11</sup> So for the moment, assuming that

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<sup>10</sup> Nichols and Mallon (2006) conducted another survey, Catastrophic Footbridge Case, in order to show that affect-backed rules need not always suppress utilitarian thinking. In this example, pushing a heavy person off the footbridge in front of a train that carries some virus that can kill billions of people, if the virus is released, will prevent the train from hitting a bomb on the rails and from releasing the virus. In this case, people responded that pushing the stranger breaks a moral rule but most of them stated that the act of pushing is the right thing to do. So this example indicates that, if the affect backing the moral rule is balanced by another affect, the killing of billions backing utilitarian thinking, people take into account the utilitarian calculation which is also a reasoning process.

<sup>11</sup> Since we didn’t measure response times and students had time to respond (it took five to ten minutes to fill out the surveys) and, in fact, some students explained their responses on questionnaires, students might have used their time assessing possible responses. But, of course, this doesn’t mean that affect didn’t produce any emotions in the participants or responses were not automatic.

most participants were aware of the metaphysical question within the moral question; assuming also that they would give incompatibilist answer to the abstract question, then they had to decide between their incompatibilist tendency and moral evaluation or intuition about the crime committed that violates the rule or the intuition that murder is wrong. As we know, around 72% of the participants give compatibilist answer. We think, what happens here is that the moral rule backed by affect (read it as emotions) persuades participants toward a compatibilist response. In other words, the moral rule trumps the metaphysical tendency (a reasoning process). We can even say perhaps that the dilemma for the participants is deciding between being consistent with their incompatibilism (a metaphysical problem) and their negative attitude towards the violation of an important moral rule or moral intuition. Either way, it seems that moral rules may play a role but this role is emphasized by the affect, because as the affect is reduced by changing stories in the questions from the description of a horrific murder to cheating on taxes, compatibilist responses drop quite dramatically. It shows that rules work with affects: Nichols and Mallon's (2006) affect-backed rules, mentioned above. Therefore we think that free will surveys can be analyzed similarly as trolley cases, both personal and impersonal ones. So Greene's Dual Process Model or Mallon or Nichols (2010) Dual Vector Model or our Dual Interacting-Process Model *may* explain both moral and metaphysical intuition studies.

## **4.2. Study 2**

In order to test this interactionist hypothesis, we decided to extend our surveys to directly measuring/observing a possible interaction between reason and emotions and also observing possible order effects. In this second phase of the experiment, we decided to give abstract and concrete questions (the fourth questions in Sets 1 and 2) together but in different orders. One group would receive questions in abstract-concrete order and the other group in concrete-abstract order. (79 participants received questions in abstract-concrete order, and 80 participants received questions in concrete-abstract order.) We expected to see that both abstract and concrete questions would have some effect on the following question. In other words, we expected that reason and emotions would interact so that both compatibilist and

incompatibilist responses get lower than Study 1. (By the way, we kept only the first question of Study 1, that is, the one about our universe being a deterministic or an indeterministic universe, and eliminated the next two questions testing the comprehension of determinism and indeterminism by the subjects).

Since in these questionnaires the subjects received both questions together on the same sheets (though the second questions were printed on the back of the sheet) with another group we tried something else which is, however, more difficult to manage. In this one, we first gave abstract/concrete question and then collected these sheets after students responded and then gave concrete/abstract question so that they would not have a chance to change their earlier responses. 77 subjects received first the abstract question, and then responded the concrete question, while 53 subjects received the concrete question first, and then responded the abstract question.

#### **4.2.1. Participants**

The participants of the survey have been exclusively Turkish students. All participants signed an informed consent before participation of the survey. The sample consisted of 289 Middle East Technical University (METU) students from different departments. 159 students were juniors from civil engineering department, 77 students were juniors from psychology and 53 juniors from sociology departments.

#### **4.2.2. Materials and Procedure**

The participants were provided with a questionnaire. As said above, the concrete and abstract questions were presented to them in two different orders (that is, abstract-concrete to one group and concrete-abstract to the other group). We divided our survey questions into four different ordered question sets. All sets have a manipulation text and share the initial question which is about our own universe. What is different in the ordered sets is the order of the second and third questions (see Appendix A 8 and 9 ). In the ordered sets 8 and 9, we gave abstract and concrete

questions together to participants, but we changed the order of abstract and concrete questions. Then, we gave our participants first the concrete question, we gathered the answers, and then we distributed the abstract question to our participants. In another ordered set, we gave our participants first the abstract question, we collected the answers, and then we gave the concrete question to our subjects. We again collected the same data on students' demographic information.<sup>12</sup> In order to test our hypothesis, we decided to continue our surveys by testing for order effect. For this phase (STUDY 2), we decided to use only the long concrete and abstract questions in varying orders (i.e. abstract-concrete and concrete-abstract). Table 3 summarizes the results of STUDY 2.1 where we prepared two kinds of questionnaires: in the first one ("CE" in Table 3) we ordered the concrete and abstract questions on the same side of the sheet (of course, in both directions, from abstract to concrete and from concrete to abstract orders). The reason for measuring the order effect is thus: If we are right about our Dual Interacting-Process Model, we should be able to observe order effect by responses only to two questions rather than the whole bunch in STUDY 1 and that the observation of order effect indicates to an interaction between abstract and concrete responses, thus reason and emotion respectively. The reason why we selected the long concrete and abstract questions rather than the others is that these two questions, we think, represent emotional and theoretical processes of the brain the best. By presenting these two questions together we were expecting to find changing values in compatibilist and incompatibilist responses which would be evidence for an interaction between these two parts of the brain.

#### **4.2.3. Results and Discussion**

In Table 3, we summarize responses to abstract and concrete questions. "Yes" responses about moral responsibility (i.e. free will) in a deterministic universe are indicated as "Compatibilism" ("comp" for short) and "No" responses are indicated as "Incompatibilism" ("incomp" for short). The left-hand side of the table presents responses in the abstract-concrete order while the right-hand side presents the

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<sup>12</sup> We have given demographic information page to our participants in our survey. You can see this page in Appendix 1. All of the participants have been received this page in all phases of the surveys.

concrete-abstract order. The percentages on the left side as compared to those in Table 2 are interesting: the incompatibilist response to the abstract question goes from 86,6% in Table 2 to 81% in Table 3; however, the compatibilist response to the concrete question changes from 71,6% to 54,4%. Although both questions are on the same side of the questionnaires, the reasoning process required to answer the abstract question seems to remain unaffected by emotions that are expected to be triggered by the concrete question and seems to suppress or, perhaps, neutralize emotional effect while answering the concrete question (because the compatibilist answer to the concrete question is only 54,4%). On the right-hand side, it is almost the same (incompatibilism for abstract 80%, compatibilism for concrete 60%). This means that there is no order effect. However, we think the above-mentioned “dominance” of the reasoning process over the affective process is evidence for an interaction, though asymmetrical, between reason and emotion.

Table 3

*Study 2.1 (CE: The long concrete and abstract questions on the same side of the sheet but in varying orders. Norevision: The recalculated data excluding revisions in questionnaires by some participants)*

	ABSTRACT-CONCRETE				Sample Size	CONCRETE-ABSTRACT				Sample Size
	ABSTRACT		CONCRETE			ABSTRACT		CONCRETE		
	comp	incomp	comp	incomp		comp	incomp	comp	incomp	
<b>CE</b>	19%	81%	54,4%	45,6%	79	20%	80%	60%	40%	80
<b>norevision</b>	16,5%	83,5%	55,7%	45,3%	79	22,5%	77,5%	72,5%	27,5%	80

Since in these questionnaires the abstract and concrete questions are printed on the same side of the question sheets, though in varying orders, we examined the questionnaires for possible revisions (i.e. traces of erasing, etc.) by the participants. As we expected there are quite a few revisions. Hence we counted these revisions and produced new percentages that are reproduced in Table 3, on the second, shaded, row. The revisions do not change the abstract-concrete order but make a significant difference in the concrete-abstract order. It seems that some participants first gave a compatibilist answer to the concrete question, moved to the abstract question, gave an incompatibilist answer and then returned to their compatibilist response and changed it. We think this is not surprising since we measured compatibilist response to the concrete question as 71,6% in STUDY 1. It appears that there would be an order effect not reflected on the first row in Table 3, if these revisions had not been



made. The fact that these participants changed their original responses suggests that there is interaction between reason and emotion: first, the participants gave compatibilist answer because, in virtue of the affect, they intuited or interpreted the question as a moral question but, later, upon the reading of the abstract question, their moral intuition (emotion) is suppressed or neutralized or they realized that it is a metaphysical question, thus went back to change their answers.

As said before, when subjects are presented with the abstract question and various forms of concrete questions in STUDY 1 (and also in Nichols and Knobe's 2007) there are always some responses in the minority positions. For instance, in the abstract inquiry, around 86% of people are incompatibilist but there are also 14% of people who seem to be compatibilist, while in the long concrete case 72% percent are compatibilist but there are 28% of responses in the incompatibilist mode. Who are these people? Why are not they "enchanted" by the murder story in the concrete question, as most others are? Why are there those people who insist in compatibilism even thinking abstractly? Do they have very strong "intuitions" or "prejudice" that do not fall prey to the "trick" in the survey? Or are they just those people who do not pay attention to or care about survey questions? It occurred to us that since we asked both questions to the same individuals we have a chance for a more refined analysis of the compatibilist and incompatibilist responses that may shed light on these questions.

In Table 4, we summarize this analysis by four possible responses of the subjects to abstract and concrete questions on both directions. We think those who say yes to both questions (i.e. abstract *and* concrete) are *hard compatibilists* (19,0% on the left side and 18,8% on the right side) because they do not change their compatibilist attitudes even when they respond to the abstract question. Those who say no to both questions are *hard incompatibilist* (45,6% on the left side and 38,8% on the right side) because they are somehow resistant to the effect of the concrete question. The third class is *persuasible (reasonable) compatibilist/affect-prone (emotional) incompatibilist* (41,2% and 35,4% respectively) because they seem to have more flexible attitudes that are revised from incompatibilist (abstract) to compatibilist

(concrete) (*affect-prone incompatibilist*) or from compatibilist (concrete) to incompatibilist (abstract) (*persuasible compatibilist*).<sup>13</sup>

Revised numbers mentioned above also produce a significant difference on the concrete-abstract direction (the shaded part in Table 4). By these revised values, we see that persuasible compatibilism is significantly higher (51,4%) and hard incompatibilism is similarly lower 26,3%. This also shows that some participants revised their position after they read the abstract question. This also confirms our suggestion that the abstract question (reason) has greater authority on the concrete (emotions) than the other way around. But, of course, this authority is not valid for everyone, for the affect still has some significant power on others, as Nichols and Knobe (2007) argued originally.

Although we distinguish these different forms of compatibilism and incompatibilism, frankly, we are not sure about the significance of this for the free will intuition or perhaps the methodology of these surveys. For instance, are the participants who are hard compatibilist or incompatibilist immune to influence because of their characters or religious/philosophical convictions? We do not have evidence to answer this question.

Table 4

*Study 2.1.1 (The proportions in percentages for finer-grained classes from STUDY 2.1: hard compatibilist, hard incompatibilist, persuasible (reasonable) compatibilist and affect-prone (emotional) incompatibilist attitudes)*

	ABSTRACT-CONCRETE		No Revision	CONCRETE-ABSTRACT		No Revision
<b>YES - YES</b>	19,0%	hard compatibilist	16,5%	18,8%	hard compatibilist	21,3%
<b>YES - NO</b>	0,00%	failed to comprehend		41,2%	persuasible (reasonable) comp.	51,4%
<b>NO - NO</b>	45,6%	hard incompatibilist	44,3%	38,8%	hard incompatibilist	26,3%
<b>NO - YES</b>	35,4%	affect-prone (emotional) incomp.	39,2%	1,2%	failed to comprehend	

<sup>13</sup> On the abstract-concrete direction, no-yes order gives the affect-prone incompatibilism whereas, on the concrete-abstract direction, yes-no order the persuasible compatibilism. Although above we differentiate between these two types of incompatibilists and compatibilists they are, in a way, quite similar attitudes that we sometimes treat them in the same sense in some of our interpretations below.

In STUDY 2.1, the survey included abstract and concrete questions in the same questionnaires in order to observe the predicted interaction by our hypothesis between emotion and reason. Although we ordered the abstract and concrete questions in the questionnaires, no significant order effect as appeared in Table 3 has been detected but some order effect is detected in Table 4 (taking into account the figures in the shaded area). One reason for not detecting any significant order effect may be the result of both questions being on the same questionnaires.<sup>14</sup> The subjects were allowed to revise their positions as they respond to questions. That is why we decided to go another round of our surveys. This time, in order to hand out abstract or concrete questions and collect them and to hand out the second set (abstract to those who had concrete question and concrete to those who had the abstract question), we printed abstract and concrete questions on different sheets and also enumerated these sheets so that we can match the responses of the same individuals.

In the second round of STUDY 2 (Study 2.2, Table 5), we handed out either the abstract or the concrete question to participants and collected them in the first phase; in the second phase that comes right after the first phase, we handed out the abstract to those who got the concrete at first and the concrete to those who got the abstract first. We also enumerated the abstract and concrete questions in order to keep track of the responses of two different questions by the same participants. By this method, we intended to isolate the interaction between the abstract and concrete questions in one direction at a time. In other words, we wanted to observe the effect of the abstract on concrete and the concrete on abstract, if any. So the subjects would not have the chance to go back and change their marks on the sheets once they made their decisions either on the abstract or concrete. By this “one-way” direction, we could control the effect of one type of questions (for instance, abstract) over the other type (for instance, concrete) without the interference of the reverse effect, in order to see both order effect and interaction between emotion and reason.

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<sup>14</sup> That is why the revised values in Tables 2&3 are important because they indicate to some order effect if the participants had not had the chance to revise their first responses, especially, to the concrete question.

Table 5, summarizes these results. In the direction from abstract to concrete, as we expected, we get exactly the same result for incompatibilist responses to the abstract question (87,0%) as in Table 2. However, responses to concrete question are dramatically lower, 40,3%, which is 71,6% in STUDY 1 (shown in Table 2). It seems that being exposed to the abstract question first has significant “effect” on subjects’ responses to the concrete question, as we discussed above. In other words, the effect of the murder story in the concrete question loses its spell on a number of subjects. In this way, perhaps we allowed the subjects to think more “theoretically/abstractly” when they were exposed to the concrete vignette after the abstract question. But, of course, some of them, still an important number (40,3%), are compatibilist.

**Table 5**  
*Study 2.2 (For one group, the long concrete question is handed out first and collected in the first phase which is followed by the second phase with the abstract question. For another group, the abstract came first and then the concrete followed. The subjects are tracked by enumeration)*

<b>ABSTRACT-CONCRETE</b>				<b>Sample Size</b>	<b>CONCRETE-ABSTRACT</b>				<b>Sample Size</b>
<b>ABSTRACT</b>		<b>CONCRETE</b>			<b>ABSTRACT</b>		<b>CONCRETE</b>		
<b>comp</b>	<b>incomp</b>	<b>comp</b>	<b>incomp</b>		<b>comp</b>	<b>incomp</b>	<b>comp</b>	<b>incomp</b>	
13,0%	87,0%	40,3%	59,7%	77	15,1%	84,9%	73,6%	26,4%	53

In Table 5, the results for the concrete-abstract direction indicate that the concrete question has no impact on the responses to the abstract question. In other words, being exposed to the murder story does not change the answers of the subjects to the abstract question. In STUDY 2.1, we already observed this asymmetry but here it is exhibited more powerfully than there. It means that we can arouse the emotions of a significant number of subjects (73,6%) when we expose them to the murder story but this heightened emotional state doesn’t endure to influence their incompatibilist response (84,9%) when they are exposed to the abstract question. So they seem to be making their decisions as if they were switching very easily to theoretical mode from the amplified emotional mode. Is that really so? We can test this by classifying the responses of individuals in terms of hard, affect-prone and persuasible forms of (in)compatibilism.

Table 6 compares responses of subjects as hard, affect-prone and persuasive compatibilists and incompatibilists by also taking into account possible order effect. Let's start with hard compatibilists. We think 10,4% in the abstract-concrete direction (the left side of Table 6) gives us the *base line* for hard compatibilists, for these are compatibilists even when they are exposed to the abstract question first. These subjects, even when they are thinking abstractly (that is, without the effect of the murder story), seem to be determined compatibilists. On the right hand side, hard compatibilism increases to 15,1%. This change might be showing the impact of the concrete vignette, which is in conflict with the results in Table 5 where the concrete doesn't seem to have any effect on the abstract (but, of course, numbers are not so different to be significant).

Table 6

*Study 2.2.1 (The proportions in percentages for finer-grained classes from STUDY 2.2: hard compatibilist, hard incompatibilist, persuasive (reasonable) compatibilist and affect-prone (emotional) incompatibilist attitudes)*

	<b>ABSTRACT-CONCRETE</b>		<b>CONCRETE-ABSTRACT</b>	
<b>YES - YES</b>	10,4%	hard compatibilist	15,1%	hard compatibilist
<b>YES - NO</b>	2,6%	failed to comprehend	58,5%	persuasive (reasonable) comp.
<b>NO - NO</b>	57,1%	hard incompatibilist	26,4%	hard incompatibilist
<b>NO - YES</b>	29,9%	affect-prone (emotional) incomp.	0,0%	failed to comprehend

On the right hand side of Table 6, hard incompatibilists are 26,4% which, we think, is the base line for incompatibilism (*harder/more persistent* incompatibilists). For some reason, they are immune or resistant to the effect of the concrete question. It doubles (57,1%) on the left side of Table 6, when the order is from abstract to concrete (order effect). The abstract question should be responsible for this increase.

On the left side, 29,9% of the participants give incompatibilist response to the abstract question, but they become compatibilist when they respond to the concrete question (*affect-prone* incompatibilists). On the right side, on the other hand, 58,5% of the participants are compatibilist in the concrete case but they turn into incompatibilist when they get the abstract question (*persuasive* compatibilists). First of all, the change in these forms shows clearly that there is an order effect. Then we can conclude that although Table 5 also shows an order effect, Table 6 gives the details of this order effect.

#### 4.2.4. Overview, So Far

Intuitions of people and their pervasiveness can be subject to empirical investigation. Nahmias et al. (2004, 2005) suggested that ordinary people have compatibilist intuitions. They gave participants descriptions of a person in a deterministic universe. They also repeated their survey by varying determinism different descriptions. Evidence regarding people's intuitions as natural compatibilist or incompatibilist is variable. By conducting five experiments, Feltz & Millan (2015) concluded that people do not confuse determinism with fatalism. They also think the results about folk intuitions support neither compatibilism nor incompatibilism. Feltz & Millan further argue that there is no difference between Nichols & Knobe's and Nahmias et al's determinism scenarios. Judgments of freedom and moral responsibility were lower in fatalistic scenarios compared to deterministic scenarios.

Two conflicting camps concerning free will compete with each other. The Nahmias group holds that the folk are natural compatibilists while Nichols & Knobe argue that people are natural incompatibilists.<sup>15</sup> Feltz, Cokely and Nadelhoffer (2009) suggest that there is more empirical support for affective performance error model, tentatively suggested by Nichols and Knobe (2007). They argue that there is not one monolithic folk concept of moral responsibility. However, participants in Nichols and Knobe's experiments were only asked questions about moral responsibility and not free will. They should have been asked about free will as well.

Feltz & Cova (2014) say that "a meta-analysis to estimate the impact of affect" is needed to be done. (p. 234) They point to a lack of replication of high and low affect cases which were designed to test performance error model suggested by Nichols and

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<sup>15</sup> One of their more recent works (Sarkissian et al., 2010) questions whether the belief in free will, i.e. incompatibilism, is a cultural universal. They did a cross-cultural study examining intuitions about free will in subjects from different countries. They found a cross-cultural convergence in four cultural groups and what their study revealed matches with the results of our survey that we have conducted with Turkish subjects. (The survey that we have conducted might be thought as a cross-cultural study of intuitions about free will which supports this cross-cultural convergence of our moral intuitions about free will.) 231 undergraduates from four different countries participated to their survey. Incompatibilist responses range from 82% of subjects in the United States sample, 85% in the India sample, 65% in the Hong Kong sample, and 77% in the Colombia sample. (Ibid., p. 352).

Knobe. Feltz and Cova also propose that there is no reliable difference between the scenarios used by Nichols & Knobe (2007) and Nahmias et al. (2007) If the affective performance error model introduced by Nichols and Knobe is correct, they expect to find an order effect. Feltz and Cova focus on the existence and the size of this order effect.

To understand free will and moral responsibility deeper, experimental philosophy offers new ways to us. Natural compatibilism or natural incompatibilism camps conflict with each other, and there is various experimental evidence for each of these camps. Choosing one from Nichols & Knobe or Nahmias et al.'s group is not easy. Nichols and Knobe emphasize the performance error model to explain the tendency for natural incompatibilism. Dual theories are also an option to disclose the dispute between natural compatibilism and natural incompatibilism. We should need some criteria in choosing theories, between performance error model and dual theories. According to Kuhn (1962), a theory should be simple and fruitful of new research findings. Choosing between competing theories leads us to reach different conclusions. For instance, I may be interpreting simplicity criteria differently from other scientists. We should oversee beyond the list of criteria proposed by Kuhn. My individual choice between competing theories such as dual process models or performance error model depends on objective and subjective factors. Which one of dual theories or performance error model is more cogent depends not only objective factors, but also subjective factors such as individual biography and personality. Kuhn advises us to consider limitations of objectivity in theory choice. Choosing between competing theories between dual models and performance error model is not so simple.

Mapping folk intuitions has been used by philosophers and psychologists to study people's intuitions about various philosophical issues. Both Nahmias group and Nichols group presented subjects a deterministic scenario and then participants are asked whether an agent in that deterministic scenario is or should be morally responsible. Björnsson (2009) judges from Nichols' results that different ways of asking about responsibility in deterministic scenarios can trigger contradictory intuitions. On the other hand, he also mentions Nahmias' and his colleagues'

hypothesis that, when subjects take responsibility to be undermined in deterministic scenarios, this is because they take agents' beliefs, desires, and decisions to play no role in bringing about actions. Agents' deliberative or agential capacities are bypassed. Nahmias, Coates and Kvaran (2007) suggest that subjects are willing to attribute moral responsibility when deterministic causation of actions were described in psychological terms, but they are more reluctant when scenario was described in neurological terms. It seems that both incompatibilist and compatibilist theories of moral responsibility have experimental evidence from several studies. Disagreement among philosophers about our mundane intuitions indicates that it is not very easy to determine ordinary people's default position. Nahmias and his colleagues (2005) claim that compatibilists or incompatibilists cannot both be right. They emphasize that they are not aiming at resolving the free will problem by discovering folk intuitions. We agree with them on asking why people have the intuitions they do about free will is a noteworthy question accepting that surveying intuitions about free will and determinism lead us to other difficult problems. Hoping to see further research, Nahmias and colleagues (2005) argue that people do not understand the concept "determinism" in the technical way philosophers do. Ordinary people understand determinism in relation to free will. They used several determinism scenarios to test their hypothesis. They claim that the moral status of an action, and any emotional responses it evokes, have no significant effect on judgments of free will. They say that their studies suggest that people's intuitions about free will and responsibility do not support incompatibilism. Although they used more salient determinism scenarios in their studies, subjects might still comprehend the determinism as philosophers do. Describing determinism in a salient way is a challenge on its own. They recommend us to understand folk intuitions concerning free will and responsibility better.

Nahmias, Coates and Kvaran tell that they do not think that experimental evidence about folk intuitions can provide certain answers to these philosophical debates such as free will and moral responsibility. The evidence is seen as a catalyzer that may be used to improve a philosophical position. They replicated Nichols and Knobe's study, and questioned if the performance error model is the optimal way to interpret the influence of affect on people's judgements of responsibility. They think that



determinism does not suggest this bypassing threat which was introduced by Nahmias and his colleagues, because determinism doesn't imply that our deliberations are causally irrelevant to what we do. They differentiate two types of incompatibilism: Mechanism Incompatibilism and Pure Incompatibilism. They also argue that people mostly have Mechanism Incompatibilism intuitions rather than Pure Incompatibilism intuitions.

How determinism is described has an impact on people's intuitions. If a scenario presents determinism in a way that leads people to adopt the mechanistic stance toward an agent, then people are less likely to attribute free will and moral responsibility toward the agent. On the other hand, if determinism is presented in a way that leads people to interpret an agent's conscious deliberations, values or goals, then people attribute free will and more responsibility (Nahmias, Coates & Kvaran, 2007, p. 222). Nahmias, Coates and Kvaran used eight scenarios in their experiments varying by the following considerations: 1) whether the universe is described as our actual world or a similar alternate world; 2) whether the agents are described abstractly or a particular agent is described performing a concrete bad action or good action; 3) whether determinism in the scenario is described in neuroscientific or psychological language. According to the results of this study, they found that how a deterministic scenario is described either in neuroscientific or psychological language has an influence on free will and moral responsibility judgments. People are more inclined to give compatibilist responses in the psychological real world scenarios. Determinism might be misrepresented in a way that leads people to take a mechanistic stance toward situations. This kind of experimental projects is worthwhile for philosophical debates about these topics. They suggest revisionism about free will by a revision of ordinary people's understanding of the mind, consciousness and rationality.

Nahmias and his colleagues argue that people confuse determinism with bypassing. However, Rose and Nichols (2013) say that these studies suggest that bypassing results do not show a confusion but rather the depth of the incompatibilist intuition. (p. 559) They pose the question of why people do not confuse physical events. They ask why people make bypassing judgments about just mental states. Murray and

Nahmias (2010) used a statistical technique- mediation analysis- to advance the Bypassing Model. In this analysis, a causal direction functions as a postulate. The causal relationship between Bypassing and Moral Responsibility/Free Will is unclear. Rose and Nichols used another model which indicates that determinism directly causes moral responsibility/free will and that moral responsibility/free will causes bypassing. They tested whether the Bypassing Model fits the data and found that it should be rejected.

Nahmias group argue that people's default position is compatibilism while Nichols' group suggesting that people are natural incompatibilists. In a sense, they cannot both be right at the same time. Surveying intuitions about free will will generate interest in further research. I have said that choosing between dual models or performance error model is quite difficult to explain people's intuitions, but I favor dual models to performance error model due to various reasons. Nahmias group's ideas and results moved me toward dual models. People's responses to thought experiments might be valuable for us to make philosophical fictions, and Greene's discussion of footbridge and bystander case really resemble the idea behind Nichols and Knobe's abstract and concrete cases in which they are keen on to determine the role of affect. Yet still, I should say that we do not aim to resolve the free will problem and paradox we face in bystander and footbridge case. To resolve these paradoxes, philosophers appeal to intuitions according to Armstrong. We can use Nichols' or Nahmias' group's results to undermine the intuitions on one side of a paradox, and to support the other side. As Armstrong offers, we should try to understand such paradoxes and intuitions rather than to resolve them or to undermine other intuitions. The paradox of free will/moral responsibility persists among common folk like among professional philosophers. I have no reason to prefer performance error model to dual models. It is so hard not to choose a model between dual models and performance error model. Preferring a model among other models keeps you away from the pit of skepticism and it is more adoptable for practical ordinary life. It is more like making more concrete decisions and having a strong, useful position to enhance your theories. The most important personal motivation behind my choice of dual interaction model is plainly that I want to understand and explain free will/moral responsibility issue. I do not have a claim for or against

natural incompatibilism/natural compatibilism. Of course, I mentioned several experimental evidence to differentiate them, and I should say that Nichols and Knobe's study was intriguing enough for me to choose performance error model two years ago. But now, I decided that my results that I reached based on Nichols' experimental evidence for performance error model is not enough for me to hold a particular belief about free will/moral responsibility. Further experimental evidence and investigation of various philosophical topics can capture us on the bubble. Though now, I am willing to take a stance on the side of dual interaction model to understand and explain the free will problem more deeply by saying that it doesn't mean that I can choose another more simple theory to others one day. Robert Stam says that unanswerable questions are worthwhile due to see that the path we follow in answering them. Stam's main interest is film theory and he mentions that film theory can procreate productive mistakes and bad successes. Robert Stam's stance on film theory really depicts what I am thinking about experimental philosophy. I find valuable keeping in asking philosophical questions even if we know that there is not definitive answers.

## CHAPTER 5

### DUAL INTERACTION MODEL OF MORAL INTUITIONS

We have so far, almost exclusively, followed the footsteps of Nichols and Knobe (2007) by repeating their experiments (Study I & II) with Turkish students in order to see the effect of culture, if any, in these experiments, except, of course, in our attempt to measure order effect on compatibilist and incompatibilist intuitions. We have found evidence for order effect. It seems, however, that there is no cultural effect at all. Our measurements indicate that Turkish students are not different (in a statistically significant way) from American students in their compatibilist and incompatibilist intuitions as explained in the previous chapter.

In this chapter, we present another set of data (graded scale rather than categorical one in the answers to questions) and discuss the significance of this data regarding the psychological mechanism that may play a role in students' responses to abstract and concrete cases. In order to understand why we chose to revise Nichols and Knobe's experiments from categorical measurement to scalar measurement we have to take a look at Joshua Greene's experimental work on trolley cases (basically footbridge and switch cases) that were first formulated and discussed by Philippa Foot in 1967. The reason for taking into consideration empirical research on trolley cases is that they, in fact, aim at the same end as that of experimental philosophers: to discover whether there are moral intuitions that can be accounted for by some psychological mechanisms that might have evolved through natural selection. As a result of his experiments, Greene suggested that there might be two independent psychological mechanisms, namely cognitive and emotive that come into play in the decisions of the subjects about footbridge and switch cases. For the subjects who refuse to push a bulky person from a footbridge onto the rails in order to save five

individuals from the crash of the trolley, the emotive mechanism was in play whereas for the subjects who agreed to change the switch of the trolley in order to save five individuals by letting one individual die, the cognitive mechanism was in action. According to Greene, these two mechanisms are like the manual and automatic modes of a camera that can be controlled by a switch. Subjects respond to trolley cases by switching to one or the other. We believe that these two mechanisms may interact in the decision process. We also believe that the responses that the subjects give to questions in Nichols and Knobe's (and ours) surveys may also be controlled by similar emotive and cognitive mechanisms. For instance, when subjects that are given the abstract question respond in incompatibilist fashion where the cognitive mechanism is in play whereas when subject that are given concrete/high affect questions respond in compatibilist way where the emotive mechanism is in play. We think the emotive mechanism is triggered by the details of the description of the case, like how the man plans and executes killing his wife and three children by a fire starting mechanism in order to be with his secretary. But we also think that these two psychological mechanisms interact in decision making of the subjects. The first evidence we had for this interaction is the change from greater number of compatibilist responses to smaller numbers as the affect of the scenario is reduced in the questions. That is why we wanted to test this hypothesis by switching from absolute to graded scales that, we hoped, would show some significant results in favor of dual interaction model of psychological mechanisms.

At first, it can be imagined that someone who claims that belief in moral rules or particular moral judgments is or can be foundational. Surely, many particular moral judgments and moral rules such as genocide is wrong express moral beliefs which seem more fixed and less revisable than any other beliefs. On the other hand, justification in ethics has a definite *structure*, and this structure reinforces a form of intuitionism that restricts foundational status to moral beliefs at the more general levels. Particular moral judgments can be justified inferentially; a particular moral judgment is justified by appealing to moral rules. Then, moral rules are justified by appealing to moral principles. However, the inferential justification process must stop at some point which does not depend on other moral claims for their justification to prevent infinite regress or circularity. This is the view to which

Sidgwick refers as philosophical intuitionism (Brink, 1989, p. 107). There might be several sorts of intuitionism such as dogmatic, philosophical and perceptual. Philosophical intuitionism allows foundational moral beliefs only about ethical first principles. However, intuitionism is not plausible to many people who accept foundationalism. There are two main objections to intuitionism. At first, do people have a special faculty for the perception of moral facts? Second, conflicting moral beliefs undermine intuitionism. To deal with the objections against foundationalism or intuitionism we must distinguish different versions of foundationalism or intuitionism (Brink, 1989, p.108). Why do moral disagreements undermine intuitionism? Perhaps, disagreements threaten the principle of noncontradiction. If foundational moral beliefs guarantee truth, then conflicting moral intuitions imply that certain moral propositions are both true and false (Brink, 1989, p.108).

Self-evident moral principles seem to be problematic in the case of intuitionism if we are obsessed with the justification of moral principles. The objections rely on the existence of conflicting moral intuitions or foundational moral beliefs. If there are conflicting moral intuitions, it seems that they are quite open to manipulation, according to the results that we have obtained from our survey. However, before the model that we develop, it is now time to discuss the resemblance of trolley problems to our survey. To do this, I will first focus on what Greene says about the trolley cases, once again.

### **5.1. Dual Interaction Model of Moral Intuitions**

We examined why people have compatibilist and incompatibilist intuitions in different cases in our experimental study. When the questions are on the abstract basis, participants give incompatibilist responses. But if questions trigger emotions, participants' responses become compatibilist. These findings show us that affect has a big impact on the formation of our responses. It sounds plausible to say that trolley and footbridge cases, on the one hand, and the abstract and concrete cases, on the other, may be similar regarding the role of emotions in decision making. Abstract cases seem to be quite impersonal moral situations in which the role of emotion is minimized, while concrete cases look like personal moral situations in which we feel

the role of affect intensively, as perhaps in the case of Greene’s footbridge case. We have come to think that Greene’s dual-process theory of moral judgment may also explain why we have conflicting incompatibilist and compatibilist responses because dual-process theory of moral judgment provides a plausible explanation for the results of our survey. It reveals the underlying neurological mechanisms of our decisions in conflicting moral cases. Moral intuitions vary in different cases, such as abstract and concrete, with respect to the degree of emotion in the loop. Greene and his colleagues’ studies are important for showing the place of emotion and cognition in decision making. We shall not disregard their contribution to our study because what Greene puts forward as an analogy<sup>16</sup> forms the fundamental point of our dual interaction model of moral intuitions.

The table below presents the outcomes as compatibilist and incompatibilist intuitions in percentages for each questionnaire (running from the earliest, the long-concrete case to the third phase high affect to the short version of the long-concrete to the third phase low affect and finally to the abstract case). Although it may seem plausible to think of the functioning of the brain as a camera, as Greene suggested, that differentiates the ventral and dorsal parts to assess the role of emotion and reasoning we do not think that there is an on-off kind of switch mechanism which turns on and off between switch or footbridge trolley cases, or abstract and concrete cases in our survey. Experiments that we have conducted summarized in the table below show us that there is a kind of gradual transition between emotion and reason.

Table 7  
*Gradual Transition Between Emotion and Reason*

Cases	Compatibilists	Incompatibilists
1	%71,6	%28,4
4	%53,8	%46,2
3	%40,3	%59,7
6	%31,7	%68,3
2	%13,4	%86,6

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<sup>16</sup> Greene says that the human brain is like a dual-mode camera in his dual-process theory of moral decision making.

In the table above, there are only five cases, 1, 2, 3, 4, 6 because we omit indeterminist cases here. In the table, in order to make the interaction between emotion and reason more explicit, we ordered these cases from very high effect (number 1, the lengthy concrete description of a man murdering his wife and children) to high effect (number 4, stalking and rape case) to short version of murdering wife and kids (number 3) to low effect (number 6, cheating on taxes) and finally to the abstract case (number 2). So compatibilist responses, for instance, range from very high effect which is 71,6%, through 53,8%, 40,3%, 31,7% to 13,4% (the abstract) indicating that as the effect increases emotions take over gradually and at the same time still interacting with reason. What is missing in Greene's data and present in ours is this gradual increase/decrease with increase/decrease in affect that, we think, is evidence for the interaction between reason and emotion (impersonal-personal of Greene's).

Greene's dual process theory leads us to the model that we have developed to explain conflicting moral intuitions in problematic cases such as footbridge and switch dilemma or the case of concrete and abstract to which we refer in moral responsibility issue. There is a kind of resemblance between trolley cases and the cases that we present to our participants in our survey. Moral intuitions can be manipulated quite easily, so that we form our questions with respect to the emotional content's degree of effect. This is from where we reach to the conclusion that there is a gradual transition between emotion and reason. It is not a kind of camera with an on-off switch.

## **5.2. Experimental Investigation of the Dual Interaction Model of Moral Intuitions**

Greene's dual process theory leads us to the model that we have developed to explain conflicting moral intuitions in problematic cases such as footbridge and switch dilemma or the case of concrete and abstract to which we refer in moral responsibility issue. There is a gradual transition between emotion and reason. In this study, we tried to provide experimental evidence for this gradual transition argument. Both in Nichols and Knobe's (2007) original surveys and our STUDY 1 & 2, categorical scale (Yes-No answers to questions) are used. In these surveys,



questions ask whether the person is *completely* responsible for his/her acts that forces subjects to either choose one or the other option. We decided that a seven-degree scale might show interaction between emotion and reason better, since subjects would have more freedom to express their opinions of moral responsibility of the subject. In fact, this new study revealed something else that we didn't expect: greater variation in responses to the abstract question. In the earlier studies, incompatibilist response to the abstract question was as high as 86% and was not influenced so much by the co-presence of the concrete question. In order to be able to compare and contrast the results we conducted the experiments in two different forms. (Again we used only abstract and the long concrete questions only.) In the first phase (single phase), we presented the subjects either with abstract or concrete question. In the second phase (Two phases) with seven-degree scale, we repeated handing out abstract/concrete, collecting and then handing out concrete/abstract, with enumeration to match responses of the same individual.

### **5.2.1. Study 3**

Intuitions can be manipulated quite easily. In this third experiment, we predicted to find that there is a gradual transition between reason and emotion. To do this, we used a better experimental set up and a scale. We conducted an experiment which resembles to the first and second phase with a scale. This scale is a combination of Likert and Osgood type of scale.

### **5.2.2. Participants**

The sample consisted of 149 Middle East Technical University students. Of the participants, 65 were male and 72 were female. Nine participants did not mention their gender. 2 participants signed the other, and 1 participant did not want to specify gender. The mean age was 22.89 (S.D = 3.909). This sample represents the single phase experiment set ups.

### 5.2.3. Materials and Procedure

The participants were provided with a questionnaire. The materials were presented to them in the following order.

*Determinism-indeterminism manipulation:* A novel was developed by Joshua Knobe and Shaun Nichols and we used it to determine participants' view about our own universe. Participants were asked a Yes/No type question to evaluate their views about our own universe. (see Appendix A no 10-19) Then, participants were asked to rate on a 7-point scale (1 = Definitely Impossible, 7 = Definitely Possible) It was a question that all participants who were given graded scale surveys answered about our own universe.

*Abstract-concrete manipulation:* A novel was developed by Knobe and Nichols and we used it in order to test the role of affect. Participants were asked to rate on a 7-point scale (1 = Never Responsible, 7 = Fully Responsible) One of the novel consists of a deterministic concrete long scenario, the other involves a deterministic abstract case. (See Appendix A no 10 and 11).

### 5.2.4. Results

In Table 8, these results are summarized (ABS stands for abstract, CON for concrete.). We calculated mean and median for the abstract and concrete responses by which we can compare and contrast single phased and two phased surveys. In the first stage (Single-phased ABS/CON), the means and medians are respectively 3,1 and 2 for the abstract and 5,3 and 6 for the concrete. This means that responses to both abstract and concrete questions accumulate at opposite ends (toward 1 and 7 on the scale) with some scattering (standard deviations for the concrete and the abstract are 2,219 and 2,095 respectively). However, although the standard deviation is higher for the concrete than the abstract there is greater accumulation for the concrete at “fully morally responsible” end, that is, at “7”, (49,4% in Table 8) than for the abstract at “not responsible at all”, that is “1”, (33,3% in Table 8); and at “6” and “7” (63,7% in Table 7) for the concrete and at “1” and “2” (51,4% in Table 7) for the

abstract. So it is reasonable to say that although incompatibilism is very high with the categorical scale (86,6%) it is quite low with the 7-degree Likert scale (51,4%), whereas compatibilism with the categorical scale is 71,6% but with the 7-degree scale it is 63,7% which is not, relatively speaking, so low as incompatibilism.<sup>17</sup> We think these lower percentages with graded scale suggest that those responded “1” and “2” for the abstract and “6” and “7” for the concrete are hard compatibilists and incompatibilists, because even with greater freedom to choose these, participants remained to be compatibilists or incompatibilists. The significance of this is that by the graded scale we have a chance to revise earlier very high values like 86,6% and 71,6% which may not be reflecting the true positions of the participants. We believe hard and other forms of compatibilism/incompatibilism we discriminated above are also evidence for this claim. It seems that affect-loaded concrete questions, order effect, graded scale all show that most people do not have very strong intuitions about the possibility of free will in a deterministic world. Some of these “diversions” may be working on emotions (e.g. concrete questions) some on reason (e.g. graded scale) or on both (order effect and/or co-presence of questions).

Table 8

*Study 3 (This time seven-degree Rikert scale rather than categorical scale is used for single-phase concrete and abstract and two-phase ordered concrete-abstract/abstract-concrete surveys. The subjects in two-phase surveys are tracked by enumeration)*

Survey Type	MEAN		Sample Size		Percentages	
	MEDIAN					
	ABS	CON	ABS	CON	ABSTRACT Incompatibilism	CONCRETE Compatibilism
Single-phased ABS/CON	3,1	5,3	72	77	51,4%	63,7%
	2	6				
Two phased ABS- CON	2,5	4,1	70		65,7%	42,9%
	2	4				
Two phased CON- ABS	3,5	5,5	76		44,7%	72,0%
	3	7				

<sup>17</sup> In these calculations, we are assuming that, for the abstract question, “1” and “2” represent incompatibilism and, for the concrete, “6” and “7” represent compatibilism. We calculate proportions for the next two surveys in percentages by these assumptions as well. Although it is possible to calculate proportions by mean or median or just by the mid-point of the scale we think our assumption is more reasonable since we like to know who really are (in)compatibilists compared to the results of the categorical-scale surveys.

The means and medians of the data from the two-phased survey (Table 8) indicate to some order effect. The means and medians for the two-phased ABS-CON (the second line in Table 8) are lower than both the single-phased ABS/CON and the two-phased CON-ABS. This means that receiving the abstract question first influenced the decisions of the participants while responding the concrete question. This is consistent with the earlier categorical surveys.

Now we can take a look at the percentages in Table 8 that are calculated as explained in Footnote 19. We will compare and contrast these values with each other and with the percentages from the earlier surveys. The very low values for incompatibilism in the first and second lines in the table above contrast quite sharply with 86,6% in Table 2. The values for compatibilism on the first and third lines, on the other hand, are similar to 71,6% in Table 2. It is also evident from Table 7 that receiving the abstract question first had a big impact on compatibilist responses to the concrete question (42,9%) which should be expected on the basis of the results from earlier surveys. What is unexpected is the impact of the concrete question on the incompatibilist responses to the abstract question on the third line, 44,7%, though not very big drop compared to the values on the first line.<sup>18</sup> This drop is probably the joint product of the impact of the concrete and of the graded scale on the participants. Another result is the order effect that is absent in the earlier surveys.<sup>19</sup>

Table 9 below shows the change in percent values from “1” to “7” for both abstract and concrete questions. Although there is more distinct accumulation around the compatibilist end for the concrete question than the incompatibilist end for the abstract question in the single-phased survey results, there is also noticeable scatter away from the “1” and “2” end for the abstract and the “6” and “7” end for the concrete. For the two-phased survey, the scatter increases significantly in the values

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<sup>18</sup> Compared to the average of 51,4% and 65,7% on the first and second lines which is 58,6%, 46,8% is low enough to suggest the effect of the concrete on the abstract which is absent in the earlier surveys.

<sup>19</sup> We do not refer to the tables summarizing hard and other forms of compatibilism and incompatibilism with categorical scale where some order effect is observed.

for the concrete away from the “6” and “7” end in the ABS-CON direction and for the abstract away from the “1” and “2” end in the CON-ABS direction. Furthermore there are also higher accumulations at the opposite ends of the concrete and the abstract above (i.e. “1” and “2” as opposed to “6” and “7” respectively). This means that the abstract question in the ABS-CON direction attracts participants away from the compatibilist to incompatibilist end (“CON” line) and the concrete question in the CON-ABS direction attracts participant away from incompatibilist to compatibilist end (“ABS” line).

Table 9  
*Percentages for All Graded-Scale Results*

Survey Type		Likert Scale	1	2	3	4	5	6	7
Single Phased		ABS	33,3%	18,1%	11,1%	12,5%	2,8%	13,9%	8,3%
		CON	14,3%	2,6%	6,5%	5,2%	7,8%	14,3%	49,4%
Two Phased	ABS-CON	ABS	45,7%	20,0%	5,7%	8,6%	7,1%	8,6%	4,3%
		CON	32,9%	7,1%	2,9%	7,2%	7,1%	11,4%	31,4%
	CON-ABS	ABS	30,2%	14,5%	10,5%	6,6%	13,2%	7,9%	17,1%
		CON	14,7%	1,3%	2,7%	4,0%	5,3%	17,3%	54,7%
Question Order		Question Type							

The scattering in the abstract data seems to suggest that although the responses to the abstract question in categorical surveys are not vulnerable to the affect produced by the concrete question the scaler data show that responses to the abstract question do not equally gather around the incompatibilist end (i.e. “1” and “2”). In the ABS-CON direction, the scattering is a bit less whereas in the CON-ABS direction, due probably to the affect, it is greater. The sums of the percentages of responses in the middle values (“3”, “4”, “5”) in the first, third and fifth lines in Table 9 are pretty high and diverse: 26,4%, 21,4%, and 30,3%, respectively. The first thing that comes to mind is as to whether these participants would be the first to change their views when they get the concrete question after the abstract? Table 10 below shows that the participants who responded in these middle values on both directions (ABS-CON and CON-ABS) are around 10% which we call “ambiguous attitude”. So some of these participants do not change their positions, stay within the same range. We call those who either start with the middle values and move to “6” and “7” (the ABS-CON direction) or start with “6” and “7” and move to the middle values (the CON-ABS direction) which are 11,4% and 21,1%, respectively, “soft compatibilist”,

because they stay within the range of the compatibilist end. On the other hand, doing the same thing with the middle values and “1” and “2” (11,4% and 1,3%) are called “soft incompatibilist” for the same reason. Surprisingly, those who are more susceptible to change their positions are mostly the ones at the extreme ends, affect-prone (emotional) incompatibilists (18,6%) and persuasible (reasonable) compatibilists (26,3%). However, compared to the average of the values in Tables 3 and 5, which are 32,7% for emotional incompatibilists and 49,9% for reasonable compatibilists, those values are quite low, because in Table 9 we also distinguished the soft forms of (in)compatibilists. Adding the values of the softs on each side gives similar numbers. Of course, we should also take into account the group of “ambiguous attitude” (approximately 10%, both sides). What may be the significance of this enhanced taxonomy? Frankly, we do not know. But we may guess that such diversity might suggest that the experimental texts and questions may not be able to clearly distinguish incompatibilist and compatibilist attitudes as found out by categorical scale.

Table 10  
*Study 3 (Finer-Grained Classes for Compatibilist and Incompatibilist Attitudes)*

	ABSTRACT-CONCRETE		CONCRETE-ABSTRACT	
66,67,76,77	12,9%	<b>hard compatibilist</b>	23,7%	<b>hard compatibilist</b>
(3,4,5)(6,7)	11,4%	<b>soft compatibilist</b>	1,3%	failed to comprehend
(6,7)(3,4,5)	0,0%	failed to comprehend	21,1%	<b>soft compatibilist</b>
61,62,71,72	0,0%	failed to comprehend	26,3%	<b>persuasible (reasonable) comp.</b>
11,12,21,22	40,0%	<b>hard incompatibilist</b>	15,8%	<b>hard incompatibilist</b>
(1,2)(3,4,5)	7,1%	<b>soft incompatibilist</b>	0,0%	failed to comprehend
(3,4,5)(1,2)	0,0%	failed to comprehend	1,3%	<b>soft incompatibilist</b>
16,17,26,27	18,6%	<b>affect-prone (emotional) incomp.</b>	0,0%	failed to comprehend
(3,4,5)(3,4,5)	10,0%	<b>ambiguous attitude</b>	10,5%	<b>ambiguous attitude</b>

The graded scale leads to scattering in data. So the question is whether and how this scattering is distributed. As mentioned above, we enhanced the taxonomy of the attitudes of the responders in order to account further accumulations around different parts of the graded scale. Our earlier two-phased studies enabled us to distinguished two new attitudes.<sup>20</sup> This allowed some of them to change their attitudes and enabled

<sup>20</sup> Actually they are of the same type, because in both cases people change their attitudes from one extreme to the other (emotional and reasonable ones) when they are subjected to both questions, simultaneously or severally in different orders

us to distinguish these attitudes. These new attitudes are “softer” in the sense that people seem to be vulnerable<sup>21</sup> to different effects. The new categories discriminated above also represent “softer” attitudes meaning that in the categorical scale they are pushed to either extreme. With the freedom to choose in a finer scale, their real attitudes are revealed. The order from the concrete to abstract suggests that, when people are liberated from the cold abstract question, they tend toward softer positions. Perhaps this tendency to soften represents the real life situations better, because the real life is much more complicated than how it looks to armchair philosophers.

### 5.2.5. Discussion

The results of Study 3 did support the hypotheses. Concreteness/Abstract manipulation did significantly increase the feeling of responsibility. Similarly, the interaction between abstract and concreteness manipulations result in a significant effect on the measures related to assertion of free will and moral responsibility. Such results could be due to interaction of reason and emotion. Because we observe that there is a kind of gradual transition between reason and emotion. Nichols and Mallon (2006) argue that in personal footbridge and bystander (switch) style cases, there are three factors that interact in forming moral/nonmoral judgments: moral rules, utilitarian calculations, and emotions while in the impersonal forms, since the affect is minimized, interaction is between moral norms and utilitarian calculations. In Nichols and Knobe’s 2007 and our replication of their surveys, interaction, assuming that Nichols and Mallon (2006) are right about interaction, must be between rules and emotions because the questions in these surveys do not require any utilitarian calculations.

In responding to the abstract question, the subject must evaluate a metaethical (metaphysical) question that whether free will (assuming that moral responsibility judgments *imply* free will) and determinism are compatible. There are two possible

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<sup>21</sup> Not necessarily a bad thing. Perhaps they are more open “minded”.

responses; they are compatible or incompatible. Most people are incompatibilist (around 86%), but there are also some compatibilists (around 14%) which we call below strong compatibilist and we analyze the significance of this group with other similar groups. (We think strong compatibilism is a valid option because some may think that free will is somehow unaffected by determinism. This position doesn't require philosophical education, since the Abrahamic religions preach that although God is omniscient and omnipotent humans are still free to choose.)

The subjects responding, for instance, to the long concrete question have to decide between their metaethical convictions (if they gave incompatibilist response to the abstract question) and the moral rule that murder is wrong. Then it seems that there are two "rules" here one ethical one metaethical. Around 76% of subjects give compatibilist answer meaning that, in the clash between metaethics and ethics, ethics wins. We think even if the clash is between two principles emotions also have some effect in this decision process pushing some people toward compatibilism, because the story in the long concrete presents a difficult dilemma: either they have to be consistent with their incompatibilist convictions (if they have that conviction of course) and agree with the moral irresponsibility of a murderer (because he should not be responsible because he doesn't have freedom of choice) or they will revise their incompatibilist conviction and become compatibilist that even in a deterministic universe a man can choose not to murder his wife and three children, because he *somehow* has free will.

It appears that Greene's Dual Process Model and our Dual Interacting-Process Model, are not the only options for explaining the psychological processes behind moral/metaethical judgments. Nichols and Mallon (2006) designed some impersonal versions of footbridge and switch style cases and argued in reaction to Greene's claim that a moral violation can be either personal or impersonal, that is, footbridge-style cases are personal, because they generate higher degrees of emotions in subjects than the switch-style cases that are impersonal. Nichols and Mallon's impersonal scenarios with minimal emotional content are intended to show that rules may also be responsible for even automatic moral responses by reproducing the asymmetry between the responses to footbridge and switch cases. These cases are about some



children's toy trains that would run over five teacups, unless *a* teacup is thrown at the train to stop it or switch the track of the train to another track where there is again only one teacup. (So these are really very well-thought examples reproducing footbridge and switch cases without triggering any emotions in the participants.) Here although there are utilitarian calculations relevant to decision making there is also an explicitly stated rule (Mom's Rule: "You are forbidden from breaking any of the teacups that are on the counter." Nichols and Mallon, 2006, p. 534) that forbids the kids from breaking any of the teacups. In this survey they asked several adult participants two questions for both impersonal footbridge and switch cases in addition to the original (personal) ones: whether the kid who smashes a teacup either by throwing it at the model train or by diverting the train toward it *breaks* her mother's rule (weak permissibility) and, all things considered, whether it is *wrong* to smash a teacup, in order to save five (all-in permissibility). Greater number of participants in the impersonal footbridge case than in the impersonal switch case said that the rule was broken. But more important consequence of this survey is that the participants differentiated between breaking a rule and judging that the act is wrong by saying that although the big sister breaks Mom's Rule by throwing the teacup what she does, all things considered, is permissible (all-in permissibility). Nichols and Mallon compares this with the responses to the personal footbridge case where the participants' responses clearly show that pushing the heavy man breaks a rule (weak impressibility) *and* it is *wrong* to push him to save five other people (all-in impressibility). This means that the rule *determines* what is right or wrong in the personal footbridge case but not in the impersonal footbridge case. What happens here is that in the impersonal case the *rule* is appealed to for weak impressibility but *utilitarian calculations* are appealed to for the judgment of all-in permissibility (so this case is both "deontological" and "utilitarian"), whereas in the personal case, the rule determines wrongness of the act (then this case is only "deontological").

We agree that this study shows very nicely how rules work in judgments and how rules "interact" with utilitarian calculations (that is, reasoning process on the basis of a rule "interact" somehow with reasoning process doing utilitarian calculations.). Of course, both are processes of reason, and no emotions are involved. According to Mallon and Nichols (2010), in the case of personal footbridge case, the moral

decision making results from the interaction of emotions and reason (rule-based reasoning) while, in the case of the impersonal footbridge case, the decision (which is not a moral one, of course) comes from the assessment of rule-based and utilitarian thinking (both reasoning processes). In the personal footbridge case, although there is a possibility of utilitarian thinking, emotions suppress this thinking by supporting rule-based thinking. That is why Nichols and Mallon (2006) call it “affect-backed rules: our all-in judgment to footbridge-style cases is a product of emotions and reason. Emotional responses elevate the rule above the utilities. But the rules play an essential role in everyday moral judgment” (p.540).<sup>22</sup> The lesson we learn from the results of impersonal cases is that rules may have an important role to play in the free will surveys as well. So we consider the rule-based thinking for our and Nichols and Knobe’s results.

First of all, we should emphasize that there are no utilitarian calculations available to participants responding to free will questions (so these cases are *non-utilitarian*) and concrete questions have affect components (so emotions seem to be produced by affects). The question here is whether judgments about (in)compatibilism is an assessment process of two rule-based reasoning (metaethical reasoning and moral reasoning) and how emotions are involved in the decision making process. Here is our description of the psychological process behind the decision making process for metaethical judgments. Participants responding to concrete questions may be assessing the metaethical question (whether free will is compatible/incompatible with determinism) in the presence of a moral question (for instance, “murder is wrong” for the long and short concrete questions), since the question describes an obvious violation of a moral rule.<sup>23</sup> So for the moment, assuming that most participants were

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<sup>22</sup> Nichols and Mallon (2006) conducted another survey, Catastrophic Footbridge Case, in order to show that affect-backed rules do not necessarily suppress utilitarian thinking. In this example, pushing a heavy person off the footbridge in front of a train that carries some virus that can kill billions of people, if the virus is released, will prevent the train from hitting a bomb on the rails and from releasing the virus. In this case, people responded that pushing the stranger breaks a moral rule but most of them stated that the act of pushing is the right thing to do. So this example indicates that, if the affect backing the moral rule is balanced by another affect, the killing of billions backing utilitarian thinking, people take into account the utilitarian calculation which is also a reasoning process.

<sup>23</sup> Since we didn’t measure response times and students had time to respond (it took five to ten minutes to fill out the surveys) and, in fact, some students explained on questionnaires their responses,

aware of the metaethical question within the moral question; assuming also that they would give incompatibilist answer to the abstract question, then they had to decide between their incompatibilist tendency and moral evaluation of the rule that murder is wrong. As we know, around 72% of the participants give compatibilist answer. We think, what happens here is that moral rule backed by affect (read it as emotions) persuades participants toward a compatibilist response. In other words, the moral rule trumps the metaethical tendency. We can even say perhaps that the dilemma for the participants is deciding between being consistent with their incompatibilism (a logical concern) and their negative attitude towards the violation of an important moral rule. Either way, it seems that moral rules play a role but this role is emphasized by the affect, because as the affect is reduced by changing stories in the questions from a horrific description of a murder to cheating on taxes, compatibilist responses drop quite dramatically. It shows that rules work with affects: Nichols and Mallon's (2006) affect-backed rules, mentioned above. Therefore we think that free will surveys can be analyzed similarly as trolley cases. So Greene's Dual Process Model or Mallon or Nichols (2010) Dual Vector Model or our Dual Interacting-Process Model which is between these two models or something similar to these can explain moral and metaethical intuition studies so far.

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we can be quite sure that students took their time assessing possible responses. But, of course, this doesn't mean that affect didn't produce any emotions in the participants.

## CHAPTER 6

### CONCLUSION

We borrowed STUDY 1 from Shaun Nichols and Joshua Knobe's (2007) study and compared participants' responses to concrete and abstract conditions. We expected to see that people would give compatibilist responses to the concrete questions and incompatibilist responses to the abstract condition. We replicated Nichols and Knobe's results; we had initially expected to find cultural variation between US and Turkish students in compatibilist/ incompatibilist intuitions as well.

71,6% of the subjects held the agent fully morally responsible in a deterministic (long concrete) scenario in which the agent is murdering his children and wife. Merely 13,4% of participants told that the agent is fully morally responsible in a deterministic abstract question in which the role of affect is minimized. We agreed that the degree of affect has an impact on people's decisions on compatibilism/incompatibilism. In STUDY 1, we also tested whether there would be any cultural differences between the responses to the same survey questions given exclusively with Turkish citizens, and those in Nichols and Knobe (2007) research. Our results replicate Nichols and Knobe's (2007) results and vindicate their conclusions about people's free will intuition. So there is not significant cultural variation at all.

Greene's Dual Process Model for trolley cases is quite inspiring for us. He is interested in the psychological and brain processes that are responsible for surprisingly different responses of subjects to two kinds of trolley cases, namely footbridge and switch (bystander). Most subjects who were presented with footbridge-style cases responded negatively to the killing of an innocent heavy

person by pushing him in front of a trolley so as to save five other innocents, but most subjects were more comfortable with switch-style cases that require pulling a switch to divert the trolley onto another rail that would kill one person (that is, they would let one person die) but spare five. Greene and his colleagues conducted also an fMRI investigation with individuals who were subject to footbridge and switch style cases to see what parts of their brains are activated. The conclusion was that in the negative answers to the footbridge cases (i.e. refusing to push a heavy person to save five) the center of the brain responsible for emotions was activated while in the positive answers to the switch cases (i.e. agreeing to switch the rail to save five and let one get killed), the centers of their brain that were activated are responsible for theoretical thinking or reasoning. As a result of this conclusion, Greene et al. (2001) proposed a dual process model that reason and emotion are responsible for different responses. In other words, as a camera is switched from automatic to manual mode, these parts alternate as the trolley examples change.

Greene's model encouraged us in explaining the responses of the participants in our surveys to questions with affect and the question with the abstract formulation. However, as a result of increasing degrees of the power of affect, we believe that the emotional and theoretical parts of the brain do not function in alternating fashion; rather they interact with each other. We thus proposed our hypothesis Dual Interacting-Process Model. In this Dual Interacting-Process Model, when participants answering the abstract question, in other words, when there is no affect, the theoretical part of the brain is mostly in control, while the affect is presented in increasing orders of magnitude to the individuals, the emotional part of the brain interacting with the theoretical part. In the long concrete question condition in which we think affect has the greatest magnitude, the probability of a compatibilist answer is the highest (around 72%). This high probability of compatibilist answer is due to the interaction of reason and emotion. In a sense, the negotiation between two parts lead to very high probability in favor of the compatibilist answer. However, differently from the long concrete case, in the abstract condition, the negotiation may be resolved with much higher probability in favor of an incompatibilist answer (86%). Therefore, it appears that this dual interaction can explain us the increasing order of values in the surveys.

In order to see the interaction between emotion and reason better, we added several experimental set ups. In STUDY 2.1, we used only the long concrete and abstract questions in varying orders (i.e. abstract-concrete and concrete-abstract). One group of subjects would receive questions in abstract-concrete order and the other group of subjects in concrete-abstract order. (79 participants received questions in abstract-concrete order, and 80 participants received questions in concrete-abstract order.) We predicted that reason and emotions would interact so that both compatibilist and incompatibilist responses would be lower than STUDY 1.

Later (STUDY 2.2) we undertook a different version. In this one, we first have abstract/concrete question and then gathered the sheets after students responded and then gave concrete/abstract question so that they would not have a chance to change their earlier answers. We enumerated the questionnaires so that we can match the responses of every participant to both abstract and concrete questions. (77 subjects received first the abstract question, and then responded the concrete question, while 53 subjects received the concrete question first, and then responded to the abstract question). We examined the results for order effect. If our Dual Interacting-Process Model is tenable, we should be able to observe interaction in responses only to two questions rather than the whole of them in STUDY 1.

The difference between the responses to the concrete/abstract questions in STUDY 1 and STUDY 2.1 should be an evidence for the interaction between reason and emotion. Crudely put, we found that the abstract question which is not as much affected by the concrete question has stronger impact on the responses to the concrete question. In other words, the emotional process (emotion) did not influence the theoretical process (reason) as much as theoretical process (reason) influenced emotional process (emotion). We do not detect any significant order effect in Table 3. This might be due to that participants received both abstract/concrete questions together on the same sheet, because this gives an opportunity for them to change their answers. In Study 2.1, the survey included abstract and concrete questions on the same questionnaire so as to observe an expected interaction between emotion and reason. Our hypothesis about this interaction seems to be confirmed by the results. We deepened our analysis to see whether there is any significant order effect. The

reason for not detecting any order effect might be that both questions were on the same questionnaire as I mentioned above. Subjects may revise their opinions about the cases when questions are on the same questionnaire.

In the second phase of STUDY 2 (Study 2.2), we printed abstract and concrete questions on different sheets, and also enumerated these sheets so that we could match the responses of the same person. By doing this, we aimed to isolate interaction of the abstract and concrete question to one direction at each time. We expected to observe either the effect of the abstract on concrete or the concrete on abstract. This might be a way to see both order effect and interaction between emotion and reason.

At the end we received that being exposed to the abstract question has a big impact on participants' responses to the concrete questions. By our Dual Interacting-Process Model, it can be said that the negotiation of reason and emotion in subjects increases the probability of being more susceptible to the influence of reason than when subjects are exposed to these questions one by one. The concrete question has no effect on the abstract responses at all. Namely, being exposed to the murder story does not change the responses of the participants to the abstract question. We also presented how the strong and weak forms of incompatibilism/compatibilism change on both directions in the thesis.

In STUDY 3, we present another set of data (graded scale rather than categorical one in the answers to questions) and discuss the importance of this data regarding the psychological mechanism that may play a role in participants' responses to abstract and concrete conditions. Greene's dual process theory prompts us to the model that we have put forward to explain conflicting moral intuitions in equivocal cases such as footbridge and switch cases, or the case of concrete and abstract which we refer in moral responsibility issue. There might be a sort of gradual transition between emotion and reason. In STUDY 3, we tried to provide experimental evidence for this gradual transition. We decided to use a seven-degree scale in order to show interaction between emotion and reason in a better way, because participants would be more comfortable to express their opinions of moral responsibility of the subject.

Actually, this new study revealed something else that we did not expect to find: greater variation in responses to the abstract question. We conducted the experiments in three different forms. In the first phase(single phase), we presented the students either with abstract or concrete question. In the second phase (two phases) with seven –degree scale, we repeated handing out abstract/concrete, collecting and then handing out concrete/abstract, with enumeration to match answers of the same subject. In the third phase, we gave concrete and abstract questions on the same questionnaire on different sheets. In this way we would have repeated all phases of the earlier surveys.

As a result, we may say that the degree of affect has an impact on subjects' moral decisions on compatibilism/incompatibilism. The more the degree of affect increases, the more reason's role decreases. Participants gave compatibilist answers to concrete conditions and their responses became incompatibilist to abstract cases. It seems that there is no significant difference between the responses from participants in Ankara and Utah. We reached lower compatibilist/incompatibilist responses than Study 1 in Study 2. We expected to find order effect as well in Study 2. Being exposed to the abstract question has an impact on subjects' responses to the concrete questions. However, the concrete question has no effect on the abstract answers at all. Additionally, we found greater variation in answers to the abstract question in Study 3. When all phases of the earlier surveys in Study 1 and Study 2 were repeated, we detected interaction by using graded scale surveys. Order effect supports negotiation between reason and emotion. Dual-interacting process model is functional to understand and explain free will/moral responsibility issue. Further experimental research and evidence, investigation of different philosophical topics such as free will and moral responsibility will help us to understand paradoxes about intuitions. I am both optimistic and pessimistic on folk intuitions. I agree with Greene on modeling "moral thinking", because such kind of model can provide us to understand better moral decisions in problematic cases. Science will not tell us itself that what is right and what is wrong thing to do, but if we are trying to solve difficult moral problems, a scientific understanding is a strong step towards progress. To do this, we presented Dual-Interacting Process Model in this thesis.



“Can we trust our moral intuitions? It depends on what we are trying to do.”(Greene,2017, p. 76) Trusting our intuitions can make easier our daily lives, but if we are trying to solve moral problems or dealing with conflicting moral questions, we should not disregard the limitations of our intuitive moral decisions (judgments). Instead, modeling “moral thinking” and using it to make better decisions is more profitable. As Greene puts forward (2017) “science can’t by itself, tell us what is right or wrong” (Greene, 2017, p. 76). However, if we are aiming to solve difficult moral problems, “a scientific understanding of moral thinking” will be better at hand (Greene, 2017, p.76).

There might be a kind of negotiation between emotion and cognition skills. The experimental evidence from our results shows us that there might be a sort of gradual change and interaction between emotion and reason. In our Dual Interaction Model of Moral Decision Making Process, both emotions and reasoning are all equally important. They are two complementary different processes functioning to derive at a moral judgment. Although we do not know how the interaction between them crystal clear yet, we can say that they are not like the on and off modes of a camera as Greene proposes. Further research will show us this gradual transition between these two kinds of processes, reason and emotion.

It is a simple example of experimental philosophy study. We departed from Greene’s ideas and arrived decisive conclusions. Utilitarianism and deontology underlie the core philosophical points of Greene’s study. Thought experiments such as trolley problem let us to replicate an imaginary vignette and “imagine what we should or should not do.” Abstract-concrete conditions or high-low affect cases might be seen as thought experiments like the Trolley Problem. They provide us a way to discuss issues like moral responsibility, free will, determinism, indeterminism, compatibilism and incompatibilism “without having to experience them”. Actually, thought experiments are practical enough to discuss several philosophical approaches. Introducing some philosophical thought experiments allow us to discuss “the ethics of a situation” by diving it into most basic elements.

Greene tackles the Trolley Problem in modeling moral decision making process. A typical utilitarian would require to throw the switch and save more lives; while a deontologist would have problems with acting to killing an innocent person. Thomson's answer combines the concerns of both utilitarianism and deontology. An agent is allowed to divert the train and kill one person rather than five, but it is also acceptable for an agent to have problems with pushing the heavy man on the road. I have also stated the surgeon-transplant case in the thesis. Is there a difference between the bystander in the trolley case and the surgeon in the transplant case? Thompson (1985) and other philosophers deal with this question and do not give a definitive answer to this question. Most people will agree that diverting the trolley with a switch is acceptable and this action will seem to them justified, and surgeon's actions will be unacceptable, but we do not have plausible answer to that and it is a though job to put the different points of surgeon-transplant and trolley case. As I have mentioned above Greene differentiates bystander and footbridge case according to personalness of the harm, but what Mallon and Nichols' claim is a strong objection to Greene's argument. Since Mallon and Nichols suggest that participants can distinguish footbridge cases from switch cases even in impersonal cases and they provided experimental evidence for their hypothesis. Utilitarianism and deontology lie behind these conditions, and thought experiments are stimulating enough to discuss issues like moral responsibility and free will. We used a replication of a study done by Joshua Knobe and Shaun Nichols and we added several experimental set ups too. This experimental study might be seen as a thought experiment which an imaginary scenario is served to participants, like the trolley problem which was studied by Greene.

We presented imaginary scenarios to subjects and gathered data in order to derive conclusions on about the cases. We established a model for moral decision making process and told that emotion and reason are two dual processing system interact and in negotiation. We have enough empirical evidence to support our hypothesis. The interaction between emotion and reason verified by finding this order effect. As experimental results show us that when participants are in the emotional mode (when they are exposed to concrete question) does not switch to theoretical mode, because they are under the influence of their emotions roused by the concrete question. This

is also an indication of an order effect. In other words, we observed an order effect from abstract to concrete, namely from reason to emotion mode, however, we cannot observe an order effect from concrete to abstract, namely from emotion to reason in enumerated questionnaires.

Affect might have a big impact on participants' moral decisions. We have done several experiments to see the impact of affect and to support our model "Dual Interacting Process Model" for moral decision making. Empirical evidence shows us that there is a gradual decline/increase of the impact of affect in our decisions. The more the degree of affect increases, the more the reason's role decreases. Then, it is apprehensible that why people hesitate to push the bulky person into the railroad, or regard someone as responsible for his action in a deterministic universe in which a vignette is presented to them in purely abstract way.

Experimental philosophy opened a road for us to reveal our Dual Interacting Process Model. It leads us to conduct several experiments and gather data about the subject. On the basis of data, we construed with the results and we established our "moral thinking" model. It is not the only example of experimental philosophy. We replicated Nichols and Knobe's experiment and it encouraged us, therefore, Nichols and Knobe (2007) paper is a good piece of experimental philosophy work. Greene's findings and his research also lead us to propose our model. His empirical study might be supposed to be another example of experimental philosophy study. There can be other experimental philosophy study examples, but I referred them due to that I utilized them in our study.

Our philosophical arguments and theories rely on our intuitions. Folk intuitions are basic intuitions about philosophical questions of laypeople. Folk intuitions can be examined by using surveys and interviews in experimental philosophy. We do have conflicting intuitions about free will and moral responsibility issue, and experimental data can tell us something about why we do have these conflicting intuitions such as compatibilism or incompatibilism. Intuitions are fallible and changeable according to various parameters, and trying to understand and explain these conflicting intuitions is a substantial work of experimental philosophy. It is not aimed to provide solutions

for disagreements among people. Although these disagreements will remain unresolved at the end of the day, experimental philosophy will bring into question new philosophical topics. We do have enough reason to ask what causes our free will and moral responsibility intuitions in this study.

We departed from conflicting moral intuitions in this study and questioned why people do have disagreements about the same hypothetical cases. I was skeptical about the fallibility and changeability of moral intuitions, and we gathered data with survey studies from undergraduates in Ankara. We were expecting to find a cultural variation in moral intuitions between students in Ankara and Utah. However, we did not find a cultural variation between our study and Nichols and Knobe's research, but we can say that intuitions can be manipulated quite easily by imaginary scenarios designed by Nichols and Knobe (2007) and translated to Turkish by us. Although we did not find a cultural variation in participants' answers, this does not mean that localness and reliability of our moral intuitions are inquirable. Sarkissian et al. have done a cross cultural study based on also Nichols and Knobe (2007) research. They questioned whether belief in free will is a cultural universal in their study. (2010) Our work can also be seen as an extra cross-cultural study to understand conflicting moral intuitions.

The aim of this study is not to discuss ethical objectivism and subjectivism. Torturing animals might be seen as acceptable in a culture while it is unacceptable in another culture. Both of these arguments might be true at the same time, but does that mean that we do not have to discuss the torturing issue? From my point of view, some principles might be more foundational than others. For instance, "do not torture animals" might be a moral rule which might be more foundational than any other moral arguments. In our dual interacting process model of moral judgments, we returned the role of reason's role in moral judgments. Affect has an impact on our compatibilist/incompatibilist decisions, and the more the degree of affect increases, the more reason's role decreases. There is a gradual interaction between emotions and reason. Study 1 presented to us these findings, and Study 2 and Study 3 helped us to see the order effect. The order effect from abstract to concrete (from reason to emotion) supported our Dual Interaction Process Model, because participants have

given low-high affect questions and concrete-abstract questions in different orders. (In Study 3 we used graded scale surveys and repeated all phases of the survey used in Study 1 and Study2).

Empirical evidence supports our Dual Interacting Process Model. Thanks to experimental philosophy, we found an opportunity to discuss free will and moral responsibility. Surveys can be enhanced by using more direct questions such as asking “Do you think Bill is free in his actions? rather than asking “Is he fully morally responsible in his actions?” We choosed to provide participants more freedom by using graded scales in Study 3 but this might not be a plausible way for you to discuss free will and moral responsibility. It really depends what you mean in using the term free will and moral responsibility. We tried to emphasize the reason’s role in moral judgments. This study is a new and basic start to ask philosophical questions and a short introduction to experimental philosophy. Further research will provide us new insights about moral responsibility and free will, and we will be waiting impatiently for new study on moral thinking models. Dual-interacting process model is functional to understand and explain free will/moral responsibility issue. Further experimental research and evidence, investigation of different philosophical topics such as free will and moral responsibility will help us to understand paradoxes about intuitions.

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## APPENDICES

### APPENDIX A: SURVEYS IN TURKISH

#### 1. Long Concrete-Categorical

**Aşağıda size iki evren tanımı verilmektedir; ardından da bu tanımlarla ilişkili dört soru sorulmaktadır. Soruların doğru cevabı yoktur. Sizden istediğimiz sorulara *sizce* en uygun cevabı vermeye çalışmanızdır.**

Bir evren (Evren A) hayal edin. Bu evrende meydana gelen her olaya *tamamen* kendinden önce meydana gelmiş olaylar neden olmuştur. Evrenin en başından beri bu böyledir. Yani, evrenin başlangıcında meydana gelen bir olay bir sonraki olaya neden olmuş ve bugüne kadar aynı şekilde gelmiştir. Örneğin bir gün Mert öğle yemeğinde patates kızartması yemeye karar verdi. Her şey gibi, bu karara da tamamen daha önce meydana gelmiş olaylar neden olmuştur. Bu durumda, eğer bu evrendeki her şey Mert'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse, Mert yine patates kızartması yemeye karar *vermek zorundadır*.

Şimdi ise bir başka evren (Evren B) hayal edin. Bu evrende meydana gelen her olaya *neredeyse* tamamen kendinden önce meydana gelmiş olaylar neden olmuştur. Buna tek istisna kişilerin bir konuda karar vermesidir. Örneğin, bir gün Pelin öğle yemeğinde patates kızartması yemeye karar verdi. Bu evrende bir kişinin bir konuda karar vermesine tamamen karardan önce meydana gelmiş olaylar neden olmadığından, eğer bu evrendeki her şey Pelin'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse bile, Pelin patates kızartması yemeye karar vermek *zorunda kalmazdı*. Pelin farklı bir şey yemeye karar verebilirdi.

Bu durumda asıl fark şudur. A evreninde her karara tamamen karardan önce meydana gelen olaylar neden olur – yani geçmiş aynı kaldığında, her karar aynı şekilde *verilmek zorundadır*. Bunun aksine, B evreninde kararlara tamamen geçmişteki olaylar neden olmadığından kişiler her kararı aynı şekilde *vermek zorunda değildir*.

1. Sizce bu evrenlerden hangisi bizim evrenimize daha çok benziyor? (birini daire içine alın)

**Evren A**

**Evren B**

Lütfen cevabınızı kısaca açıklayın:

2. A evreninde meydana gelecek olayları önceden bilmek ilkece olanaklı mıdır?

**EVET**

**HAYIR**

3. B evreninde meydana gelecek olayları önceden bilmek ilkece olanaklı mıdır?

**EVET**

**HAYIR**

4. A evreninde, Utku isimli bir adam sekreterinden çok hoşlanmaktadır ve sekreteriyle birlikte olmanın tek yolunun karısı ve üç çocuğunu öldürmek olduğuna karar verir. Yangında sırasında kendisi de evde olursa evden kaçmanın imkânsız olduğunu bilmektedir. Bundan dolayı bir iş seyahati için evden ayrılmadan önce, evin bodrumuna yerleştirdiği bir düzenele evi yakar ve ailesini öldürür.

Utku karısını ve çocuklarını öldürmekten ahlaki olarak tamamen sorumlu mudur?

**EVET**

**HAYIR**

**Aşağıdaki sorular araştırmamız için gerekli olan sizin hakkınızdaki bazı sorulardır. Bunlara da cevap verirseniz seviniriz.**

**1) Cinsiyetiniz:**

A) Erkek  
istemiyorum

B) Kadın

C) Diğer

D) Belirtmek

**2) Yaşınız:**

**3) Üniversitedeki yılınız**

A) Lisans 1 B) Lisans 2 C) Lisans 3 D) Lisans 4 E) Yüksek Lisans F) Doktora

**4) Bölümünüz (Ana dal):**

5) Yandal (varsa):

6) Felsefe öğrencisi değilseniz, üniversitede felsefe dersi aldınız mı?

A) Evet B) Hayır

7) Evet ise, kaç felsefe dersi aldınız?

2. Abstract-Categorical

**Aşağıda size iki evren tarifi verilmektedir; ardından da bu tariflerle ilişkili dört soru sorulmaktadır. Soruların doğru cevabı yoktur. Sizden istediğimiz sorulan sorulara sizce en uygun cevabı vermeye çalışmanızdır.**

Bir evren (Evren A) hayal edin. Bu evrende meydana gelen her olaya *tamamen* kendinden önce meydana gelmiş olaylar neden olmuştur. Evrenin en başından beri bu böyledir. Yani, evrenin başlangıcında meydana gelen bir olay bir sonraki olaya neden olmuş ve bugüne kadar aynı şekilde gelmiştir. Örneğin bir gün Mert öğle yemeğinde patates kızartması yemeye karar verdi. Her şey gibi, bu karara da tamamen daha önce meydana gelmiş olaylar neden olmuştur. Bu durumda, eğer bu evrendeki her şey Mert'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse, Mert yine patates kızartması yemeye karar *vermek zorundadır*.

Şimdi ise bir başka evren (Evren B) hayal edin. Bu evrende meydana gelen her olaya *neredeyse* tamamen kendinden önce meydana gelmiş olaylar neden olmuştur. Buna tek istisna kişilerin bir konuda karar vermesidir. Örneğin, bir gün Pelin öğle yemeğinde patates kızartması yemeye karar verdi. Bu evrende bir kişinin bir konuda karar vermesine tamamen karardan önce meydana gelmiş olaylar neden olmadığından, eğer bu evrendeki her şey Pelin'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse bile, Pelin patates kızartması yemeye karar vermek *zorunda kalmazdı*. Pelin farklı bir şey yemeye karar verebilirdi.

Bu durumda asıl fark şudur. A evreninde her karara tamamen karardan önce meydana gelen olaylar neden olur – yani geçmiş aynı kaldığında, her karar aynı şekilde *verilmek zorundadır*. Bunun aksine, B evreninde kararlara tamamen geçmişteki olaylar neden olmadığından kişiler her kararı aynı şekilde *vermek zorunda değildir*.

1. Sizce bu evrenlerden hangisi bizim evrenimize daha çok benziyor? (birini daire içine alın)

**Evren A**

**Evren B**

Lütfen cevabınızı kısaca açıklayın:

2. A evreninde meydana gelecek olayları önceden bilmek ilkece olanaklı mıdır?

**EVET**                      **HAYIR**

3. B evreninde meydana gelecek olayları önceden bilmek ilkece olanaklı mıdır?

**EVET**                      **HAYIR**

4. A evreninde, bir kişi eylemlerinden ahlaki olarak tamamen sorumlu mudur?

**EVET**                      **HAYIR**

### 3. Short Concrete- Categorical

**Aşağıda size iki evren tarifi verilmektedir; ardından da bu tariflerle ilişkili dört soru sorulmaktadır. Soruların doğru cevabı yoktur. Sizden istediğimiz sorulan sorulara *sizce* en uygun cevabı vermeye çalışmanızdır.**

Bir evren (Evren A) hayal edin. Bu evrende meydana gelen her olaya *tamamen* kendinden önce meydana gelmiş olaylar neden olmuştur. Evrenin en başından beri bu böyledir. Yani, evrenin başlangıcında meydana gelen bir olay bir sonraki olaya neden olmuş ve bugüne kadar aynı şekilde gelmiştir. Örneğin bir gün Mert öğle yemeğinde patates kızartması yemeye karar verdi. Her şey gibi, bu karara da tamamen daha önce meydana gelmiş olaylar neden olmuştur. Bu durumda, eğer bu evrendeki her şey Mert'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse, Mert yine patates kızartması yemeye karar *vermek zorundadır*.

Şimdi ise bir başka evren (Evren B) hayal edin. Bu evrende meydana gelen her olaya *neredeyse* tamamen kendinden önce meydana gelmiş olaylar neden olmuştur. Buna tek istisna kişilerin bir konuda karar vermesidir. Örneğin, bir gün Pelin öğle yemeğinde patates kızartması yemeye karar verdi. Bu evrende bir kişinin bir konuda karar vermesine tamamen karardan önce meydana gelmiş olaylar neden olmadığından, eğer bu evrendeki her şey Pelin'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse bile, Pelin patates kızartması yemeye karar vermek *zorunda kalmazdı*. Pelin farklı bir şey yemeye karar verebilirdi.

Bu durumda asıl fark şudur. A evreninde her karara tamamen karardan önce meydana gelen olaylar neden olur – yani geçmiş aynı kaldığında, her karar aynı şekilde *verilmek zorundadır*. Bunun aksine, B evreninde kararlara tamamen geçmişteki olaylar neden olmadığından kişiler her kararı aynı şekilde *vermek zorunda değildir*.

1. Sizce bu evrenlerden hangisi bizim evrenimize daha çok benziyor? (birini daire içine alın)

**Evren A**

**Evren B**

Lütfen cevabınızı kısaca açıklayın:

2. A evreninde meydana gelecek olayları önceden bilmek ilkece olanaklı mıdır?

**EVET**

**HAYIR**

3. B evreninde meydana gelecek olayları önceden bilmek ilkece olanaklı mıdır?

**EVET**

**HAYIR**

4. A evreninde, Utku karısı ve çocuklarını bıçaklayarak öldürür, böylece sekreteriyle beraber olabilecektir. Utku ailesini öldürmekten ahlaki olarak tamamen sorumlu mudur?

**EVET**

**HAYIR**

4. Concrete-High Affect Universe A Categorical

**Aşağıda size iki evren tanımı verilmektedir; ardından da bu tanımlarla ilişkili dört soru sorulmaktadır. Soruların doğru cevabı yoktur. Sizden istediğimiz sorulara sizce en uygun cevabı vermeye çalışmanızdır.**

Bir evren (Evren A) hayal edin. Bu evrende meydana gelen her olaya *tamamen* kendinden önce meydana gelmiş olaylar neden olmuştur. Evrenin en başından beri bu böyledir. Yani, evrenin başlangıcında meydana gelen bir olay bir sonraki olaya neden olmuş ve bugüne kadar aynı şekilde gelmiştir. Örneğin bir gün Mert öğle yemeğinde patates kızartması yemeye karar verdi. Her şey gibi, bu karara da tamamen daha önce meydana gelmiş olaylar neden olmuştur. Bu durumda, eğer bu evrendeki her şey Mert'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse, Mert yine patates kızartması yemeye karar *vermek zorundadır*.

Şimdi ise bir başka evren (Evren B) hayal edin. Bu evrende meydana gelen her olaya *neredeyse* tamamen kendinden önce meydana gelmiş olaylar neden olmuştur. Buna tek istisna kişilerin bir konuda karar vermesidir. Örneğin, bir gün

Pelin öğle yemeğinde patates kızartması yemeye karar verdi. Bu evrende bir kişinin bir konuda karar vermesine tamamen karardan önce meydana gelmiş olaylar neden olmadığından, eğer bu evrendeki her şey Pelin'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiye bile, Pelin patates kızartması yemeye karar vermek *zorunda kalmazdı*. Pelin farklı bir şey yemeye karar verebilirdi.

Bu durumda asıl fark şudur. A evreninde her karara tamamen karardan önce meydana gelen olaylar neden olur – yani geçmiş aynı kaldığında, her karar aynı şekilde *verilmek zorundadır*. Bunun aksine, B evreninde kararlara tamamen geçmişteki olaylar neden olmadığından kişiler her kararı aynı şekilde *vermek zorunda değildir*.

1. Sizce bu evrenlerden hangisi bizim evrenimize daha çok benziyor? (birini daire içine alın)

**Evren A**

**Evren B**

Lütfen cevabınızı kısaca açıklayın:

2. Utku A evrenindedir. Geçmişte birçok kere yaptığı gibi, tanımadığı birini gizlice izler ve ona tecavüz eder. Utku, bu yabancıya tecavüzden ahlaki olarak tamamen sorumlu mudur?

**EVET**

**HAYIR**

5. Concrete-High Affect Universe B Categorical

**Aşağıda size iki evren tarifi verilmektedir; ardından da bu tariflerle ilişkili dört soru sorulmaktadır. Soruların doğru cevabı yoktur. Sizden istediğimiz sorular sorulara *sizce en uygun cevabı vermeye çalışmanızdır*.**

Bir evren (Evren A) hayal edin. Bu evrende meydana gelen her olaya *tamamen* kendinden önce meydana gelmiş olaylar neden olmuştur. Evrenin en başından beri bu böyledir. Yani, evrenin başlangıcında meydana gelen bir olay bir sonraki olaya neden olmuş ve bugüne kadar aynı şekilde gelmiştir. Örneğin bir gün Mert öğle yemeğinde patates kızartması yemeye karar verdi. Her şey gibi, bu karara da tamamen daha önce meydana gelmiş olaylar neden olmuştur. Bu durumda, eğer bu evrendeki her şey Mert'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiye, Mert yine patates kızartması yemeye karar *vermek zorundadır*.

Şimdi ise bir başka evren (Evren B) hayal edin. Bu evrende meydana gelen her olaya *neredeyse* tamamen kendinden önce meydana gelmiş olaylar neden olmuştur. Buna tek istisna kişilerin bir konuda karar vermesidir. Örneğin, bir gün Pelin öğle yemeğinde patates kızartması yemeye karar verdi. Bu evrende bir kişinin



bir konuda karar vermesine tamamen karardan önce meydana gelmiş olaylar neden olmadığından, eğer bu evrendeki her şey Pelin'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse bile, Pelin patates kızartması yemeye karar vermek *zorunda kalmazdı*. Pelin farklı bir şey yemeye karar verebilirdi.

Bu durumda asıl fark şudur. A evreninde her karara tamamen karardan önce meydana gelen olaylar neden olur – yani geçmiş aynı kaldığında, her karar aynı şekilde *verilmek zorundadır*. Bunun aksine, B evreninde kararlara tamamen geçmişteki olaylar neden olmadığından kişiler her kararı aynı şekilde *vermek zorunda değildir*.

1. Sizce bu evrenlerden hangisi bizim evrenimize daha çok benziyor? (birini daire içine alın)

**Evren A**

**Evren B**

Lütfen cevabınızı kısaca açıklayın:

2. Utku B evrenindedir. Geçmişte birçok kere yaptığı gibi, tanımadığı birini gizlice izler ve ona tecavüz eder. Utku, bu yabancıya tecavüzden ahlaki olarak tamamen sorumlu mudur?

**EVET**

**HAYIR**

6. Concrete- Low Affect Universe A Categorical

**Aşağıda size iki evren tarifi verilmektedir; ardından da bu tariflerle ilişkili dört soru sorulmaktadır. Soruların doğru cevabı yoktur. Sizden istediğimiz sorulara sizce en uygun cevabı vermeye çalışmanızdır.**

Bir evren (Evren A) hayal edin. Bu evrende meydana gelen her olaya *tamamen* kendinden önce meydana gelmiş olaylar neden olmuştur. Evrenin en başından beri bu böyledir. Yani, evrenin başlangıcında meydana gelen bir olay bir sonraki olaya neden olmuş ve bugüne kadar aynı şekilde gelmiştir. Örneğin bir gün Mert öğle yemeğinde patates kızartması yemeye karar verdi. Her şey gibi, bu karara da tamamen daha önce meydana gelmiş olaylar neden olmuştur. Bu durumda, eğer bu evrendeki her şey Mert'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse, Mert yine patates kızartması yemeye karar *vermek zorundadır*.

Şimdi ise bir başka evren (Evren B) hayal edin. Bu evrende meydana gelen her olaya *neredeyse* tamamen kendinden önce meydana gelmiş olaylar neden olmuştur. Buna tek istisna kişilerin bir konuda karar vermesidir. Örneğin, bir gün Pelin öğle yemeğinde patates kızartması yemeye karar verdi. Bu evrende bir kişinin

bir konuda karar vermesine tamamen karardan önce meydana gelmiş olaylar neden olmadığından, eğer bu evrendeki her şey Pelin'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse bile, Pelin patates kızartması yemeye karar vermek *zorunda kalmazdı*. Pelin farklı bir şey yemeye karar verebilirdi.

Bu durumda asıl fark şudur. A evreninde her karara tamamen karardan önce meydana gelen olaylar neden olur – yani geçmiş aynı kaldığında, her karar aynı şekilde *verilmek zorundadır*. Bunun aksine, B evreninde kararlara tamamen geçmişteki olaylar neden olmadığından kişiler her kararı aynı şekilde *vermek zorunda değildir*.

1. Sizce bu evrenlerden hangisi bizim evrenimize daha çok benziyor? (birini daire içine alın)

**Evren A**

**Evren B**

Lütfen cevabınızı kısaca açıklayın:

2. Selçuk A evrenindedir. Selçuk, geçmişte birçok kere yaptığı gibi vergi kaçarır. Selçuk, vergi kaçırmaktan ahlaki olarak tamamen sorumlu mudur?

**EVET**

**HAYIR**

7. Concrete-Low Affect Universe B Categorical

**Aşağıda size iki evren tanımı verilmektedir; ardından da bu tanımlarla ilişkili dört soru sorulmaktadır. Soruların doğru cevabı yoktur. Sizden istediğimiz soruların sorularına *sizce en uygun cevabı vermeye çalışmanızdır*.**

Bir evren (Evren A) hayal edin. Bu evrende meydana gelen her olaya *tamamen* kendinden önce meydana gelmiş olaylar neden olmuştur. Evrenin en başından beri bu böyledir. Yani, evrenin başlangıcında meydana gelen bir olay bir sonraki olaya neden olmuş ve bugüne kadar aynı şekilde gelmiştir. Örneğin bir gün Mert öğle yemeğinde patates kızartması yemeye karar verdi. Her şey gibi, bu karara da tamamen daha önce meydana gelmiş olaylar neden olmuştur. Bu durumda, eğer bu evrendeki her şey Mert'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse, Mert yine patates kızartması yemeye karar *vermek zorundadır*.

Şimdi ise bir başka evren (Evren B) hayal edin. Bu evrende meydana gelen her olaya *neredeyse* tamamen kendinden önce meydana gelmiş olaylar neden olmuştur. Buna tek istisna kişilerin bir konuda karar vermesidir. Örneğin, bir gün Pelin öğle yemeğinde patates kızartması yemeye karar verdi. Bu evrende bir kişinin bir konuda karar vermesine tamamen karardan önce meydana gelmiş olaylar neden

olmadığından, eğer bu evrendeki her şey Pelin'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse bile, Pelin patates kızartması yemeye karar vermek *zorunda kalmazdı*. Pelin farklı bir şey yemeye karar verebilirdi.

Bu durumda asıl fark şudur. A evreninde her karara tamamen karardan önce meydana gelen olaylar neden olur – yani geçmiş aynı kaldığında, her karar aynı şekilde *verilmek zorundadır*. Bunun aksine, B evreninde kararlara tamamen geçmişteki olaylar neden olmadığından kişiler her kararı aynı şekilde *vermek zorunda değildir*.

1. Sizce bu evrenlerden hangisi bizim evrenimize daha çok benziyor? (birini daire içine alın)

**Evren A**

**Evren B**

Lütfen cevabınızı kısaca açıklayın:

2. Selçuk B evrenindedir. Selçuk, geçmişte birçok kere yaptığı gibi vergi kaçırmıştır. Selçuk, vergi kaçırmaktan ahlaki olarak tamamen sorumlu mudur?

**EVET**

**HAYIR**

8. SM-SY

**Aşağıda size iki evren tarifi verilmektedir; ardından da bu tariflerle ilişkili dört soru sorulmaktadır. Soruların doğru cevabı yoktur. Sizden istediğimiz sorulan sorulara *sizce* en uygun cevabı vermeye çalışmanızdır.**

Bir evren (Evren A) hayal edin. Bu evrende meydana gelen her olaya *tamamen* kendinden önce meydana gelmiş olaylar neden olmuştur. Evrenin en başından beri bu böyledir. Yani, evrenin başlangıcında meydana gelen bir olay bir sonraki olaya neden olmuş ve bugüne kadar aynı şekilde gelmiştir. Örneğin bir gün Mert öğle yemeğinde patates kızartması yemeye karar verdi. Her şey gibi, bu karara da tamamen daha önce meydana gelmiş olaylar neden olmuştur. Bu durumda, eğer bu evrendeki her şey Mert'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse, Mert yine patates kızartması yemeye karar *vermek zorundadır*.

Şimdi ise bir başka evren (Evren B) hayal edin. Bu evrende meydana gelen her olaya *neredeyse* tamamen kendinden önce meydana gelmiş olaylar

neden olmuştur. Buna tek istisna kişilerin bir konuda karar vermesidir. Örneğin, bir gün Pelin öğle yemeğinde patates kızartması yemeye karar verdi. Bu evrende bir kişinin bir konuda karar vermesine tamamen karardan önce meydana gelmiş olaylar neden olmadığından, eğer bu evrendeki her şey Pelin'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse bile, Pelin patates kızartması yemeye karar vermek *zorunda kalmazdı*. Pelin farklı bir şey yemeye karar verebilirdi.

Bu durumda asıl fark şudur. A evreninde her karara tamamen karardan önce meydana gelen olaylar neden olur – yani geçmiş aynı kaldığında, her karar aynı şekilde *verilmek zorundadır*. Bunun aksine, B evreninde kararlara tamamen geçmişteki olaylar neden olmadığından kişiler her kararı aynı şekilde *vermek zorunda değildir*.

1) Sizce bu evrenlerden hangisi bizim evrenimize daha çok benziyor? (birini daire içine alın)

**Evren A**

**Evren B**

2) A evreninde, Utku isimli bir adam sekreterinden çok hoşlanmaktadır ve sekreteriyle birlikte olmanın tek yolunun karısı ve üç çocuğunu öldürmek olduğuna karar verir. Yangın sırasında kendisi de evde olursa evden kaçmanın imkânsız olduğunu bilmektedir. Bundan dolayı bir iş seyahati için evden ayrılmadan önce, evin bodrumuna yerleştirdiği bir düzenekle evi yakar ve ailesini öldürür.

Utku karısını ve çocuklarını öldürmekten ahlaki olarak tamamen sorumlu mudur?

**EVET**

**HAYIR**

3) A evreninde, bir kişi eylemlerinden ahlaki olarak tamamen sorumlu mudur?

**EVET**

**HAYIR**

## 9. SY-SM

**Aşağıda size iki evren tarifi verilmektedir; ardından da bu tariflerle ilişkili dört soru sorulmaktadır. Soruların doğru cevabı yoktur. Sizden istediğimiz sorulan sorulara *sizce* en uygun cevabı vermeye çalışmanızdır.**

Bir evren (Evren A) hayal edin. Bu evrende meydana gelen her olaya *tamamen* kendinden önce meydana gelmiş olaylar neden olmuştur. Evrenin en başından beri bu böyledir. Yani, evrenin başlangıcında meydana gelen bir olay bir sonraki olaya neden olmuş ve bugüne kadar aynı şekilde gelmiştir. Örneğin bir gün Mert öğle yemeğinde patates kızartması yemeye karar verdi. Her şey gibi, bu karara da tamamen daha önce meydana gelmiş olaylar neden olmuştur. Bu durumda, eğer bu evrendeki her şey Mert'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse, Mert yine patates kızartması yemeye karar *vermek zorundadır*.

Şimdi ise bir başka evren (Evren B) hayal edin. Bu evrende meydana gelen her olaya *neredeysse* tamamen kendinden önce meydana gelmiş olaylar neden olmuştur. Buna tek istisna kişilerin bir konuda karar vermesidir. Örneğin, bir gün Pelin öğle yemeğinde patates kızartması yemeye karar verdi. Bu evrende bir kişinin bir konuda karar vermesine tamamen karardan önce meydana gelmiş olaylar neden olmadığından, eğer bu evrendeki her şey Pelin'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse bile, Pelin patates kızartması yemeye karar vermek *zorunda kalmazdı*. Pelin farklı bir şey yemeye karar verebilirdi.

Bu durumda asıl fark şudur. A evreninde her karara tamamen karardan önce meydana gelen olaylar neden olur – yani geçmiş aynı kaldığında, her karar aynı şekilde *verilmek zorundadır*. Bunun aksine, B evreninde kararlara tamamen geçmişteki olaylar neden olmadığından kişiler her kararı aynı şekilde *vermek zorunda değildir*.

1) Sizce bu evrenlerden hangisi bizim evrenimize daha çok benziyor? (birini daire içine alın)

**Evren A**

**Evren B**

2) A evreninde, bir kişi eylemlerinden ahlaki olarak tamamen sorumlu mudur?

**EVET**

**HAYIR**

3) A evreninde, Utku isimli bir adam sekreterinden çok hoşlanmaktadır ve sekreteriyle birlikte olmanın tek yolunun karısı ve üç çocuğunu öldürmek olduğuna karar verir. Yangın sırasında kendisi de evde olursa evden kaçmanın imkânsız olduğunu bilmektedir. Bundan dolayı bir iş seyahati için evden ayrılmadan önce, evin bodrumuna yerleştirdiği bir düzenekle evi yakar ve ailesini öldürür.

Utku karısını ve çocuklarını öldürmekten ahlaki olarak tamamen sorumlu mudur?

**EVET**

**HAYIR**

10. Concrete Graded Seperate

1

**Aşağıda size iki evren tarifi verilmektedir; ardından da bu tariflerle ilişkili sorular sorulmaktadır. Soruların doğru cevabı yoktur. Sizden istediğimiz sorulan sorulara sizce en uygun cevabı vermeye çalışmanızdır.**

Bir evren (Evren A) hayal edin. Bu evrende meydana gelen her olaya *tamamen* kendinden önce meydana gelmiş olaylar neden olmuştur. Evrenin en başından beri bu böyledir. Yani, evrenin başlangıcında meydana gelen bir olay bir sonraki olaya neden olmuş ve bugüne kadar aynı şekilde gelmiştir. Örneğin bir gün Mert öğle yemeğinde patates kızartması yemeye karar verdi. Her şey gibi, bu karara da tamamen daha önce meydana gelmiş olaylar neden olmuştur. Bu durumda, eğer bu evrendeki her şey Mert'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse, Mert yine patates kızartması yemeye karar *vermek zorundadır*.

Şimdi ise bir başka evren (Evren B) hayal edin. Bu evrende meydana gelen her olaya *neredeyse* tamamen kendinden önce meydana gelmiş olaylar neden olmuştur. Buna tek istisna kişilerin bir konuda karar vermesidir. Örneğin, bir gün Pelin öğle yemeğinde patates kızartması yemeye karar verdi. Bu evrende bir kişinin bir konuda karar vermesine tamamen karardan önce meydana gelmiş olaylar neden olmadığından, eğer bu evrendeki her şey Pelin'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse bile, Pelin patates kızartması yemeye karar vermek *zorunda kalmazdı*. Pelin farklı bir şey yemeye karar verebilirdi.

Bu durumda asıl fark şudur. A evreninde her karara tamamen karardan önce meydana gelen olaylar neden olur – yani geçmiş aynı kaldığında, her karar aynı şekilde *verilmek zorundadır*. Bunun aksine, B evreninde kararlara tamamen geçmişteki olaylar neden olmadığından kişiler her kararı aynı şekilde *vermek zorunda değildir*.

1. Sizce bu evrenlerden hangisi bizim evrenimize daha çok benziyor? (birini daire içine alın)

**Evren A****Evren B**

Lütfen cevabınızı kısaca açıklayın:

2. A evreninde, Utku isimli bir adam sekreterinden çok hoşlanmaktadır ve sekreteriyle birlikte olmanın tek yolunun karısı ve üç çocuğunu öldürmek olduğuna karar verir. Yangın sırasında kendisi de evde olursa evden kaçmanın imkânsız olduğunu bilmektedir. Bundan dolayı bir iş seyahati için evden ayrılmadan önce, evin bodrumuna yerleştirdiği bir düzenekle evi yakar ve ailesini öldürür.

Utku karısını ve çocuklarını öldürmekten sizce ahlaki olarak ne kadar sorumludur?

Aşağıdaki ölçekte uygun bulduğunuz numarayı işaretleyin:

Hiç sorumlu değil						Tamamen sorumlu
1	2	3	4	5	6	7

**11. Abstract Graded Separate****2**

**Aşağıda size iki evren tanımı verilmektedir; ardından da bu tanımlarla ilişkili dört soru sorulmaktadır. Soruların doğru cevabı yoktur. Sizden istediğimiz sorulara sizce en uygun cevabı vermeye çalışmanızdır.**

Bir evren (Evren A) hayal edin. Bu evrende meydana gelen her olaya *tamamen* kendinden önce meydana gelmiş olaylar neden olmuştur. Evrenin en başından beri bu böyledir. Yani, evrenin başlangıcında meydana gelen bir olay bir sonraki olaya neden olmuş ve bugüne kadar aynı şekilde gelmiştir. Örneğin bir gün Mert öğle yemeğinde patates kızartması yemeye karar verdi. Her şey gibi, bu karara da tamamen daha önce meydana gelmiş olaylar neden olmuştur. Bu durumda, eğer bu evrendeki her şey Mert'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse, Mert yine patates kızartması yemeye karar *vermek zorundadır*.

Şimdi ise bir başka evren (Evren B) hayal edin. Bu evrende meydana gelen her olaya *neredeyse* tamamen kendinden önce meydana gelmiş olaylar neden olmuştur. Buna tek istisna kişilerin bir konuda karar vermesidir. Örneğin, bir gün Pelin öğle yemeğinde patates kızartması yemeye karar verdi. Bu evrende bir kişinin bir konuda karar vermesine tamamen karardan önce meydana gelmiş olaylar neden olmadığından, eğer bu evrendeki her şey Pelin'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse bile, Pelin patates kızartması yemeye karar vermek *zorunda kalmazdı*. Pelin farklı bir şey yemeye karar verebilirdi.

Bu durumda asıl fark şudur. A evreninde her karara tamamen karardan önce meydana gelen olaylar neden olur – yani geçmiş aynı kaldığında, her karar aynı şekilde *verilmek zorundadır*. Bunun aksine, B evreninde kararlara tamamen geçmişteki olaylar neden olmadığından kişiler her kararı aynı şekilde *vermek zorunda değildir*.

1. A evreninde, bir kişi eylemlerinden sizce ahlaki olarak ne kadar sorumludur?  
Aşağıdaki ölçekte uygun bulduğunuz numarayı işaretleyin:

Hiç sorumlu değil						Tamamen sorumlu
1	2	3	4	5	6	7

#### 1. Concrete-Abstract Graded Joint

##### SM-SY

**Aşağıda size iki evren tarifi verilmektedir; ardından da bu tariflerle ilişkili sorular sorulmaktadır. Soruların doğru cevabı yoktur. Sizden istediğimiz sorulan sorulara sizce en uygun cevabı vermeye çalışmanızdır.**

Bir evren (Evren A) hayal edin. Bu evrende meydana gelen her olaya *tamamen* kendinden önce meydana gelmiş olaylar neden olmuştur. Evrenin en başından beri bu böyledir. Yani, evrenin başlangıcında meydana gelen bir olay bir sonraki olaya neden olmuş ve bugüne kadar aynı şekilde gelmiştir. Örneğin bir gün Mert öğle yemeğinde patates kızartması yemeye karar verdi. Her şey gibi, bu karara da tamamen daha önce meydana gelmiş olaylar neden olmuştur. Bu durumda, eğer bu evrendeki her şey Mert'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse, Mert yine patates kızartması yemeye karar *vermek zorundadır*.

Şimdi ise bir başka evren (Evren B) hayal edin. Bu evrende meydana gelen her olaya *neredeyse* tamamen kendinden önce meydana gelmiş olaylar neden olmuştur. Buna tek istisna kişilerin bir konuda karar vermesidir. Örneğin, bir gün Pelin öğle yemeğinde patates kızartması yemeye karar verdi. Bu evrende bir kişinin bir konuda karar vermesine tamamen karardan önce meydana gelmiş olaylar neden olmadığından, eğer bu evrendeki her şey Pelin'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse bile, Pelin patates kızartması yemeye karar *vermek zorunda kalmazdı*. Pelin farklı bir şey yemeye karar verebilirdi.

Bu durumda asıl fark şudur. A evreninde her karara tamamen karardan önce meydana gelen olaylar neden olur – yani geçmiş aynı kaldığında, her karar aynı şekilde *verilmek zorundadır*. Bunun aksine, B evreninde kararlara tamamen



geçmişteki olaylar neden olmadığından kişiler her kararı aynı şekilde *vermek zorunda değildir*.

1. Sizce bu evrenlerden hangisi bizim evrenimize daha çok benziyor? (birini daire içine alın)

**Evren A**

**Evren B**

Lütfen cevabınızı kısaca açıklayın:

2. A evreninde, Utku isimli bir adam sekreterinden çok hoşlanmaktadır ve sekreteriyle birlikte olmanın tek yolunun karısı ve üç çocuğunu öldürmek olduğuna karar verir. Yangın sırasında kendisi de evde olursa evden kaçmanın imkânsız olduğunu bilmektedir. Bundan dolayı bir iş seyahati için evden ayrılmadan önce, evin bodrumuna yerleştirdiği bir düzenekle evi yakar ve ailesini öldürür.

Utku karısını ve çocuklarını öldürmekten sizce ahlaki olarak ne kadar sorumludur?

Aşağıdaki ölçekte uygun bulduğunuz numarayı işaretleyin:

Hiç sorumlu değil						Tamamen sorumlu
1	2	3	4	5	6	7

3. A evreninde, bir kişi eylemlerinden sizce ahlaki olarak ne kadar sorumludur?

Aşağıdaki ölçekte uygun bulduğunuz numarayı işaretleyin:

Hiç sorumlu değil						Tamamen sorumlu
1	2	3	4	5	6	7

### 13. Abstract-Concrete Graded Seperate

#### SY-SM

**Aşağıda size iki evren tarifi verilmektedir; ardından da bu tariflerle ilişkili sorular sorulmaktadır. Soruların doğru cevabı yoktur. Sizden istediğimiz sorulara sizce en uygun cevabı vermeye çalışmanızdır.**

Bir evren (Evren A) hayal edin. Bu evrende meydana gelen her olaya *tamamen* kendinden önce meydana gelmiş olaylar neden olmuştur. Evrenin en başından beri bu böyledir. Yani, evrenin başlangıcında meydana gelen bir olay bir sonraki olaya neden olmuş ve bugüne kadar aynı şekilde gelmiştir. Örneğin bir gün Mert öğle yemeğinde patates kızartması yemeye karar verdi. Her şey gibi, bu karara da tamamen daha önce meydana gelmiş olaylar neden olmuştur. Bu durumda, eğer bu evrendeki her şey Mert'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse, Mert yine patates kızartması yemeye karar *vermek zorundadır*.

Şimdi ise bir başka evren (Evren B) hayal edin. Bu evrende meydana gelen her olaya *neredeyse* tamamen kendinden önce meydana gelmiş olaylar neden olmuştur. Buna tek istisna kişilerin bir konuda karar vermesidir. Örneğin, bir gün Pelin öğle yemeğinde patates kızartması yemeye karar verdi. Bu evrende bir kişinin bir konuda karar vermesine tamamen karardan önce meydana gelmiş olaylar neden olmadığından, eğer bu evrendeki her şey Pelin'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse bile, Pelin patates kızartması yemeye karar vermek *zorunda kalmazdı*. Pelin farklı bir şey yemeye karar verebilirdi.

Bu durumda asıl fark şudur. A evreninde her karara tamamen karardan önce meydana gelen olaylar neden olur – yani geçmiş aynı kaldığında, her karar aynı şekilde *verilmek zorundadır*. Bunun aksine, B evreninde kararlara tamamen geçmişteki olaylar neden olmadığından kişiler her kararı aynı şekilde *vermek zorunda değildir*.

1. Sizce bu evrenlerden hangisi bizim evrenimize daha çok benziyor? (birini daire içine alın)

**Evren A**

**Evren B**

Lütfen cevabınızı kısaca açıklayın:

2. A evreninde, bir kişi eylemlerinden sizce ahlaki olarak ne kadar sorumludur?

Aşağıdaki ölçekte uygun bulduğunuz numarayı işaretleyin:

Hiç sorumlu değil						Tamamen sorumlu
1	2	3	4	5	6	7

3. A evreninde, Utku isimli bir adam sekreterinden çok hoşlanmaktadır ve sekreteriyle birlikte olmanın tek yolunun karısı ve üç çocuğunu öldürmek olduğuna karar verir. Yangın sırasında kendisi de evde olursa evden kaçmanın imkânsız olduğunu bilmektedir. Bundan dolayı bir iş seyahati için evden ayrılmadan önce, evin bodrumuna yerleştirdiği bir düzenekle evi yakar ve ailesini öldürür.

Utku karısını ve çocuklarını öldürmekten sizce ahlaki olarak ne kadar sorumludur?

Aşağıdaki ölçekte uygun bulduğunuz numarayı işaretleyin:

Hiç sorumlu değil						Tamamen sorumlu
1	2	3	4	5	6	7

#### 14. Abstract Concrete Graded Joint

##### SY-SM

**Aşağıda size iki evren tarifi verilmektedir; ardından da bu tariflerle ilişkili sorular sorulmaktadır. Soruların doğru cevabı yoktur. Sizden istediğimiz sorulara sizce en uygun cevabı vermeye çalışmanızdır.**

Bir evren (Evren A) hayal edin. Bu evrende meydana gelen her olaya *tamamen* kendinden önce meydana gelmiş olaylar neden olmuştur. Evrenin en başından beri bu böyledir. Yani, evrenin başlangıcında meydana gelen bir olay bir sonraki olaya neden olmuş ve bugüne kadar aynı şekilde gelmiştir. Örneğin bir gün Mert öğle yemeğinde patates kızartması yemeye karar verdi. Her şey gibi, bu karara da tamamen daha önce meydana gelmiş olaylar neden olmuştur. Bu durumda, eğer bu evrendeki her şey Mert'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse, Mert yine patates kızartması yemeye karar *vermek zorundadır*.

Şimdi ise bir başka evren (Evren B) hayal edin. Bu evrende meydana gelen her olaya *neredeyse* tamamen kendinden önce meydana gelmiş olaylar neden olmuştur. Buna tek istisna kişilerin bir konuda karar vermesidir. Örneğin, bir gün

Pelin öğle yemeğinde patates kızartması yemeye karar verdi. Bu evrende bir kişinin bir konuda karar vermesine tamamen karardan önce meydana gelmiş olaylar neden olmadığından, eğer bu evrendeki her şey Pelin'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiye bile, Pelin patates kızartması yemeye karar vermek *zorunda kalmazdı*. Pelin farklı bir şey yemeye karar verebilirdi.

Bu durumda asıl fark şudur. A evreninde her karara tamamen karardan önce meydana gelen olaylar neden olur – yani geçmiş aynı kaldığında, her karar aynı şekilde *verilmek zorundadır*. Bunun aksine, B evreninde kararlara tamamen geçmişteki olaylar neden olmadığından kişiler her kararı aynı şekilde *vermek zorunda değildir*.

1. Sizce bu evrenlerden hangisi bizim evrenimize daha çok benziyor? (birini daire içine alın)

**Evren A**

**Evren B**

Lütfen cevabınızı kısaca açıklayın:

2. A evreninde, bir kişi eylemlerinden sizce ahlaki olarak ne kadar sorumludur?

Aşağıdaki ölçekte uygun bulduğunuz numarayı işaretleyin:

Hiç sorumlu değil						Tamamen sorumlu
1	2	3	4	5	6	7

3. A evreninde, Utku isimli bir adam sekreterinden çok hoşlanmaktadır ve sekreteriyle birlikte olmanın tek yolunun karısı ve üç çocuğunu öldürmek olduğuna karar verir. Yangın sırasında kendisi de evde olursa evden kaçmanın imkânsız olduğunu bilmektedir. Bundan dolayı bir iş seyahati için evden ayrılmadan önce, evin bodrumuna yerleştirdiği bir düzenekle evi yakar ve ailesini öldürür.

Utku karısını ve çocuklarını öldürmekten sizce ahlaki olarak ne kadar sorumludur?

Aşağıdaki ölçekte uygun bulduğunuz numarayı işaretleyin:

Hiç sorumlu değil						Tamamen sorumlu
1	2	3	4	5	6	7

## 15. Short Concrete Graded

Aşağıda size iki evren tarifi verilmektedir; ardından da bu tariflerle ilişkili dört soru sorulmaktadır. Soruların doğru cevabı yoktur. Sizden istediğimiz sorulara *sizce* en uygun cevabı vermeye çalışmanızdır.

Bir evren (Evren A) hayal edin. Bu evrende meydana gelen her olaya *tamamen* kendinden önce meydana gelmiş olaylar neden olmuştur. Evrenin en başından beri bu böyledir. Yani, evrenin başlangıcında meydana gelen bir olay bir sonraki olaya neden olmuş ve bugüne kadar aynı şekilde gelmiştir. Örneğin bir gün Mert öğle yemeğinde patates kızartması yemeye karar verdi. Her şey gibi, bu karara da tamamen daha önce meydana gelmiş olaylar neden olmuştur. Bu durumda, eğer bu evrendeki her şey Mert'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse, Mert yine patates kızartması yemeye karar *vermek zorundadır*.

Şimdi ise bir başka evren (Evren B) hayal edin. Bu evrende meydana gelen her olaya *neredeyse* tamamen kendinden önce meydana gelmiş olaylar neden olmuştur. Buna tek istisna kişilerin bir konuda karar vermesidir. Örneğin, bir gün Pelin öğle yemeğinde patates kızartması yemeye karar verdi. Bu evrende bir kişinin bir konuda karar vermesine tamamen karardan önce meydana gelmiş olaylar neden olmadığından, eğer bu evrendeki her şey Pelin'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse bile, Pelin patates kızartması yemeye karar vermek *zorunda kalmazdı*. Pelin farklı bir şey yemeye karar verebilirdi.

Bu durumda asıl fark şudur. A evreninde her karara tamamen karardan önce meydana gelen olaylar neden olur – yani geçmiş aynı kaldığında, her karar aynı şekilde *verilmek zorundadır*. Bunun aksine, B evreninde kararlara tamamen geçmişteki olaylar neden olmadığından kişiler her kararı aynı şekilde *vermek zorunda değildir*.

1. Sizce bu evrenlerden hangisi bizim evrenimize daha çok benziyor? (birini daire içine alın)

**Evren A**

**Evren B**

Lütfen cevabınızı kısaca açıklayın:

2. A evreninde meydana gelecek olayları önceden bilmek sizce olanaklı mıdır? Aşağıdaki ölçekte uygun bulduğunuz numarayı işaretleyin:

Kesinlikle olanaksızdır						Kesinlikle olanaklıdır
1	2	3	4	5	6	7

3. B evreninde meydana gelecek olayları önceden bilmek sizce olanaklı mıdır?

Aşağıdaki ölçekte uygun bulduğunuz numarayı işaretleyin:

Kesinlikle olanaksızdır						Kesinlikle olanaklıdır
1	2	3	4	5	6	7

4. A evreninde, Utku karısı ve çocuklarını bıçaklayarak öldürür, böylece sekreteriyle beraber olabilecektir. Utku ailesini öldürmekten sizce ahlaki olarak ne kadar sorumludur?

Aşağıdaki ölçekte uygun bulduğunuz numarayı işaretleyin:

Hiç sorumlu değil						Tamamen sorumlu
1	2	3	4	5	6	7

16. Concrete – High Affect Universe A Graded

**Aşağıda size iki evren tanımı verilmektedir; ardından da bu tanımlarla ilişkili dört soru sorulmaktadır. Soruların doğru cevabı yoktur. Sizden istediğimiz soruların cevaplarına sizce en uygun cevabı vermeye çalışmanızdır.**

Bir evren (Evren A) hayal edin. Bu evrende meydana gelen her olaya *tamamen* kendinden önce meydana gelmiş olaylar neden olmuştur. Evrenin en başından beri bu böyledir. Yani, evrenin başlangıcında meydana gelen bir olay bir sonraki olaya neden olmuş ve bugüne kadar aynı şekilde gelmiştir. Örneğin bir gün Mert öğle yemeğinde patates kızartması yemeye karar verdi. Her şey gibi, bu karara da tamamen daha önce meydana gelmiş olaylar neden olmuştur. Bu durumda, eğer bu evrendeki her şey Mert'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse, Mert yine patates kızartması yemeye karar *vermek zorundadır*.

Şimdi ise bir başka evren (Evren B) hayal edin. Bu evrende meydana gelen her olaya *neredeyse* tamamen kendinden önce meydana gelmiş olaylar neden olmuştur. Buna tek istisna kişilerin bir konuda karar vermesidir. Örneğin, bir gün Pelin öğle yemeğinde patates kızartması yemeye karar verdi. Bu evrende bir kişinin bir konuda karar vermesine tamamen karardan önce meydana gelmiş olaylar neden olmadığından, eğer bu evrendeki her şey Pelin'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse bile, Pelin patates kızartması yemeye karar vermek *zorunda kalmazdı*. Pelin farklı bir şey yemeye karar verebilirdi.

Bu durumda asıl fark şudur. A evreninde her karara tamamen karardan önce meydana gelen olaylar neden olur – yani geçmiş aynı kaldığında, her karar aynı şekilde *verilmek zorundadır*. Bunun aksine, B evreninde kararlara tamamen geçmişteki olaylar neden olmadığından kişiler her kararı aynı şekilde *vermek zorunda değildir*.

1. Sizce bu evrenlerden hangisi bizim evrenimize daha çok benziyor? (birini daire içine alın)

**Evren A**

**Evren B**

Lütfen cevabınızı kısaca açıklayın:

2. Utku A evrenindedir. Geçmişte birçok kere yaptığı gibi, tanımadığı birini gizlice izler ve ona tecavüz eder. Utku, bu yabancıya tecavüzden sizce ahlaki olarak ne kadar sorumludur?

Aşağıdaki ölçekte uygun bulduğunuz numarayı işaretleyin:

Hiç sorumlu değil						Tamamen sorumlu
1	2	3	4	5	6	7

#### 17. Concrete High Affect Universe B Graded

**Aşağıda size iki evren tanımı verilmektedir; ardından da bu tanımlarla ilişkili dört soru sorulmaktadır. Soruların doğru cevabı yoktur. Sizden istediğimiz sorulara sizce en uygun cevabı vermeye çalışmanızdır.**

Bir evren (Evren A) hayal edin. Bu evrende meydana gelen her olaya *tamamen* kendinden önce meydana gelmiş olaylar neden olmuştur. Evrenin en başından beri bu böyledir. Yani, evrenin başlangıcında meydana gelen bir olay bir sonraki olaya neden olmuş ve bugüne kadar aynı şekilde gelmiştir. Örneğin bir gün Mert öğle yemeğinde patates kızartması yemeye karar verdi. Her şey gibi, bu karara da tamamen daha önce meydana gelmiş olaylar neden olmuştur. Bu durumda, eğer bu evrendeki her şey Mert'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse, Mert yine patates kızartması yemeye karar *vermek zorundadır*.

Şimdi ise bir başka evren (Evren B) hayal edin. Bu evrende meydana gelen her olaya *neredeyse* tamamen kendinden önce meydana gelmiş olaylar neden olmuştur. Buna tek istisna kişilerin bir konuda karar vermesidir. Örneğin, bir gün Pelin öğle yemeğinde patates kızartması yemeye karar verdi. Bu evrende bir kişinin bir konuda karar vermesine tamamen karardan önce meydana gelmiş olaylar neden olmadığından, eğer bu evrendeki her şey Pelin'in kararını verdiği zamana kadar

tamamen aynı şekilde meydana geldiyse bile, Pelin patates kızartması yemeye karar vermek *zorunda kalmazdı*. Pelin farklı bir şey yemeye karar verebilirdi.

Bu durumda asıl fark şudur. A evreninde her karara tamamen karardan önce meydana gelen olaylar neden olur – yani geçmiş aynı kaldığında, her karar aynı şekilde *verilmek zorundadır*. Bunun aksine, B evreninde kararlara tamamen geçmişteki olaylar neden olmadığından kişiler her kararı aynı şekilde *vermek zorunda değildir*.

1. Sizce bu evrenlerden hangisi bizim evrenimize daha çok benziyor? (birini daire içine alın)

**Evren A**

**Evren B**

Lütfen cevabınızı kısaca açıklayın:

2. Utku B evrenindedir. Geçmişte birçok kere yaptığı gibi, tanımadığı birini gizlice izler ve ona tecavüz eder. Utku, bu yabancıya tecavüzden sizce ahlaki olarak ne kadar sorumludur?

Aşağıdaki ölçekte uygun bulduğunuz numarayı işaretleyin:

Hiç sorumlu değil						Tamamen sorumlu
1	2	3	4	5	6	7

18. Concrete -Low Affect Universe A Graded

**Aşağıda size iki evren tarifi verilmektedir; ardından da bu tariflerle ilişkili dört soru sorulmaktadır. Soruların doğru cevabı yoktur. Sizden istediğimiz sorular sorulara *sizce en uygun cevabı vermeye çalışmanızdır*.**

Bir evren (Evren A) hayal edin. Bu evrende meydana gelen her olaya *tamamen* kendinden önce meydana gelmiş olaylar neden olmuştur. Evrenin en başından beri bu böyledir. Yani, evrenin başlangıcında meydana gelen bir olay bir sonraki olaya neden olmuş ve bugüne kadar aynı şekilde gelmiştir. Örneğin bir gün Mert öğle yemeğinde patates kızartması yemeye karar verdi. Her şey gibi, bu karara da tamamen daha önce meydana gelmiş olaylar neden olmuştur. Bu durumda, eğer bu evrendeki her şey Mert'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse, Mert yine patates kızartması yemeye karar *vermek zorundadır*.

Şimdi ise bir başka evren (Evren B) hayal edin. Bu evrende meydana gelen her olaya *neredeyse* tamamen kendinden önce meydana gelmiş olaylar neden olmuştur. Buna tek istisna kişilerin bir konuda karar vermesidir. Örneğin, bir gün



Pelin öğle yemeğinde patates kızartması yemeye karar verdi. Bu evrende bir kişinin bir konuda karar vermesine tamamen karardan önce meydana gelmiş olaylar neden olmadığından, eğer bu evrendeki her şey Pelin'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse bile, Pelin patates kızartması yemeye karar vermek *zorunda kalmazdı*. Pelin farklı bir şey yemeye karar verebilirdi.

Bu durumda asıl fark şudur. A evreninde her karara tamamen karardan önce meydana gelen olaylar neden olur – yani geçmiş aynı kaldığında, her karar aynı şekilde *verilmek zorundadır*. Bunun aksine, B evreninde kararlara tamamen geçmişteki olaylar neden olmadığından kişiler her kararı aynı şekilde *vermek zorunda değildir*.

1. Sizce bu evrenlerden hangisi bizim evrenimize daha çok benziyor? (birini daire içine alın)

**Evren A**

**Evren B**

Lütfen cevabınızı kısaca açıklayın:

2. Selçuk A evrenindedir. Selçuk, geçmişte birçok kere yaptığı gibi vergi kaçırmıştır. Selçuk, vergi kaçırmaktan sizce ahlaki olarak ne kadar sorumludur?

Aşağıdaki ölçekte uygun bulduğunuz numarayı işaretleyin:

Hiç sorumlu değil						Tamamen sorumlu
1	2	3	4	5	6	7

19. Concrete Low Affect Universe B Graded

**Aşağıda size iki evren tanımı verilmektedir; ardından da bu tanımlarla ilişkili dört soru sorulmaktadır. Soruların doğru cevabı yoktur. Sizden istediğimiz sorulara sizce en uygun cevabı vermeye çalışmanızdır.**

Bir evren (Evren A) hayal edin. Bu evrende meydana gelen her olaya *tamamen* kendinden önce meydana gelmiş olaylar neden olmuştur. Evrenin en başından beri bu böyledir. Yani, evrenin başlangıcında meydana gelen bir olay bir sonraki olaya neden olmuş ve bugüne kadar aynı şekilde gelmiştir. Örneğin bir gün Mert öğle yemeğinde patates kızartması yemeye karar verdi. Her şey gibi, bu karara da tamamen daha önce meydana gelmiş olaylar neden olmuştur. Bu durumda, eğer bu evrendeki her şey Mert'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse, Mert yine patates kızartması yemeye karar *vermek zorundadır*.

Şimdi ise bir başka evren (Evren B) hayal edin. Bu evrende meydana gelen her olaya *neredeyse* tamamen kendinden önce meydana gelmiş olaylar neden olmuştur. Buna tek istisna kişilerin bir konuda karar vermesidir. Örneğin, bir gün Pelin öğle yemeğinde patates kızartması yemeye karar verdi. Bu evrende bir kişinin bir konuda karar vermesine tamamen karardan önce meydana gelmiş olaylar neden olmadığından, eğer bu evrendeki her şey Pelin'in kararını verdiği zamana kadar tamamen aynı şekilde meydana geldiyse bile, Pelin patates kızartması yemeye karar vermek *zorunda kalmazdı*. Pelin farklı bir şey yemeye karar verebilirdi.

Bu durumda asıl fark şudur. A evreninde her karara tamamen karardan önce meydana gelen olaylar neden olur – yani geçmiş aynı kaldığında, her karar aynı şekilde *verilmek zorundadır*. Bunun aksine, B evreninde kararlara tamamen geçmişteki olaylar neden olmadığından kişiler her kararı aynı şekilde *vermek zorunda değildir*.

1. Sizce bu evrenlerden hangisi bizim evrenimize daha çok benziyor? (birini daire içine alın)

**Evren A**

**Evren B**

Lütfen cevabınızı kısaca açıklayın:

2. Selçuk B evrenindedir. Selçuk, geçmişte birçok kere yaptığı gibi vergi kaçırmış. Selçuk, vergi kaçırmaktan sizce ahlaki olarak ne kadar sorumludur?

Aşağıdaki ölçekte uygun bulduğunuz numarayı işaretleyin:

Hiç sorumlu değil						Tamamen sorumlu
1	2	3	4	5	6	7

## APPENDIX B: ETİK İZİN FORMU/ETHICS PERMISSION FORM

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ  
APPLIED ETHICS RESEARCH CENTER



ORTA DOĞU TEKNİK ÜNİVERSİTESİ  
MIDDLE EAST TECHNICAL UNIVERSITY

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ueam@metu.edu.tr  
www.ueam.metu.edu.tr  
Sayı: 28620816/306

01 TEMMUZ 2016

Konu: Değerlendirme Sonucu

Gönderilen: Prof.Dr. Ayhan SOL,  
Felsefe Bölümü

Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (İAEK)

İlgi: İnsan Araştırmaları Etik Kurulu Başvurusu

Sayın Prof.Dr. Ayhan SOL,

Ar.Gör. Özge DURAL ile birlikte yürüttüğünüz "Özgür İrade Probleminin Deneysel Felsefe Yöntemleri ile İncelenmesi" başlıklı araştırmanız İnsan Araştırmaları Etik Kurulu tarafından uygun görülerek gerekli onay **2016-SOS-127** protokol numarası ile **01.07.2016-30.06.2017** tarihleri arasında geçerli olmak üzere verilmiştir.

Bilgilerinize saygılarımızla sunarız.

Prof. Dr. Canan SÜMER

İnsan Araştırmaları Etik Kurulu Başkanı

Prof. Dr. Meliha ALTUNIŞIK

İAEK Üyesi

Prof. Dr. Ayhan Gürbüz DEMİR

İAEK Üyesi

Yrd. Doç. Dr. Pinar KAYGAN

İAEK Üyesi

Prof. Dr. Mehmet UTKU

İAEK Üyesi

Doç. Dr. Yaşar KONDAKÇI

İAEK Üyesi

Yrd. Doç. Dr. Emre SELÇUK

İAEK Üyesi

BU BÖLÜM, İLGİLİ BÖLÜMLERİ TEMSİL EDEN İNSAN ARAŞTIRMALARI  
ETİK ALT KURULU TARAFINDAN DOLDURULACAKTIR.

Protokol No: SOS - 2016 - 127

İAEK DEĞERLENDİRME SONUCU

Sayın Hakem,

Aşağıda yer alan üç seçenektan birini işaretleyerek değerlendirmenizi tamamlayınız. Lütfen “Revizyon Gereklidir” ve “Ret” değerlendirmeleri için gerekli açıklamaları yapınız.

Değerlendirme Tarihi: 01.07.2016

Ad Soyad:

<input checked="" type="checkbox"/> Herhangi bir değişikliğe gerek yoktur. Veri toplama/uygulama başlatılabilir.
<input type="checkbox"/> <b>Revizyon gereklidir</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Gönüllü Katılım Formu yoktur.</li> <li><input type="checkbox"/> Gönüllü Katılım Formu eksiktir. Gerekçenizi ayrıntılı olarak açıklayınız:</li> <li><input type="checkbox"/> Katılım Sonrası Bilgilendirme Formu yoktur.</li> <li><input type="checkbox"/> Katılım Sonrası Bilgilendirme Formu eksiktir. Gerekçenizi ayrıntılı olarak açıklayınız:</li> <li><input type="checkbox"/> Rahatsızlık kaynağı olabilecek sorular/maddeler ya da prosedürler içerilmektedir. Gerekçenizi ayrıntılı olarak açıklayınız:</li> <li><input type="checkbox"/> Diğer. Gerekçenizi ayrıntılı olarak açıklayınız:</li> </ul>
<input type="checkbox"/> <b>Ret</b> Ret gerekçenizi ayrıntılı olarak açıklayınız:

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Sayı: 28620816 /306

01 TEMMUZ 2016

Konu: Değerlendirme Sonucu

Gönderilen: Prof.Dr. Ayhan SOL,

Felsefe Bölümü

Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (İAEK)

İlgi: İnsan Araştırmaları Etik Kurulu Başvurusu

Sayın Prof.Dr. Ayhan SOL,

Ar.Gör. Özge DURAL ile birlikte yürüttüğünüz "Özgür İrade Probleminin Deneysel Felsefe Yöntemleri ile İncelenmesi" başlıklı araştırmanız İnsan Araştırmaları Etik Kurulu tarafından uygun görülerek gerekli onay **2016-SOS-127** protokol numarası ile **01.07.2016-30.06.2017** tarihleri arasında geçerli olmak üzere verilmiştir.

Bilgilerinize saygılarımızla sunarız.



Prof. Dr. Canan SÜMER

İnsan Araştırmaları Etik Kurulu Başkanı

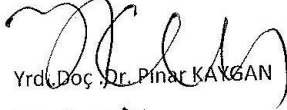


Prof. Dr. Meliha ALTUNIŞIK

İAEK Üyesi

Prof. Dr. Ayhan Gürbüz DEMİR

İAEK Üyesi



Yrd. Doç. Dr. Pinar KAYGAN

İAEK Üyesi



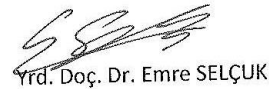
Prof. Dr. Mehmet UTKU

İAEK Üyesi



Doç. Dr. Yaşar KONDAKÇI

İAEK Üyesi



Yrd. Doç. Dr. Emre SELÇUK

İAEK Üyesi

BU BÖLÜM, İLGİLİ BÖLÜMLERİ TEMSİL EDEN İNSAN ARAŞTIRMALARI  
ETİK ALT KURULU TARAFINDAN DOLDURULACAKTIR.

Protokol No: SOS - 2016 - 127

İAEK DEĞERLENDİRME SONUCU

Sayın Hakem,

Aşağıda yer alan üç seçenektan birini işaretleyerek değerlendirmenizi tamamlayınız. Lütfen “Revizyon Gereklidir” ve “Ret” değerlendirmeleri için gerekli açıklamaları yapınız.

Değerlendirme Tarihi: 01.07.2016

Ad Soyad:

<input checked="" type="checkbox"/> Herhangi bir değişikliğe gerek yoktur. Veri toplama/uygulama başlatılabilir.
<input type="checkbox"/> <b>Revizyon gereklidir</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Gönüllü Katılım Formu yoktur.</li> <li><input type="checkbox"/> Gönüllü Katılım Formu eksiktir. Gerekçenizi ayrıntılı olarak açıklayınız:</li> <li><input type="checkbox"/> Katılım Sonrası Bilgilendirme Formu yoktur.</li> <li><input type="checkbox"/> Katılım Sonrası Bilgilendirme Formu eksiktir. Gerekçenizi ayrıntılı olarak açıklayınız:</li> <li><input type="checkbox"/> Rahatsızlık kaynağı olabilecek sorular/maddeler ya da prosedürler içerilmektedir. Gerekçenizi ayrıntılı olarak açıklayınız:</li> <li><input type="checkbox"/> Diğer. Gerekçenizi ayrıntılı olarak açıklayınız:</li> </ul>
<input type="checkbox"/> <b>Ret</b> Ret gerekçenizi ayrıntılı olarak açıklayınız:

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05 Mayıs 2017

Konu: Değerlendirme Sonucu


Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (İAEK)

İlgi: İnsan Araştırmaları Etik Kurulu Başvurusu


Sayın Prof. Dr. Ayhan SOL ve Ar. Gör. Özge DURAL ;

"*Özgür İrade Probleminin Deneysel Felsefe Yöntemleri ile İncelenmesi*" başlıklı araştırmanız İnsan Araştırmaları Etik Kurulu tarafından uygun görülerek gerekli onay **2016-SOS-127** protokol numarası ile **05.05.2017 – 31.12.2017** tarihleri arasında geçerli olmak üzere verilmiştir.

Bilgilerinize saygılarımla sunarım.

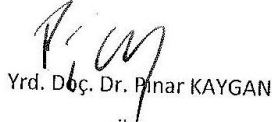
  
Prof. Dr. Ayhan SOL  
Üye

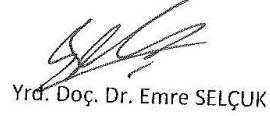
  
Prof. Dr. Ş. Halil TURAN  
Başkan V

  
Prof. Dr. Ayhan Gürbüz DEMİR  
Üye

  
Doç. Dr. Yaşar KONDAKÇI  
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Sayı: 28620816 / 163

27 ŞUBAT 2018

Konu: Değerlendirme Sonucu

Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (İAEK)

İlgi: İnsan Araştırmaları Etik Kurulu Başvurusu

Sayın Prof. Dr. Ayhan SOL, Arş. Gör. Özge DURAL;

**"Özgür İrada Probleminin Deneysel Felsefe Yöntemleri ile İncelenmesi"** başlıklı araştırmanız İnsan Araştırmaları Etik Kurulu tarafından uygun görülerek gerekli onay **2016-SOS-127** protokol numarası ile **27.02.2018 – 30.12.2018** tarihleri arasında geçerli olmak üzere verilmiştir.

Bilgilerinize saygılarımla sunarım.

Prof. Dr. Ş. Halil TURAN

Başkan



## APPENDIX C: CURRICULUM VITAE

### PERSONAL INFORMATION

Surname, Name : Dural Özer, Özge  
Nationality : Turkish (TC)  
Date and Place of Birth : 17 December 1986, Eskişehir  
Marital Status : Married  
Phone : +90 5544629571  
Email : ozgeduralozge@gmail.com

### EDUCATION

Degree	Institution	Year of Graduation
PhD	METU, Philosophy	2019
MA	METU, Philosophy	2013
BS	Bilkent Üni., Philosophy	2009
High School	Kılıçoğlu Anadolu High School, Eskişehir	2004

### WORK EXPERIENCE

Year	Place	Enrollment
2011-2018	METU Department of Philosophy	Research Assistant(ÖYP)

### FOREIGN LANGUAGES

Advanced English

### PUBLICATIONS

1. Workshop: Dural, Özge. Is there a relation between autism and schizophrenia?
2. Interactivist Summer Institute. July 29 - Aug 1, 2011, Department of Product and Systems Design Engineering, University of the Aegean, Syros, Greece.
3. Presentation: Gök, Seher & Dural, Özge. Moleküler Bilgi Kavramının Metodolojik Naturalizme Göre Değerlendirilmesi. 9. Uluslararası Türk Dünyası Sosyal Bilimler Kongresi. 16-17 Haziran 2011. Bakü, Azerbaycan.
4. Poster presentation: Dural Özer, Özge. Mental Time Travel and Episodic Memory as an Indication of Higher Degree Time Consciousness. Conscious Experience of Time Its Significance and Interpretation in Neuroscience and Philosophy. 30.09.2014-02.10.2014, Berlin School of Mind and Brain, Humbolt-Universität Zu Berlin, Berlin, Germany.
5. Member of Organisation Committee: Dural Özer, Özge. METU Metaphysics and Language Symposium. 19/11/2015. Ankara, Turkey.

6. Poster presentation: Dural Özer, Özge. The Role of Mental Time Travel and Episodic Memory in Time Consciousness. ISBC 2016 3rd International Symposium on Brain and Cognitive Science.08/05/2016, Yeditepe University. İstanbul, Turkey.
7. Poster presentation: Dural Özer, Özge. The Role of Free Will in Crime Causation and Criminal Justice System. 21.09.2016-24.09.2016, 16th Annual Conference of the European Society of Criminology. Münster, Germany.
8. Presentation: Dural Özer, Özge. Platon'un Mizah Felsefesi. 6-8 October 2016.Uluslararası Genç Akademisyenler Kültür Kongresi. İzmir, Türkiye

## **HOBBIES**

Archery, Zumba Dance, Literature

## APPENDIX D: TURKISH SUMMARY / TÜRKÇE ÖZET

### I

Bu çalışmada öncelikle deneysel felsefeden kastımızın ne olduğunu belirlemeye çalışacağım. Bunu yapmak için özgür irade ve ahlaki sorumluluğa dair geleneksel sezgilerimiz üzerine yürütülmesi gereken ampirik (görgül) çalışmanın öneminden bahsedeceğim. Daha sonra ise deneysel felsefe ile görgül felsefe arasında varsayılan farklara odaklanacağım. Her ne kadar deneysel felsefe ve görgül felsefenin tanımlanması ve ikisi arasındaki farklar muğlak olsa da bu ikisini birbirinden ayırt etmeye çalışacağım. En sonunda ise, özgür irade ve ahlaki sorumluluğa dair geleneksel sezgilerimiz üzerine yürüttüğüm görgül çalışmanın genel hatlarından ve insanların değişken olan uyumcu (compatibilist) ya da uyumsuzcu (incompatibilist) sezgilere sahip olduklarından bahsedeceğim.

Deneysel felsefeyi göz önünde bulundurarak özgür irade ve ahlaki sorumluluk meselesini ele aldığım için, öncelikle özgür irade ve özgür irade ile ilintili uyumculuk, uyumsuzculuk, belirlenimcilik (determinism) gibi kavramların kısaca bize ne anlatmak istediğine bir göz atalım. Özgür irade, neyi seçip, nasıl hareket ettiğimizin bize bağlı olduğunu hissetmektir ve bu da başka bir şekilde hareket etme imkânımızın olması demektir. Eylemlerimizin ana kaynağı olmamızdır. Eylemlerimizin kaynağının bizim kontrolümüzün dışında olmamasıdır. Uyumcular özgür olmayı, istediğimizi yapabilme yeteneğine, gücüne sahip olmak olarak tanımlarlar. Özgür irade, bizi istediğimizi yapmaktan alıkoyan sınırlamaların, engellerin olmaması demektir. (Kane, 2005, s.13) Eğer özgürlük bu anlama geliyor ise uyumculara göre özgür irade ve belirlenimcilik birbiriyle uyumludur. Diğer bir ifadeyle uyumcular olayların nedensel olarak birbirini gerektirdiği sıkı bir belirlenimcilik ile özgür iradenin bir arada bulunmasının sorun teşkil etmeyeceğine inanır. Uyumsuzcular ise özgür irade ve belirlenimcilik arasında bir uyumsuzluk olduğuna inanır. Çünkü olayların katı bir şekilde birbirini gerektirdiği bir nedensellik

anlayışında özgür iradeye yer kalmaz. Eğer tek bir olası gelecek tasavvur ediliyorsa, eylemlerimiz olması gerektiği gibi gerçekleşecektir ve bu aşamada belirlenimcilik bizi istediğimizi yapmaktan alıkoyan bir kısıtlama haline gelir. Sanıyorum ki burada önemli olan özgür irade ve belirlenimciliğin nasıl tanımlandığıdır.

Özgür iradenin ahlaki sorumluluk üzerinde de etkisi vardır. Kişinin davranışlarından sorumlu tutulabilmesi için alternatif olasılıklara sahip olması gerekir. Alternatif olasılıklara sahip olmak demek kişinin eylemlerinde birden fazla davranış geliştirme olasılığına sahip olması demektir. Kişinin başka türlü davranması olasılığı var ise kişi eylemlerinden sorumlu tutulabilir. Bu varsayıma “Alternatif Olasılıklar İlkesi” denir, fakat bu ilke de eleştirilmektedir. Frankfurt-tarzı örnekler bu eleştirilerdendir.<sup>24</sup> Görüldüğü üzere özgür irade, belirlenimcilik ve ahlaki sorumluluk kavramları iç içe geçmiştir ve nasıl tanımlandıkları önem arz etmektedir. Özgür iradenin olup olmadığı a priori olarak kabul edilmektedir ve bu varsayımların ahlaki sorumluluk gibi diğer kavramlar üzerinde de etkisi vardır. Kişilerin çoğunlukla bu gibi kavramları esas alan konular hakkında geliştirdikleri argümanları da sezgileri tarafından belirlenir. Sezgiler kişilerin sahip olduğu, rasyonel olarak elde etmedikleri örtük düşünceleridir ve kişiden kişiye değişmektedir. Yani, sezgilerimiz güvenilir değildir ve değişkendir. Kişilerin özgür irade ve ahlaki sorumluluk konusundaki sezgileri vaka kurulumuna ve diğer başka faktörlere göre değişmektedir. Bu yüzden deneysel yöntemler kullanılarak birbiri ile ilişkili bu kavramlar açıklığa kavuşturulmalıdır.

Son yıllarda felsefede sezgilerin önemi üzerine hararetli bir tartışma sürmektedir. Sezgilerin tarafında olanlar, sezgilerin “a priori felsefi açıklamayı” sağladığını düşünürken, sezgi karşıtları ise, sezgilerin felsefi doğruluk için güvenilir olmayan bir rehber olduğunu ve göz ardı edilmesi gerektiğini savunuyorlar. (Fischer ve Collins, 2015, s. 51) A priori felsefi bilginin nasıl olup da mümkün olduğu ise tartışılması gereken bir soru olarak karşımızda durmaktadır. Bağımsız bir dünya hakkında sadece oturup düşünerek nasıl bir şeylere ulaşabiliriz? A priori olarak kabul edilen özgür irade gibi kavramların yukarıda da değindiğim gibi diğer başka

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<sup>24</sup> Harry G. Frankfurt alternatif olasılıklar ilkesinin yanlış olduğunu belirtmektedir. Kişi başka türlü davranması mümkün olmamasına rağmen eylemlerinden sorumlu tutulabilir.

kavramlar üzerinde de etkisi vardır. Eğer kişiler argümanlarını ve teorilerini de sezgileriyle oluşturuyorlarsa bu durumda sezgilerin güvenilirliği ve yerelliği konusundaki hassasiyetler de hesaba katılmalıdır. Deneysel felsefe bu noktada bize yardımcı olarak, sadece oturup düşünerek felsefe yapmanın ötesinde bir dizi imkân sunmaktadır.

Yukarıda özgür irade ve özgür irade ile ilintili kavramlardan ne anladığıma değindikten sonra şimdi de özgür irade ve ahlaki sorumluluğa dair geleneksel (folk) sezgilerimiz üzerine yürütülmesini düşündüğüm görgül çalışmadan bahsedeceğim. Sezgiye dayandığı iddia edilen ve oturduğu yerden felsefe yapmak (armchair philosophy) denilen yöntem, analitik felsefeciler arasında yaygın olarak kullanılmaktadır. Oysaki sezgilerimizin değişmezliği ve güvenilirliği yapılan bazı araştırmalarla sorgulanmaya başlamıştır. Felsefecilerin sezgileri de felsefeci olmayanların sezgileri kadar çevresel koşullar gibi çeşitli parametrelere bağlı olarak değişmektedir. Ampirik araştırmalar ile uğraşmak oturduğumuz yerden felsefe yapmaktan daha doğalcıdır (natüralisttir). Ben de belirlenimcilik ve özgür irade konusundaki görüşlerin güvenilir olmayan bu sezgilere fazlasıyla dayandığımı ve farklı felsefi görüşlerin de sezgiler arasındaki farklılıktan ve dolayısıyla ussal olmayan nedenlerden kaynaklandığını düşünüyorum. Bu nedenle sezgilerin görgül yöntemlerle araştırılmasını destekliyor ve bazı deneyleri Türkiye özelinde tekrarlamak istiyordum. Aynı konudaki benzer çalışmalarını tekrar ederek, önceki çalışmalar ile uyumlu sonuçlar elde edeceğimi umuyordum. Shaun Nichols ve Joshua Knobe'nin yürüttüğü çalışmanın bir benzerini yaparak, çalışmamın sonunda bulgularımın onların bulduğu sonuçları destekleyeceğini umuyordum. Ayrıca, çalışmanın farklı bir kültürden olan katılımcılarla tekrarlanması sezgilerimizin çeşitliliği ve değişkenliği konusunda da bize bilgi verecekti. Özgür irade ve ahlaki sorumluluk hakkındaki geleneksel sezgilerdeki kültürel çeşitlilik, a priori felsefi yöntemlerle çözümsüz kalmaktadır ve deneysel çalışmalar yürütmek adeta bir gereklilik olarak karşımıza çıkmaktadır.

Kişiler, özgür iradeye sahip olduklarına inanıyor olabilirler, fakat özgür irade hiçbir şekilde var olmasa da biz diğer kişileri eylemlerinden sorumlu tutmak için özgür iradenin var olduğunu sanıyor olabiliriz. Kişiler özgür iradenin varlığı hakkında farklı sezgilere sahip olabilirler ve düşünce deneylerini ya da teorilerini bu

sezgiler üzerine inşa ediyor olabilirler. Bununla birlikte, bu sezgiler kişiden kişiye değişiyor olabilir. Deneysel sonuçlarımdan kişilerin uyumculuk ve uyumsuzluk hakkındaki cevaplarının vakanın kurulumuna göre değişeceğini bulmayı bekliyordum ve benim için deneysel felsefe değişken olan sezgileri değerlendirmeye yarayan bir araçtı.

Geleneksel (folk) sezgiler kişilerin felsefi sorular hakkındaki temel sezgileridir. Deneysel felsefeyi özgür irade ve ahlaki sorumluluk bağlamında değerlendirdiğim için, konuyu özgür irade ve ahlaki sorumluluk üzerinden ele alırsak, özgür irade ve ahlaki sorumluluğa dair geleneksel sezgilerimizin de çeşitlendiğini görüyoruz. Roskies ve Nichols özgür irade ve ahlaki sorumluluk hakkındaki sezgilerimizin a priori düzeyde bir tartışmaya indirgenemeyeceğini söylemektedir. (Roskies ve Nichols, 2008, s. 372) Özgür irade ve ahlaki sorumluluğa dair geleneksel sezgilerimiz deneysel felsefe ile değerlendirilebilecek görgül bir meseledir. Ahlaki sorumluğa ilişkin yapılan deneysel çalışmalarda halkın uyumcu mu uyumsuzcu mu olduğuna dair birbiriyle çelişen sonuçların elde edildiğini görmekteyiz. Yani deneysel çalışmalar halkın bu konudaki sezgilerinin değişken olduğunu göstermektedir. Örneğin, Nahmias ve meslektaşları deney katılımcılarının belirlenimciliği doğru kabul ettiği bir çalışmaya başlamış ve katılımcılardan bu belirlenimci durumda diğer kişilerin suçlu sayılıp sayılmayacağını değerlendirmelerini istemişlerdir. Çalışmanın sonucunda Nahmias ve meslektaşları katılımcıların diğer kişileri belirlenimci durumda da suçlu olarak gördüklerini bulmuştur. Belirlenimci durum önceki bir olay ile geçmiş olayı izleyen olay arasında sıkı bir gerekliliğin olduğu durumu varsayar ve bu durum her ne kadar özgür iradeye imkân tanımıyor gibi görünse de çalışmanın sonucuna göre katılımcılar özgür iradenin varlığını kabul edip, diğerlerini belirlenimci durumda da eylemlerinden sorumlu tutarlar. Roskies ve Nichols (2008) ise bir başka çalışmada katılımcılara alternatif bir evren sunmuşlardır. Bu alternatif evren, katılımcıların kendi evrenlerinden farklı hayali bir evrendir. Roskies ve Nichols ise bu alternatif evrende katılımcıların diğer kişileri sorumlu tutmadıklarını bulmuştur. Bu alternatif evren kişilerin içinde yaşadıkları evren değildir, tasarlayıp hayal ettikleri bir evrendir. Alternatif evren, içinde yaşadıkları evren olmadığında kişiler diğerlerini eylemlerinden dolayı sorumlu tutmamışlardır. Gördüğümüz gibi, uyumsuzcular kendi görüşlerinin sezgisel görüş olduğunu söylerken, kişilerin sezgisel olarak

uyumcu olduklarına dair deneysel kanıtlar mevcuttur. Peki, buradaki doğru görüş kime aittir? Uyumculara mı yoksa uyumsuzculara mı? Shaun Nichols'e göre her iki taraf da haklıdır. Belirli şartlar altında kişiler uyumcu sezgilere sahipken, diğer bazı şartlarda, uyumsuzcu olurlar.

Görüldüğü üzere, yeni çalışmalar kişilerin farklı sezgilere sahip olduklarını göstermektedir. Araştırmacılar çeşitli görgül yaklaşımları geleneksel kavramları incelemek için kullanmaktadırlar. Geleneksel sezgilerdeki kültürel çeşitlilik, a priori felsefi yöntemlerin hakimiyetini sarsmıştır. Oturduğumuz yerden yaptığımız kavramsal analiz problemlidir çünkü bu yöntemi uygulayanlar kavramlarının hangi yönlerinin kültürel olarak yerel olduğunu görmezden gelir. Felsefi sezgilerde kültürlerarası çeşitlilik önemlidir. Kavramsal analizde görgül yöntemlerin kullanımı alternatif bir yaklaşımdır ve görgül yöntem felsefi sezgilerin psikolojik altyapılarını açığa çıkartmak açısından önemlidir. Görgül yaklaşımda herhangi birinin sezgilerinin halkın tamamını temsil ettiği kabul edilmez. Aksine, görüşme ve anketler geleneksel sezgilerin objektif ölçümü için kullanılır. (Nichols, 2006, s. 64) Hangi psikolojik mekanizmaların sezgilerin temelini oluşturduğunu belirlemek oturduğumuz yerden yapılabilecek bir iş değildir.

Şimdiye değin özgür irade ve ahlaki sorumluluğa dair geleneksel sezgilerimiz üzerine yürütülmesini düşündüğüm görgül çalışmanın öneminden bahsettim. Şimdi ise deneysel felsefe ve görgül felsefe arasında bir fark olup olmadığına değinmeye çalışacağım. Bazen deneysel felsefe ve görgül felsefe arasına sınır çizildiği olur. Rose ve Danks görgül felsefe ve deneysel felsefe arasında bir fark olduğunu söylüyor, fakat bu farkın bir altküme ilişkisi olduğunu, yani deneysel felsefenin görgül felsefenin alt kümesi olduğunu iddia ediyor. Prinz (2008) "Görgül Felsefe ve Deneysel Felsefe" başlıklı bölümde deneysel felsefe ve görgül felsefe arasındaki farka odaklanır. Bazı felsefeciler bilimsel bulguları rapor etmek yerine, deneyler tasarlayıp yürüterek bilime katkıda bulunurlar. Diğerleri ise bilimsel bulguları kullanır. İlki deneysel felsefe, ikincisi ise görgül felsefe yaklaşımında kendine yer bulmaktadır.

Felsefi sorular görgül soruşturma ile aydınlatılabilir, ancak bunu yaparken felsefeciler görgül araştırmayı nasıl ele almalıdırlar? Literatürde iki ana yaklaşım bulunmaktadır. Bazı felsefeciler profesyonel bilim insanları tarafından elde edilen

görgül sonuçları kullanırlar. Genellikle bu felsefeciler, sinirbilimciler ve psikologların çalışmalarına atıfta bulunurlar, ayrıca dilbilimciler, evrimsel biyologlar, robot bilimciler, antropologlar ve diğerlerine başvururlar. Bu bilimsel sonuçlar felsefi teorileri desteklemek ya da çürütmek için kullanılır. Prinz bu şekilde izlenen yolu görgül felsefe olarak nitelemektedir. Deneysel felsefeciler olarak adlandırılan diğer felsefeciler ise kendi psikolojik deneylerini yürütürler. Özetle, birinci gruptakiler bilimsel verileri kullanırken, ikinci gruptakiler verilerini kendileri toplamaktadır. İlkece deneysel ve görgül felsefe arasındaki fark çok da önemli olmayabilir. Ama yine de görgül ve deneysel felsefenin yeni literatüre yaklaşımında bazı farklılıklar mevcuttur. Prinz'e göre görgül ve deneysel felsefe arasında farklılıklar vardır. Görgül felsefeciler çok geniş bir alanı kapsayan meselelerle uğraşır ve genellikle bu alan zihin felsefesi alanıdır. Görgül felsefeciler kavramsal sorularla ilgilenmezler. İnsanların "kavram, acı, yanlış" gibi kavramlarla neyi kastettiklerini belirlemeye çalışmazlar. Görgül felsefeciler kavramsal iddialarda bulunurken nadiren görgül sonuçlara başvururlar. Görgül sonuçları yorumlamak için ise oturdukları yerden kavramsal analiz yaparlar. Deneysel felsefe bu anlamda görgül felsefeden ayrılmaktadır. Deneysel felsefeciler özellikle sıradan kavram kullanıcılarının belirli kategorilerden ne anladıkları ile ilgilenirler. Zihinsel kategorilere odaklanırlar ve deneysel felsefe geleneksel psikolojiyi anlamaya çalışır. Deneysel felsefeciler şu gibi sorularla ilgilenirler: Yönelimleri (intention) nasıl anlıyoruz? Özgür iradeye inanıyor muyuz? Ahlaki nesnelciler (moral objectivist) miyiz? (Nichols ve Knobe, 2008, s. 198) Bu soruları soran felsefeciler bu zihinsel kapasiteleri araştırırken öncelikli olarak bu kapasitelerin neyi temsil ettiğiyle ilgilenmezler. Yani yönelimler nedir, özgür irade var mıdır, ahlaki olgular (moral fact) var mıdır gibi sorularla deneysel felsefeciler çoğunlukla ilgilenmezler. Deneysel felsefeciler tarafından sorulan sorular görgül felsefeciler tarafından sorulan sorulara göre daha özeldir. (Nichols ve Knobe, 2008, s. 198) Görgül felsefeciler görece genel, birinci dereceden (first-order) sorularla ilgilenirler. Kavramları analiz ederken, bunu genellikle oturdukları yerden yaparlar. Deneysel felsefeciler ise belirli kavramlar hakkında ikinci dereceden (second-order) sorular ile ilgilenir, kavramsal analizlerini eğitilmemiş kişilerin oturdukları yerden ulaştıkları sezgileri üzerine istatistiki analizler yaparlar. Eğer bir felsefeci deney yürütecekse, bu deneyler anket



çalışmaları şeklinde olabilir. Anket çalışmaları özellikle eğitimsiz sezgilerin toplanması açısından kullanışlıdır.

Bunlarla birlikte, David Rose ve David Danks deneysel felsefenin alışılmadık bir felsefe olarak anlaşılması gerektiğini söyler. Rose ve Danks'e göre deneysel felsefe felsefi doğalcılık (philosophical naturalism) ve bilişsel bilimin (cognitive science) bir araya getirilmesidir. Rose ve Danks, birincil hedefin sezgiler olduğu psikolojik deneylerin yürütüldüğü deneysel felsefenin dar anlamda bir deneysel felsefe anlayışı olduğunu söyler. Rose ve Danks'e göre bu dar deneysel felsefe anlayışı reddedilmelidir çünkü bu dar anlayış deneysel felsefeyi kısıtlar. Deneysel felsefe sadece geleneksel sezgileri çalışan bir felsefe anlayışı haline gelir. Ayrıca, bu dar anlayış gerçek uygulamaların çoğunu kapsamaz. (Rose ve Danks, 2013, s. 514) “Daha geniş bir deneysel felsefe anlayışını hayata geçirmeliyiz, çünkü deneysel felsefe, görgül verinin belli felsefi sorularla ilişkilendirildiği, gerekirse ilgili deneylerin yürütüldüğü, felsefi doğalcılık geleneğinin bir örneğidir” (Rose ve Danks, 2013, s. 514). Deneysel felsefe, felsefi anlamda doğalcıdır, çünkü felsefi sonuçlara erişmek için görgül olgular ele alınır. Rose ve Danks felsefenin sadece dilsel analiz ya da a priori akıl yürütme ile yapılamayacağını, bunların belirli çeşitlerde görgül olguyla da birleştirilmesi gerektiğini söylemektedir. Rose ve Danks ayrıca deneysel felsefeyi doğalcılık ve gerçek deneylerin yürütülmesinin bileşimi olarak gördüklerini söylemektedir. Deneysel felsefeciler geleneksel sezgilerin felsefi tartışmalarla derinden ilişkili olduğunu iddia eder. Sezgilerin güvenilirliği konusunda olumlu ve olumsuz sonuçlara ulaşmak mümkündür. Deneysel felsefede olumlu ve olumsuz projeler olarak görülen bu iki yaklaşımda ya deneysel yöntemler ile sezgilerin felsefeciler tarafından daha güvenilir bir şekilde kullanılması hedeflenir ya da sezgilerin rolü konusuna şüpheci yaklaşılr. Deneysel felsefede, sezgilerin oynadıkları rol açısından olumlu ve olumsuz görüş olmak üzere iki yaklaşım bulunmaktadır. Bunlardan olumlu görüş yaklaşımı, “deneysel bulguları, sezgileri demokratikleştirmek” için kullanır. (Fischer ve Collins, 2015, s. 223) Deneysel felsefenin eski moda kavramsal analizden ayrıldığı nokta, sadece felsefe eğitimi almış bir kişinin sezgilerini değil yüzlerce kişinin sezgilerini göz önünde bulundurmasıdır. Bu yaklaşımı radikal olmayan deneysel felsefe çeşidi olarak adlandırabiliriz. Bence Nanay, daha radikal bir yaklaşım olan olumsuz yaklaşımın, deneysel felsefeyi felsefede sezgilerin rolünü zayıflatmak için kullandığını

söylemektedir. Olumsuz görüş, sezgilerimizin çeşitliliğinin önemine dikkat çeker. Sezgilerimiz çevresel etkiler, demografik farklılıklar gibi pek çok nedenle değişir. Eğer sezgilerimiz bu kadar geniş bir ölçekte çeşitleniyorsa ve bilmediğimiz pek çok parametreye de bağlıysa, onlara güvenmemiz için yeterli sebebimiz yoktur. Bu radikal sonuçlar da elbette farklı şekillerde eleştirilmektedir. (Fischer ve Collins, 2015, s. 223) Deneysel felsefenin radikal çeşidi, geleneksel sezgilerimiz üstüne yürütülen deneyleri, geleneksel sezgilerimizi gerekçelendiremediklerini göstermek için kullanır. Deneysel felsefede olumsuz program Bence Nanay'a göre doğalcıdır.

Diğer yandan Joshua Knobe ve Shaun Nichols *Deneysel Felsefe Manifestosu*'nda deneysel felsefenin doğasını belirginleştirmeyi amaçladıklarını söylemektedir. Bu kısa manifestoda, deneysel felsefenin amacının kavramsal analizden farklı olduğunu söylemektedirler. Kavramların kullanılmasının altında yatan içsel psikolojik işlemlerin neler olduğunu belirlenmesinin amaçlarından biri olduğunu anlatmaktadırlar. Knobe ve Nichols'un bilmek istediği şey kişilerin sahip oldukları sezgilere neden sahip olduğudur. (Knobe ve Nichols, 2008, s. 6) Deneysel felsefenin amacı özgür irade, ahlaki sorumluluk hakkında olduğu gibi sahip olduğumuz sezgilere neyin sebep olduğunu belirlemeye çalışmaktır. Knobe ve Nichols'a göre dinsel, ahlaki ve metafizik inançlarımızın kaynakları hakkındaki sorular son derece önemli sorulardır ve hiçbir zaman da bu soruları takip etmememiz gerektiğine dair iyi bir neden yoktur. Bu iki deneysel felsefeci, amaçlarının bu sorulara dönmek olduğunu ve çağdaş bilişsel bilim yöntemlerini kullanarak bu amacı gerçekleştireceklerini söylemektedir. Kişilerin sezgilerini oluşturan temeldeki psikolojik işlemler hakkında kuramlar geliştirmek için deneysel sonuçlar kullanılabilir. Psikolojik işlemler hakkındaki kuramlarımız sezgilerin kanıtlanıp kanıtlanamayacağını belirlemek için kullanılabilir. Knobe ve Nichols hangi işlemlerin hangi sezgileri oluşturduğunu belirlemek için en iyi yöntemin dışarı çıkıp görgül veri toplamak olduğunu söylemektedir. En basit kavramlarda bile bir çeşitlilikten söz edebiliriz. Örneğin, bilgi için neyin gerekli olduğu hakkındaki temel düşünceler kültürler arasında farklıdır.

## II

Şimdiye kadar genel olarak deneysel felsefeden ne anlamamız gerektiği ve deneysel felsefenin görgül felsefeden ayrıldığı noktalara değinmeye çalıştım. Yazımın bu kısmında, yapacağım görgül çalışmanın felsefi meselelerde bizi nereye götürebileceğini anlatmaya çalışacağım. Özgür irade inancının ahlaki davranış üzerinde bir etkisinin olup olmadığı tartışması uzun zamandır süregiden bir mesele olmasına rağmen, deneysel felsefeciler görgül olarak meseleyi incelemeye son zamanlarda başlamışlardır. Deneysel felsefeciler salt belirlenimci bir dünyada kişisel sorumluluğu değerlendirmek için kişilere bazı sorular yöneltmişlerdir. Nahmias, Morris, Nadelhoffer ve Turner (2005) deney katılımcılarından belirlenimciliğin doğruluğunu kabul etmelerini ve daha sonra bu belirlenimci durumda kişinin eylemleri nedeniyle suçlu sayılıp sayılamayacağını değerlendirmelerini istemişlerdir. Bu araştırmacılar, katılımcıların örnekteki kişiyi belirlenimci bir evrende bulunuyorsa bile suçlu olarak gördüklerini bulmuşlardır. Diğer yandan, Nichols ve Knobe katılımcıların belirlenimci bir evrende bireylerin eylemlerinden sorumlu tutulamayacaklarını söylemeye yatkınlıkları olduğunu bulmuşlardır. Roskies ve Nichols bu çalışmalardaki çelişkiyi şu şekilde çözmeye çalışmıştır. Roskies ve Nichols belirlenimci evren kendi evrenimiz ya da alternatif bir evren olarak varsayıldığında, bireylerin sorumluluk anlayışında farklılık olup olmadığını karşılaştırmışlardır. Katılımcılar belirlenimci evreni kendi evrenleri olarak gördükleri zaman diğerlerini suçlu bulmaya eğilimlidir. Ancak hayali bir evren varsayılıyor ise, diğerlerini daha az suçlu bulmaya yatkındırlar. Özgür iradenin var olup olmadığına olan inanışın insanların ahlaki davranışları ve diğer insanlara karşı gösterilen tavırlar üzerinde etkisi vardır. Özgür iradenin olmadığına dair sezgilerin insanların hilekârlığını ve saldırganlığını artırmak, yardımseverliğini azaltmak gibi davranışları üzerinde olumsuz etkileri vardır. Diğer yandan, özgür iradenin olmadığına dair inanış intikam isteğini azaltır ve insanları daha affedici olmaya iter.

Vohs ve Schooler özgür iradeye sahip olup olmamaya dair bilimsel iddiaların katılımcılar üzerindeki etkisini araştırmışlardır. Özgür iradenin olmadığı ile ilgili bir metinle karşılaşan katılımcılar, aritmetik testinde kopya çekmeye daha yatkındırlar ve ahlaki olmayan davranışları artar. Bir başka deneyde, katılımcılar belirlenimcilik hissini düşüren çeşitli cümleleri okurlar. Örnek cümleler şunun gibi ifadelerdir: “En

nihayetinde, bizler genetik vasıtasıyla inşa edilmiş ve çevre tarafından programlanmış, evrim tarafından tasarlanmış biyolojik bilgisayarlarız.” Katılımcıların görevi cümleyi okuyup üzerinde düşünmek ve daha sonra bilgilendirildikleri zaman başka bir cümle okumaktır. Bir başka durumda, katılımcılar “ben davranışlarımı etkileyen genetik ve çevresel faktörleri geçersiz kılabilirim” gibi özgür irade inancını desteklemek için yazılan cümleleri okumuşlardır. Üçüncü bir grup katılımcı ise yansız cümleler okumuştur. Sonrasında kopya çekme ortamı oluşturulmuş ve katılımcılar ödeme de aldıkları testleri kendileri değerlendirmişlerdir. Sonuçlar ise katılımcıların, eylemlerin önceden belirlenmiş ve kendi kontrolleri dışında olduğuna dair cümleler okuduklarında, daha fazla kopya çektiklerini göstermektedir. İnsanların ilk varsaydıkları şey özgür iradenin varlığını kabul etmek olabilir, ancak bu deney katılımcıların, özgür iradenin olmadığına dair metinlerin etkisinde bırakıldıkları zaman inançlarının değiştiğini göstermektedir. Bireylerin özgür iradeye bakış açıları özgür iradenin bir yanılsama olduğuna dair bilimsel iddiaların etkisinde kaldıklarında değişir. Vohs ve Schooler’in çalışmasının en önemli noktası özgür iradenin olmadığına dair önermelerin etkisinde kalmanın ahlaki olmayan davranışlarda artışa sebep olduğunu göstermesidir. Özgür irade konusunda hayal kırıklığına uğramak diğer başka anti-sosyal davranışları da artırır. Baumeister, Masicampo ve Dewart’ın (2009) çalışması özgür iradenin olmadığına dair metinleri okumanın sosyal davranışı zayıflattığını göstermektedir. Katılımcılar diğer insanlara yardım etmek konusunda daha isteksiz olurlar veya saldırgan davranma yatkınlıklarında bir artış gözlenir. Özgür irade inancının kırılmasının yalnızca kötü yanları yoktur. Bazen bir yarar bile gözlemlenebilir. Greene ve Cohen (2004) özgür irade inancının yokluğunun bazı sosyal faydalara neden olduğunu bildirirler. İnsanlar daha affedici olurlar ve daha az kindar davranırlar.

Ben ise çalışmamda genel olarak insanların neden uyumcu ya da uyumsuzcu sezgilere sahip olduklarını değerlendirmeye çalıştım. Nichols ve Knobe bu soruyu daha önce ele alarak, deneysel çalışma yürütmüşlerdir. Nichols ve Knobe sorunun nasıl sorulduğuna bağlı olarak insanların ahlaki sorumluluğa dair sorulara verdikleri cevaplarının değiştiğini gösteren deneysel veriler elde ettiklerini bildirmiştir. Deney katılımcılarına yöneltilen sorular soyut olduğunda, katılımcılar daha çok uyumsuzcu cevaplar vermektedirler. Fakat sorular duyguları tetikleyen somut bir durumu anlatan sorularsa, katılımcıların cevapları daha çok uyumcu olmaktadır. Bu sonuç bize

duygulanımın kişilerin sezgilerini oluşturmada etkili olduğunu göstermektedir. Nichols ve Knobe iki farklı evren kurmuşlardır. Evren A'da her karar, karardan önce gerçekleşen olay tarafından belirlenmektedir, fakat B evreninde kararlar geçmiş tarafından belirlenmez ve insanların eylemleri eylemde buldukları gibi olmak zorunda değildir. Nichols ve Knobe'nin çalışmasında katılımcılara ilk önce A mı yoksa B evrenini mi kendi evrenlerine yakın buldukları sorulmuştur. Bu soruların amacı katılımcıların evrenimizi belirlenimci mi belirlenimci olmayan şeklinde mi düşündüklerini belirlemeye çalışmaktır. Nichols ve Knobe hemen hemen neredeyse bütün katılımcıların evrenimizi belirlenimci olmayan bir evren olarak gördüklerini bulmuşlardır. Bu sorudan sonra, katılımcılar uyumcu mu yoksa uyumsuzcu sezgilere mi sahip olduklarını belirlemek için başka bir soruyla karşılaşmışlardır. Somut durum için yöneltilen sorulardan biri şudur:

A evreninde, Bill isimli bir erkek sekreterinden etkilenir ve sekreteriyle birlikte olmanın tek yolunun karısı ve üç çocuğunu öldürmek olduğuna karar verir. Yangın durumunda ailesinin evden kaçmasının imkansız olduğunu bilmektedir. Bir iş seyahati için evden ayrılmadan önce, evi yakan ve ailesini öldüren düzeneği merdivenlere yerleştirir. Bill karısını ve çocuklarını öldürmekten ahlaki olarak tamamen sorumlu mudur? (Nichols & Knobe 2007).

Evet

Hayır

Bu durumda, çoğu katılımcı (%72) uyumcu cevabı (yani Evet) vermiştir. Katılımcılar Bill'in suçundan tamamen ahlaki olarak sorumlu olduğunu düşünmüşlerdir. Eğer soyut düşünceyi içeren başka bir durum tasarlırsak:

A evreninde, bir kişinin eylemlerinden tamamen ahlaki olarak sorumlu olması mümkün müdür?

Evet

Hayır (Nichols & Knobe 2007).

Bu durumda ise, çoğu katılımcı (%86) uyumsuzcu cevabı vermiştir. Yani, çoğu katılımcı hayır cevabını vermiştir.

Sonuç olarak, Nichols ve Knobe insanların somut duruma uyumcu soyut duruma ise uyumsuzcu cevap verdiklerini tespit etmiştir. Öyle görünüyor ki insanların durumlara karşı geliştirdikleri hem uyumcu hem uyumsuzcu cevaplar söz konusudur. İnsanların duyguları tetiklendiği zaman, uyumcu sezgilere sahiptirler. Fakat soyut bir durumla karşılaştıklarında uyumsuzcu cevaplar vermektedirler. Bu çalışma bize duygulanımın

insanların uyumcu sezgilerini oluşturmada önemli bir katkısı olduğunu göstermektedir.<sup>25</sup>

Yukarıda özgür irade a priori olarak kabul edilmektedir ve bu varsayımın ahlaki sorumluluk gibi diğer kavramlar üzerinde de etkisi vardır, demiştik. Kişilerin özgür irade ve ahlaki sorumluluk konusunda sahip oldukları sezgileri vaka kurulumuna göre değişmektedir. Sezgilerin bu denli çeşitli olması, kişilerin duruma göre uyumcu ya da uyumsuzcu olmaları bizi sezgilerimizin güvenilirliği konusunda şüpheye itmektir. Çünkü bu çeşitlenen sezgiler üzerine argümanlar geliştirip, kuramlar üretmekteyiz. Özgür irade ve ahlaki sorumlulukla ilgili sezgilerimiz deneysel yöntemler ile ya daha güvenilir bir hale getirilmelidir ya da bu gibi sezgiler konusunda tümünden şüpheli bir yaklaşım benimsenmelidir. Olumlu ya da olumsuz deneysel felsefe yaklaşımlarından hangisini benimserseniz benimsenir, oturduğumuz yerden bu işi tamamlayamayız. Zaman zaman kavramsal analiz için a priori yöntemlerin kullanımı gerekli olabilir, ancak görgül yöntemlerin önemi yadsınamaz. Özgür irade ve ahlaki sorumluluk gibi iki önemli felsefi mesele ile görgül kanıtlar birbiriyle ilişkilendirilebilir. Sezgilerin nesnel olarak anket çalışmaları ile değerlendirilmeye çalışılması, neden bu tür sezgilere sahip olduğumuz hakkında bize bilgi verecektir. Sezgilerimizin altında yatan nedenlerin neler olduğunu belirlemeye çalışmak her ne kadar profesyonel psikologların işi gibi görünüyorsa da, bu gibi çalışmalar en azından soru sorabilmek adına önemlidir. Disiplinler arası çalışmaların önemi günümüz dünyasında göz ardı edilmemelidir. Ayrıca disiplinler arasında keskin çizgilerin varlığı konusunda da çeşitli tartışmalar mevcuttur.

Özgür irade ve ahlaki sorumluluk bu iki kavram üzerine deneysel çalışmalar yürütülebilir ve oturduğumuz yerden felsefe yapmanın ötesinde, istatistikî analizler bize kişilerin hangi durumlarda bu sezgilere sahip oldukları konusunda fikir verebilir. Aksi takdirde, özgür irade ve sorumluluk üzerine sahip olduğumuz düşünceler bir

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<sup>25</sup> Bu yapılan görgül çalışmanın bir benzerini Türkiye’de lisans eğitimi almakta olan öğrencilerle gerçekleştirdik. Deney katılımcılarına yönelttiğimiz sorular Nichols ve Knobe’nin yönelttiği sorular ile birlikte birkaç ek sorudan (demografik, vb.) oluşmaktadır. Deneyin başka bir coğrafyada, farklı bir kültürde yaşayan kişiler üzerinde tekrarlanması ve deney sonucunda ulaştığımız bulgular sezgilerin çeşitliliği konusunda ve neden kişilerin uyumcu ya da uyumsuzcu görüşlere sahip oldukları konusunda bize bir fikir vermektedir.

ikilem düzeyinde kalmaktan öteye gitmez. Hangi durumlarda insanlar özgür iradenin varlığına dair sezgileriyle, hangi durumlarda yokluğuna dair sezgileriyle hareket etmektedirler? Bu konuda deneysel çalışmalar bize bilgi verecektir. “Örtük sezgilerimizin neler olduğunu bilmek zorundayız, fakat kesinlikle onlara güvenmemeliyiz” (Fischer ve Collins, 2015, s. 69).

### III

Bu metinde, öncelikle deneysel felsefeden ne anlamamız gerektiğini açıklamaya çalıştım. Genel hatları ile özgür irade ve ahlaki sorumluluğa dair geleneksel sezgilerimiz üzerine yapacağım görgül çalışmanın öneminden bahsettim. Deneysel felsefe ve görgül felsefe arasında varsayılan farklara odaklanarak bu ikisini anlamaya çalıştım. Sonuç olarak, sezgilerin kültürden kültüre, vaka kurulumuna ya da diğer başka parametrelere bağlı olarak değişkenliği, apriori olarak kabul edilen özgür irade ve ahlaki sorumluluk konusundaki görüşlere şüpheyle yaklaşmama sebep olmuştur. Özgür irade ve ahlaki sorumluluk hakkındaki uyumculuk ve uyumsuzculuk gibi farklı felsefi görüşler de bu değişken sezgilere dayandığından, oturduğumuz yerden felsefe yapmak bize yarar sağlamayacaktır.

“Ahlaki sezgilerimize güvenebilir miyiz? Bu tamamen ne yapmaya çalıştığımızla alakalıdır” (Greene, 2017, s.76). Sezgilerimize güvenmek gündelik hayatlarımızı kolaylaştırabilir, fakat diğer yandan eğer ahlaki problemleri çözmek ya da çelişen ahlaki sorularla uğraşıyorsak, sezgisel ahlaki kararlarımızın (yargılarımızın) sınırlarını görmezden gelemeyiz. “Ahlaki düşüncenin” modellenmesi ve modellerin daha iyi kararlar alabilmek için kullanılması daha karlıdır. Greene’nin ortaya attığı gibi (2017, s. 76) “bilim kendi başına bize neyin doğru ya da yanlış olduğunu söyleyemez.” Fakat eğer zor ahlaki problemleri çözmeyi amaç ediniyorsak, “ahlaki düşüncüyü bilimsel olarak anlamaya çalışmak” daha iyi olacaktır. (Ibid.)

Halkın sezgileri konusunda hem iyimser hem de kötümserim. Greene’e ahlaki düşünmenin modellenmesi konusunda katılıyorum çünkü bu tarz bir model problemler vakalardaki ahlaki kararları daha iyi anlamamızı sağlayabilir. Bilim kendi başına ne yapmanın doğru ne yapmanın yanlış olduğunu bize söylemeyecektir, ancak eğer zor ahlaki problemleri çözmeye çalışıyorsak, bilimsel bir anlayış ilerleme yolunda atılan

güçlü bir adımdır. Bunu yapmak için biz de Etkileşimli İkili Süreç Modelini (Dual Interacting Process Model) bu tezde önermiş bulunuyoruz.

Sonuçlarımızdan ulaştığımız deneysel kanıtlar da bize duygular ve akıl yürütme arasında bir çeşit kademeli geçiş ve etkileşim olduğunu göstermektedir. Bizim ahlaki karar verme sürecindeki Etkileşimli İkili Süreç Modelimizde, hem duygular hem de akıl yürütme eşit derecede önemlidir. Ahlaki yargılarda bulunabilmek için işleyen birbirini tamamlayan iki farklı süreçtir. Duygular ve akıl yürütme arasındaki bu etkileşimin nasıl olduğunu açıkça bilmememize rağmen, Greene'nin iddia ettiği gibi bir fotoğraf makinesinin açık kapalı konumları gibi olmadığını söyleyebiliriz. Akıl yürütme ve duygular, pazarlık içinde işleyen ikili bir süreçtir. Sonraki araştırmalar bize akıl yürütme ve duygular bu ikili süreç arasındaki kademeli geçişi gösterecektir.

Bu basit bir deneysel felsefe çalışmasıdır ve bu özetle, ara ara bu çalışmanın felsefi sonuçlarına da değinmek istemekteyim. Bütünüyle bu çalışma, ahlaki sorumluluk problemini “yararcılık ve deontoloji olarak iki ana ahlak felsefesi okulu arasındaki farklara dikkat çeken ünlü felsefi düşünce deneyi, tramvay problemi üzerinden” tartışmaktadır. (White, 2010, s. 163) Greene ray değiştirme (switch) ve köprü (bystander) olarak, iki çeşit tramvay durumuna katılımcıların verdikleri farklı cevaplardan sorumlu psikolojik ve beyin süreçlerine odaklanır. Çoğu katılımcı diğer beş kişiyi kurtarmak için iri birini rayların üzerine itmeyi reddeder, fakat insanlara beş kişiyi kurtarmak için rayı değiştirmek ve bir kişinin ölmesine izin vermek kabul edilebilir görünür. Greene duygular ve akıl yürütmenin farklı cevaplardan sorumlu olduğu bir ikili süreç modeli ortaya atar. Greene ray değiştirme ve köprü durumlarını zararın kişiselliğine göre ayırır ve her bir durumda hangi beyin bölgesinin aktif olduğunu açıklar. Biz de Greene'in fikirlerinden yola çıktık ve önemli sonuçlara ulaştık kanısındayım.

Yararcılık ve deontoloji Greene'in çalışmasının ana felsefi noktalarını oluşturmaktadır. Tramvay problemi gibi düşünce deneyleri bizim de hayali bir hikâyeyi kullanarak “ne yapmamız ya da ne yapmamamız gerektiğini hayal etmemizi” sağladı. Soyut-somut durumlar ya da yüksek-düşük duygu durumları tramvay problemi gibi bir düşünce deneyi olarak görülebilir. Bu durumlar bize ahlaki sorumluluk, özgür irade, belirlenimcilik, belirlenemezlik, uyumculuk ve



uyumsuzculuk gibi meseleleri “onları deneyimlemeden” tartışmamızı sağladı. Aslında, düşünce deneyleri çeşitli felsefi yaklaşımları tartışmak için yeterince pratik araçlardır. Bazı felsefi düşünce deneylerinin sunulması bize “bir durumun ahlakiliğini” onu en basit parçalarına bölerek tartışma imkanı verdi.

Greene tramvay problemini ahlaki karar verme sürecini modellemede kullanmıştır. Tipik bir yararçı rayların değiştirilmesi gerektiğini söyler ve daha fazla hayat kurtarıken, bir ödev ahlakçısının masum bir insanı öldürmek konusunda tereddütleri olacaktır. Thomson’un cevabı hem yararçı hem de ödev ahlakçısının kaygılarını kapsar. Kişi rayları değiştirir ve beş kişi yerine bir kişiyi öldürür, fakat kişinin iri birini rayların üzerine itmesi konusunda tereddütleri olması da kabul edilebilir. Tezde ayrıca organ nakli-ameliyat durumuna da değindim. Tramvay durumundaki ray değiştirme ile organ naklindeki doktorun icraatları arasında bir fark var mıdır? Thomson (1985) ve diğer felsefeciler bu soru ile uğraştılar ve bu sorunun kesin bir cevabını bulamadılar. Pek çok kişi tramvayın yolunu değiştirmeyi kabul edilebilir buldu ve bu eylem onlara temellendirilmiş olarak göründü ve doktorun eylemleri kabul edilemez bulundu, fakat ne yazık ki bizim de buna verilebilecek tatmin edici bir cevabımız yok. Tramvay durumu ile organ nakli durumu arasındaki farklı noktaları bulmak çok zor bir iş olsa gerek. Yukarıda da bahsettiğim gibi Greene ray değiştirme ve köprü durumlarını zararın kişiselliğine göre ayırt etmiştir. Fakat Mallon ve Nichols’ün iddia ettikleri şey Greene’in argümanına karşı gelen güçlü bir itirazdır. Mallon ve Nichols kişisel olmayan durumlarda da katılımcıların köprü durumlarını ray değiştirme durumlarından ayırt edebildiklerini öne sürmüşlerdir ve bu hipotezlerini destekleyen deneysel kanıtlar da sunmuşlardır. Yararcılık ve ödev ahlakı bu durumların ardında yatar ve düşünce deneyleri ahlaki sorumluluk ve özgür irade gibi konuları tartışmak için yeterince ilham vericidir. Biz de Shaun Nichols ve Joshua Knobe tarafından yapılan bir çalışmanın benzerini kullandık ve çeşitli deneysel kurgular ekledik. Bu deneysel çalışma Greene tarafından çalışılan tramvay problemi gibi, hayali bir senaryonun katılımcılara sunulduğu bir düşünce deneyi olarak görülebilir.

Hayali senaryoları katılımcılara sunduk ve durumlar hakkında çıkarımlar yapabilmek için veri topladık. Ahlaki karar verme süreci için bir model geliştirdik ve akıl yürütme ve duyguların pazarlık halinde etkileşimde olduğunu söyleyen etkileşimli

ikili süreç modelini öne sürdük. Hipotezimizi desteklemek için yeterince görgül kanıtımız da bulunmaktadır. İlk başta sıralama etkisini gözlemleyemsek de analizimizi derinleştirdik ve sıralama etkisini gözlemledik. Fakat sıralama etkisi ilk başlarda sandığımız gibi karşılıklı değildi. Deneysel sonuçların bize gösterdiği gibi katılımcılar duygusal durumda (somut soru ile karşılaştıklarında) kuramsal duruma geçemediler, çünkü somut sorunun ortaya çıkardığı duyguların etkisi altındaydılar. Bu ayrıca sıralama etkisinin bir göstergesidir. Başka bir deyişle, numaralandırılmış anketlerde soyuttan somuta bir sıralama etkisini gözlemledik, yani akıl yürütmeden duygusal duruma doğru, fakat somuttan soyuta, yani duygudan akıl yürütmeye doğru bir sıralama etkisini gözlemleyemedik.

Duyguların ahlaki kararlar üzerinde büyük bir etkisi olabilir. Duyguların etkisini görmek ve Etkileşimli İkili Süreç Modelini desteklemek için çeşitli deneyler yürüttük. Görgül kanıtlar bize kararlarımızda, duyguların etkisinde kademeli bir artış/düşüş olduğunu gösterdi. Duyguların derecesi arttıkça, akıl yürütmenin rolü azalır. Ve bu da bize neden kişilerin iri birini demiryoluna itme ya da katılımcılara belirlenimci olmayan evren tamamen soyut bir şekilde bir senaryo ile sunulduğunda diğer kişiyi sorumlu tutma konusunda tereddüt ettiğini gösterir.

Deneysel felsefe Etkileşimli İkili Süreç Modelini açıklamak için bize bir yol açmıştır. Deneysel felsefe sayesinde çeşitli deneyler yürüttük ve konu hakkında veri topladık. Bu veriyi esas alarak sonuçları yorumladık ve “ahlaki düşünme” modelimizi ortaya koyduk. Bu yapılan tek deneysel felsefe örneği değildir. Biz Nichols ve Knobe tarafından yapılan bir deneyi tekrarladık ve onların deneyi bize cesaret verdi, bu yüzden Nichols ve Knobe (2007) makalesi başarılı bir deneysel felsefe çalışmasıdır. Greene’in bulguları ve onun araştırması da bizim modelimizin ortaya çıkmasında yarar sağladı. Greene’in görgül çalışması da diğer bir deneysel felsefe çalışmasına örnek olarak gösterilebilir. Daha başka deneysel felsefe çalışma örnekleri de olabilir, fakat ben burada çalışmamızda hangilerinden daha çok yararlandıysak onları örnek göstermeye çalıştım.

Felsefi argümanlarımız ve teorilerimiz sezgilerimize dayanmaktadır. Halkın sezgileri sıradan insanların felsefi sorular hakkındaki basit sezgileridir. Halkın sezgileri deneysel felsefede anket çalışmaları ve mülakat görüşmeleri ile incelenebilir. Özgür irade ve ahlaki sorumluluk meselesinde çelişkili sezgilere sahip

olabiliriz ve deneysel veri uyumculuk ve uyumsuzculuk gibi çelişkili bu sezgilere neden sahip olduğumuz konusunda bize bir şeyler söyler. Sezgiler çeşitli parametrelere bağlı olarak yanılabilir ve değişebilir. Değişken ve yanılabilir bu çelişkili sezgileri anlamaya ve açıklamaya çalışmak deneysel felsefenin önemli çalışma alanlarından biridir. Kişiler arasındaki anlaşmazlıklara çözüm sağlamak amaçlanmamaktadır. En sonunda kişiler arasındaki bu anlaşmazlıklar çözümsüz olarak kalsalar da deneysel felsefe yeni felsefi başlıkları açmak için kayda değerdir. Bu çalışmada da neyin özgür irade ve ahlaki sorumluluk sezgilerine sebep olduğunu sormak için yeterince geçerli nedenimiz vardı.

Bu çalışmada, çelişkili ahlaki sezgilerden yola çıktık ve neden kişilerin aynı varsayımsal durumda anlaşmazlığa düştüklerini sorguladık. Ahlaki sezgilerin yanılabilirliği ve değişkenliği konusunda şüpheliydim ve Orta Doğu Teknik Üniversitesindeki lisans öğrencilerinden anket çalışmaları ile veri topladık. Ankara ve Utah arasındaki öğrencilerde ahlaki sezgilerde kültürel bir çeşitlilik bulmayı bekliyorduk. Ancak Nichols ve Knobe'nin çalışması ile bizim çalışmamız arasında belirgin bir kültürel çeşitlilik bulamadık. Fakat sezgilerin Nichols ve Knobe tarafından geliştirilen ve Türkçe'ye tercüme ettiğimiz hayali senaryolar ile oldukça kolay bir şekilde etkilenebildiğini söyleyebiliriz. Katılımcıların cevapları arasında kültürel bir fark bulamamamıza rağmen, bu ahlaki sezgilerin yerelliği ve güvenilirliğinin sorgulanamayacağı anlamına gelmemektedir. Sarkissian ve çalışma arkadaşları Nichols ve Knobe'nin (2007) araştırmasını esas alarak kültürler arası bir çalışma yapmışlardır. Sarkissian ve çalışma arkadaşları (2010) özgür iradenin kültürel bir evrensel olup olmadığını sorgulamışlardır. Bizim çalışmamız da çelişkili ahlaki sezgileri anlamaya çalışan ek bir kültürler arası çalışma olarak görülebilir.

Bu çalışmanın amacı ahlaki nesnellik ve özneliği tartışmaya açmak değildir. Örneğin hayvanlara işkence etmek bir kültürde kabul edilebilirken başka bir kültürde kabul edilebilir bulunmayabilir. Bu iki argüman da aynı anda doğru olabilir, fakat bu işkence meselesini tartışmamamız gerektiği anlamına mı gelir? Bence bazı ilkeler diğerlerinden daha önemlidir (fundamental). Örneğin "hayvanlara işkence etme" ilkesi diğer başka ahlaki ilkelerden daha temelde yer alan bir ahlak ilkesi olabilir. Bizim ahlaki yargılarda etkileşimli ikili süreç modelimizde, ahlaki yargılardaki akıl yürütmenin rolü vurgulanmıştır. Duyguların belirlenimci/belirlenimci olmayan

kararlarda etkisi vardır ve duyguların derecesi arttıkça, akıl yürütmenin rolü azalır. Duygular ve akıl yürütme arasında kademeli bir etkileşim bulunmaktadır. Birinci çalışma bize bu bulguları sunmaktadır. İkinci ve üçüncü çalışma ise bize sıralama etkisini göstermesi açısından önemlidir. Soyuttan somuta (akıl yürütmeden duygulara) bir sıralama etkisi Etkileşimli İkili Süreç Modelini desteklemektedir, çünkü katılımcılara düşük-yüksek duygu soruları ve somut-soyut sorular farklı sıralamalar ile verilmiştir. (Üçüncü çalışmada anketlerde dereceli bir ölçek kullandık ve birinci ve ikinci çalışmada kullanılan bütün anket fazlarını tekrar ettik.)

Görgül kanıt Etkileşimli İkili Süreç Modelini desteklemektedir. Deneysel felsefe sayesinde, özgür irade ve ahlaki sorumluluğu tartışma fırsatı bulduk. Anketlerde sorulan sorular daha net sorular ile geliştirilebilir. Örneğin, “Mert kararlarında ahlaki olarak tamamen sorumlu mudur?” yerine “Mert’in eylemlerinde özgür olduğunu düşünüyor musunuz?” gibi. Üçüncü çalışmada dereceli ölçek kullanarak katılımcılara cevaplarında daha fazla özgürlük vermeyi düşündük fakat bu özgür irade ve ahlaki sorumluluğu tartışmak adına sizin için makul bir yol olmayabilir. Bu daha çok, özgür irade ve ahlaki sorumluluk kavramları ile ne kastettiğimize bağlıdır. Ahlaki yargılarda akıl yürütmenin rolünü vurgulamaya çalıştık. Bu çalışma felsefi sorular sormak için yeni ve basit bir başlangıç, deneysel felsefeye kısa bir girişti. Gelecek araştırmalar bizlere ahlaki sorumluluk ve özgür irade konusunda yardımcı olacaktır. Ahlaki düşünme modelleri konusunda yeni çalışmaları sabırsızlıkla bekliyoruz.

## APPENDIX E: TEZ İZİN FORMU/THESIS PERMISSION FORM

### ENSTİTÜ / INSTITUTE

Fen Bilimleri Enstitüsü / Graduate School of Natural and Applied Sciences

Sosyal Bilimler Enstitüsü / Graduate School of Social Sciences

Uygulamalı Matematik Enstitüsü / Graduate School of Applied Mathematics

Enformatik Enstitüsü / Graduate School of Informatics

Deniz Bilimleri Enstitüsü / Graduate School of Marine Sciences

### YAZARIN / AUTHOR

Soyadı / Surname : Dural Özer

Adı / Name : Özge

Bölümü / Department : Felsefe

**TEZİN ADI / TITLE OF THE THESIS:** A Dual Process Model For Incompatibilist and Compatibilist Folk Intuitions: An Experimental Philosophical Approach To Moral Responsibility and Determinism

**TEZİN TÜRÜ / DEGREE:** Yüksek Lisans / Master  Doktora / PhD

1. **Tezin tamamı dünya çapında erişime açılacaktır.** / Release the entire work immediately for access worldwide.
2. **Tez iki yıl süreyle erişime kapalı olacaktır.** / Secure the entire work for patent and/or proprietary purposes for a period of **two years**. \*
3. **Tez altı ay süreyle erişime kapalı olacaktır.** / Secure the entire work for period of **six months**. \*

Yazarın imzası / Signature

Tarih / Date