

Intuition about Justice: Desertist or Luck Egalitarian?
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Abstract: There is a large and growing body of empirical work on people's intuitions about distributive justice. In this paper, we investigate how well luck egalitarianism and desertism—the two normative approaches that appear to cohere well with people's intuitions—are supported by more fine-grained findings in the empirical literature. The time is ripe for a study of this sort, as the positive literature on justice has blossomed over the last three decades. The results of our investigation are surprising. In three different contexts (good option luck, good brute luck, and bad brute luck) in which the demands of luck egalitarianism and those of a mainstream desert-based view come apart, the latter carries the day. One ramification of these findings is that people's intuitions about justice are moralized; that is, they appeal to particular conceptions of the good. Luck egalitarians must decide whether to embrace these moralized intuitions by adopting desertism—or to resist them.

Keywords: desert; luck egalitarianism; intuition; experimental philosophy

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Our aim in this paper is to answer a question: “Which normative theory best fits the empirical evidence on what people believe about justice?”

Now, if we interpret this question at a coarse-grained level, the answer is already known. It is well-established that people reject egalitarian and quasi-egalitarian distribution: “Empirical studies provide almost no support for egalitarianism, understood as equality of outcomes, or for Rawls’s difference principle [Rawls 1971]” (Konow 2003: 1199).

People also believe, *pace* the libertarian, that justice often requires redistribution: “The entitlement theory [of Nozick (1974)] . . . says that all allocations resulting from freely chosen transfers are fair, a claim that is not supported by the evidence” (Konow 2003: 1207).

Instead, the consensus judgment about justice goes something like this: Unequal outcomes are justified when they reflect unequal economic contributions rather than lucky breaks; effort should be rewarded; a social safety net should protect the prudent poor but not the profligate; our economy ought to be responsive to merit.¹

The reader may recognize that this story, which has some *prima facie* coherence, in fact contains conceptual unclarity (mightn’t one’s economic contributions be matters of luck, at least in part?), and involves potentially clashing normative principles (reward on the basis of effort and reward on the basis of merit are different).

¹ Economists and philosophers who have pointed out this folk consensus about justice, and how different it is from the main theories of justice on offer in the literature, include Konow and Schwetmann (2016), Miller (1999), Mulligan (2018), and Scheffler (1992).

Relevance

We want to probe these matters. In particular, we want to examine how well luck egalitarianism and desertism—the two normative approaches that *do* fit the coarse-grained story—are supported by the empirical literature.

The time is ripe for a study of this sort, as the positive literature on justice has blossomed over the last three decades (one study even explicitly asks, “Are Individuals Luck Egalitarians?”—Tinhög *et al.* 2017). This is, in part, a result of the development of experimental philosophy *qua* subfield of philosophy. But the topic has also been investigated independently—indeed, more extensively—in social psychology, experimental economics, evolutionary biology, neurology, child development, and other fields.

As we shall see, the evidence from these different fields suggests that human beings are desertists deep down—not luck egalitarians. While it is certainly true that luck egalitarianism coheres with our intuitions about justice more closely than egalitarianism or libertarianism do, desert does better. This also goes for novel varieties of luck egalitarianism that have emerged in recent years, like luck egalitarianism with a desertist principle of stakes.

Selection of empirical work

There is, in our view, still too little exchange between philosophers who develop theories of justice and empirical researchers (across disciplines) who analyze people’s intuitions about justice in diverse contexts. We hope to help remedy this by making three contributions. First, we point out the ways in which luck egalitarian and desertist views differ from each other. Second, we examine whether these differences have been studied by empirical researchers—and, if so, what the empirical evidence suggests for our normative theorizing. And third, we identify remaining

unclearities related to the desert / luck egalitarianism distinction and people's intuitions, and suggest projects which an empirically-minded philosopher might take on to resolve them.

The principal criterion we used for including empirical research in this paper is whether that research is fine-grained enough to help determine whether people's intuitions fit better with desertism or with luck egalitarianism.² We focus on empirical work published during the past thirty years and have tried to be as inclusive as possible by looking not only at the literature in experimental philosophy, but also, as mentioned, social psychology, experimental economics, evolutionary biology, neurology, and related fields. The empirical work we discuss in this paper mostly involves studies done with American subjects, though not exclusively so.

Structure

This paper is divided into seven sections. In §1, we discuss the relevance of intuition, and this empirical literature, to our normative theorizing about justice. In §2, we define luck egalitarianism and desertism. Because these are best understood as *classes* of theories rather than unique theories in themselves, it is necessary to identify the *core holdings* of each to be compared with the empirical evidence. §§3-5 are the center of this investigation: We examine cases in which a person is better-off than others owing to her choices; better-off than others owing to good luck rather than choice; and worse-off than others owing to bad luck rather than choice. For readers familiar with luck egalitarianism, these are contexts of good option luck, good brute luck, and

² We identified studies by searching for the terms “desert”, “desertism”, “luck egalitarianism”, “intuition”, and “distributive justice” on Google Scholar and in the APA, EconLit, and PhilPapers databases, among others. We note that in the field of empirical philosophy itself, there are relatively few studies relevant to our research question. Although we tried to be as complete as possible, it is possible that we missed a study that is, in fact, relevant. However, this would not detract much, if at all, from our main claim: There is ample empirical evidence showing that while luck egalitarianism coheres with our intuitions about justice more closely than egalitarianism or libertarianism do, desert fits our intuitions better.

bad brute luck, respectively.³ We also, in §5, discuss recent work on the origin of desert-based justice. We provide suggestions for future empirical research in §6. §7 concludes.

As we shall see, classic luck egalitarianism—that is, luck egalitarianism with a contextualist principle of stakes—does not fit well with people’s intuitions about justice. Luck egalitarianism with a desertist principle of stakes fares better. But desertism fits the empirical evidence best. One ramification of these findings is that people’s intuitions about justice are moralized; that is, they appeal to particular conceptions of the good. Luck egalitarians must decide whether to embrace these moralized intuitions by adopting desertism—or to resist them.

1. Why intuition matters

Our goal in this paper is not to defend intuition’s justificatory power but to describe the extent to which luck egalitarianism and desertism cohere with our intuitions. But a few words about why this research matters philosophically (as opposed to being merely psychologically interesting) are in order.⁴

First, following Goodman (1955) and Rawls (1971), many political theorists—even those who are not pure intuitionists—*do* believe that intuition matters when it comes to our theorizing, through the process of reflective equilibrium. This is essentially a mode of coherentist

³ Readers familiar with luck egalitarianism will notice that the category of bad option luck is absent. We think that there is an interesting divergence between luck egalitarianism and desertism in this category, as well; namely, luck egalitarianism does not provide distributive justice reasons for the requital of voluntary, costly, praiseworthy choices—whereas desertism does (*cf.* Brouwer and Mulligan 2019; Moriarty 2018). However, there is insufficient empirical research on people’s intuitions about the appropriate requital for such choices (see also §6). Now, some scholars—such as Eyal (2006), Temkin (2011 and 2017), and Thaysen and Albertsen (2017)—have argued that luck egalitarianism ought to compensate people for supererogatory choices which benefit others. Brouwer and Mulligan (2019) respond that this makes these scholars not really luck egalitarians, but desertists. We agree. It is important to note that while the requital of voluntary, praiseworthy choices is an important difference between luck egalitarianism and desertism in option luck contexts, there are other differences between the two views. The unifying characteristic of these differences is that desert theorists require that the size of people’s rewards be *proportional* to the size of their contribution, whereas contextualist luck egalitarianism does not contain such a requirement (see also §3).

⁴ For further discussion see, *e.g.*, Brownlee and Stemplowska (2017) and Mitchell and Tetlock (2017).

justification: We are justified believing that a theory of justice is true (at least *pro tanto*) if its prescriptions align with our intuitions in cases that implicate justice. (For Rawls, reflective equilibrium plays a further, constructive role—see Daniels 1996.)

Second, in recent years, scholars involved in the “ideal *v.* non-ideal” debate (which, again, originated in Rawls 1971) have begun to fret about the gap between (i) our abstract theories and (ii) public sentiment toward relevant policy, like income/wealth redistribution. For some non-ideal theorists, if this gap is too large (if, *e.g.*, the theory calls for a redistributive policy that is widely resisted), this is a defect in the theory itself (see, *e.g.*, Farrelly 2007; Wiens 2015a, 2015b, and 2016).

Third, many public reason proponents put “stability” constraints on our theories: “The problem of stability is not that of bringing others who reject a conception [of justice] to share it ... rather, justice as fairness is not reasonable in the first place unless in a suitable way it can win its support by addressing each citizen’s reason” (Rawls 1993: 143). The problem, in short, is that if a society is built upon a theory of justice that clashes with the moral intuitions of its members, then (i) it will inevitably collapse and (ii) there will be insufficient cooperation (see Garthoff 2016). As we shall see in §5, our moral intuitions about desert are perhaps baked into our DNA, and thus offer a stable ground on which to construct a theory of justice and, thereby, a society.

Fourth, Matthew Lindauer has argued that our intuitions provide insight into how “fruitful” a moral or political concept (theory, *etc.*) is—that is, how effectively it can address real-world problems. One of the dimensions of fruitfulness he identifies is “consensus”: the ability of concepts (*etc.*) to generate agreement amongst people in a way that is “consistent with good will and a desire for peaceful coexistence” (2020: 2136).

For these four reasons, we believe that investigating the fit between people’s intuitions about justice and the theory of desert and of luck egalitarianism should be of broad interest to political theorists.

2. Conceptual outlines of luck egalitarianism and desertism

Luck egalitarianism and desertism are best thought of as classes of views with significant internal variety. We cannot, within the confines of this paper, do justice to all the luck egalitarian and desertist views which have been defended in the literature,⁵ let alone compare all of them to the empirical research.

What we shall do is focus on the central claims of each view—the claims that one needs to endorse in order to count as a defender of them.⁶ In focusing on these essential claims only, we ignore for the moment (discussion to follow in §5) that some luck egalitarians and desertists are pluralists who think that the central value they endorse (luck-adjusted equality or desert) must be combined with other values (such as compassion, or efficiency, or need) in order to produce a full theory of distributive justice.⁷

⁵ Arneson (2011) and Lippert-Rasmussen (2016) provide overviews of luck egalitarianism. Prominent luck egalitarians include Cohen (1989), Lippert-Rasmussen (2001), and Roemer (1998). Feldman and Skow (2015) and McLeod (2013) provide contemporary overviews of desert. Pojman and McLeod (1999) have assembled excerpts from important historical and contemporary texts on desert. The seminal conceptual work on desert was done by Feinberg (1963), Kleinig (1971), and Sher (1987).

⁶ This approach is similar to that taken by Brouwer and Mulligan (2019) and Voigt (2007).

⁷ Cohen (1989) and Temkin (2017) are well-known defenders of pluralistic versions of luck egalitarianism. De la Torre Dwyer (2020), Miller (1999), and Schmidtz (2006) propose pluralistic theories of justice which include desert. Feldman (2016) and Mulligan (2018) defend monistic versions of desertism.

2.1 Luck egalitarianism

Two impulses motivate luck egalitarianism. The first is that it is unjust if people are worse off than others through no choice of their own. Call this the “unfairness impulse”. It is unfair, for instance, if Tracy is worse off than others because she is born with a physical disability.

The second impulse is that it is unjust if people (are made to) bear the costs of someone else’s voluntary choices. Call this the “exploitation impulse”. It is exploitative, for instance, if Jennifer voluntarily chooses to buy a lottery ticket, loses, and then another person is made to compensate Jennifer for her loss.

These two impulses are accommodated by luck egalitarianism through the distinction between brute luck and option luck. Ronald Dworkin, who introduced the distinction, characterizes it as follows: “Option luck is a matter of how deliberate and calculated gambles turn out—whether someone gains or loses through accepting an isolated risk he or she should have anticipated and might have declined. Brute luck is a matter of how risks fall out that are not in that sense deliberate gambles.” (1981: 293).

If brute luck is neutralized, then the unfairness impulse of luck egalitarianism is accommodated. And if option luck is *not* neutralized, then the exploitation impulse is accommodated—people are made to bear the costs and reap the benefits of their voluntary choices.

There has been a great deal of discussion in the luck egalitarian literature about how to draw the distinction between the two impulses. The discussion centers on the conditions for brute luck (the problem of “conditions”) and the consequences that should be attached to good and bad option luck (the problem of “stakes”).

When it comes to specifying the conditions for brute luck, there are two main views: the control view and the choice view. Defenders of the control view say that X is brute luck

for P iff P does not and did not control X ; X is option luck for P iff P does or did control X (*cf.* Cohen 1989; Dworkin 1981). Defenders of the choice view, on the other hand, hold that X is brute luck for P iff P did not substantially and voluntarily choose X ; X is option luck for P iff P did substantially and voluntarily choose X (*cf.* Zimmerman 1993).

The two views come apart in a number of well-documented cases, an important one of which is *overdetermination* (see, *e.g.*, Lippert-Rasmussen 2018). If an outcome X is overdetermined, then it could still be that P chose it voluntarily—but she cannot plausibly be said to have controlled it. We have constructed the cases in this paper in such a way that they are valid on both the control and the choice view—but will, for convenience, assume the choice view from now on.

When it comes to the problem of stakes—that is, identifying the consequences that should attach to good and bad option luck—the number of possible views is growing. The traditional, and most widely discussed, view is contextualism.⁸ On this view, P should bear X if X is option luck for P . That is: P should bear “the actual consequences choices happen to have in a given context” (Olsaretti 2009: 175). Adherents of the contextualist view typically hold that Marc Fleurbaey’s (1995) motorcyclist Bert—who voluntarily chooses not to wear a helmet and to drive recklessly, and gets in an accident as a result—needs to bear the costs of the accident himself.⁹

The view can be summarized as follows:

Luck egalitarianism with a contextualist principle of stakes: Whenever the consequences of choice are the result of brute luck, these consequences should be neutralized. Whenever the consequences of choice are the result of option luck, a person should bear all consequences that her choice happens to have.

⁸ A well-known statement of the view can be found in Rakowski 1991.

⁹ They may, however, resort to pluralism and invoke a principle of need to argue that Bert should still be assisted. On this, see §5.2.

Many prominent defenders of luck egalitarianism have understood the theory in its contextualist form, and the principle continues to command support. The implications of contextualist luck egalitarianism, in various concrete cases, have been widely discussed. And the contextualist principle of stakes represents luck egalitarianism at its purest; indeed, deviations to other principles of stakes may be understood as attempts to weaken the theory in order to accommodate intuitions about justice. Moreover, contextualist luck egalitarianism has the same implications as versions of luck egalitarianism with non-contextualist principles of stakes when it comes to cases of good and bad brute luck.

For these reasons, we focus much of our discussion on contextualist luck egalitarianism.¹⁰ We will, however, also consider non-contextualist principles of stakes. We do so with an important caveat: The literature on these alternative principles is still in its infancy—much work remains to flesh out non-contextualist principles of stakes and what they imply in concrete cases.¹¹ That said, let us mention three alternative principles which have been proposed.¹²

On the *equal shares* view, *P* should bear *X* only insofar as it is compatible with her having an equal opportunity for advantage compared to others, if *X* is option luck for *P* (Stemplowska 2009). Adherents of the equal shares view would hold that Bert only needs to bear a subset of these consequences, to equalize his stakes with those of people with less risky preferences (see Olsaretti 2009: 177-182). On the *consequentialist* view, *P* should bear *X* only insofar as that

¹⁰ Recently, some luck egalitarians have defended “all-luck egalitarianism”, the view that both brute luck and option luck need to be neutralized (Knight 2013 and 2021). We do not consider all-luck egalitarianism in this paper because it is a view that comes close to strict egalitarianism, which, as we pointed out in the introduction, people intuitively reject.

¹¹ It seems to us that equal shares, consequentialist, and desertist principles of stakes do not exhaust possible views. We could envision (i) a democratic account, in which the stakes are arrived at by a democratic process (in much the same way that Sen (2011) holds that capability lists should be arrived at), and (ii) a non-domination account, on which agents should bear the consequences of their choices only to the extent that this does not lead to domination by others.

¹² See Olsaretti (2009) and Stemplowska (2009) for discussions of the principles of stakes available to the luck egalitarian.

promotes independently desirable outcomes (like maximizing the social surplus), if X is option luck for P (Vallentyne 2002). Adherents of the consequentialist view would hold that Bert only needs to bear those consequences that would be optimal for him to bear from a consequentialist point of view. On the “*desertist*” view, P should bear X only insofar as P deserves X , if X is option luck for P (Brouwer and Van der Deijl 2018; Dekker 2009; Olsaretti 2009: 183-185). Adherents of the desertist view would hold that Bert only needs to bear a subset of these consequences: those which he deserves.

Given that we will be arguing that desertism fits best with people’s intuitions about justice, we can be most charitable to the luck egalitarian by considering the form of the theory that attempts to accommodate those tendencies—namely, luck egalitarianism with a desertist principle of stakes.¹³

2.2 *Desertism*

When it comes to desertism, the variety of views is as wide as is the case for luck egalitarianism. Nearly all defenders of desert agree, however, on two things. First, desert-claims consist of three elements: a desert subject (S), a desert object (O), and a desert base (B).¹⁴ We might say, for instance, that Steve Jobs (S) deserves to be wealthy (O) on the basis of his contributions to the computer industry (B).

We shall assume that economic contribution is the proper desert basis. This has been the most popular candidate basis in the literature (see, *e.g.*, Miller 1999; Mulligan 2018 and 2023;

¹³ Some of the other non-contextualist principles of stakes that have been suggested fit even less well with people’s intuitions than contextualism does. This goes for the consequentialist principle, *e.g.*, because while “justice requires consideration of the consequences of acts, specifically, of the size of the total surplus, the efficiency criterion is too austere to serve as a general theory of justice” (Konow 2003: 1205). Indeed, as we shall see in §5.2, it is perhaps more accurate to say that efficiency considerations like those the consequentialist would attend to *compete with*, rather than constitute, justice.

¹⁴ Napolitano (2022) is a recent dissenter.

Riley 1989). That said, there is lively debate in the desert literature about how economic contribution should be defined and measured.¹⁵ But as the cases we discuss in §§3-5 are valid on many possible answers to this question, we will not enter this debate here. What is important is that many contributions may not be remunerated by markets (and thus represent potential inefficiencies under *laissez-faire*), such as caring for children, the infirm, and the elderly.

Second, desertists agree that desert-claims are subject to an “aboutness principle”: *S* can deserve on the basis of *B* only if *B* is an act or a characteristic of *S*. Steve Jobs can deserve on the basis of some economic contribution only if it is *his* contribution (and not, *e.g.*, Steve Wozniak’s). This principle may be precisified in many ways; for example, in terms of a responsibility requirement, according to which *S* can deserve on the basis of *B* only if *S* is *responsible* for *B* (for discussion, see Feldman 1995 and 1996; Smilansky 1996).

We shall assume only that our agents have been raised under conditions of equal opportunity—that is, that the state has “leveled the playing field” (through, *e.g.*, a public education system and universal healthcare for children) so that their natural talents and their choices, and not their families’ socioeconomic positions, determine their outcomes. The intuition here is straightforward: Suppose that Bruce and Patti are siblings of equal natural talent, who have made similar choices (about, *e.g.*, human capital development) to this point. Bruce then receives a large inheritance—in violation of equal opportunity—which he invests in a firm, thereby creating an economic contribution. He does not deserve reward for this, since the contribution was not really *about* him, but about his parents, or his parents’ parents, and so on.

(***)

¹⁵ Among others, Dekker (2010), Hsieh (2000), Miller (1999), Mulligan (2018), Riley (1989), Sheffrin (2013), and von Platz (2022).

3. Good option luck

We first consider good option luck. The flipside of the luck egalitarian concern with exploitation is that if people voluntarily choose to do things that earn them high rewards, they can, compatibly with justice, keep those rewards. Although this feature of luck egalitarianism is often presented as an advantage of the view, it runs afoul of widespread intuitions about distributive justice in an important instance: economic rents. On the other hand, desertism, and luck egalitarianism with a desertist principle of stakes, capture people's intuitive judgments about rents.

Imagine a luck egalitarian utopia: Brute luck has been neutralized completely, and the only differences between people in terms of resource holdings are the results of voluntary choices. But then one day, “this . . . utopia is disturbed by an entrepreneur with an idea for a new product. Think of the entrepreneur as Steve Jobs as he develops the iPod, J. K. Rowling as she writes her Harry Potter books, or Steven Spielberg as he directs his blockbuster movies.” (Mankiw 2013: 21).

The contextualist luck egalitarian believes that it is just if Steve Jobs, J.K. Rowling, and Steven Spielberg end up wealthy as a result of their inventions—so long as the conditions for option luck are met. The desertist and the desertist luck egalitarian agree that it is just, but for a different reason: The iPad, *Harry Potter*, and *Jaws* are genuine contributions. Their creators deserve reward—*but not too much*.

For the desertist and the desertist luck egalitarian, it is essential that reward be *proportional* to contribution. It is bad if a person receives less than he deserves; but it is also bad if he receives

more than he deserves.¹⁶ Contextualist luck egalitarians, on the other hand, do not object to deviations from proportional treatment, so long as there is no unfairness or exploitation.

Now imagine a different type of “entrepreneur”. Perhaps it is a banker at Drexel Burnham Lambert, which developed the collateralized debt obligation (an instrument which would go on to play a major role in the 2008 financial crisis), or a lobbyist working for the car industry seeking to block environmental regulation. And in this utopia—as in the actual world—many people want to buy CDOs, and many people want to hire the lobbyist.

According to the contextualist luck egalitarian, the banker’s and the lobbyist’s wealth is justly held so long as the conditions for option luck are met—that is, so long as it is a result of the free choices of economic actors. The desertist and the desertist luck egalitarian disagree. The banker and the lobbyist are, in these instances, not making contributions to the economy. They are rent-seeking. Their work does not increase the size of the economic pie but simply changes how it is distributed (see, *e.g.*, ***; Stiglitz 2012). (More precisely, the banker and the lobbyist are receiving outsized rewards given their contributions.)

There is an important class of empirical research that shows that people find it unjust if people are better-off due to rent-seeking: *dictator games with a production phase*. In this variant on the classic dictator game, there are two phases: a production phase and a division phase. (Classic dictator games consist only of the latter.) During the production phase, two experimental subjects perform a task, like copying documents. During the division phase, one subject (the “dictator”) gets a sum of money to divide between him/herself and the other subject. The dictator also gets information about the other subject’s performance during the production phase. (See Almås *et al.*

¹⁶ The connection between desert and proportionality harkens back to Aristotle (both the *Nicomachean Ethics* and the *Politics*), who argued for “proportional equality” in distribution (in fact, a desertist principle). What should be made equal between persons, according to Aristotle, are the *ratios* of merit to reward. On the importance of proportionality for accounts of desert, see also Christman (1994: 89) and Kinghorn (2021: 52).

2010; Cappelen *et al.* 2007; Cappelen *et al.* 2010; Cherry *et al.* 2002; Feng *et al.* 2013; Frohlich *et al.* 2004; Hoffman *et al.* 1994; Karagözoğlu 2012; Konow 2000; Korenok *et al.* 2017; Oxoby and Spraggon 2008).

In these games, dictators—who have complete control over how much money to give away—seek to distribute the money *in proportion* to the two subjects' contributions during the production phase. Perfect proportionality is the modal result, even when it is the other subject—not the dictator—who produced more. Dictators give away more than they keep for themselves out of a sense of justice. As Christoph Engel (2011) puts it in his meta-analysis: “The following effects are very robust: If the recipient is deserving, she gets more.” (p. 606).

In these studies, “performance” is a function of both time spent on a task and productivity. To tease out whether people were responding to working time (*i.e.* effort) or contribution, Cappelen, Sørensen, and Tungodden (2010) gave the dictators information on both time spent on typing and the number of correct words typed per minute. The majority of dictators gave the other participant a higher share when his/her productivity was higher.

These findings indicate that when people think about justice in distribution, they care not only about effort exerted, but about whether effort was exerted *in a productive way*. Since rent-seeking is unproductive—although it often requires great effort—there is little intuitive support for providing those who successfully seek rents with a higher distributive share. But contextualist luck egalitarianism requires exactly that.

Economic rents are an important difference between luck egalitarianism and desertism because rents comprise a significant portion of national income. Dean Baker (2016) estimates that four sources of rent (not exhaustive of all sources) constitute 6.2–8.5% of American gross domestic product. (The four sources are patents/copyrights, the exploitation of financial inefficiencies, excessive corporate officer pay, and excessive professional pay.)

Rents are important, further, because they are an attractive target for redistribution. Because they are regarded as undeserved, when the government taxes them, equity considerations are less acute than when the government taxes deserved, earned income. Further, being rents, when they are taxed there is no deadweight loss; that is, no reduction in economic efficiency. This again contrasts to taxes on regular, earned income (which are a disincentive to produce).

We've mentioned that desert theorists require that people's rewards be *proportional* to their contributions, whereas contextualist luck egalitarians do not impose this requirement. And this difference may come to the fore empirically, in the case of, for instance, windfall profits¹⁷ and corporate officer compensation¹⁸, although more empirical work needs to be done on these issues (to be discussed in §6).

4. Good brute luck

Next we consider cases of good brute luck.¹⁹ These are less common in the luck egalitarian literature than cases of bad brute luck (§5), likely because the visceral injustice is more intense

¹⁷ Extant work on “windfalls” (see, *e.g.*, Carlsson, He, and Martinsson 2013; Li *et al.* 2019; Reinstein and Riener 2012) further supports the superiority of desert. We regard our moral entitlement to money earned versus money gained as a windfall very differently—we feel more entitled to the former than to the latter. What makes it difficult to really tease out the difference between luck egalitarianism and desertism here is that these windfall profits may be outside of the control of their recipients—in which case, the luck egalitarian would come to a similar analysis as the desertist.

¹⁸ Motivated by the widespread unpopularity of high corporate officer compensation in the United States, Burak (2018) advances what she calls the “rent-seeking aversion hypothesis”: that the reason Americans object to high corporate officer incomes (she focuses on CEOs) is because these incomes are not commensurate with contribution. She finds strong support for this hypothesis as opposed to the alternative: that these high salaries are unjustified on egalitarian grounds. We are concerned that this study does not demonstrate how people would view pure option luck inequalities due to rent-seeking (as opposed to the rent-seeking inequalities in the actual world), because (among other reasons) good and bad brute luck have not been neutralized.

¹⁹ An interesting area of agreement is inheritances, which are generally considered to be a case of good brute luck (*cf.* Halliday 2018). At the same time, inheritances are generally considered to be undeserved (*cf.* Piketty, Saez, and Zucman 2023). It would, hence, be compatible with luck egalitarianism and desertism to impose high taxes on inheritances. Such taxes are very unpopular, however—so this is a case in which both luck egalitarianism and desertism do not appear to fit well with people's intuitive judgements. (For UK survey data, see https://www.taxpolicy.org.uk/2023/11/21/iht_polling/ and for US data, see

when bad luck leads to want rather than plenty. But so long as it is possible to redistribute the resources that accrue as a result of good brute luck to those who suffer from bad brute luck, luck egalitarianism, whether it's with a contextualist or a desertist principle of stakes, requires it.

There is one kind of good brute luck which is ubiquitous in the literature: This is the luck of winning the genetic lottery (a lottery which—important for the luck egalitarian—one did not choose to play). So far as we are aware, all luck egalitarians (including Arneson (2004), Roemer (1993), and Tan (2012)) regard any income that accrues as a result of superior genetic traits, like IQ, as unjustly held and ripe for confiscation.

Desertists, in contrast, regard inequalities that arise from genetic differences as perfectly legitimate—although not always for the same reasons.²⁰ Miller (1999), for example, argues that desert-claims turn on the decisions that a person makes against the fixed background of his natural traits. What one does, or does not do, *given these traits*, determines one's just deserts. Mulligan (2018), on the other hand, argues that natural traits are essential elements of personal identity and not matters of luck at all; Joey cannot deserve or fail to deserve on the basis of his genetics, because Joey *is* his genetics, at least in part.

In any case, for our purposes that internecine dispute is unimportant. We simply need to identify prevailing sentiment. Are people morally troubled when they see an inequality arising from genetic differences, or not?

<https://news.gallup.com/poll/190067/americans-react-presidential-candidates-tax-proposals.aspx>.) Also see Sheffrin (2013: chp 6) and Prabhakar (2015) for discussion of public opposition to inheritance taxation. We believe that more research is required, as the popularity of inheritance taxation may well change if the distribution of income and wealth is brought more in line with the luck egalitarian or desertist ideal. For example, Mulligan (2018) argues that inheritances are unpopular because there are stark inequalities of opportunity, and parents believe, with justification, that their children's prospects turn in important part on what they, the parents, provide. Mulligan conjectures that under robust equal opportunity, parents would regard inheritances as much less desirable, and indeed unjust and damaging to their children's autonomy and well-being.

²⁰ One dissenter from this desertist consensus is Olsaretti (2006).

They are not. Christopher Freiman and Shaun Nichols (2011) find that, when confronted with concrete cases of inequality arising from genetic differences, people regard these inequalities as both “just” and “fair”.²¹ If Beth is a better singer than Amy because of superior natural traits and thereby goes on to make more money than Amy, that inequality is just.

A more robust and recent effort along the same lines is Goya-Tochetto *et al.* 2016, which finds broad support for genetically-based inequalities (and, *pace* Freiman and Nichols 2010, finds little difference in moral judgment when the cases are presented concretely or abstractly). (See also Fong 2001; Schokkaert and Capeau 1991.)

On the other hand, Goya-Tochetto *et al.* find that *socially*-derived inequalities are typically regarded as unjust (*e.g.* if Beth is a better singer than Amy because Beth’s rich family provided her expensive voice lessons). And this conceptual structure—the rejection of socially-based inequalities and the allowance of genetically-based inequalities—is mirrored in desert-based theories that require equality of opportunity (*e.g.* Mulligan 2018). (On the empirical evidence on the *necessity*—not sufficiency—of equal opportunity to justice, see, *e.g.*, Alesina and Angeletos 2005; Fong 2001.)

A similar experiment was conducted decades back by Schokkaert and Capeau (1991) (see also Schokkaert and Overlaet 1989), who posed the following question to economics students and their parents:

Two salesmen, Mr. Maes and Mr. Gilis, are employed by the same cosmetics firm. Both do the same work . . . they both work equally hard, but because of his natural charm, Mr. Gilis gets 60 orders a month, while Mr. Maes brings in 40. . . . Both earn 40.000 Bef a month. A monthly bonus of 10.000 Bef is to be divided

²¹ In our judgment, concrete cases are proper. This is for, essentially, the Smithian reasons that Freiman and Nichols (2011: 130) point out: “It is in particular instances only that the propriety or impropriety, the merit or demerit of actions is very obvious and discernable. It is only when particular examples are given that we perceive distinctly either the concord or disagreement between our own affections and those of the agent, or feel a social gratitude arise towards him in the one case, or a sympathetic resentment in the other. When we consider virtue and vice in an abstract and general manner, the qualities by which they excite these several sentiments seem in a great measure to disappear, and the sentiments themselves become less obvious and discernable.” (Smith 1761: 279-280).

between the two of them. What would you consider to be a just division of that bonus? (1991: 330)

Among both students and parents, a majority endorsed giving a larger share of the bonus to Gilis and a smaller share to Maes. A 60/40 split, perfectly representative of the natural trait difference, was the modal response.

Goya-Tochetto *et al.* point out a consequence of these findings for the debate at hand:

Luck egalitarians have been arguing that the influence exerted by both natural and social luck on the outcomes of our work should be eliminated whenever possible, and minimized when elimination is not a viable alternative. This view seems to be in conflict with commonsense morality, as revealed by our results. Luck egalitarians will now have to accommodate this conflict either by embracing different standards for different kinds of luck or by standing their ground and developing workable ways by which their principles could be accepted and endorsed by the folk. (2016: 1125-1126)

In other words, luck egalitarians must either (i) accept that their view does not accord with these intuitions or (ii) modify their theory such that genetic differences are treated as option luck.

Option (ii) strikes us as hopeless; whatever the metaphysical relationship between a person and her genetics be, she plainly did not choose or control them.

5. Bad brute luck; the origins of justice

We turn to the third part of our partition, containing cases in which people are unequal owing to bad brute luck. These are perhaps the most powerful cases in the luck egalitarian's arsenal, harnessing the common intuition that it is bad—unjust and unfair—if a person is poorly-off for reasons that are in some sense exogenous to her.

But the “in some sense” is important. Is it unjust and unfair because the person's lousy circumstances are *unchosen*? Not her *fault*? Not due to *irresponsibility*? Is there a difference if these circumstances obtain for reasons of (relatively) bad genetics or (relatively) bad social factors?

Now, this last question has just been answered: There is a difference (§4). We do not object to inequalities grounded in differences in natural traits, and these cases can as easily be posed from the point-of-view of the person on the losing end of things (*i.e.* the person with the relatively lower natural talent) as it can from the point-of-view of the person on the winning end (with the relatively higher natural talent). The value of talent is, to some degree at least, relative. But here we want to examine two additional cases that fall within this part of our partition.

5.1 *Mad Max*

Max is a risk-taker, always has been. He chooses to drive his motorcycle at high speed on the highway without a helmet. He smokes, drinks, and does drugs—all to excess. He bets his weekly wage at the racetrack. Nevertheless, Max has gotten lucky so far—no accidents, apparently good health, and only the occasional destitute week. One day, a rotten branch falls on Max’s foot, breaking it. Max was just walking down the street when this happened; he had no way of knowing that the branch was rotten. Max was the victim of bad brute luck. Should wealth be transferred from Max’s peers to Max to neutralize it?

The luck egalitarian is committed to answering in the affirmative. The desertist, on the other hand, resists Max’s claim for compensation. Recall that, *via* the aboutness principle (§2) a person’s actions or characteristics are *essential* to determining what he deserves. This aboutness link might be fleshed out in different ways. A proponent of classic, “cosmic desert”—we believe that Kristjánsson (2003) is the only extant desertist of this type—may hold simply that Max, being vicious, is not the sort of person who should be made better-off at the expense of the relatively virtuous. But the mainstream conception of desert on which we have relied holds the same: A person is morally entitled to compensation if his economic contributions go unrewarded

by the market. And this consideration is orthogonal to Max's current straits. Max did indeed suffer from some brute bad luck. But he does not deserve on that basis alone.

Note: None of this implies that Max *deserved* to have his foot broken. The desertist need not hold that. The desertist's claim is that Max does not deserve compensation for his broken foot. This is perfectly compatible with believing that Max did not deserve his misfortune.

So what do the folk think? Mollerstrom *et al.* observe that people make

bad brute luck compensation conditional on how [an] agent handles option luck. These spectators only compensate an agent who experiences bad brute luck when she also avoided exposure to option luck, even though the outcome would not have been affected if the agent had made a different option luck decision. This behavior is inconsistent with fairness views where the definition of a fair distribution depends on the cause of the outcome. Instead, it suggests a fairness view that is agency dependent and conditional on aspects of the agents' choices, regardless of whether these mattered for the outcome or not. (2015: 34)

Only 1% of Mollerstrom *et al.*'s subjects compensate in accordance with the prescriptions of luck egalitarianism. The modal response was compensation for bad brute luck *only if* the agent's character rendered her suitable: "[Subjects] hold the smoker more responsible than the non-smoker, regardless of whether the disease she contracts is related to smoking or not. Likewise, they regard the notorious risk-taker as *less deserving* of for example unemployment compensation than his risk minimizing colleague, even if the risk-taking of the former had nothing to do with the risk of unemployment." (Mollerstrom 2015: 40, our emphasis). They conclude: "We find very little support for the existence of luck egalitarians." (2005: 39). (See also Schokkaert and Devooght 2003.)

Similarly, Cappelen *et al.* (2010) find, within the context of a dictator game with production, that

the core distinction when drawing the responsibility cut was not between choices and circumstances, but between impersonal and personal factors. This finding is particularly interesting given the prominence of the choice [*i.e.* luck] egalitarian position in the normative literature. Choices are, however, not unimportant to most people in

distributional situations. The meritocratic [*i.e.* desertist] position also justifies holding people responsible for their choices, though not with the justification that choices are under individual control, but because they are personal factors that merit reward. (2010: 440)

5.2 *Cosmic tragedy*

Diane is a well-ordered member of society. One day, a meteorite comes zooming through the sky and crashes near her. Diane is seriously injured by the impact.

Here we have a case in which, *prima facie*, luck egalitarianism (whether it's with a contextualist or a desertist principle of stakes) renders the right result and desert does not. Intuitively, Diane ought to receive some recompense for her injuries, like medical care. Luck egalitarianism provides that, as Diane did not choose the behavior that led to her injuries. She just had bad brute luck.

On the other hand, there is no sense in which Diane's economic contributions have been undercounted. Therefore, she has no claim of justice to meteorite-related compensation. If someone of a desertist bent wishes to provide compensation to Diane for her injuries, he will have to justify that compensation by a moral principle other than desert.

We wish to stress that the moral concept of interest to us in this paper is *justice*. There are myriad ways in which our society might be made normatively better (or worse) but that do not improve (or degrade) things from the point-of-view of justice. One may imagine a neighborhood park which has become untidy because of the indolence of local residents. It is not an *injustice* that the park is this way—but it sure would be good if the residents cleaned it up.

The relevant question is not whether Diane ought to be compensated for her bad luck, but *why* she ought to be. If Diane should be compensated for reasons of *justice*, then luck egalitarianism has things right. But if it is not an injustice that Diane is in these circumstances—if our intuitive call for compensation comes from a different moral source, like a principle of *need*—

then the desertist has the upper hand. His theory is properly constrained and the luck egalitarian's is not.

Here the specter of pluralism rises—but conceptual care is called for. A theory of *justice* may be pluralistic, which is to say that it may involve a number of moral concepts, such as desert, need, and equality. Or it may be monistic, involving a single concept. We may want to reform our society in the image of such a theory, be it pluralistic or monistic.

But that may not exhaust the moral grounds for reform. There may be moral principles *other than justice* which are relevant to the morality of our society. If there are, then they stand side-by-side with justice; they do not constitute it. They could even compete with justice. If we are convinced, for example, that *need* is morally relevant, there is a follow-up question to answer: Is it morally relevant because it is an element (maybe the only one) of justice? Or is it relevant on its own, just like justice?

A range of research, beginning with Frohlich and Oppenheimer (1992 and 1994), suggests the latter. We want to help people like Diane not because we feel that she is the victim of injustice, but because she is deeply in need. Although “need” is a slight misnomer; more precisely, we believe that (well-ordered) people ought to enjoy a minimum distributive level (Frankfurt 1987; Konow 2001).

Justice appears to be one of a triad of moral concepts that we think relevant to economic life, along with *need*, as described, and *efficiency* in the Paretian sense. It is a mistake, albeit an easy one to make, to conflate the concepts when we analyze a case like Diane's.

Efficiency and needs exist as distributional goods distinct from justice, whereas accountability [*i.e.* desert] represents the distinguishing feature of justice . . . Although substantial evidence has been presented in the foregoing sections that efficiency and needs impact and sometimes even dominate experiential justice, some readers view certain scenarios featuring those principles as being rather “forced” to think of in justice terms, to which I respond: “Precisely!” They lack the specific sense of justice, and this intuition

adds support, I believe, to the contention that accountability [desert] is . . . justice, indeed that *accountability [desert] is the quintessence of justice*. (Konow 2001: 157)

Now, we stipulated that Diane is a “well-ordered” member of society. This is an important qualification. Suppose that she were not; suppose, say, that prior to her accident Diane exploited her fellow citizens and took from the economic pie without contributing to it.

Our intuitions about compensating her for her bad luck thereby change: It is unappealing. That is because, now, that compensation pits two moral principles against each other: justice and need. When we compensate the *badly*-behaved Diane for her injuries, we make the world (i) better from the point-of-view of need and (ii) worse from the point of view of justice. Whereas, in the original case we made the world better from the point-of-view of need without infringing on justice.

In a similar way, suppose that Diane is well-ordered (so that by compensating her we do not infringe on justice), but that the only form of compensation available is massively inefficient redistribution. Here, too, the intuitive case for compensation is weaker: The world is made (i) better from the point-of-view of need and (ii) worse from the point-of-view of efficiency. And so the effect on the overall morality of the economy is unclear.

5.3 *Whence, desert?*

What is the source of our intuition that it is important, morally, to do justice to people—to give them what they deserve? One possibility is that it is an evolutionary, adaptive trait (Aarøe and Petersen 2014; Brown and Moore 2000; Cosmides *et al.* 2010; Feather 2006; Jensen and Petersen 2017; Petersen 2012 and 2015; Petersen *et al.* 2009; Petersen *et al.* 2012). It is in one’s interest to participate in an economy—to specialize in the production of goods for which one has a comparative advantage and then trade. But this is only true if other economic agents participate

in good faith as well; that is, if they do not abscond with the fruits of other people's labor.

Therefore, it has been evolutionarily important to distinguish “cheaters” from “reciprocators”:

The deservingness heuristic is rooted in evolved cognitive categories designed to detect and represent “cheaters” and “reciprocators” . . . The cross-cultural nature of the present evidence supports the view that these categories are not learned. Rather, they are something that we as humans naturally come equipped with. (Petersen 2012: 12)

This theory coheres with evidence from neuroeconomics suggesting that human beings' understanding of justice-as-desert is in a sense “built in”. Cappelen *et al.* (2014) ran an experiment in which, after a typical production phase (§3), subjects' brains were observed using functional magnetic resonance imaging while the subjects evaluated potential distributions. Observing activity in, especially, the striatum (which manages moral choice) Cappelen *et al.* found “strong evidence of the participants being concerned with deviations from a proportional income distribution”—a “particularly striking” (2014: 15370) finding given that the experiment was conducted in Norway, one of the world's most egalitarian societies.²² As Aldo Rustichini and Alexander Vostroknutov put things (in their own study on empirical justice), “the concepts of moral desert and justice are deeply connected, and one needs the other for a proper definition” (2014: 17).

6. Moralized intuitions and suggestions for further research

We have argued that in three important areas, desertism fits better with people's intuitions about justice than contextualist luck egalitarianism. Luck egalitarianism with a desertist principle of stakes fares better—but it too fails in the contexts of good and bad brute luck.

²² See also Almås *et al.* 2020.

This raises an important question for luck egalitarians who try to accommodate folk intuitions by using a desertist principle of stakes: Why use a restricted and conceptually complicated form of desertism when you could simply adopt desertism wholesale?

One reason is that luck egalitarians are often justificatory neutralists: They hold that theories of justice should not appeal to controversial conceptions of the good. But the empirical studies we discuss suggest that people's intuitions about distributive justice tend to be moralized, and best accommodated through a theory of justice that appeals to conceptions of the good, as desertism does.

This creates a dilemma for luck egalitarians: either maintain their commitment to neutrality in justification or abandon it in the name of additional intuitive support (for further discussion, see ***).

To better understand ways in which people's intuitions about justice are moralized, we believe further empirical research is required. Before concluding this paper, we wish to make a few suggestions for projects which an empirically-minded philosopher might take on.

6.1. Good option luck: proportionality

We have noted (§3) an important difference between contextualist luck egalitarianism and desertism; to wit, desertism requires proportionality between the size of people's contributions and the rewards that they receive, and luck egalitarianism does not. Extant studies speaking to this difference (in the contexts of windfalls and corporate officer compensation) use surveys. It would be interesting to investigate these contexts experimentally.

For example, we can imagine a dictator game with production variant in which the dictator receives both (1) a sum of money that is clearly connected to the production phase (as is

standard in dictator games with production) and (2) a random sum of money representing a windfall. The dictator is then charged with distributing the total sum in the standard way.

We conjecture that as (1) increases relative to (2), the total distribution will more closely track performance during the production phase; that as (2) increases relative to (1), the total distribution will be more egalitarian; and that the modal distribution will be for the dictator to distribute an amount equal to (1) in perfect proportion to contributions in the production phase (as is standard in these games) and an amount equal to (2) equally, or near-equally, between himself and the other participant.

6.2 Bad option luck: rewards for voluntary, contributory actions

Luck egalitarianism with a contextualist principle of stakes does not provide distributive justice reasons for the requital of voluntary, costly, praiseworthy choices—whereas desertism and luck egalitarianism with a desertist principle of stakes do (see n. 3). It would be worthwhile to investigate our reaction in the face of this theoretical difference.

A situation like the following (adapted from Brouwer and Mulligan 2019) could be presented: Suppose that Dylan is working in a factory when a fire breaks out. Dylan pulls the fire alarm and evacuates in accordance with his employment contract and relevant company policies. Then Dylan decides, freely, to run back inside to fight the fire. Dylan puts the fire out, saving the factory and several co-workers' lives. Suppose, first, that Dylan emerges unharmed. Should he be rewarded for his actions? Second, suppose that Dylan is injured as a result of his heroism. Should he receive payment for his injuries?

In both cases, luck egalitarianism with a contextualist principle of stakes says “no”. Either Dylan is not worse-off than his peers (the first case) or Dylan is worse-off but as a result of bad option luck (the second case).

In contrast, desertism and luck egalitarianism with a desertist principle of stakes demands payment—and in both cases. Why? Because Dylan made a *bona fide* economic contribution by saving the capital stock (the factory) and the workers. Absent intervention, this contribution of Dylan’s would go unrewarded. So justice requires that resources be redistributed to him. (Note that desert and luck egalitarianism with a desertist principle of stakes would seem to demand *identical* payment in both cases, because the contribution is the same. It would be helpful to solicit precise amounts of just payment after quantifying, for experimental subjects, both the size of Dylan’s contribution and his injury-related costs.)²³

6.3 Bad brute luck I: the importance of character

One lacuna in the empirical literature on desert is the relation between compensation, character, and contribution. *Mad Max* (§5.1), for example, admits of three different interpretations, each of which has different ramifications for desert-based justice. The first interpretation is the one given—Max is not compensated simply because the case has nothing to do with Max’s economic activity.

On a second interpretation, we are inferring, implicitly, that Max has created negative economic value in the past. Perhaps his activities (*e.g.* his involvement in the drug trade) produced negative externalities, such that he has to this point been overcompensated. If that is so, then the case against luck egalitarianism is weaker, since it arguably has the tools to handle the impositions of costs on third parties (see Knight 2013).

²³ A similar case might further illuminate whether we are driven by a “cosmic” or contribution-based sense of desert. To wit: Imagine this fire breaks out not at a factory but at a prison. Dylan rushes in and puts it out. Here it is unclear that he is making an *economic* contribution, and so, if our intuition remains that payment is warranted, that is a point in favor of the cosmic desertist. The case would have to be put very carefully, though, as it is natural enough to suppose that prisons are economically beneficial; among other things, crime is economically damaging and prisons keep criminals from committing them, and prisons play a human capital-improving, rehabilitative role.

On a third interpretation, it is not Max's contributions at all that render him undeserving, but facts about his character unrelated to his economic activity. On this interpretation, we are inferring, implicitly, that Max is, say, vicious to his fellow citizens. (Explicitly, he is only an extreme risk-taker.)

Suppose it were stipulated that (i) Max has been *underpaid* in the past and (ii) Max is vicious to his fellow citizens. If experimental subjects still felt that he did not deserve compensation, that would be a point in favor of the "cosmic" desertist over the mainstream, contribution-based desertist.

The case can be manipulated and presented to tease out these different interpretations. Something similar may be done with *Cosmic tragedy* (§5.2). Experiments along those lines could both validate the superiority of desert over luck egalitarianism and clarify its concept.

6.4 Bad brute luck II: circumstantial luck

Warren is the richest man in a city built upon luck egalitarian principles. During his working life, Warren had better option luck than anyone else and he is now enjoying a comfortable retirement. Warren's wealth also reflects genuine economic contributions.

One day, a freak storm levels Warren's house while leaving all others unharmed. Warren is worse-off owing to this incident of bad brute luck, though still better-off than everyone else. He petitions his fellow citizens for recompense on luck egalitarian grounds. Should the other citizens be made worse-off so that Warren's bad brute luck is neutralized?

The luck egalitarian (contextualist and desertist) answers "yes": A just pattern of wealth prevailed; there was a deviation from this pattern which was unchosen; and it is possible to take from those with good brute luck (poorer citizens unaffected by the storm) and give to those with bad brute luck.

The desertist says “no”. The freak storm has introduced no deviations in how citizens are remunerated for their work. Warren was properly compensated—he was paid in accordance with his contributions—and this fact is unchanged by the storm. Here, too, we suspect that desert would fit best with intuition.

7. Conclusion

We have considered how well luck egalitarianism and desertism—the two normative approaches that appear to cohere well with people’s intuitions about justice—are supported by more fine-grained findings in the empirical literature.

We have shown that contextualist luck egalitarianism does not fit well with people’s intuitions about distributive justice in three different contexts: good option luck, good brute luck, and bad brute luck. Luck egalitarianism with a desertist principle of stakes fares better—but it too fails in the contexts of good and bad brute luck. Desertism appears to fit people’s intuitions about distributive justice best of all.

Although we believe that there is a clear convergence in the empirical literature upon desertism, more empirical work needs to be done to better understand the nuances of this convergence. This will require closer collaboration between philosophers and empirical researchers.

There is, in our judgment, too much distance between (i) the philosophical literature in which theories of justice are developed and refined, and (ii) the empirical literatures (across academic disciplines) in which people’s intuitions about justice are scrutinized. We hope that this paper helps to close that gap.

7. References

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