Why Moral Heuristics can Lead to Mistaken Moral Judgments



VITALIY NADURAK

Abstract

Given the lack of generally accepted moral standards, one of the controversial questions for those who investigate moral heuristics is whether we can argue that moral heuristics can lead to mistaken moral judgments. This paper suggests that, even if we agree that moral standards are different and chosen subjectively, deviations from them are possible and we can prove such deviations in a logically correct way. However, in this case, it must be admitted that not every deviation is a mistake. Deviation becomes a mistake only when a person departs from the standard which she or he considers as right. There are cases where it is impossible to establish the fact of a mistake: when a person chooses a moral standard post hoc, in the light of which the decision would be right (only when there is a deviation from all moral standards which a person considers as right, it is possible to recognize the decision as mistaken). Accepting the idea of the subjectivity of a moral standard, it is also necessary to accept the idea of relativity of moral heuristics: the normative standard chosen by a person also determines which method of moral decision making will be considered as a heuristic.

Keywords: moral heuristics, subjective rationality, moral decision making, normative criterion, moral standard

1 Introduction

The idea that, in moral decision-making, a person relies on heuristics is quite common among researchers. The study of moral heuristics began in the early 1990s [1, 13]. However, the wide-spread discussion and research pertaining to this topic unfolded after the publication of Cass Sunstein's article, "Moral heuristics", where the author defines moral heuristics as moral short-cuts, or rules of thumb, that generally work well, but that also lead to mistaken and even absurd moral judgments [20, p.531]. As

an example, he mentioned moral rules ("do not steal", "do not lie"), different simple methods for solving complex moral problems, and automatic emotional reactions, such as moral aversion to cannibalism or incest. In general, his statement that in moral decision-making people use rules of thumb did not cause significant objections. But Sunstein's conclusion that moral heuristics can "lead to mistaken and even absurd moral judgments" [20, p.531] has become the object of criticism. Daniel Bartels and his colleagues noticed:

While adhering to this error-and-bias approach makes sense across many domains of choice where there is widespread agreement about the normative standard (such as probabilistic judgments), it is unclear that the approach is appropriate for ethical judgment given how little agreement there is among experts or lay judges about the "right" answer. [2, p.495]

This problem was also noticed by other researchers [10, 14, 22, 16] and its essence is that a normative criterion is needed to distinguish when the heuristic performs well and when our moral judgments misfire [22]. But there is no universal criterion, so there is no reason to assert that heuristics can lead to correct or mistaken moral decision.

It is worth noting that Sunstein paid attention to this problem and wrote that in some cases "it is possible to conclude that a moral heuristic is at work without accepting any especially controversial normative claims" [20, p.534]. But other cases will require acceptance of "weak consequentialism", in accordance with which the social consequences of the legal system are relevant, other things being equal, to what law ought to be doing" [20, p.534].

However, Sunstein's arguments did not convince some researchers. John Mikhail noted that Sunstein gives a theory of performance errors without a corresponding theory of moral competence. His definitions of weak consequentialism are "too vague and uncontroversial" [14, p.557]. Janett Triskiel noted that "providing such a criterion for the moral domain usually falls within the scope of philosophers". However, "in philosophy, it is far from clear what the correct criterion for being morally right is, because, as opposed to, e.g., logic, we find many conflicting accounts for that in moral philosophy. Different from statistical facts, we do not have any objective recordings of moral rightness" [22, p.84]. David Pizarro and Eric Uhlmann question "Does a good theory of moral judgment require an objectively "right" set of moral criteria with which to compare lay judgments? Perhaps not" [16, p.558]. They propose an

alternative standard for evaluating moral judgments – subjective rationality, according to which a person makes a moral mistake when she or he fails to match her or his own standard [16, p.558]. So, if people are indeed exhibiting "absurd moral judgments" this is "not because heuristics lead individuals' moral judgments to diverge from some objective standard of morality (such as weak consequentialism), but because these judgments would be deemed irrational by the participant himself upon reflection" [16, p.559]. Jonathan Haidt in his commentary to Sunstein's article did not directly address this problem, but some of his conclusions are relevant to it. He does not agree with the widespread statement that moral truths are not facts (as we know, this one of the main obstacles to the recognition that moral judgments can be mistaken – they do not reflect facts, but various subjective representations; therefore, it is problematic to say that some are correct while others are mistaken). Haidt refers to David Wiggins [24] and thinks that useful distinction can be made between two kinds of facts – anthropocentric and non-anthropocentric. Our judgments about morality are factual judgments too. "They are judgments about anthropocentric truths – truths that are true only because of the kinds of minds that we happen to have, and the cultural worlds within which our minds developed" [10, p.552-553]. Therefore "the problem with moral heuristics is not that there is no fact of the matter with which to compare them; rather, it is that there are many (anthropocentric) facts of the matter, and it is hard to get people to question their anthropocentric moral facts [10, p.553].

The purpose of this paper is to formulate new arguments in support of the thesis that moral heuristics can lead to mistaken moral judgments. It will be based on the Pizarro and Uhlmann's idea that it is worthwhile to accept the principles of subjective rationality in order to prove the possibility of mistakes in moral judgment. Developing this idea, I will try to answer a few questions. First (2), I will answer whether the subjectivity of the moral normative standard denies the possibility of deviation from it. Second (3), under what conditions can a deviation from the subjective moral standard be regarded as a mistake? Third (4, 5), what consequences will the idea of subjectivity of the moral standard have on the theory of moral heuristics?

2 Deviation from subjective moral standard

Raymond Boudon summed up Herbert Simon's [18] formulation of subjective rationality and wrote: "subjective rationality designates the cases

where subjects appear as having often good reasons, not only of believing in objectively grounded statements, but also of believing in objectively ungrounded statements" [4, p.10]. Moral decision making is a good example of such a case where a person deals not only with objectively grounded statements, but also objectively ungrounded statements. For example, when someone follows a certain norm because they believe that this is commanded by God.

The main argument against the possibility of establishing the correctness or erroneousness of moral judgments guided by heuristics is based on the idea that there is no universal objective moral standard, but there are different subjective standards. Therefore, first, it must be determined whether the existence of different subjective standards is contrary to the possibility of deviations from them.

When we make moral decisions, we distinguish the actual state of affairs (how things are) from the desirable (how things ought to be). In order to describe, how things ought to be, normative statements are used. When we act, guided by the idea of how things ought to be, this idea becomes a reality (how things are), which we describe using positive statements. Accordingly, we can compare this act with the idea about how things ought to be, in order to assess whether it corresponds to this idea. For example:

A moral person should do X.

I did not do X.

I did not do what a moral person should do.

The first normative statement describes how things ought to be. It reflects the vision of morally correct acts by a person or group of people. The second statement describes how things are. The conclusion logically follows from the previous statements. The truth of the first statement cannot be established. As for the second statement, we can say whether it is true or false. The third statement (conclusion) can be evaluated as correct or incorrect, depending on whether it was logically derived from the first two. The idea about "how things ought to be" is called "subjective": people accept it for the truth due to reasons that are personally important for them, although others may not think so. However, as has been demonstrated, it is possible to establish the fact of deviation from such a subjective normative standard. In order to do this, we must compare with this standard "how things are" (committed act) in a logically correct way.

Eventually, people constantly choose for themselves various subjective normative standards and define their own actions or thoughts as those that meet or do not meet these standards. For example, a person may subjectively determine for themselves that they should devote to research work at least two hours a day. However, for some reason, they did not comply with this normative standard. Deviation from the subjective norm is obvious. Normally, the person is aware of this and seeks to overcome this deviation. Similarly, in a moral life, a person may choose a norm for themselves that they will always be polite to the people even if they are not polite to them. If, for some reason, they do not comply with this norm, then the deviation from the subjective norm is obvious.

Of course, the well-known fact is that there are various moral normative standards. However, this also does not deny the fact that simultaneous deviations from them are possible, which can be logically proven. Let's imagine that some person has chosen for themselves the rule "you should always be polite to other people even if they are not polite to you". Another person has chosen the rule "you should be polite to people who are polite to you and not polite to people who are not polite to you". Both, for some reason, did not comply with subjectively chosen norms. So, we have simultaneous deviations from different norms, which can be logically proven.

It should be noted that the above-mentioned examples describe the deviations of the *actions* from the chosen normative standard. But heuristics are methods of *decision*-making. So, in order to assert that heuristics can lead to mistaken moral *judgments*, it is necessary to transform the scenario described above:

A moral person should do X.

Guided by heuristic Y, I decided not to do X.

Guided by heuristic Y, I decided not to do what a moral person should do.

In this example, as in the example where action was compared with normative standard, the first normative statement describes how things ought to be, the second – how things are. The conclusion logically follows from the previous statements. Therefore, there is no fundamental difference between the processes of establishing deviations of acts and decisions. The algorithm is similar in both cases (although in practice it is easier to establish a deviation of an act). In most cases (although

not always), an act is preceded by decision. Therefore, by establishing a deviation of an act from the normative standard, we establish the deviation of the decision that precedes this act. At the same time, it must be born in mind that an act, which deviates from the normative standard, may not be the result of mistaken decision like when a person does not comply with some norm due to objective circumstances. So, it is not always enough to assess the act in order to know if the decision that preceded it was wrong.

3 Not every deviation is error

Considering what was written, speaking about deviations from the normative standard, it is always important to emphasize the standard from which the deviation took place. Sanjit Dhami, Ali al-Nowaihiy and Cass Sunstein, who analyzed the problem of normative standard of behavior in economics, note that KT&O (an approach that Daniel Kahneman, Amos Tversky, and some other researchers adhere to) "did not advocate, nor defend, a particular normative standard of behavior. They took the existing, and well established, normative standard of behavior in economics. Their objective was to test if people do actually conform to this normative standard" [5]. Such a statement will also be true with respect to moral heuristics. The theory of heuristics cannot defend a particular moral normative standard. The goal is to find out if people actually conform to this normative standard when using simple rules of thumb. If deviations occur, it is always important to emphasize the standard from which the deviation took place, because often deviations from one standard (e.g., consequentialist) can mean compliance with another (e.g., deontological). For example, if a person decided to commit unjust acts under the influence of empathy towards one of the parties, the following statement would be correct: "In this case, influenced by affect heuristics, the person has deviated from the principle of justice, although the principle of mercy was respected". Or if the person decided to tell the truth in a particular case, although she or he realizes that this will lead to bad consequences, then the following statement would be correct: "In this case, using "deontological heuristics" [15], the person has deviated from consequentialist criterion, although deontological criterion was respected". In this regard, when conducting empirical research on moral heuristics, first it is necessary to find out which normative standard is supported by a person, and then test whether she or he deviates from it using a certain heuristic.

It follows from the above that not every deviation from the moral standard is an error. If we accept that such a standard is subjective, then it should be recognized that deviation from it becomes an error only when a person deviates from the standard which they consider as right. Therefore, it is necessary to emphasize the difference between a moral decision, in which there is deviation from the normative standard and a decision that is *mistaken* with respect to this standard. In many areas where individuals use heuristics, there is no difference between deviation and error, since they use the only criterion with which the decision is compared like when a person, guided by the availability heuristic, reaches a conclusion about the subjective probability of a particular event. This conclusion can be compared with a single criterion - an objective probability. In this case, the deviation is an error. But in the field of morality there are different normative standards. So, a person may deviate from one standard and at the same time hold to another. Therefore, not every deviation is an error.

Cass Sunstein has concluded that moral heuristics "lead to mistaken and even absurd moral judgments" without differentiating the notion of deviation and error. This caused the anticipated criticism, given the existence of differences in moral standards. But the remark that the moral heuristics lead to mistakes only when there is a deviation from the normative standard, which is recognized by a person, makes Sunstein's conclusion less vulnerable to criticism.

4 The relativity of moral heuristics

The normative standard chosen by a person also determines which method of moral decisions making will be considered as heuristic. Cass Sunstein noticed:

Utilitarians ought to be able to identify heuristics for the maximization of utility; deontologists should be able to point to heuristics for the proper discharge of moral responsibilities; and those uncommitted to any large-scale theory should be able to specify heuristics for their own more modest normative commitments [20, p.532].

Norms, like "do not kill" and "do not steal", can be heuristics for the consequentialist, who can use them as a fast and frugal way to achieve his normative standard – the best possible consequences. Similarly, fulfilling the norms can be a heuristic for the adherent of virtue ethics, because

they can help achieve his normative ideal – do what "someone ideally virtuous would do" [12, p.60].

However, for deontologists, fulfillment of the norm is not a heuristic method, but a normative standard (such a fulfillment is a goal, not a means to achieve some other goal). Accordingly, other simple methods of moral decision making are heuristics for them. Among such methods may be some social heuristics described by Gerd Gigerenzer [6, p.545-546]. For example, a person who has a stable set of norms may, in certain situations, be guided by "default heuristic", that is, adhere to typical behavior accepted in the community. Also, sometimes she or he can make decisions under the influence of affect heuristics, that is, instead of answering the question "does this act comply with the norm?", answering the question "what do I feel about that?" All these heuristics operate through the attribute substitution "when an individual assesses a specified target attribute of a judgment object by substituting another property of that object - the heuristic attribute - which comes more readily to mind" [11, p.53]. That is, instead of answering the question whether this action is morally wrong, morally good, etc. (which is equivalent to answering the question of whether this action complies with the norm), one will answer the question "what do others do in this case?" or "how do I feel about that?".

It should be added that the compliance with a moral norm cannot always be regarded as a heuristic, even for supporters of consequentialism or virtue ethics. An essential feature of heuristics is that they primarily serve the purpose of reducing the effort associated with a task [17, p.207]. However, the answer to the question "does this act comply with the norm?" sometimes requires a complex analysis. For example, a person who follows to the rule "do not cheat" sometimes has to make significant cognitive efforts to find out if a particular act is cheating. That is, this method of decision making is not easy, so it cannot be called a heuristic.

5 Are deviations from flexible moral beliefs possible?

Analyzing the problem of deviation from chosen moral normative standards, we should take into account the fact that people tend to show inconsistency in their moral beliefs. We can agree with Christopher Bauman and Linda Skitka that in real life people show "selective, concrete, and object-specific expressions of commitments to a core moral value or principle" [3, p.348]. Moral principles and values are selectively applied to specific situations and people "abruptly abandon one standard"

and employ another based on relatively small changes in the scenario" [3, p.350]. Philippe Tobler, Annemarie Kalis and Tobias Kalenscher also suppose that in real life people do not commit themselves to one moral theory but switch between different theories as the circumstances change. People may eclectically combine considerations from different moral theories (although they allow an alternative explanation: perhaps people are not "sometimes utilitarians and sometimes deontologists but use rules of thumb to make decisions that are essentially about utility" [21, p.392]). For example, the study conducted by Eric Uhlmann and his colleagues proves that people flexibly endorse moral principles that support judgments consistent with their political inclinations [23, p.489]. Therefore, "rather than being moral rationalists who reason from general principle to specific judgment, it appears as if people have a 'moral toolbox' available to them where they selectively draw upon arguments, that help them build support for their moral intuitions" [23, p.489].

This requires asking the question: can we talk about a deviation from a subjectively chosen normative standard, considering the fact that a person can deny the fact of a deviation and choose another standard that is consistent with their action? First of all, it should be noted that the individual who has a stable set of moral beliefs is an idealized model. This model is convenient to use for the theoretical analysis of moral heuristics. In real life people are, in varying degrees, similar to this ideal. To identify an error in the decisions of a person who has a stable set of moral beliefs is much easier than in the decisions of a person who does not have it. Although it is more difficult to identify an error in the decisions of people who switch between different theories, it is also sometimes possible. First, it is necessary to distinguish two types of situations in which individuals make this "switch".

In situations of the first type, people choose an ethical theory or moral principles before they make a decision. If such a person recognizes different normative standards, and in a particular situation was guided by a particular normative standard but was unable to comply with it (in particular, due to the use of heuristics), then we have a deviation, which is an error. This error can be proved in the manner mentioned above. Thus, the error identification process in such situations will not differ from the situations when a person has a stable set of moral beliefs. The propensity to abandon one standard and employ another is not an obstacle. For example, imagine a person who combines consequentialism and deontological ethics. In one of the situations, they give a promise to their colleague that they will not tell anyone about the project they are

working on. The person has a sincere intention to keep their promise, because they are convinced that the principle of trade secrets is one of the basic principles of business ethics (that is, in this case they decide to act as a deontologist). Later, in a conversation with a friend, influenced by friendly emotions they talk about the project. Thus, although the person wanted to comply with the principle of trade secrets they could not do it, under the influence of affect heuristics (instead of answering the question "is it morally proper to tell this to a friend?", they answered the question "will I be pleased to tell this to a friend?").

Situations of the second type are distinguished by the fact that a person chooses, post hoc, an appropriate moral standard, in light of which an act would be correct. An example would be a situation when a person makes an intuitive decision, and then "searches for arguments that will support an already-made judgment" [9]. In situations of this type, it is really difficult to identify the mistake, because in the case of non-compliance with one standard a person can replace it with another, according to which the act will be moral. In this case, it is possible to say that the decision is mistaken only if it deviates from all of the moral standards which a person accepts. This can be exemplified by when a person who adheres to deontological and consequentialists theories, driven by "imitate-your-peers" heuristics [6, p.545] had decided to kill an innocent victim and this killing did not have positive consequences. In other cases, it will be difficult to establish the fact of a mistake.

It is worth noting that a person can deny a deviation even from a moral standard chosen by them. People have the "ability to justify their immoral actions by generating multiple and diverse rationales for why these actions are ethically appropriate or consistent with their moral compass" (moral flexibility) [8, p.76]. For example, a person can strategically choose the sort of information that might render selfish actions as morally appropriate [19, p.181]. In this case, even a decision that deviates from the normative standard chosen by a person will remain subjectively correct.

However, these are different tasks: to establish the fact of a mistake and convince the person who has made the mistake. In order to establish the fact of a mistake, it is necessary to compare the normative standard chosen by the person and their decision. In order to prove this mistake to a person, it is necessary to show them the discrepancy between a decision and a standard. If a person accepts logical arguments, then it is possible. If they do not accept such arguments, then it is unlikely (although, of course, this does not deny the fact of the mistake). However, as Jonathan

Haidt notes in the field of morality, reasoning often becomes the "slave of the passions". That is, rational arguments cannot always convince a person that they are mistaken. Haidt wrote:

I have now interviewed several hundred people about taboo violations such as consensual safe sex between an adult brother and sister, and I have never yet seen a person say "Oh, I see! I had this strong gut feeling that it was wrong, but now that I understand that no child can result from the union, I realize that I was mistaken." More typically, people struggle valiantly to find some reason why even in this special case the brother and sister should not have sex [10, p.552].

Therefore, Haidt concludes that "the problem with moral heuristics is . . . it is hard to get people to question their anthropocentric moral facts" [10, p.552].

For the theory of moral heuristics, it is in fact not essential whether a person acknowledges a mistake. It is important to show that, guided by heuristics, a person may deviate from the chosen normative standard. It does not matter whether a person acknowledges the fact of such a deviation, since the discrepancy between the chosen standard and their decision will still take place. Therefore, although the principles of subjective rationality can be accepted by the theory of moral heuristics when it comes to choosing a normative standard, there is no need to use these principles in proving or disproving the fact of compliance with the normative standard, since this can be done in a logically correct way. Thus, it is possible to clearly delineate the limits of the legitimacy of subjective rationality in the theory of heuristics – the choice of a normative standard. However, as soon as a person has adopted a certain standard, it becomes possible to logically prove a deviation from it. Therefore, there is no need to acknowledge the fact of such a mistake – it takes place regardless of whether a person acknowledges it or not.

6 Conclusions

Gerd Gigerenzer has noticed that "heuristics provide explanations of actual behavior; they are not normative ideals. Their existence, however, poses normative questions" [7, p.5]. One of them is the question of a normative standard regarding which moral decisions based on heuristics can be judged as correct or not. Some authors point out that since there is no generally accepted criterion of morality, there is no reason to

assert that heuristics lead to moral mistakes. However, the arguments presented in this article prove that even if such a criterion is subjective, deviations from it are possible. In order to prove the fact of such a deviation, it is necessary to compare "how things are" (committed act or decision) with "how things ought to be" (norm) in a logically correct way. Since such an operation can be carried out with subjective moral standards, it is possible to prove deviations from them. However, in order to establish the fact of a mistake, we must always note the standard from which the deviation took place. Deviation becomes a mistake only when a person deviates from the standard which they consider as right.

Accepting the idea of the subjectivity of a moral standard, it is also necessary to accept the idea of the relativity of moral heuristics. The normative standard chosen by a person also determines which method of making moral decisions will be considered as heuristic. What is for one moral theory a heuristic may be normative standard for another.

Also, the theory of moral heuristics must accept the fact that although the subjectivity of a moral standard does not exclude the possibility of deviations from it, there are cases where it is impossible to establish the fact of a mistake. These are cases where person chooses, post hoc, a moral standard, in light of which the decision would be right. In such cases, it is possible to recognize that the decision is mistaken only if the act is a deviation from all moral standards which the person considers as right. In other cases, it will be difficult to establish the fact of a mistake.

Finally, it is possible to delineate the limits of the legitimacy of subjective rationality in the theory of moral heuristics. These principles can be adopted only when it comes about choosing a normative standard. In everything else we can rely on traditional logical methods of proving.

Acknowledgements

I would like to thank Prof. Jonathan Baron for his constructive comments on earlier versions of this manuscript. I would also like to express my gratitude to anonymous reviewers and the editor for their insightful and constructive feedback. The author also wishes to thank Andrea Weyneth for proofreading this paper.

Vitaliy Nadurak
Department of Philosophy,
Sociology and Religious Studies
Vasyl Stefanyk Precarpathian
National University
57 Shevchenko street
Ivano-Frankivsk, 76018, Ukraine
<vnadurak@gmail.com>

References

- [1] Baron, Jonathan. "Heuristics and biases in equity judgments: a utilitarian approach". In: *Psychological perspectives on justice: Theory and applications.* Ed. by Barbara A. Mellers and Jonathan Baron. Cambridge University Press, 1993, pp. 109-137.
- [2] Bartels, Daniel M., Christopher W. Bauman, Fiery A. Cushman, David A. Pizarro and Peter A. McGraw. "Moral judgment and decision making". In: *The Wiley Blackwell handbook of judgment* and decision making. Ed. by Gideon Keren and George Wu. Wiley-Blackwell, 2015, pp. 479-516.
- [3] Bauman, Christopher W. and Linda J. Skitka. "In the mind of the perceiver: psychological implications of moral conviction". In: *The psychology of learning and motivation: Vol. 50. Moral judgment and decision making.* Ed. by Daniel M. Bartels, Christopher W. Bauman, Linda J. Skitka and Douglas L. Medin. Elsevier Academic Press, 2009, pp. 339-362.
- [4] Boudon, Raymond. "Toward a synthetic theory of rationality". In: International Studies in the Philosophy of Science 7(1) (1993), pp. 5-19.
- [5] Dhami, Sanjit, Ali al-Nowaihi and Cass R. Sunstein. 2018. "Heuristics and public policy: decision making under bounded rationality". In: SSRN. Available in: http://dx.doi.org/10.2139/ssrn.3198739. Accessed: March 2019.

- [6] Gigerenzer, Gerd. "Moral satisficing: rethinking moral behavior as bounded rationality". In: *Topics in Cognitive Science* 2(3) (2010), pp. 528-554.
- [7] Gigerenzer, Gerd. "Moral intuition = fast and frugal heuristics?" In: Moral psychology, Volume 2: The cognitive science of morality: intuition and diversity. Ed. by Walter Sinnott-Armstrong. MIT Press, 2008, pp. 1-26.
- [8] Gino, Francesca. "How moral flexibility constrains our moral compass". In: Cheating, corruption, and concealment: the roots of dishonesty. Ed. by Jan-Willem van Prooijen and Paul A.M. van Lange. Cambridge University Press, 2016, pp. 75-97.
- [9] Haidt, Jonathan. "The emotional dog and its rational tail: a social intuitionist approach to moral judgment". In: *Psychological Review* 108(4) (2001), pp. 814-834.
- [10] Haidt, Jonathan. "Invisible fences of the moral domain". In: Behavioral and Brain Sciences 28(4) (2005), pp. 552-553.
- [11] Kahneman, Daniel and Frederick Shane. "Representativeness revisited: attribute substitution in intuitive judgment". In: *Heuristics and biases: the psychology of intuitive judgment*. Ed. by Thomas Gilovich, Dale Griffin and Daniel Kahneman. Cambridge University Press, 2002, pp. 49-81.
- [12] Kwame, Anthony A. Experiments in ethics. Cambridge: Harvard University Press, 2008.
- [13] Messick, David M. "Equality as a decision heuristic". In: *Psychological perspectives on justice: theory and applications*. Ed. by Barbara A. Mellers and Jonathan Baron. Cambridge University Press, 1993, pp. 11-31.
- [14] Mikhail, John. "Moral heuristics or moral competence? Reflections on Sunstein". In: *Behavioral and Brain Sciences* 28(4) (2005), pp. 557-558.
- [15] Nadurak, Vitaliy. "Two types of heuristics in moral decision making". In: Filosofija. Sociologija 29(3) (2018), pp. 141-149.
- [16] Pizarroa, David A. and Eric L. Uhlmann. "Do normative standards advance our understanding of moral judgment?" In: *Behavioral and Brain Sciences* 28(4) (2005), pp. 558-559.

- [17] Shah, Anuj K. and Daniel M. Oppenheimer. "Heuristics made easy: an effort-reduction framework". In: *Psychological Bulletin* 134(2) (2008), pp. 207-222.
- [18] Simon, Herbert A. Models of bounded rationality. Vol. 2: Behavioral economics and business organization. Cambridge: MIT Press, 1982.
- [19] Spiekermann, Kai and Arne Weiss. "Objective and subjective compliance: a norm-based explanation of 'moral wiggle room'". In: Games and Economic Behavior 96 (2016), pp. 170-183.
- [20] Sunstein, Cass R. "Moral heuristics". In: Behavioral and Brain Sciences 28(4) (2005), pp. 531-542.
- [21] Tobler, Philippe N., Annemarie Kalis and Tobias Kalenscher. "The role of moral utility in decision making: an interdisciplinary framework". In: *Cognitive*, *Affective*, & *Behavioral Neuroscience* 8(4) (2008), pp. 390-401.
- [22] Triskiel, Janett. "Psychology instead of ethics? Why psychological research is important but cannot replace ethics". In: *Dual-process theories in moral psychology*. Ed. by Cordula Brand. Springer VS, 2016, pp. 77-98.
- [23] Uhlmann, Eric L., David A. Pizarro, David Tannenbaum and Peter H. Ditto. "The motivated use of moral principles". In: Judgment and Decision Making 4(6) (2009), pp. 476-491.
- [24] Wiggins, David. Needs, values, truth: essays in the philosophy of value. Oxford, New York: Blackwell, 1987.