

THREE SHORTCOMINGS OF THE TROLLEY METHOD OF MORAL PHILOSOPHY

Guy Crain

SEVERAL AUTHORS have criticized what James O'Connor has called the “trolley method” of moral philosophy.¹ Named for trolley problems that typify cases used in the method, the method includes presenting cases where there are one or more parties, one of whom is the *agent*—the moral agent poised to make the relevant decision. There are *variables*—objects, settings, and other parties described in a scenario that only function as features either merely to be accepted by the agent or to be managed by the agent in some way (e.g., the trolley, a switch, five people on a track). There are *options*—the limited courses of action available to the agent to interact with some of the variables; importantly, each option presented seems morally problematic. And there is also a *respondent*—the person(s) to whom the trolley problem is presented and who is expected to identify the correct or best option available to the agent. Thus, while the trolley method includes the traditional trolley problem cases, it includes a far broader range of moral dilemma-esque thought experiments. For a more concrete idea of trolley method cases, consider the following examples:

Switch: A man is standing by the side of a track when he sees a runaway train hurtling toward him: clearly, the brakes have failed. Ahead are five people tied to the track. If the man does nothing, the five will be run over and killed. Luckily he is next to a signal switch: turning this switch will send the out-of-control train down a side track, a spur, just ahead of him. Alas, there is a snag: on the spur he spots one person tied to the track: changing direction will inevitably result in this person being killed.²

Footbridge: George is on a footbridge over the trolley tracks. He knows trolleys and can see that the one approaching the bridge is out of control. On the track further along from the bridge there are five people; the banks are so steep that they will not be able to get off the track in time.

1 O'Connor, “The Trolley Method of Moral Philosophy.”

2 Edmonds, *Would You Kill the Fat Man?*, 8.

George knows that the only way to stop an out-of-control trolley is to drop a very heavy weight into its path. But the only available, sufficiently heavy weight is a fat man also watching the trolley from the footbridge. George can shove the fat man onto the tracks in the path of the trolley, killing the fat man, or he can refrain from doing this, letting the five die.³

Ticking Time Bomb: A terrorist has been captured, and you know that he has planted a small atomic bomb in a major city that is due to detonate in two hours. The terrorist will not tell you where the bomb is, and unless you use torture to obtain the information from him, thousands of people will die.⁴

Jim the Botanist: Jim is a botanist on an expedition in South America. He wanders into the central square of a remote village in which twenty people are restrained against a wall and being guarded by armed men in uniforms. Pedro, the officer in charge, questions Jim and comes to believe that his presence in the village is a mere coincidence. Pedro informs Jim that the captives are a randomly selected group of inhabitants that are about to be killed in order to put an end to recent acts of protest against the government. Pedro would like to honor Jim's presence by offering him the opportunity to kill one of the innocent villagers himself. If Jim accepts the offer, Pedro will release the surviving nineteen villagers. If Jim refuses, Pedro will kill Jim and the twenty prisoners. Violent resistance is not an option.⁵

Harry the President: Harry is the president and has just been told that the Russians have launched an atomic bomb toward New York. The only way the bomb can be prevented from reaching New York is by deflecting it, but the only deflection path available will take the bomb onto Worcester. Harry can do nothing, letting all of New York die, or he can press a button that deflects the bomb, killing all of Worcester.⁶

Organ Transplant: A surgeon knows of five seriously ill patients in a hospital who all urgently need organ transplants. Two require kidneys, two need lungs, and one needs a heart. An innocent, healthy, and young drifter with no family or attachments comes to the hospital for a routine

3 Thomson, "Killing, Letting Die, and the Trolley Problem," 207–8

4 Edmonds, *Would You Kill the Fat Man?*, 49.

5 Williams, "A Critique of Utilitarianism." See also Moseley, "Revisiting Williams on Integrity."

6 Thomson, "Killing, Letting Die, and the Trolley Problem," 208.

checkout. If the surgeon chooses to sedate the drifter and harvest the drifter's organs, the five patients will live. If the surgeon does not do so, the five will die.⁷

I will use "trolley problems" to refer to any case relevantly similar to the cases above.

In the trolley method, respondents' answers to such cases are then argued to have one or more of a wide range of implications—from criticisms of major moral theories to how to behave in (allegedly) analogous real-world scenarios. The trolley method, then, employs what Laura Martena calls the probative and heuristic functions of trolley problems—where trolley problems are used either to test ethical theories and principles by whether they correspond to respondents' case-specific intuitions or to build ethical theories and formulate principles by inferences from respondents' case-specific intuitions.⁸

The trolley method has been widely criticized. The criticisms include:

- It detracts attention from the more important systematic or institutional factors that give rise to such bleak choices in the first place.⁹
- To the extent that the trolley method is treated as analogous to scientific methods, there are significant problems with both the internal and external validity of the thought experiments it uses.¹⁰
- It fails to test important ethical features of the agents forced to act—features such as resourcefulness.¹¹
- It fails to be action-guiding.¹²
- It fails to predict what people would actually do in relevantly similar scenarios.¹³
- It often includes conceptions of agents who possess capacities not had by many or perhaps any actual human.¹⁴
- It is "outright harmful."¹⁵

7 Edmonds, *Would You Kill the Fat Man?*, 33.

8 Martena, "Thinking inside the Box," 385.

9 Rennix and Robinson, "The Trolley Problem Will Tell You Nothing Useful about Morality."

10 Wilson, "Internal and External Validity in Thought Experiments." See also Bauman et al., "Revisiting External Validity."

11 O'Connor, "The Trolley Method of Moral Philosophy," 248.

12 O'Connor, "The Trolley Method of Moral Philosophy," 250.

13 Bostyn, Sevenhant, and Roets, "Of Mice, Men, and Trolleys."

14 O'Neill, *Towards Justice and Virtue*, 41.

15 Martena, "Thinking inside the Box," 385.

I find many of these criticisms apt. But there are three criticisms of the trolley method that have not, to my knowledge, been adequately articulated in the literature. In this paper, I will argue that trolley problems (and, therefore, the trolley method) have three significant shortcomings—namely, the foregrounding of high-stakes ethical choices, the *faux* anonymization of moral agents, and the mischaracterization of ethical decision-making.

1. BACKGROUNDING THE FOREGROUND

Trolley problems tend to spotlight high-stakes moral decisions. They often involve the death of multiple parties, significant bodily injury, torture, acts of violence, the starvation of entire populations, and so on—decisions most people should never expect to face. I am not the first to point this out. Others have criticized the trolley method for its lack of realism. However, in my view, these critics commit the very error they identify in the trolley method and thus miss the depth of the shortcoming. For example, Christopher Bauman and colleagues point out that trolley problems lack “mundane realism”¹⁶—that is, how likely it is that the events in a study resemble those that participants confront in their everyday lives:

Trolley problems also lack mundane realism because the catastrophes depicted in sacrificial dilemmas differ considerably from the type and scale of moral situations people typically face in real life. To illustrate this point, we measured how realistic our participants found trolley problems compared with short scenarios about contemporary social issues (viz. abortion and gay marriage . . .). . . . Few participants in psychology experiments have direct experience making quick decisions that determine who will live and who will die, and few would even expect to face anything even remotely similar.¹⁷

Notice that to illustrate the lack of “mundane realism” in trolley problems, Bauman and colleagues had subjects respond to an item about abortion. True, this issue reflects a greater realism than trolley problems. Still, it is hardly “mundane.” It, too, as Bauman and colleagues put it, “[differs] considerably from the type and scale of moral situations people *typically* face in real life” (emphasis added). Replacing trolleys with abortion improves on the trolley method but not by much. The very test Bauman and colleagues use to correct for mundane realism itself lacks mundane realism.

¹⁶ Bauman et al., “Revisiting External Validity.”

¹⁷ Bauman et al., “Revisiting External Validity,” 542.

Barbara Fried comes the closest to the criticism I am raising when she writes that the trolley method

has resulted in non-consequentialists' devoting the bulk of their attention to an oddball set of cases at the margins of human activity, while largely ignoring conduct that (outside the context of criminal activity and warfare) accounts for virtually all harm to others: conduct that is *prima facie* permissible (mowing a lawn, fixing your roof, driving a car down a city street) but carries some uncertain risk of accidental harm to generally unidentified others.¹⁸

From here, though, Fried proceeds to argue that the trolley method leads its authors and consumers to underestimate the frequency of tragic choices, which is a mistake because, so she claims, such choices are "ubiquitous" and, for the most part, "quotidian."

To illustrate, she considers the example of transportation infrastructure investment (specifically, trolley safety): "Suppose that if we invest \$5 billion . . . in safety measures, we can reduce expected deaths or serious injuries from trolley accidents from one in every 10 million trolley trips to one in every 12 million trolley trips. Should we (must we?) make that investment?"¹⁹ While almost no one will ever have to face a decision like the one described in *Switch*, many more persons will have to decide whether to invest a certain amount of money in safety protocols that will result in either a higher or lower number of expected deaths. However, in light of Fried's trolley safety example (which is intended as a stand-in for any relevantly analogous political policy decision), I take it that her use of "ubiquitous" and "quotidian" is intended to mean ubiquitous and quotidian only when compared to trolley problems and therefore that Fried's criticism is still different from mine.

It is easy to miss this, given Fried's misleading use of "we." "We" gives the sense that I, the reader, am included—I am a part of deciding what dollar amount to invest in trolley safety. But, in fact, I am not. Deciding what dollar amount to invest in this or other analogous collective projects is not a regular part of the ethical decisions I make in a day. I am not in a position politically to have the authority to make that decision in any direct sense. Perhaps if I were to vote on a ballot measure concerning transportation funding or for a candidate who might, in turn, vote on that issue, I would play a part in the decision; but even that act does not come up for me with any "quotidian" level of frequency. Even if I were politically situated to make that decision in a more direct

18 Fried, "What Does Matter?," 506.

19 Fried, "What Does Matter?," 512.

sense—for instance, if I happened to be a member of a city council whose job it was to propose or vote on some infrastructure budget—I would likely only make that decision no more than once a year. So, similar to Bauman and colleagues' use of abortion, the example Fried gives of a “ubiquitous” decision still does not represent the vast majority of ethical decisions faced by the vast majority of persons. While Fried rightly observes that the fact that the trolley method has led to a “lopsided allocation of attention” has itself not received adequate attention, neither has Fried, I think, paid it adequate attention. While Fried's aim is to spotlight tragic choices to show their commonness, the result is still, in practice, backgrounding the foreground.

In an attempt to pay this problem adequate attention, consider that among trolley problems, there is a glaring lack of attention paid to issues such as writing thank-you cards; empathizing with one's spouse; the frequency with which to call or visit one's elderly parents; a healthy relationship with one's neighbors; how to conduct oneself in a workplace breakroom; the language one uses when interacting with online acquaintances; the verbal or facial expressions one makes when dealing with customer service workers; appropriate amounts of sleep and rest; how to express volatile emotions; whether one should cover one's car with bumper stickers that have antagonistic slogans on them; how to help one's child transition from adolescence into adulthood; proper boundaries and communication practices with potential marital partners; whether to greet persons one is passing by; the importance of dietary health; putting money in fundraiser collection tins; drawing undue attention to oneself; validating the feelings of those with whom one is conversing; and things such as bragging, swearing, smiling, listening, joking, complaining, and gossiping. Some philosophers do give attention to some of these issues (though they do not employ the trolley method in doing so).²⁰ I suspect, though, that some might react to the above list with a sense that such small things are either not ethical issues or not worthy of the attention of ethicists. Surely, there is precedent for thinking this is not right. Consider that a leader of a world religion took the time to teach his followers about greeting others and that a saint of that same religion stressed the importance of smiling.²¹

In light of what I take to be the far more “mundane realist” list of ethical concerns I present above (the larger category of which I will refer to as the “ethics of the mundane”), both trolley method peddlers and their mundane realist critics contribute to the view that ethics is either rare or elite. They are

20 Regarding interacting with online acquaintances, see Barney, “[Aristotle], *On Trolling*.” Regarding swearing, see Roache “Naughty Words.” Regarding volatile expressions, see Roache, “Honestly, It's Fine!” See also Olberding, “The Wrong of Rudeness.”

21 See Matthew 5:47; and Reilly, “10 Of Mother Teresa's Most Powerful Quotes.”

not alone. Perusing tables of contents of applied ethics textbooks from the past few decades also gives the impression that the average person might only face a few ethical decisions in their lifetime (namely, concerning abortion, suicide and euthanasia, and reproductive technology) and that ethical decisions worth a significant amount of attention are made only by the few persons who occupy positions of significant political power (namely, concerning war and terrorism, criminal and capital punishment, environmental policy, affirmative action, and economic policy). Perhaps the closest such manuals come to quotidian issues are treatments of vegetarianism and drug use.²²

That the trolley method foregrounds high-stakes moral decisions and pays no attention to the ethics of the mundane is a shortcoming for three reasons. First, these low-stakes issues make up the stuff of everyday moral life. Not only does most of daily life for most moral agents not concern the potential rogue doctor harvesting a healthy, unattached drifter's organs for the sake of saving five other patients, as in *Organ Transplant*, neither does *daily* life for *most* moral agents concern abortion (it is difficult even to imagine a world in which at least fifty-one percent of all moral agents decide whether to have an abortion *every day*) let alone allocating public funds for transportation safety. Granted, some moral agents face such issues some of the time. An event strikingly similar to *Jim the Botanist* took place in Colombia in 1987.²³ Self-driving-car designers do consider scenarios relevantly similar to *Switch*.²⁴ Masahiro Morioka argues that the trolley method resembles the rationale behind the United States's decision to drop atomic bombs in Japan.²⁵ Health care staff working triage with limited resources face utilitarian trade-offs not unlike trolley problems.²⁶ And, of course, a sizable number of agents do face the decision of whether to have an abortion.²⁷ Yes, these things happen, and they do deserve philosophical attention. But high-stakes moral decisions occupy the *daily* life of very few people. By foregrounding what either most people face rarely or what few people face at all, the trolley method, in effect, backgrounds most of moral life.

22 See, Bonevac, *Today's Moral Issues*; Boss, *Analyzing Moral Issues and Ethics for Life*; Cahn, *Exploring Philosophy of Religion*; Hinman, *Contemporary Moral Issues*; MacKinnon, *Ethics*; Rachels, *Moral Problems*; Shafer-Landau, *The Ethical Life*; Soifer, *Ethical Issues*; and White, *Contemporary Moral Problems*.

23 Lederach, *The Moral Imagination*, 13–16.

24 Lin, "Robot Cars and Fake Ethical Dilemmas." However, some argue the scenarios are disanalogous in important ways: see Roff, *The Folly of Trolleys*.

25 Morioka, "The Trolley Problem and the Dropping of Atomic Bombs."

26 Kneer and Hannikainen, "Trolleys, Triage and COVID-19."

27 Centers for Disease Control and Prevention, "CDC's Abortion Surveillance System FAQs."

Second, this foregrounding of high-stakes moral decisions can be precedent setting or norm setting. Practicing the trolley method or using it as a primary pedagogical tool—this pattern of action can build the impression that ethics just amounts to the rare decision faced by many or the normal decision faced by the few. It can create the impression that if one wants to do work in ethics, then one *ought* to focus on warfare, killing in self-defense, lethal self-driving-car accidents, healthcare funding, prison reform, climate change legislation, and so on. But if I, who will likely never be in a position to make any such decisions, am on my way to visit an incarcerated acquaintance for the first time, and I am wondering what I ought or ought not to say during the visit—from the perspective of the trolley method, well, that is not really the stuff of ethics. To illustrate the shortcoming, imagine Smith, who routinely pours time and energy into some matter of international conflict happening far away from where she lives and has few cognitive resources left over to recognize the importance of energetically applauding at the end of her son's band recital: the foreground of her moral life—the stuff most frequently proximate to her—gets backgrounded due to misdirected attention. By this practice of directed attention, the ethics of the mundane are out of sight, out of mind, and the rare or elite matters become the paradigm cases of doing ethics, let alone behaving ethically.

Third, the trolley method is, by design, a terrible tool for working on the ethics of the mundane. This is because trolley problems differ from the ethics of the mundane in at least three ways. First, trolley problems feature neatly quantified choices—this life lost or that life lost, one life versus five lives, x amount of time inflicting serious injury versus thousands of lives lost, and so on. But what does a neatly quantified choice about thank-you cards even look like? It is true that in choosing to spend x amount of time writing a thank-you card, I have made some trade-off—the opportunity cost of having spent that time doing something else that, perhaps, would have had a higher moral payoff. But worrying about spending five minutes writing a thank-you card versus spending four minutes and devoting that one minute to some other activity seems wrongheaded. True, people routinely make decisions about these trade-offs—when to tell the kids it is time to leave the park and go home, how much time to allot to visiting a friend, and so on. But aiming to make those choices quantifiably precise itself seems like ethically bad practice. Imagine meeting your friend Smith for lunch and saying, “Smith, to maximize the moral payoffs of our friendship or avoid a morally impermissible use of my time, you will stay here interacting with me for at most forty-three minutes; however, I have determined that even one minute more is morally subpar, given that it will mean one minute fewer than the morally optimal amount of time spent writing thank-you cards this afternoon.” Second, trolley problems are, by design, urgent.

Grave consequences loom no matter what the agent in a trolley problem does. But, again, viewing or acting as though each mundane ethical choice made in a day is a crisis seems wrongheaded and itself like bad ethical practice (let alone mentally unhealthy). Third, trolley problems involve only bad options. Such dilemmas are not analogous to my options when, say, considering whether I ought to brag or complain about something.

In sum, not only does the trolley method ignore most of most people's moral life and, in effect, thereby consign most of life to the realm outside ethics, but it also lacks the tools necessary to remedy this.

2. THE FAUX ANONYMIZATION OF MORAL AGENTS

Trolley problems are presented in one of two ways. There are second-person trolley problems that are written such that the agent is the respondent (such as in Ticking Time Bomb). And there are third-person trolley problems that are written such that some nondescript third party (e.g., "Jim the botanist," "Harry the president," or "a surgeon"), not the agent, is the respondent. First, consider third-person trolley problems. When the agent is just "someone" or "a person" or even "a surgeon," this creates the impression that the respondent can imagine a nearly featureless agent navigating the case—"nearly featureless" because in some cases limited details are provided ("Jim" is a botanist and "Harry" is the president); but also "nearly featureless" because the respondent must imagine *some* minimum set of features so that the agent is capable of acting as a *moral agent* in the case. So, the respondent is surely thinking of an agent who is, for example, not in a coma. Whatever features the agent has beyond this minimal set, plus whatever features are provided in the description, are treated as operationally unimportant.

Others have pointed out that the parties mentioned in trolley problems are under-described and that the details left indeterminate are potentially morally relevant²⁸—though, to my knowledge, not a great deal of attention has been paid specifically to the under-described nature of the agent.²⁹ Virginia Held, however, has criticized the "dominant moral theories" (i.e., Kantianism, utilitarianism, and Aristotelian virtue ethics) because they operate as though there is such a thing as a nondescript "agent as such."³⁰ This chimerical abstraction, according to Held, lacks thick interconnectedness to other agents as such, and

28 See Bauman et al., "Revisiting External Validity," 542; Wilson, "Internal and External Validity in Thought Experiments"; and JafariNaimi, "Our Bodies in the Trolley's Path."

29 O'Connor, "The Trolley Method of Moral Philosophy," 246–48.

30 Held, *The Ethics of Care*, 13.

thus the dominant moral theories miss moral issues that arise in the contexts of family, friendship, and social groups.

The criticism of the trolley method I aim to develop here builds on but differs from Held's. Consider this progression of three trolley problems I routinely present to ethics students after they have read excerpts from Held's *Ethics of Care*:

Bystander: Suppose Smith is an unarmed bystander who witnesses Jones initiate a violent attack against an innocent victim, Williams.

Grandfather: Suppose you are taking a slow, leisurely stroll with your elderly grandfather, who is heavily dependent on a walking cane. You tell him you want to go into the store right behind a sidewalk bench to buy a couple of items. He can rest on the bench, and you will continue the walk after you are done in the store. While you are in the store, your grandfather notices that across the street, a muscular male youth brutally attacks a smaller mid-thirties male. Your grandfather is the only bystander witnessing this attack and is unarmed.

Marine's Wife: Suppose a short, 100-pound female notices that her tall, muscular, 280-pound former marine husband is being violently attacked by a 200-pound, unarmed male who is less fit than her husband.

For each case, I ask students whether the agent is obligated to intervene (violently, if necessary) to try to stop the attacker and protect the victim. The majority of respondents do not give the same answer in all three cases. A considerable majority say that the agent is obligated to intervene in *Bystander* but not in *Grandfather* or *Marine's Wife*. I, then, ask if more detailed descriptions of the agent and variables in each case affected their answers. Again, a considerable majority say yes. Last, I ask them to give a brief description of "Smith"—the person they imagined as the agent in *Bystander*. Overwhelmingly, student responses indicate that they imagined an able-bodied male. Interestingly, many of these responses are worded such that the students do not even realize that they themselves assigned a gender to Smith—responses such as, "I imagined him as young and fit." I, then, point out to students that there is nothing in *Bystander* that indicates that Smith was *not* an elderly grandfather or a marine's wife, let alone that Smith was male. (I once had a student resist this point, insisting that she could "just tell he was a guy" without being able to provide any further explanation of how she was able to tell this.)

I offer this not as an experiment performed with any scientific rigor but at least as an illustration of Held's view of the shortcomings of using this "agent as such" in any method of doing ethics, and also of something more. The cases function in much the same way as the infamous father/son/surgeon riddle:

A father and a son are in a terrible car crash. They are both rushed to the hospital. The father is pronounced dead on arrival, while the son is in a critical condition. The son needs emergency surgery and is rushed to the operating room. The surgeon looks at the boy and says, "I cannot perform this operation—that is my son!" Who is the surgeon?

Respondents come up with a variety of solutions but routinely fail to come up with the solution that the surgeon could be the boy's *mother*. The big "aha"—the reason that it is a riddle with the potential to stump people at all—is that the respondent will likely supply more information than is actually presented in the riddle itself, and that supplied information is precisely what excludes the mother solution. Yet another "aha" is that the failure to come up with the mother solution is not endemic to male respondents. Females, females with mothers who were doctors, and even female doctors also tend not to come up with the mother solution.³¹

According to James Wilson, thought experiments similar to trolley problems are presented as though it is expected that the respondent will fill in the details left indeterminate but "only add colour and detail that is morally irrelevant."³² I disagree. I think their presentation is more insidious. Third-person trolley problems give the impression that but for the sparsest of features, the agent is *anonymized*; any other features are operationally unimportant, and therefore, analysis can proceed as though those details are left indeterminate. The problem revealed by the surgeon riddle and my Bystander, Grandfather, and Marine's Wife cases is that respondents do *not*, in fact, proceed as though those features are left indeterminate, even when they take themselves to be proceeding in that way. This sense of anonymization is merely a veneer. Blanks *are* filled in—likely in an unwitting way. And more importantly, those blanks tend to get filled in strikingly similar ways—my students tend to assume "Smith" is an able-bodied male without realizing they have done so, and both males and females tend to assume that the surgeon must somehow be male without realizing they have done so.

Thus, what is taken to be a method involving anonymized agents actually involves agents who are rather descript. Consequently, the features that are implicitly supplied become part of the model agent operating as a stand-in for just anyone—anyone who is a moral agent. The more this becomes part of the practice of the trolley method, the more these sneakily supplied features become integral parts of *the* stand-in moral agent. If those integral parts include anything like "young and fit male" or "surgeon that must somehow be a male,"

31 Barlow, "BU Research." See also Gil, "The Fifth Floor—Riddle Me This."

32 Wilson, "Internal and External Validity in Thought Experiments," 138.

then that stand-in for just anyone does not really represent just anyone. If trolley method users are operating in a way that excludes female surgeons, elderly grandfathers, or wives of marines from being the agent, then it is not hard to imagine many more well-described agents who are likely being operationally excluded. This is what strikes me as particularly problematic about this faux anonymization of the trolley method: underneath the veneer of operational inclusion is a practice that is rather exclusive. The trolley method is not ethics for everyone.

Do second-person trolley problems avoid this problem? I do not think so. The degree to which second-person trolley problems are operationally inclusive is an empirical matter concerning the demographic makeup of respondents. In one case of empirical research, trolley problems (specifically, Switch and Footbridge) were posed to seventy thousand participants in forty-two different countries.³³ Perhaps, then, moral psychology's use of trolley problems is becoming more diverse, but surely, the majority of respondents to the broad variety of trolley problems being used *as part of the trolley method* are either academics or college students. If that is true, then most respondents imagining themselves as the agent are likely imagining an agent who is at least WEIRD; this acronym, which stands for wealthy, educated, industrialized, rich, and democratic, was coined by social scientists raising the criticism that social scientists have poor grounds for taking their findings to be representative of human beings in general when the demographics of their sample base likely represent less than twelve percent of the world's population.³⁴

I say "*at least* WEIRD" because, as revealed previously about third-person trolley problems, the imagined agents are likely even more particular—relatively young (to the exclusion of the elderly) but not excessively young (to the exclusion of younger adolescents and children); able (to the exclusion of not only those with severe physical limitations but likely even those with lesser limitations such as dependence on a walking cane); and, if considering academic respondents specifically, probably male. Similar to third-person trolley problems, if second-person trolley problems are presented to enough respondents, it can create the sense that the agent has been anonymized—the agent could be any one of the many respondents, say, seated in a large university classroom taking an ethics course or any given reader of an academic work. But on closer

33 Awad et al., "Universals and Variations in Moral Decisions Made in 42 Countries by 70,000 Participants."

34 Henrich, Heine, and Norenzayan, "Most People Are Not WEIRD," 29. See also Henrich, Heine, and Norenzayan, "The Weirdest People in the World?"; and Arnett, "The Neglected 95%."

inspection, the actual respondents used in the trolley method are a notably homogenous group, and the agent is therefore not so anonymized after all.

Because of this faux anonymization, the trolley method has an agent-inclusivity problem. This is not a gripe about excluding diverse intuitions. Others have pointed out this worry. In response to a meta-analysis suggesting that the bulk of trolley problem respondents have largely similar intuitions, Edouard Machery and Stephen Stich conducted a larger meta-analysis showing there are significant differences in trolley problem intuitions among different demographic groups.³⁵ According to Machery and Stich, it would be a “disaster” if philosophers, psychologists, and anthropologists became convinced that “OUR intuitions (i.e., the intuition of educated, white, wealthy, Western people) are human intuitions.”³⁶ The criticism I am raising is distinct from but analogous to theirs—that the trolley method’s faux anonymization of moral agents can insidiously create the impression that to be a moral agent at all is to be a WEIRD, young, and fit male.

Recall that a significant number of respondents to the surgeon riddle—whether male or female—are equally stumped because they associate “surgeon” with maleness. The point is that however similar people’s intuitions are about trolley problems, they are likely based on a conception of the category of “moral agents” that is itself exclusionary. Trolley method ethics represents an ethics for the educated, healthy, young, and able. Telling someone the relevant agent is an elderly grandfather seems to change things even though the cases never explicitly excluded such agents from being the nondescript third party. Those second-person respondents engaged in trolley method ethics are largely relatively wealthy persons highly educated in Western university systems. There are differently abled persons, persons in eldercare facilities, persons at the margins of stature or age, persons who lack much formal education, and so on who have to make moral decisions most days of their lives. The trolley method, in effect, leaves them out.

3. THE MISCHARACTERIZATION OF MORAL DECISIONS

Trolley problems present a fairly univocal model of what ethical decision-making is like. To illustrate that model, consider what I will call the myth of the voting booth. Imagine being enclosed in a voting booth. There are two boxes in front of you with small slits through which tokens can be inserted. You hold one

35 Knobe, “Philosophical Intuitions Are Surprisingly Robust across Demographic Differences.”

36 Quoted in Weinberg, “Philosophical Intuitions and Demographic Differences.” See also Stich and Machery, “Demographic Differences in Philosophical Intuition.”

token. Dropping the token into one box as opposed to the other will indicate that you have chosen in favor of one outcome as opposed to the other. Within the booth, you are aware of both outcomes, and your consideration of which outcome you ought to favor has occurred entirely during the time in which you occupy the voting booth. You reach out and drop the token into one of the boxes, and this action is the result of your conscious consideration and deliberation while in the voting booth.

Granted, this description of voting sounds cartoonish. But it illustrates a certain conception of what ethical decision-making is like. The voting booth conception is one of a historyless, radically uninfluenced moral decision. That decision is made between at least two options of which the agent is fully aware. The agent's phenomenological experience of that decision includes being fully mentally present and the act being entirely the result of the agent's in-the-moment considerations; and these phenomenological experiences are veridical. This is not the standard complaint that trolley problems routinely involve levels of knowledge and certainty that are disanalogous to real-world ethical decision-making, as others have pointed out.³⁷ Rather, I mean to highlight the isolated, free-of-historical-influence, and performed-with-extreme-awareness nature of this conception of ethical decision-making.

In contrast, consider what I will call the water-walking analogy. Growing up, I had a neighborhood friend with a swimming pool. In the summer, I would go to his house to swim. Often, while we were swimming, his mother and sister would get in the pool to exercise. They would set a kitchen timer and leave it on the edge of the deck. For fifteen minutes, they would walk the internal perimeter of the circular pool as fast as they could. At first, we stayed in the middle of the pool to stay out of their way. But around the ten-minute mark, it was fun to join them at the perimeter because they had built up a current. Their water walking eventually created a makeshift lazy river. The current made it easy to walk behind them. We could even lift our legs and let the current move us. At the fifteen-minute mark, the kitchen timer would buzz. That meant it was time for my friend's mom and sister to turn around and walk in the opposite direction for fifteen more minutes. That turnaround was an interesting experience. Suddenly, for an eight- or nine-year-old, it was nearly impossible to walk the perimeter of the pool. The current against us was so strong that it was a struggle to make any forward progress. We would move our feet in the right direction, but due to the current, we still traveled backward, despite taking forward-moving steps. Eventually, persevering with forward-moving steps would start to pay off, and we could not only move forward but slowly accelerate. By the end

37 Lieberman, "Fight the Hypo," 14–15.

of the second fifteen-minute portion, we had reversed the current, though the second was not as strong as the first.

The water-walking analogy illustrates a conception of ethical decision-making different from the myth of the voting booth. Unlike the stationary, enclosed voting booth, the water-walking analogy includes motion through a medium. It thereby illustrates activity that is dynamic and influenced. There is causal interplay between internal and external factors, and the influence of those factors themselves is, in part, a product of the agent's past decisions and actions—an interplay that creates a behavioral momentum. Because of this, to attempt to understand the agent's actions as a series of isolable moments where the agent faced a clear and limited set of discrete options from which to choose (e.g., "so now at time t I have the option to plant my foot on the pool floor with amount of pressure p , and I have the option not to do that—which is best?")—in other words, to attempt to understand it in a voting-booth-like way—mischaracterizes those acts. The acts exhibit varying degrees of mental presence, some of which are performed as part of a pattern (where that attempted pattern might include mistakes), and the performance of those acts, whatever their degree of mental presence, also cannot be legitimately conceptually isolated from the influence of the medium through which the motion takes place. Rather, each act on the agent's part is better characterized as a part of the whole activity and its environment—as part of a flow.

The myth of the voting booth and the water-walking analogy illustrate two different conceptions of moral decision-making. Of the two, the myth of the voting booth best captures the conception common to trolley problems. There are real-world moral decisions that are more akin to the voting booth than to water walking. And I concede that when discussing difficult choices, people often take themselves to be in situations more akin to the voting booth. Nevertheless, this exclusive focus on voting-booth-like decisions is problematic for the trolley method because the water-walking analogy better represents most real-world ethical decision-making.

The trolley method fails to capture, as psychologist John Bargh describes it, the "automaticity of everyday life."³⁸ An overwhelming number of daily decisions (let alone ethical ones) are made on autopilot, and that autopilot sequence draws on internal, unreflective resources to respond to and navigate environmental features and cues. Consider the activity of driving home from work. For many people, dozens or hundreds of potentially injurious, if not nearly fatal, decisions are made during that activity. Many of those decisions are arguably ethical in nature—for example, whether to obey traffic laws. Yet, as I suspect

38 Bargh, "The Automaticity of Everyday Life."

many readers can also attest, it is possible for me to complete that activity, arrive home, and have no lucid memory of taking part in the activity in any careful, deliberative way. And that is because I probably did not take part in that activity in a careful, deliberative way. For this reason, it seems strange to think of all the individual acts I commit while driving home as the product of discrete decisions. “I *decided* to turn left at that light” connotes far more mental presence than there was. Perhaps I have taken the same route home from work so many times that the various turns, speed changes, signals, stops, and starts are performed by something like muscle memory and neither require nor prime any careful, conscious reflection on my part. And even when I encounter new variables during that drive home—a different set of surrounding cars, lights turning red that are typically green, pedestrians in areas different from before—responding to variables of those types has likely also become second nature to me—different but sufficiently similar to many driving home “flows” I have previously experienced.

Similarly, there are a variety of internal and external factors subtly interacting to stealthily influence my behaviors—behaviors that could be more or less morally valuable than others. My prior development of values, prior experiences with having to accept trade-offs among those values, deliberative skills, the skill to notice morally relevant features of a situation, the development of my moral imagination—these parts of my history contribute to a “current” that will influence how I behave. I cannot perform acts I cannot conceive; my moral conceptual capacities are thus one part of a current that excludes certain options when I act as an agent trying to respond to variables in a given scenario. I will fail to take into account what I am unlikely to notice; thus, similarities among my previous attention-directing flows are also a part of the current likely to limit the options available to me. Further, my physical capacities play a role. It likely will not occur to me to attempt to pull a lever that would divert a trolley, as in *Switch*, if I have routinely lacked the physical strength necessary to move such objects. I am also unlikely to behave in ways that require cognitive energy that I lack; thus, my sleeping and eating patterns are a part of the current that might either enable or limit my ability to listen attentively to a friend’s grievances. Clearly, such internal factors will greatly influence how I behave in non-voting-booth-like scenarios: the degree of ease with which I ignore a panhandler at a traffic stop, how big I smile when I make eye contact with my child who is performing on stage, the tone of voice with which I respond to my wife when she is explaining why she had a bad day, the amount and type of body language with which I convey that I am listening to someone who is talking to me, whether I freeze in situations of threat, and so on. Internally speaking, these behaviors are habituated or routinized—the result of rehearsals that have contributed to behavioral momentum.

A wealth of social science suggests that a great many external factors affect our ethical behaviors. Whether seminary students help someone in their path is affected by their sense of being in a hurry.³⁹ Whether someone will report the truth of what she sees is affected by whether the reports of other people near her differ from what she plainly sees for herself.⁴⁰ Whether a person will agree to be an organ donor is affected by whether becoming an organ donor is an opt-in or opt-out process.⁴¹ The same is true for the amount of withholdings employees choose to divert into their retirement savings.⁴² Whether someone will put money into an honor-system pay box is affected by whether a picture of someone's eyes is displayed near the box.⁴³ How a person evaluates the quality of a variety of objects can be greatly influenced by the order in which those objects are presented to the evaluator.⁴⁴ Whether students cheat on a test is affected by whether they take that test in front of a mirror.⁴⁵ Cheating is even affected by as little as telling the students "Don't be a cheater" as opposed to telling them "Don't cheat."⁴⁶ In other words, features of our environment perform a function similar to the current in the water-walking analogy—giving lazy-river-like assistance to some behaviors and against-the-current resistance to others, where the influence of those currents is likely unnoticed. In fact, many of these studies find that participants not only are unaware of these subtle influences but also even deny them.⁴⁷

Other studies illustrate ways these internal and external factors interplay to sway our behaviors. Correll and colleagues found that while participants might take themselves to be trying to decide whether to shoot someone on the basis of whether that person is armed, the actual shots fired might be affected by the person's skin color and the degree to which participants associate "black" with "dangerous"—an association about which the participants likely lack introspective awareness.⁴⁸ Several studies find that whether we offer someone a job and the amount we offer them as an initial starting salary can be greatly affected by

39 Darley and Batson, "From Jerusalem to Jericho."

40 Asch, "Studies of Independence and Conformity."

41 Johnson and Goldstein, "Defaults and Donation Decisions."

42 McKenzie, Liersch, and Finkelstein, "Recommendations Implicit in Policy Defaults."

43 Ernest-Jones, Nettle, and Bateson, "Effects of Eye Images on Everyday Cooperative Behavior."

44 Nisbett and Wilson, "Telling More Than We Can Know."

45 Diener and Wallbom, "Effects of Self-Awareness on Antinormative Behavior."

46 Bryan, Adams, and Monin, "When Cheating Would Make You a Cheater."

47 Nisbett and Wilson, "Telling More Than We Can Know," 243–44.

48 Correll et al., "The Police Officer's Dilemma."

their name and the degree to which we associate that name with a gender or ethnicity.⁴⁹

To make the water-walking analogy more vivid, consider an anecdotal case. Author and martial artist Terry Dobson writes of an experience he had on a Tokyo train while studying martial arts in Japan.⁵⁰ A heavily intoxicated man entered a commuter train and began harassing and attempting to assault commuters. Dobson had been studying aikido eight hours a day for three years, and he was confident he could physically subdue the drunk. Aikido heavily discourages its students from engaging in physical conflicts; its philosophy is one of avoiding such conflicts and avoiding harm to opponents even during physical conflicts. But Dobson saw this as a clear case where violence was called for. He taunted the drunk to direct the drunk's attention away from other passengers. The drunk took the bait and started heading for Dobson. Before they met, an elderly gentleman seated on the train shouted, "Please come talk to me!" The drunk redirected his attention and said a few rude things to the old man. The old man persisted, eventually asking about the drunk's family. The drunk sank into a seat and began sobbing. He told the old man that his wife had died and that he was now unemployed and homeless. The old man listened and empathized. When Dobson got off the train, the two were still chatting. Dobson writes, "What I had wanted to do with muscle and meanness had been accomplished with a few kind words."

To analyze this case using the myth of the voting booth would be a mistake. Dobson did not experience the scenario as a voting booth in which he faced the scenario with a sense of static enclosure and carefully surveyed a variety of options, that is, one in which he noticed one of his clear options was to try to speak and empathize with the drunk but after careful deliberation among all his options "voted" against that option. Rather, Dobson's years of martial-arts training caused him to perceive the drunk as an aikido opponent. In the heat of a threatening situation, the current of Dobson's previous physical conflict rehearsals kicked in. In reaction to an environmental cue, he moved with a current the buildup of which he had been contributing to for three years. Yet another agent present in the scenario, the old man, had no such training and thus reacted from a different behavioral flow. Upon witnessing the old man's response, Dobson realized his training had precluded a morally superior response to the same environmental cue; he lacked a history of momentums

49 See Steinpreis, Anders, and Ritzke, "The Impact of Gender on the Review of the Curricula Vitae of Job Applicants and Tenure Candidates"; Moss-Racusin et al., "Science Faculty's Subtle Gender Biases Favor Male Students"; and Carlsson and Rooth, "Evidence of Ethnic Discrimination in the Swedish Labor Market."

50 Dobson, "A Soft Answer," 119.

that would have lazy-river-assisted him into easily reacting the way the old man had. Again, this case is simply unlike the myth of the voting booth and therefore unlike the conception of ethical decision-making common to trolley problems.

Our current best evidence suggests that most of our behavior is not calculated or deliberative but conditioned over time to become increasingly automated; it is not performed in an influence vacuum but facilitated, cued, and corralled. Thus, the ethical life is far more like the water-walking analogy than the myth of the voting booth. That does not make most human behavior any less moral or any less the legitimate subject of ethical scrutiny. But if the trolley method employs a conception of ethical decision-making unlike most ethical behavior, then in the case of most moral behavior it is not the right tool for the job. By presenting cases of decision-making exclusively like the myth of the voting booth, the trolley method does one of two things. Either it blatantly excludes the majority of ethical decisions from consideration (once again, backgrounding most of moral life), or it fails to represent the majority of ethical decisions, either by mischaracterizing them or by giving undue credit to the folk view of the degree to which our decisions and actions are performed uninfluenced and with self-awareness.

4. CONCLUSION

While I have not encountered the exact objections I have raised here elsewhere in the literature, I do not think what I am arguing is terribly original. Held warned against general domains of ethical investigation—domains such as the courtroom or the marketplace—leading to the development of tools that are not helpful for ethical decisions or practices outside those domains—such as the family and home life.⁵¹ Confucius took the time to address what seem, in comparison to trolley problems, very mundane issues of customary practice and social interaction.⁵² Aristotle warned against seeking undue precision in ethics.⁵³ And in criticizing the trolley method—esque conception of ethical decision-making, I draw on broader criticisms raised by virtue theorists and situationists alike that major moral theories such as utilitarianism and Kantianism miss important and basic parts of the ethical life. Pulling these resources together to shine a light on the trolley method reveals a practice that jarringly fails to include most of the lived moral experience of most moral agents.

51 Held, *The Ethics of Care*, 24–25.

52 *Analects*, 9.3.

53 Aristotle, *Nicomachean Ethics*, bk. 1, ch. 3.

Despite these shortcomings, I am not arguing that trolley problems should be altogether discarded. I do think they are interesting tools that tell us something about moral psychology. For example, work involving participant responses to trolley problems has revealed interesting things about the role of emotion in moral judgment.⁵⁴ Further, case sets such as Bystander, Grandfather, and Marine's Wife seem informative about how some people cognitively process the content of case descriptions. And, like Martena, I think the deconstruction of trolley problems is a good educational use of trolley problems for ethics students.⁵⁵ But I disagree with Martena that trolley problems are poor educational tools when used to illustrate the differences between major ethical theories such as utilitarianism and Kantianism. While Martena is right to point out that the "solutions" to trolley problems can present an oversimplified view of such theories, I find that for some students, having that oversimplified, cartoonish understanding is an entry point; for some students, the oversimplified version is already a conceptual challenge. (I suspect that, due to, perhaps, the curse of knowledge, we philosophy teachers too often forget how difficult philosophy can be for many of the uninitiated.) Once students grasp the oversimplified version, they are then in a position to see and appreciate the oversimplifications—eventually developing a more nuanced view of such theories, a ladder that some students need to climb in order to understand the reasons why, once at the top, they should kick it away. This might also describe their worthwhile use for philosophers—a blunt instrument that in some instances can help us as long as we remain aware of its bluntness and do not expect it to do the work of sharper tools.

Rose State College
gcrain@rose.edu

REFERENCES

- Aristotle. *Nicomachean Ethics*. 2nd ed. Translated by Terence Irwin. Indianapolis: Hackett Publishing Company, 1999.
- Arnett, Jeffrey J. "The Neglected 95%: Why American Psychology Needs to Become Less American." *American Psychologist* 63, no. 7 (October 2008): 602–14.

54 See Haidt, "The Emotional Dog and Its Rational Tail"; and Greene, "An fMRI Investigation of Emotional Engagement in Moral Judgment."

55 Martena, "Thinking inside the Box."

- Asch, Solomon E. "Studies of Independence and Conformity: I. A Minority of One against a Unanimous Majority." *Psychological Monographs: General and Applied* 70, no. 9 (1956): 1–70.
- Awad, Edmond, Sohan Dsouza, Azim Shariff, Iyad Rahwan, and Jean-François Bonnefon. "Universals and Variations in Moral Decisions Made in 42 Countries by 70,000 Participants." *Proceedings of the National Academy of Sciences* 117, no. 5 (February 2020): 2332–37.
- Bargh, John A. "The Automaticity of Everyday Life." In *The Automaticity of Everyday Life*, edited by Robert S. Wyer, 1–61. New York: Psychology Press, 1997.
- Barlow, Rich. "BU Research: A Riddle Reveals Depth of Gender Bias." *BU Today*, January 16, 2014. <http://www.bu.edu/today/2014/bu-research-riddle-reveals-the-depth-of-gender-bias/>.
- Barney, Rachel. "[Aristotle], *On Trolling*." *Journal of the American Philosophical Association* 2, no. 2 (Summer 2016): 193–95.
- Bauman, Christopher W., A. Peter McGraw, Daniel M. Bartels, and Caleb Warren. "Revisiting External Validity: Concerns about Trolley Problems and Other Sacrificial Dilemmas in Moral Psychology." *Social and Personality Psychology Compass* 8, no. 9 (September 2014): 536–54.
- Bonevac, Daniel A. *Today's Moral Issues: Classic and Contemporary Perspectives*. 7th ed. New York: McGraw-Hill, 2013.
- Boss, Judith A. *Analyzing Moral Issues*. 6th ed. New York: McGraw-Hill, 2013.
- . *Ethics for Life*. 6th ed. New York: McGraw Hill, 2014.
- Bostyn, Dries H., Sybren Sevenhant, and Arne Roets. "Of Mice, Men, and Trolleys: Hypothetical Judgment versus Real-Life Behavior in Trolley-Style Moral Dilemmas." *Psychological Science* 29, no. 7 (July 2018): 1084–93.
- Bryan, Christopher J., Gabrielle S. Adams, and Benoît Monin. "When Cheating Would Make You a Cheater: Implicating the Self Prevents Unethical Behavior." *Journal of Experimental Psychology: General* 142, no. 4 (November 2013): 1001–5.
- Cahn, Steven M. *Exploring Philosophy of Religion: An Introductory Anthology*. 4th ed. New York: Oxford University Press, 2017.
- Carlsson, Magnus, and Dan-Olof Rooth. "Evidence of Ethnic Discrimination in the Swedish Labor Market Using Experimental Data." *Labour Economics* 14, no. 4 (August 2007): 716–29.
- Centers for Disease Control and Prevention. "CDC's Abortion Surveillance System FAQs." November 17, 2022. https://www.cdc.gov/reproductive-health/data_stats/abortion.htm.
- Confucius. *The Analects*. Translated by D. C. Lau. London: Penguin Books, 1979.
- Correll, Joshua, Sean M. Hudson, Steffanie Guillermo, and Debbie S. Ma.

- “The Police Officer’s Dilemma: A Decade of Research on Racial Bias in the Decision to Shoot.” *Social and Personality Psychology Compass* 8, no. 5 (May 2014): 201–13.
- Darley, John M., and C. Daniel Batson. “‘From Jerusalem to Jericho’: A Study of Situational and Dispositional Variables in Helping Behavior.” *Journal of Personality and Social Psychology* 27, no. 1 (October 1973): 100–8.
- Diener, Edward, and Mark Wallbom. “Effects of Self-Awareness on Antinormative Behavior.” *Journal of Research in Personality* 10, no. 1 (March 1976): 107–11.
- Dobson, Terry. “A Soft Answer.” *Reader’s Digest*, December 1981.
- Edmonds, David. *Would You Kill the Fat Man? The Trolley Problem and What Your Answer Tells Us about Right and Wrong*. Princeton, NJ: Princeton University Press, 2015.
- Ernest-Jones, Max, Daniel Nettle, and Melissa Bateson. “Effects of Eye Images on Everyday Cooperative Behavior: A Field Experiment.” *Evolution and Human Behavior* 32, no. 3 (May 2011): 172–78.
- Fried, Barbara H. “What Does Matter? The Case for Killing the Trolley Problem (or Letting It Die).” *The Philosophical Quarterly* 62, no. 248 (July 2012): 505–29.
- Gil, Inma. “The Fifth Floor—Riddle Me This.” *BBC World Service*, March 29, 2018. Video, 2:45. <https://www.bbc.co.uk/programmes/p062qcoc>.
- Greene, Joshua D., R. Brian Sommerville, Leigh E. Nystrom, John M. Darley, and Jonathan D. Cohen. “An fMRI Investigation of Emotional Engagement in Moral Judgment.” *Science* 293, no. 5537 (September 2001): 2105–8.
- Haidt, Jonathan. “The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Moral Judgment.” *Psychological Review* 108, no. 4 (October 2001): 814–34.
- Held, Virginia. *The Ethics of Care: Personal, Political, and Global*. Oxford: Oxford University Press, 2006.
- Henrich, Joseph, Steven J. Heine, and Ara Norenzayan. “Most People Are Not WEIRD.” *Nature* 466, no. 7302 (July 2010): 29.
- . “The Weirdest People in the World?” *Behavioral and Brain Sciences* 33, nos. 2–3 (June 2010): 61–83.
- Hinman, Lawrence M. *Contemporary Moral Issues: Diversity and Consensus*. 3rd ed. Upper Saddle River, NJ: Pearson Education, 2006.
- JafariNaimi, Nassim. “Our Bodies in the Trolley’s Path, or Why Self-Driving Cars Must *Not* Be Programmed to Kill.” *Science, Technology, and Human Values* 43, no. 2 (March 2018): 302–23.
- Johnson, Eric J., and Daniel G. Goldstein. “Defaults and Donation Decisions.” *Transplantation* 78, no. 12 (December 2004): 1713–16.

- Kneer, Markus, and Ivar Rodríguez Hannikainen. "Trolleys, Triage and COVID-19: The Role of Psychological Realism in Sacrificial Dilemmas." *Cognition and Emotion* 36, no. 1 (2021): 137–53.
- Knobe, Joshua. "Philosophical Intuitions Are Surprisingly Robust across Demographic Differences." *Epistemology and Philosophy of Science* 56, no. 2 (2019): 29–36.
- Lederach, John Paul. *The Moral Imagination: The Art and Soul of Building Peace*. New York: Oxford University Press, 2005.
- Lieberman, Jethro K. *Fight the Hypo: Fake Arguments, Trolleyology and the Limits of Hypotheticals*. New York: Tribeca Square Press, 2014.
- Lin, Patrick. "Robot Cars and Fake Ethical Dilemmas." *Forbes Magazine*, April 3, 2017. <https://www.forbes.com/sites/patricklin/2017/04/03/robot-cars-and-fake-ethical-dilemmas/>.
- MacKinnon, Barbara. *Ethics: Theory and Contemporary Issues*. 5th ed. Belmont, CA: Wadsworth Cengage Learning, 2007.
- Martena, Laura. "Thinking inside the Box: Concerns about Trolley Problems in the Ethics Classroom." *Teaching Philosophy* 41, no. 4 (December 2018): 381–406.
- McKenzie, Craig R. M., Michael J. Liersch, and Stacey R. Finkelstein. "Recommendations Implicit in Policy Defaults." *Psychological Science* 17, no. 5 (May 2006): 414–20.
- Morioka, Masahiro. "The Trolley Problem and the Dropping of Atomic Bombs." *Journal of Philosophy of Life* 7, no. 2 (August 2017): 316–37.
- Moseley, Daniel. "Revisiting Williams on Integrity." *Journal of Value Inquiry* 48, no. 1 (2014): 53–68.
- Moss-Racusin, Corinne A., John F. Dovidio, Victoria L. Brescoll, Mark J. Graham, and Jo Handelsman. "Science Faculty's Subtle Gender Biases Favor Male Students." *Proceedings of the National Academy of Sciences* 109, no. 41 (October 2012): 16474–79.
- Nisbett, Richard E., and Timothy D. Wilson. "Telling More than We Can Know: Verbal Reports on Mental Processes." *Psychological Review* 84, no. 3 (May 1977): 231–59.
- O'Connor, James. "The Trolley Method of Moral Philosophy." *Essays in Philosophy* 13, no. 1 (January 2012): 243–56.
- Olberding, Amy. *The Wrong of Rudeness: Learning Modern Civility from Ancient Chinese Philosophy*. New York: Oxford University Press, 2019.
- O'Neill, Onora. *Towards Justice and Virtue*. Cambridge: Cambridge University Press, 1996.
- Rachels, James, ed. *Moral Problems: A Collection of Philosophical Essays*. New York: Harper and Row, 1971.

- Reilly, Katie. "10 of Mother Teresa's Most Powerful Quotes." *Time*, September 3, 2016. <https://time.com/4478287/mother-teresa-saint-quotes/>.
- Rennix, Brianna, and Nathan J. Robinson. "The Trolley Problem Will Tell You Nothing Useful about Morality." *Current Affairs*, November 3, 2017. <https://www.currentaffairs.org/2017/11/the-trolley-problem-will-tell-you-nothing-useful-about-morality>.
- Roache, Rebecca. "Honestly, It's Fine!" *Aeon*, December 1, 2016. <https://aeon.co/essays/what-is-worse-a-passive-aggressive-silence-or-an-outright-shout>.
- . "Naughty Words." *Aeon*, February 22, 2016. <https://aeon.co/essays/where-does-swearing-get-its-power-and-how-should-we-use-it>.
- Roff, Heather M. *The Folly of Trolleys: Ethical Challenges and Autonomous Vehicles*. Brookings Institution, December 17, 2018. <https://www.brookings.edu/research/the-folly-of-trolleys-ethical-challenges-and-autonomous-vehicles/>.
- Safer-Landau, Russ. *The Ethical Life: Fundamental Readings in Ethics and Moral Problems*. New York: Oxford University Press, 2015.
- Soifer, Eldon. *Ethical Issues: Perspectives for Canadians*. 2nd ed. Peterborough, ON: Broadview Press, 1997.
- Steinpreis, Rhea E, Katie A Anders, and Dawn Ritzke. "The Impact of Gender on the Review of the Curricula Vitae of Job Applicants and Tenure Candidates: A National Empirical Study." *Sex Roles* 41 (October 1999): 509–28.
- Stich, Stephen P., and Edouard Machery. "Demographic Differences in Philosophical Intuition: A Reply to Joshua Knobe." *Review of Philosophy and Psychology* 14, no. 2 (June 2023): 401–34.
- Thomson, Judith Jarvis. "Killing, Letting Die, and the Trolley Problem." *Monist* 59, no. 2 (April 1976): 204–17.
- Weinberg, Justin. "Philosophical Intuitions and Demographic Differences." *Daily Nous* (blog), December 2, 2019. <https://dailynous.com/2019/12/02/philosophical-intuitions-demographic-differences/>.
- White, James E. *Contemporary Moral Problems*. 5th ed. St. Paul, MN: West Publishing Company, 1997.
- Williams, Bernard. "A Critique of Utilitarianism." In *Utilitarianism: For and Against*, by J. J. C. Smart and Bernard Williams. Cambridge: Cambridge University Press, 2008.
- Wilson, James. "Internal and External Validity in Thought Experiments." *Proceedings of the Aristotelian Society* 116, no. 2 (July 2016): 127–52.