
From Moral Intuitions to Free Will Intuitions: A Dual Interacting-Process Model ^[*]

Ablaki Sezgilerden Özgür İrade Sezgilerine: İkili Etkileşim Süreci Modeli

ÖZGE DURAL ÖZER 

Bilecik Şeyh Edebali University

AYHAN SOL 

Middle East Technical University

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Abstract: In this essay, after first briefly reviewing the literature on experimental philosophy and how and why it is important especially for contemporary analytic philosophy, we focus on two earliest experimental research papers on free will intuitions. We also present psychological mechanisms that try to explain why both philosophers and ordinary people have incompatibilist and compatibilist intuitions and free will and moral responsibility. We then move on to another experimental research on moral intuitions and develop a dual process model based on the model to explain moral intuitions. However, our dual interacting-process model is not intended for moral intuitions but free will intuitions. Finally, we critically examine other mechanisms and briefly defend our model.

Keywords: Free will, moral responsibility, incompatibilism, compatibilism, dual process model.

✉ Özge Dural Özer
BŞEÜ, Fen Edebiyat Fakültesi, Felsefe Bölümü
11230, Bilecik, Turkey | ozge.dural@bilecik.edu.tr

✉ Ayhan Sol
ODTÜ, Edebiyat Fakültesi, Felsefe Bölümü
06800, Ankara, Turkey | asol@metu.edu.tr



Introduction

“Over the past decade or two there has been a heated debate about the importance of ‘intuitions’ in philosophy” (Fischer & Collins, 2015, p. 51). There are two sides of the debate: the proponents of intuitions are convinced that intuitions are a priori sources to philosophical truth while the opponents think that intuitions should be disregarded because they are not reliable guides to truth. (Fischer & Collins, 2015, p. 51) The possibility of a priori philosophical knowledge then is the focus of the dispute. Empirical scientists may wonder how one can reach the truth about a mind independent world merely by sitting and thinking. Furthermore if philosophers establish their arguments and theories through their intuitions, then sensitivity concerning the reliability and localness of intuitions may also be a point of concern. At this point, experimental philosophy may aid philosophers and provide a series of opportunities beyond just sitting and thinking.

The method that lean on intuitions and called armchair philosophy is especially and extensively used by analytic philosophers, though the reliability and stability of our intuitions have been questioned in some studies. We think that views free will and its connection with determinism rely on these unreliable intuitions eminently, and different philosophical views originate from the difference between intuitions. For this reason, intuitions should be studied by empirical methods.

We have so far mentioned the importance of the empirical study concerning folk intuitions. Now, we 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. According to Rose and Danks (2013), this difference between them is a subset relation, that is, experimental philosophy is a subset of empirical philosophy. Some philosophers contribute to philosophy by designing and conducting experiments rather than reporting scientific findings. On the other hand, others use scientific results to support their philosophical theories. The former account is experimental philosophy, the latter empirical philosophy.

A wide difference between experimental and empirical philosophy is



not necessary, but these two approaches treat the recent literature differently. Prinz (2008) says that empirical philosophy and experimental philosophy are different from each other. Empirical philosophers deal with a wide range of issues, and these usually belong to philosophy of mind. Empirical philosophers are not interested in conceptual questions in the way that other analytic philosophers are concerned. 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 constructing a conceptual claim. They later analyze these claims by sitting and thinking about how to interpret empirical results. Experimental philosophy can be distinguished from empirical philosophy in this sense.

Experimental philosophers especially consider what ordinary concept users mean by certain categories. They focus on mental categories, and try to understand the psychology of the folk. Experimental philosophers are interested in the following type 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: “what are intuitions”, “is there free will”, “are there moral facts” are not questions in which experimental philosophers are interested. Empirical philosophers consider relatively general, first order questions like the ones above. 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.

It is possible to construe “positive and negative conclusions” about the reliability of intuitions. In these positive and negative projects of experimental philosophy, the question is whether we should aim to use intuitions more reliably by empirical methods or 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 uses scientific results to democratize intuitions (Fischer & Collins, 2015, p. 223). The point where experimental philo-



sophy differs from old fashioned conceptual analysis is considering intuitions of hundreds of people rather than intuitions of just one philosopher. We can call this approach non-radical experimental philosophy view. Bence Nanay (2015, p.223) says that negative approach which is more radical than the positive one 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, and so on. If our intuitions vary in a wide range, and are dependent on different parameters that we do not know, we do not have sufficient reason to trust them.

On the other side, Knobe and Nichols (2008) say that they intend to amplify “the nature of experimental philosophy”. In their 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. They examine why people have intuitions that they have. (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. The question of where our religious, moral and metaphysical beliefs come from is vitally important, according to Knobe and Nichols. These two experimental philosophers say that their aim is to question the source of those beliefs by using the methods of contemporary cognitive science. 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 say that the best method is gathering empirical data to discover which mechanisms form which intuitions. (p.8) There are various types of empirical works conducted by experimental philosophers which pose a serious threat to 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. (Ibid., p.4).

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 may not be reliable. We should be a little bit skeptical about the conflicting intuitions, and experimental data may 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.

Do People Have Compatibilist or Incompatibilist Intuitions?

Intuitions of people and their pervasiveness can be subjected to empirical investigation. Nahmias et al. (2005) reported that subjects think that the agent is blameworthy although the agent is in a deterministic world while Nichols and Knobe found that subjects did not find agent responsible for her actions within a deterministic abstract description. Nahmias et al. (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 different descriptions of determinism. One of the scenarios developed by them is the following:

Imagine that in the next century we discover all the laws of nature, and we build a supercomputer which can deduce from these laws of nature and from the current state of everything in the world exactly what will be happening in the world at any future time. It can look at everything about the way the world is and predict everything about how it will be with 100% accuracy. Suppose that such a supercomputer existed, and it looks at the state of the universe at a certain time on March 25, 2150 AD, 20 years before Jeremy Hall is born. The computer then deduces from this information and the laws of nature that Jeremy will definitely rob Fidelity Bank at 6:00 pm on January 26, 2195. As always, the supercomputer's prediction is correct; Jeremy robs Fidelity Bank at 6:00 pm on January 26, 2195. (Nahmias et al. 2005, p. 566)



They asked participants when Jeremy robs the bank does he act of his own free will? 76% of participants said that Jeremy robs the bank of his own free will. After this first step, they wondered if some participants thought that Jeremy acts freely because he performs a blameworthy act. Hence, they changed the negative act with a positive one. In this new scenario, Jeremy performs a praiseworthy action, saving a child from a burning building. They also presented a neutral action, going out for jogging, to participants. The results indicate that 68% of participants said Jeremy saves the child of his own free will, and 79% said that Jeremy goes jogging of his own free will. (Ibid., p. 567) Therefore the Nahmias group holds that the default position is compatibilism. On the other hand, Nichols and Knobe (2007) focused on the question why people have compatibilist or incompatibilist intuitions. Their survey starts with the following description of deterministic and indeterministic universes.

Imagine a universe (Universe A) in which everything that happens is completely caused by whatever happened before it. This is true from the very beginning of the universe, so what happened in the beginning of the universe caused what happened next, and so on right up until the present. For example one day John decided to have French Fries at lunch. Like everything else, this decision was completely caused by what happened before it. So, if everything in this universe was exactly the same up until John made his decision, then it *had to happen* that John would decide to have French Fries.

Now imagine a universe (Universe B) in which *almost* everything that happens is completely caused by whatever happened before it. The one exception is human decision making. For example, one day Mary decided to have French Fries at lunch. Since a person's decision in this universe is not completely caused by what happened before it, even if everything in the universe was exactly the same up until Mary made her decision, it *did not have to happen* that Mary would decide to have French Fries. She could have decided to have something different.

The key difference, then, is that in Universe A every decision is completely caused by what happened before the decision—given the past, each decision *has to happen* the way that it does. By contrast, in Universe B, decisions are not completely caused by the past, and each human decision *does not have to happen* the way that it does. (p. 669)



Subjects were then asked some control questions to check if the subjects understand the given descriptions. One of these is, “Which of these universes do you think is most like ours?” They found that nearly all of the subjects think that our universe is indeterministic. The critical questions are the last two questions, the concrete and the abstract, and the participants of two groups responded either one or the other.

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 sets up a device in his basement that burns down the house and kills his family.

Is Bill fully morally responsible for killing his wife and children?

YES NO

72% of the participants gave a compatibilist response to this concrete question. That is, they answered that Bill “was fully morally responsible” for his crime. However, 86% of the participants who answered the following abstract questions gave an incompatibilist response, the person is not fully morally responsible.

In Universe A, is it possible for a person to be fully morally responsible for their actions?

YES NO

They hypothesize that people have a tendency to give compatibilist answers in concrete conditions because the affect in the concrete question triggers emotions. If there is a difference between responses, this might be evidence for the argument that affect has an impact on people’s free will intuitions.

Psychological Mechanisms Responsible for Free Will and Moral Responsibility Intuitions

In the previous section, we mentioned the earliest studies about free will intuition. Nahmias et. al. conclude that compatibilism is the natural free will intuition while Nichols and Knobe argue that incompatibilism is the default intuition. Nichols and Knobe also considered in their essay



possible psychological mechanisms that may explain why people are incompatible when they respond to an abstract question but compatibilist when they respond to concrete questions. Of three possible psychological mechanisms, they think affective performance error model may be the best. In affective performance error model, people's responsibility judgments can be distorted by firm affective reactions. The reason is that although people are natural incompatibilists which is obvious from their response to the abstract case since they go through cold process of reason; however, they turn to compatibilism when the question gives a lot of details with high affect that interferes with their reasoning process. In this way, they seem to be explaining why Nahmias group found that people are compatibilist by suggesting that Nahmias and colleagues present concrete scenarios to participants.

Nahmias et al (2007) on the other hand argued for another error mechanism, i.e. bypassing, to explain the claim of incompatibilism being the natural intuition. Later Nahmias and Murray (2010) and Murray and Nahmias (2014) also argued that Nichols and Knobe's deterministic scenario is causing the bypassing. Bypassing is an error that results from the descriptions of determinism, like Nichols and Knobe's, which imply that one's mental states such as thoughts, desires, and beliefs are irrelevant to one's decisions. For instance, in evidently fatalistic scenarios, one's mental states are deemed irrelevant. Although bypassing is the result of some descriptions of determinism, determinism does not entail bypassing. It seems that both sides are arguing that there is one "natural" intuition and the other is the result of some error that leads people to other "unnatural" response.

There have been others who argued differently from Nichols and Nahmias group. One of them is Walter Sinnott-Armstrong (2008) who argued that people have both incompatible and compatibilist intuitions. "One intuition [incompatibilism] reflects an abstract way of thinking, whereas the other [compatibilism] reflects a concrete way of thinking" (p. 214). The role of affect is only secondary, just supporting concreteness of a question. Armstrong thinks that abstraction account is more basic and general, and it can be applied to affect lacking domains.

Eric Mandelbaum and David Ripley (2012) agree with Sinnott-



Armstrong in his criticisms of the error theories (mentioned above) but they disagree with his claim that abstract and concrete intuitions require separate origins. They propose that “the [available] data seem to indicate that whenever a norm is broken, people think that an agent has to be responsible” (p.359). They “refer to this belief as NBAR, for ‘Norm Broken, Agent Responsible’” (ibid.). According to this hypothesis, “abstract/concrete effects are to be explained by appealing to *participants’* tacit endorsement of NBAR” (pp. 359-60). In the case of presenting people with abstract and concrete cases and cases similar to them (they discuss a few examples in their essay), people detect norm violations (for instance, “murder is wrong” in the concrete case of Nichols and Knobe) and then react to it by finding an agent responsible (for instance, Bill who murdered his wife and kids in the concrete case). Suppose as Nichols and Knobe claim that participants who find Bill morally responsible are actually intuitive incompatibilist (again as Nichols and Knobe claim). So since they think that people cannot have free will in a determinist universe they give incompatibilist response to the abstract question. But when they are presented the concrete question, they immediately detect the norm violation and, since their tacit belief in NBAR is stronger than their cognitively attained belief in incompatibilism they find Bill, the murderer, morally responsible. They apply this hypothesis to other cases and argue that it explains all these cases better than both the error models and Sinnott-Armstrong’s proposal.

From Moral Intuitions to Free Will Intuitions: Greene’s Dual Process Model and Our Dual-Interacting Process Model

Nichols and Knobe’s (2007) data suggest to us a dual-process model already proposed by Greene et al. (2001) for explaining diverse moral intuitions of people to some trolley cases, even though researchers like Nichols and Knobe and Nahmias group are interested in free will intuitions rather than moral intuitions.

Greene and colleagues were 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 are presented with footbridge-style cases res-



pond negatively to the *killing* of an innocent heavy person by pushing him in front of a trolley in order to save five innocent workers, 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 et al. (2001) conducted 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 these results, Greene, et al. (2001) proposed their dual process model that reason and emotions are responsible for different responses. In other words, Greene (2013) says, as a camera is switched from automatic to manual mode, these parts alternate as the trolley examples change.

We think people's moral intuitions as investigated by researchers like Greene and others are relevant to free will intuitions because in almost all cases free will intuitions are probed by concrete and/or affective cases that are obviously moral questions. That is why Greene and colleague's model seems to us relevant and quite promising for explaining the responses of the subjects to questions in Nichols and Knobe's surveys with different degrees of affect and abstract question (compatibilist responses changing from 72%, 64%, 50%, 23% for the concrete questions and 14% for the abstract question). Because of the decreasing degrees of percentages, we think the emotional and theoretical parts of the brain do not work in an alternating fashion as suggested by Greene (2013); rather they interact with each other as subjects respond to questionnaires with varying degrees of affect (we thus call our hypothesis Dual Interacting-Process Model, varying in terms of interaction from Greene, et al.'s Dual Process Model.) In other words, when subjects answer 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, 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 a 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 (a detailed description of a man, Bill, murdering his wife and three children in order to be with his secretary by placing a device in the house that starts fire) which we think has the highest affect, the degree of a compatibilist answer is also the highest (72%). We believe, this high degree of compatibilist answer follows from the interaction between reason and emotions and resulting in 72% of the compatibilist answers by the participants. In the abstract case, on the other hand, reason is almost in full control in responses which is indicated by 86% of incompatibilist answers by the participants. So it seems that the interaction of emotion and reason can explain the decreasing order of compatibilism in the surveys.

Although philosophers like Nichols and Mallon (2006) objected to Greene et al.'s dual process model which emphasizes the significance of emotions in forming moral judgments (they proposed a rule-based model, instead) they do not see any relevance of these models to free-will intuition studies like Nichols and Knobe's 2007. But, why not? One possible objection may be that Greene et al.'s model was proposed to explain moral intuitions, thus it is no good for other kinds of intuitions, including the intuition about free will. In other words, in trolley-like cases, the participants are expected to make moral judgments whereas in, for instance free-will cases, participants are expected to make compatibilist or incompatibilist judgments. Nevertheless, since Nichols and Knobe (2007) expected and found that 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 note that the affect present in their questions are produced by negative moral descriptions, such as someone murdering wife and kids, another raping a stranger, and so on. We think when participants respond these questions they are responding a moral problem as in the case of trolley examples. In other words, in the concrete questions, Nichols and Knobe seem to be sneaking a moral problem into the free will question. By the abstract



question, subjects are probed more directly for their free will intuitions about the compatibility of determinism and free will; however, in the concrete questions, the free will problem is wrapped up in a moral problem which carries the affect. (Whether this is a good idea is beyond the limits of this study.) So by this way also, we think, the free will investigation becomes more accessible by dual process-like models.

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 free will problem (that is, “is free will compatible or incompatible with determinism?”) and respond accordingly, either as incompatibilist or compatibilist. However, since in the concrete questions this free will problem is wrapped up in a moral question we have the following content: on the condition that a person committed a crime (murder, rape, tax fraud), is he then morally responsible for this crime *considering* that he is in a deterministic universe? We think the expectation is that participants would understand this question as a moral question *and* as a free will question. If so, we argue, their free will responses should be affected by their answers to the moral question depending upon the power of the affect. Assuming that they clearly detect the free will question here and assuming again that they would give an incompatibilist answer which seems to be the default position (according to Sarkissian, et al, 2010), now they face a tension between their incompatibilist position (intuition?) and their emotional response (intuition?) 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 free will attitude (intuition?) and moral tendency (intuition?). If they decide in favor of incompatibilism, because, perhaps, they “choose” to be consistent, they have to disregard their moral tendency. However, around 72% of people who get the question about Bill’s murderous act give a compatibilist answer. This means that they “vote” in favor of their moral tendency (emotions) and do not care so much about consistency or about their incompatibilist intuition.

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 resolved, for instance in the case of the long concrete question, in favor of compatibilism. Nevertheless, we do not know how this interaction process really works. As briefly reviewed above, Sinnott-Armstrong (2008) argues in favor of another dual process model. According to him, both compatibilist and incompatibilist intuitions are genuine because they come from our concrete and abstract intuitions, respectively. In order to defend his thesis, he conducted a survey with two epistemological questions one abstract another concrete without any affect, for he thought that concrete questions that are used to probe free will intuitions are all loaded with affect, perhaps inevitably and concrete epistemological questions that are not affective can more easily be constructed. However, although he finds a significant difference between responses to abstract and concrete questions (52% and 88%, respectively), we do not think that he actually measures concreteness by his concrete question, because the concrete question still has affect since it engages the participants much more directly (FOOTNOTE: “If you cannot give any good reason to believe that the person whom you believe to be your mother really is your mother, is it possible that you *know* that she is your mother?”). We are not claiming that there may be abstract or concrete intuitions but that his evidence is unable to support his model.

We think Mandelbaum and Ripley’s model (summarized above) is more promising than the error models and Sinnott-Armstrong’s model. We believe, an important virtue of NBAR (Norm Broken, Agent Responsible) hypothesis is to show why moral psychology research is relevant to free will intuition research by proposing to consider how people respond to concrete moral problems and how this involvement is relevant to free will intuitions. However, their model has two problems: first, NBAR hypothesis has to be silent about free will questions that do not mention responsibility. Second, and more important, is that NBAR may not be able to explain the results of experiments probing the moral psychology of people, especially psychopaths, who are emotionally impaired, because these people seem to be unable to distinguish, for instance, moral-conventional cases, are unresponsive to cases involving harm to others, and cases of fairness.



Mandelbaum and Ripley mention that the experiment conducted by Cova et. al (2012) with “patients suffering from a behavioural variant of frontotemporal dementia (bvFTD) ... [who] are known to suffer from emotional deficits” (p.852) has an unexpected result regarding free will responses of bvFTD patients, because these patients responded very similarly to Nichols and Knobe’s (2007) and Nahmias et al.’s (2005) affective cases as people without bvFTD. This seems to support Mandelbaum and Ripley’s NBAR. For the moment, we do not have an explanation of why bvFTD patients responded the way that they did to these cases (perhaps they also have other undetected characteristics interfering with their responses), overwhelming evidence from moral psychology research seems to suggest that emotions are not just secondary sources for people detecting the concreteness of cases as NBAR suggests but primary sources moral intuitions. (For instance, Blair, 2007 and Glen et al., 2009)

Conclusion

Nahmias group argue that people’s default position is compatibilism while Nichols’ group suggest 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. People’s responses to thought experiments might be valuable for us to make philosophical fictions, and Greene’s discussion of footbridge and bystander cases 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, we 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 erode the intuitions on one side of a paradox, and to support the other side. The paradox of free will/moral responsibility persists among common folk like among professional philosophers. 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 our choice of dual interacting-process model is plainly that we want to understand and explain free will/moral respon-



sibility issue. We do not have a claim for or against natural incompatibilism/natural compatibilism. Further experimental evidence and investigations of various philosophical topics can capture us on the bubble.

References

- Blair, R. J. (2007). The Amygdala and Ventro-medial Prefrontal Cortex in Morality Psychopathy. *Trends in Cognitive Sciences*, 11, 387–392.
- Cova, F. & Bertoux, M. & Bourgeois-Gironde, S. & Dubois, B. (2012). Judgments about Moral Responsibility and Determinism in Patients with Behavioral Variant of Frontotemporal Dementia: Still Compatibilists. *Consciousness and Cognition* 21 (2): 851–864.
- Doherty, G. J. M. (2010). *Intuitions, Cross-Cultural Cognition, and Experimental Philosophy*. (PhD Thesis). Ontario: University of Western Ontario.
- Fischer, E. & John. C. (2015). *Experimental Philosophy, Rationalism, and Naturalism Rethinking Philosophical Method*. Routledge. London and New York.
- Glenn, A L. & Iyer, R. & Graham, J. & Koleva, S. & Haidt, J. (2009). Are All Types of Morality Compromised in Psychopathy. *Journal of Personality Disorders*, 23 (4), 384–398.
- Greene, J. D. & Sommerville, B. & Nystrom, L. E. & Darley, J. M. & Cohen, J. D. (2001). An FMRI Investigation of Emotional Engagement in Moral Judgment. *Science*, 5537, 2105–2108.
- Greene, J. (2013). *Moral Tribes Emotion, Reason and the Gap Between Us and Them*. London: Atlantic Books.
- Mallon, R. & Nichols, S. (2006). Moral Dilemmas and Moral Rules. *Cognition*, 100, 530–542.
- Mandelbaum, E. & Ripley, D. (2012). Explaining the Abstract/Concrete Paradoxes in Moral Psychology: The NBAR Hypothesis. *Review of Philosophy and Psychology*, 3, 351.
- Murray, D. & Nahmias, E. (2014). Explaining away Incompatibilist Intuitions. *Philosophy and Phenomenological Research*, 88 (2), 434–467.
- Nahmias, E. & Morris, S. G. & Nadelhoffer, T. & Turner, J. (2005). Surveying Freedom: Folk Intuitions about free will and moral responsibility. *Philosophical Psychology*, 18 (5), 561–584.



- Nahmias, E. & Coates, D. J. & Kvaran, T. (2007). Free Will, Moral Responsibility, and Mechanism: Experiments on Folk Intuitions. *Midwest Studies in Philosophy*, 31 (1), 214-242.
- Nahmias, E. & Murray, D. (2010). Experimental Philosophy on Free Will: An Error Theory for Incompatibilist Intuitions. (Eds. J. Aguilar & A. Buckareff & K. Frankish). *New Waves in Philosophy of Action*. London: Palgrave-Macmillan, 189-215.
- Nichols, S. & Knobe, J. (2007). Moral Responsibility and Determinism: The Cognitive Science of Folk Intuitions. *Nous*, 41 (4), 663-685.
- Nichols, S. & Knobe, J. (2008). *Experimental Philosophy*. Oxford: Oxford University Press.
- Nanay, B. (2015). Experimental Philosophy and Naturalism. (Eds. E. Fischer & J. Collins). *Experimental Philosophy, Rationalism and Naturalism Rethinking Philosophical Method*. Routledge: London and New York: Routledge.
- Prinz, J.J. (2008). Empirical Philosophy and Experimental Philosophy. (Eds. J. Knobe & S. Nichols). *Experimental Philosophy*. Oxford: Oxford University Press.
- Rose, D. & Danks, D. (2013). In Defense of a Broad Conception of Experimental Philosophy. *Metaphilosophy*, 44 (4), 512-532.
- Sarkissian, H. & Chatterjee, A. & De Brigard, F. & Knobe, J. & Nichols, S. & Sirker, S. (2010). Is Belief in Free Will a Cultural Universal? *Mind & Language*, 25, 346-358.
- Sinnott-Armstrong, W. (2008). Abstract +Concrete =Paradox. (Eds. J. Knobe & S. Nichols). *Experimental Philosophy*. Oxford: Oxford University Press, 209-232.

Öz: Bu makalede, deneysel felsefe hakkındaki yazını ve deneysel felsefenin, özellikle çağdaş analitik felsefe için nasıl ve neden önemli olduğunu özetledikten sonra özgür irade sezgisi konulu ilk iki deneysel araştırma makalelerine odaklanıyoruz. Ayrıca neden hem felsefecilerin hem de felsefeci olmayanların özgür irade ve ahlaki sorumluluk konusundaki uyumsuzcu ve uyumlu sezgilerinin olduğunu açıklamaya çalışan kuramları sunuyoruz. Daha sonra ise ahlaki sezgiler hakkındaki bir başka deneysel araştırmaya geçiyoruz ve ahlaki sezgileri



açıklamak için önerilen modeli esas alan bir ikili süreç modeli geliştiriyoruz. Ancak bizim geliştirdiğimiz ikili karşılıklı etkileşimli süreç modeli ahlaki sezgileri değil özgür irade sezgilerini açıklamayı amaçlamaktadır. Son olarak da önerilen diğer mekanizmaları eleştirel bir şekilde değerlendirirken kendi modelimizi kısaca savunuyoruz.

Anahtar Kelimeler: Özgür irade, ahlaki sorumluluk, uyumsuzculuk, uyumculuk, ikili süreç modeli.

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