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# The Intuitive Appeal of Legal Protection for Future Generations

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# **Abstract**

Over the last few years, there has been important foundational work formalizing the abstract principles of longtermism and (in the context of law) legal longtermism. An implicit assumption surrounding this work is that these abstract principles are not intuitive or widely endorsed. Here we present work from several recent empirical studies indicating that the abstract principles underlying legal longtermism—namely, that the law can and should protect the long-term future much more than it does currently—are in fact widely endorsed by legal experts and laypeople, independent of demographic factors such as gender, culture, and politics. These studies carry implications regarding the validity of legal longtermism as a jurisprudential theory and provide decision-relevant insights for applied longtermism.

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# I. Introduction

Over the past several years, there has been a growing interest in protecting future generations from extreme risks associated with climate change, pandemics, artificial intelligence, and other potential threats. This interest has materialized in the form of advocacy efforts (Bliss 2022; Setzer & Vanhala 2019; Bogojević 2020; Schoch-Spana et al. 2017; Yassif 2017) as well as philosophical theories. The theories associated with the view that one should be particularly concerned with ensuring that the long-run future goes well have been referred to as *longtermism* (MacAskill 2022). In the context of law, these theories form the basis for *legal longtermism*, associated with the view that law and legal institutions ought to protect the far future (see Martínez & Winter 2021a; Winter et al. 2021).<sup>1</sup>

Given the recency of this work, as well as the apparent lack of protection afforded to future generations under current legal systems, one implicit assumption surrounding this work has been that the principles underlying longtermism are not intuitive or widely accepted. Even one of longtermism's pioneers, Toby Ord (2020: 7-8), characterizes longtermism as deeply counterintuitive, the sort of theory that only a philosopher could endorse, after years of slow, careful reflection:

I have not always been focused on protecting our longterm future, coming to the topic only reluctantly... Since there is so much work to be done to fix the needless suffering in our present, I was slow to turn to the future. It was so much less visceral; so much more abstract. Could it really be as urgent a problem as suffering now?

In this chapter, we present recent empirical work suggesting that the basic principles underlying legal longtermism are intuitive once people are made aware of them.<sup>2</sup> In particular, evidence suggests that most people across major demographic subgroups believe that (a) law *should* protect the long-term future much more than it currently does; and (b) law *can* predictably and feasibly protect the long-term future. We also review ideas associated with stronger forms of legal longtermism that are less intuitive—such as the claim that the law, other things being equal, should protect future people *to the same degree* as present people.

<sup>&</sup>lt;sup>1</sup> For the purposes of this chapter, we are proceeding with this rather broad definition. Indeed, one could further differentiate between *philosophical-level legal longtermism*, that is, the view that the law should be particularly concerned with ensuring that the long-term future goes well independent of existing legal doctrine, and *doctrinal-level legal longtermism*, the view that law should be particularly concerned with ensuring that the long-term future goes well according to the best interpretation of existing legal doctrine.

<sup>&</sup>lt;sup>2</sup> For the purposes of this chapter, an "intuitive" idea refers to one that is readily endorsed by the majority of surveyed people across major demographic subgroups without the need for explicit attempts at persuasion.

Uncovering the intuitive appeal of legal longtermism has implications for both legal theory and for practitioners of these ideas. On the legal theory front, many plausible theories treat consensus, whether derived from experts or laypeople, as indicative or even constitutive of legal truth (Baude 2015; Baude & Sachs 2019; Hart 1961).<sup>3</sup> Accordingly, that legal experts and laypeople largely agree that law should take seriously the interests or well-being of future people based on the best or ordinary understanding of legal doctrine supports the conclusion that law should take those interests seriously. On the practical front, the empirical evidence suggests that, since many people find these principles appealing once they become aware of them, resources may be best spent to raise broad awareness of these principles (as opposed to explicit persuasion attempts) and analyzing how to transform these broad principles into the right actions and policies.

The rest of the chapter proceeds as follows. Section II discusses certain *a priori* reasons to expect longtermism and legal longtermism to be intuitive or counterintuitive. Section III presents empirical data from recent studies documenting the intuitive appeal of legal longtermism. Section IV discusses the limitations and implications of these results for longtermist theory and practice.

# II. Intuitions About the Intuitive Appeal of (Legal) Longtermism

This section discusses certain *a priori* reasons to expect that (legal) longtermism might or might not be intuitively appealing to the general public.

# A. The Supposed Counterintuitiveness of Legal Longtermism

Despite the development of philosophical longtermism and legal longtermism as academic theories, there are some reasons to expect that the principles underlying both may not be intuitive or widely accepted.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> E.g. Baude & Sachs (2019: 1464) explain "positivism grounds law in social practice and consensus." Although this consensus is often understood as expert consensus among legal officials or academics, legal doctrine is in other respects explicitly grounded in the notion of lay consensus. For instance, according to the ordinary meaning doctrine, considered to be the most "fundamental principle of legal interpretation" (Slocum 2015), the words of a legal document are generally to be interpreted according to how they are ordinarily understood by laypeople. For examples of jurists more broadly arguing that lay consensus is or ought to be informative of legal doctrine, see e.g. Tobia (2021) ("The broader conclusion is that cognitive scientists can make significant progress in understanding legal cognition—and law itself—by studying the ordinary cognition of people with no special legal training."); Martínez & Tobia (2022) (stating that one might conclude that "valuations of what primary purpose law should serve, or what considerations should inform judgments of reasonableness, should be determined by laypeople as opposed to legal experts."). See also Tobia (2022); Martínez & Winter (forthcoming a).

<sup>&</sup>lt;sup>4</sup> Note that in this chapter we do not consider whether the line of reasoning is sound or valid, but instead what might be intuitive to some. As we later show, recent empirical evidence suggests that the basic abstract principles of longtermism and legal longtermism are, in fact, fairly intuitive.

First, longtermism has been described by adherents and detractors alike as being counterintuitive. For instance, Whittlestone (2022) stated that some might be skeptical because "prioritising the long-term future ... is a counterintuitive way of doing good." Kannan (2021) likewise listed "longtermism being counterintuitive" as the first of many "common standard counter-arguments" to longtermism, and Ord (2018) described the longtermist cause of existential risk as being often framed as "this really counterintuitive idea."

A second reason relates to the size and lack of intuitive appeal of the movement which longtermism grew out of. Longtermism grew out of effective altruism ("EA"), a philosophical and social movement that advocates "using evidence and reason to figure out how to benefit others as much as possible, and taking action on that basis" (MacAskill 2017).<sup>6</sup> The term "effective altruism" was coined in 2011, and the movement remains small to this day; according to recent surveys, there are fewer than 12,000 EA community members, who represent less than 1/500,000 of the global population (Moss 2020, 2021).<sup>7</sup> Effective altruism has been described by its adherents (e.g. MacAskill 2015), detractors (e.g. Wu 2022), and neutral commentators (e.g. Lewis-Kraus 2022)<sup>8</sup> alike as taking a counterintuitive approach to doing good. In other words, the fact that longtermism was developed by a niche community with a counterintuitive approach to doing good might indicate that longtermism itself is counterintuitive.

A third reason relates to the recency of philosophical longtermism as a formal philosophy. Philosophy is one of the oldest academic disciplines, and for millennia scholars have formalized, developed, and documented moral intuitions into formalized theories. One might expect that, on that time frame, moral views even somewhat intuitive would have already been developed into formalized moral theory. However, although Sidgwick (1907) and other philosophers appear to have thought carefully about ideas consistent with longtermism in the 19th century or even earlier, longtermism legal longtermism did not

<sup>&</sup>lt;sup>5</sup> Some may object to these quotes as referring to certain implications of longtermism as opposed to the basic abstract principles. While this may be the case, and we will discuss some less intuitive aspects of longtermism's implications later, we believe these quotes are most naturally understood as being about longtermism in general.

<sup>&</sup>lt;sup>6</sup> Though also note that many others were developing some of the foundational ideas of longtermism long before effective altruism existed or "longtermism" was coined. See, for instance, Russell & Einstein (1955); von Neumann (1955); Baier (1981); Parfit (1984); Sagan (1994); UNESCO (1997). For an exploration of the history of thinking about human extinction, see Moynihan (2020).

<sup>&</sup>lt;sup>7</sup> Though, as we will describe later, one reason for this fact might be that most people simply have not yet come across EA. See Caviola, Morrissey & Lewis (2022).

<sup>&</sup>lt;sup>8</sup> "Effective altruists have lashed themselves to the mast of a certain kind of logical rigor, refusing to look away when it leads them to counterintuitive, bewildering, or even seemingly repugnant conclusions" (Lewis-Kraus 2022). See also <u>Pellegrino</u> (2017: 44), arguing that certain tenets of effective altruism require effective altruists to "accept some strongly counterintuitive judgments."

<sup>&</sup>lt;sup>9</sup> See Fn. 6. See further MacAskill's (2022: 76) discussion of the Mohists, a group of adherents to a consequentialist philosophy whose teachings in the 5th century B.C. were said to "fill the world." MacAskill

exist as formalized theories until well into the 21st century. Thus, the recency of longtermism within philosophy may lead one to expect that it is not as intuitive as other theories that were developed centuries or even millennia earlier and which enjoy mainstream acceptance among professional philosophers, such as Kantian deontology, Aristotelian virtue ethics or even Benthamite utilitarianism.

In the context of legal longtermism specifically, the fourth and perhaps most salient reason to expect longtermism to be counterintuitive is the sheer lack of *de facto* legal protection provided to future generations. For example, although there have been various dissenting voices over time advocating for "the future of man" via environmental protections and nuclear disarmament (Mansfield 1955; Russell 1955), past and present legal systems have failed to grant future generations democratic representation in the legislature, <sup>10</sup> standing to bring forth a lawsuit in the judiciary, <sup>11</sup> and serious consideration in cost-benefit analyses in the executive. <sup>12</sup> Were legal longtermism intuitive, this line of reasoning holds, surely democratic legal systems would have granted future generations some form of substantial protection by now.

# B. The Arguable Intuitiveness of Legal Longtermism

Nevertheless, one may also point to reasons legal longtermism could be expected to be intuitive or commonsensical. First among them, philosophical longtermism appears to be compatible with a wide range of moral philosophies, including deontology (Baier 1981) virtue ethics (Ord 2020; Schell 2000; Brand 2000),<sup>13</sup> and consequentialism (Bourget & Chalmers 2021; Martínez & Winter unpublished manuscript).<sup>14</sup>

notes that the silencing and oppression of Mohism may have contributed to a "value lock-in" of values less favorable to longtermism, such as Confucianism (2022: 97-98).

<sup>&</sup>lt;sup>10</sup> While not possible directly via the right to vote, it could be done indirectly via representation in the legislature, for example (John & MacAskill 2022; González-Ricoy & Gosseries 2016).

Although standing requirements can vary widely across jurisdictions, the vast majority of jurisdictions have not explicitly extended the doctrine of *locus standi* to future generations. See e.g. Bogojević (2020), discussing the challenges and failures of extending the doctrine of standing in climate law cases. But see *Minors Oposa* (Supreme Court of the Philippines 1993, stating "We find no difficulty in ruling that [petitioners] can, for themselves, for others of their generation and for the succeeding generations, file a class suit."); Sahoutara (2016) and *Rabab Ali v. Pakistan* (Petition to Supreme Court of Pakistan 2016: paras. 1, 6-7, 31, xviii) (granting standing to petitioner challenging various government actions related to Thar coal, on behalf of present and future generations).

<sup>&</sup>lt;sup>12</sup> For an overview of discount rates, see Zhuang et al. (2007).

<sup>&</sup>lt;sup>13</sup> For example, one might argue from a deontological perspective that we owe a duty to future generations, independent of what a consequentialist calculus might demand. From a virtue ethics perspective, one might argue that it is a virtue to act in such a way that protects future generations by exercising "civilizational virtues" such as patience, self-discipline, benevolence, and taking responsibility for our actions (Gaba 1999: 283-87; Ord 2020; Winter et al. 2021).

<sup>&</sup>lt;sup>14</sup> In Bourget and Chalmers' (2021) survey of professional philosophers, the distribution of participants' meta-ethical beliefs were as follows: 37.2% endorsed virtue ethics, 32.1% endorsed deontology,

A second reason is that, despite the fact that legal systems do not afford *de facto* legal protection to future generations, many legal systems are beginning to provide *de jure* legal protection to future generations independent of other issues, such as climate change. For example, recent work by Araújo and Koessler (2021) found that constitutions referencing future generations now comprise roughly one-third of all the constitutions in force. Although most of these reference future generations alongside or in the context of environmental protection (62%) and natural resources (35%), some constitutions (22%) mention future generations *stricto sensu*—that is, by themselves without another theme mentioned. The past few decades have also seen a handful of institutions and government offices designed to consider the interests of future generations, such as the Future Generations Commissioner of Wales, although to date these have focused primarily on environmental protection and sustainability (see e.g. Jones et al. 2018; Viña & Bueta 2021; Olawuyi 2021). These efforts to protect future generations suggest that lawmakers, and the constituents and groups who inform their policies, may find the principles of legal longtermism intuitively appealing.

# III. Legal Longtermism's Empirical Intuitive Appeal

Recent empirical work appears to support the idea that, at least on an abstract level, people agree with the principles of legal longtermism. In this section, we present three sets of findings in support of this claim, showing that: (a) legal experts and laypeople alike believe that the law *should* protect the long-term future much more than it currently does, in Section III.A; (b) legal experts believe that the law *can* predictably and feasibly protect the long-term future, in Section III.B; and (c) these beliefs hold true across major demographic subgroups and across cultures, in Section III.C. These findings draw on four recent empirical studies:

1. "Global Law Professor Survey" of over 500 legal academics from leading universities around the English-speaking world, specifically in Australia, Bangladesh, Canada, India, New Zealand, South Africa, and the United Kingdom (Martínez & Winter 2021a);

and 30.6% endorsed consequentialism. In Martínez and Winters' (unpublished manuscript) survey of legal academics, the distribution was as follows: 49.5% endorsed deontology, 41.1% endorsed consequentialism, and 57.2% endorsed virtue ethics (note that Martínez and Winters' format allowed for participants to endorse more than one theory).

<sup>&</sup>lt;sup>15</sup> Note that for the purposes of this chapter, *de jure* protection refers to protection that is officially provided by written law (so-called "law in books") but not necessarily recognized or enforced in practice by the courts (so-called "law in action"), whereas *de facto* protection refers to protection that is actually recognized in practice by the courts.

- 2. "U.S. Law Professor Survey" of over 600 United States law professors<sup>16</sup> (Martínez & Tobia 2022);
- 3. "U.S. Layperson Survey" of over 1,000 lay adults in the United States (Martínez & Winter 2021b); and
- 4. "Global Layperson Survey" of roughly 3,000 lay adults across ten countries—Australia, Canada, Chile, Japan, Mexico, Spain, South Africa, South Korea, the United Kingdom, and the United States (Martínez & Winter forthcoming b).

# A. The Law Should Do More To Protect the Far Future

One source of evidence comes from a pair of recent empirical studies. Both the Global Law Professor Survey and U.S. Layperson Survey asked participants about their beliefs regarding the current and desired level of legal protection afforded to future generations and other groups, such as present humans, non-human animals, the environment, and artificial intelligence. The two prompts were presented to participants as follows:

- 1) On a scale of 0–100, how much **does** your country's legal system protect the welfare (broadly understood as the rights, interests, and/or well-being) of the following groups?
- 2) On a scale of 0–100, how much **should** your country's legal system protect the welfare (broadly understood as the rights, interests, and/or well-being) of the following groups?

Participants were asked to rate the following groups:

Humans inside the jurisdiction

Humans outside the jurisdiction

Non-human animals

Environment (e.g., rivers, trees or nature itself)

Sentient artificial intelligence (assuming its existence)

Humans living now

Humans living in the near future (0-25 years from now)

Humans living in the medium future (25-100 years from now)

Humans living in the far future (100+ years from now)

<sup>&</sup>lt;sup>16</sup> Note that United States law professors refers to professors based in the United States of America (as opposed to, for example, professors that necessarily specialize in United States law).

Some of the main results of these studies are visualized in Figures 1 and  $2.^{17}$  The main takeaways are threefold.

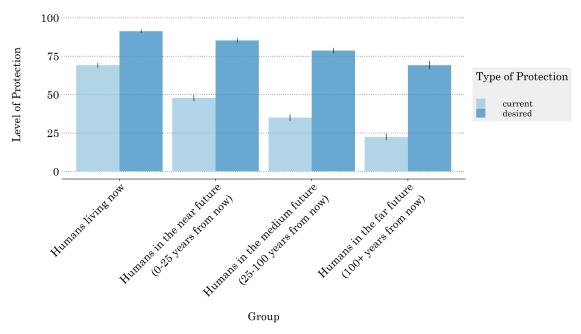


Figure 1: Current vs. desired level of legal protection for present and future humans (Global Law Professor Survey).

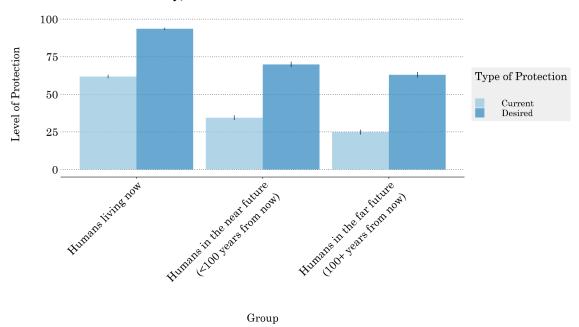


Figure 2: Current vs. desired level of legal protection for present and future humans (U.S. Layperson Survey).

 $<sup>^{17}</sup>$  Note that in all figures, error bars reflect 95% bootstrapped confidence intervals.

First, the desired level of protection to future generations was roughly two-and-a-half to three times higher than the perceived current level of protection. Second, the desired level of protection for those living in the far future was roughly the same as the perceived current level of protection being afforded to humans living in the present. Third, the gap between the desired and current level of protection is (a) significantly higher for future generations than the present generation; (b) significantly higher for humans living in the far future than the near future; and (c) higher for humans living in the far future than any other group surveyed on, including non-human animals, the environment, artificial intelligence, and humans outside the jurisdiction. Taken together, these results support the claim that legal experts and laypeople alike believe the law should do much more to protect humans living in the long-term future, even when their interests are weighed against other neglected entities and issues. 19

Empirical work also suggests that future generations are deserving of not only general legal protection, but fundamental access to the legal system, such as via legal personhood. In the U.S. Law Professor Survey, Martínez and Tobia (2022) asked participants their beliefs regarding several dozen legal theory issues, including personhood. The personhood prompt was presented as follows:

Insofar as domestic law should protect the rights, interests, and/or well-being of "persons", which of the following categories includes at least some "persons"?

Participants were asked about the following categories:

Humans in the legal jurisdiction
Humans outside the legal jurisdiction
Corporations
Unions
Non-human animals
Artificially intelligent beings
Humans who do not yet exist, but will be born in the next 50 years
Humans who will only exist in the very distant future

 $<sup>^{18}</sup>$  Note that "significantly" here (and elsewhere when discussing the results) refers to statistical significance. For details regarding the statistical analyses conducted for the survey, refer to Martínez & Winter (2021b).

<sup>&</sup>lt;sup>19</sup> Additionally, the fact that the desired level of protection for those living in the far future (even taking the lower bound of the 95% confidence interval) was non-zero alone provides evidence in favor of the intuitive appeal of the principle that future people count and deserve legal consideration. Moreover, the fact that the *current* level of protection for those living in the far future was also non-zero provides further evidence in favor of the intuitive appeal of the principle that that law can affect the lives of future people in a positive way.

For each category, participants could either "Accept," "Lean towards," "Lean against," or "Reject" personhood, or they could choose from a number of "other" options as an explanation for why they could not provide a rating (e.g. "it depends," "insufficient knowledge," or "no fact of the matter").

A majority of U.S. law professors surveyed (53.8%) leaned towards or accepted personhood for humans who will be born in the next 50 years, while a substantial minority (34.5%) leaned towards or accepted personhood for humans who will only exist in the very distant future.

An extension of this work, the U.S. Layperson Survey asked U.S. adults the same prompt with slight differences in the categories surveyed on—instead of "humans who do not yet exist, but will be born in the next 50 years" and "humans who will only exist in the very distant future," participants were asked about "humans living in the near future (<100 years from now)" and "humans living in the far future (100+ years from now)." Participants favored personhood for future persons: 64.09% leaned towards or accepted personhood for humans living in the near future, and 61.75% leaned towards or accepted personhood for humans living in the far future.

Given that future humans in general are not currently granted personhood in any fashion, these findings further support the claim that experts and laypeople believe the law should protect the future more than it does currently.

### B. The Law Can Protect the Far Future

Other empirical evidence supports the premise that law *can* help those living in the future. The Global Law Professor Survey asked participants whether they believed there are feasible, predictable mechanisms through which the law can affect the long-term future. Participants were asked about the long-term future (defined as at least 100 years from now) as well as the very long-term future (defined as at least 1000 years from now). Figure 3 visualizes the main results. For both time periods, significantly more law professors agreed than disagreed with the claim that law can predictably and feasibly influence the future. The vast majority (74.5%) of participants agreed with respect to the long-term future, while a plurality (40.9%) agreed with respect to the very-long-term future—both striking results given longtermist concerns about cluelessness and washing out (Greaves & MacAskill 2021; Thorstad 2021).<sup>20</sup>

<sup>&</sup>lt;sup>20</sup> Note that cluelessness in longtermist literature refers to the concern that it is impossible to calculate the expected value for long-term interventions. The "washing-out" hypothesis refers to the concern that it is impossible to influence the far future, given the likelihood that the effects of one's actions and policies decay over time, making the effects on the near-term outweigh any on the long-term. Note also that participants' estimates may also reflect unfamiliarity with the longtermist concepts of cluelessness and washing out, as well as lack of expertise in forecasting discussed by Martínez & Winter (2021a: 38, note 82).

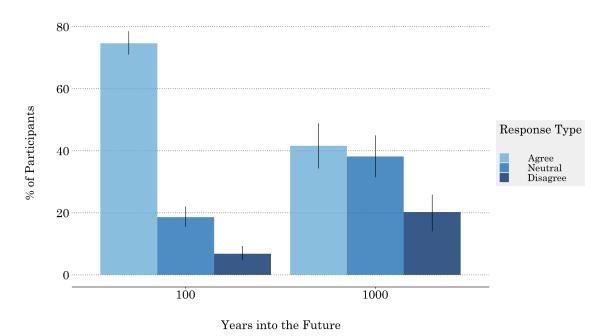


Figure 3: Participant responses to the prompt that there are feasible, predictable legal mechanisms for influencing the future (Global Law Professor Survey).

Participants responded similarly when asked about specific areas of law, such as constitutional, criminal, and environmental law, as well as when asked about specific risks, such as those resulting from artificial intelligence, climate change, and biorisk, suggesting that legal academics view law as a multifaceted and versatile tool to influence the long-term future.

Similar to the normative prompts discussed in the previous section, several questions in the Global Law Professor Survey asked about more concrete legal mechanisms within existing legal doctrine, such as standing. Participants were asked with respect to several groups whether they considered there to be "a reasonable legal basis for being granted standing to bring forth a lawsuit (*locus standi*) in at least some possible cases?"

More than two-thirds (67.74%) of legal experts endorsed there being a reasonable legal basis for granting standing to humans living in the near future (understood as up to 100 years from now), while a slight majority (51.16%) endorsed the proposition with regard to humans living in the far future (understood as 100+ years from now). Insofar as legal experts believe standing to be an effective mechanism for influencing the long-term future, this finding supports the claim that experts believe existing law can influence the long-term future.

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For further discussion of cluelessness, see Greaves (2016). For further discussion of the washing-out hypothesis, see Greaves and MacAskill (2021).

Finally, the Global Law Professor Survey asked participants to rate how much protection certain constitutional mechanisms, if incorporated into their country's constitution, would provide to future generations. Participants rated the level of protection on a scale of 1 to 7, with 1 representing "none at all," 4 representing "some" and 7 representing "very much." Participants were asked to rate the following mechanisms:

- 1. Protection against discrimination towards future generations
- 2. Commitment to spend 1% of GDP towards protection against existential risk (such as those posed by runaway climate change, artificial intelligence, or pandemics)
- 3. Provision granting standing (*locus standi*) to future generations
- 4. Commission or ombudsperson to oversee the protection of future generations
- 5. State goal to protect future generations

Although some mechanisms were rated as higher than others, for each of these mechanisms,<sup>21</sup> the mean rating for level of protection was above a 4 ("some"), further suggesting that law professors believe specific mechanisms could be implemented to offer at least some protection to the long-term future.<sup>22</sup>

# C. On the Robustness of the Intuition that Law Can and Should Do More To Protect the Long-term Future

With regard to the third set of findings, the studies revealed that these beliefs are held, not only by legal experts and laypeople as a whole, but also across several demographic subgroups. Both the Global Law Professor Survey and U.S. Layperson Survey findings were robust to differences in gender, age, country of origin, type of legal training, and political affiliation.<sup>23</sup> For example, the breakdown of responses to desired vs current level of legal protection among liberal (left-leaning) and conservative (right-leaning) lay adults is visualized in Figure 4, which shows that main trends identified with regard to laypeople as a whole were also observed across the political spectrum.

<sup>&</sup>lt;sup>21</sup> The mechanism that was rated as granting the most protection was a commitment to spend 1% of GDP towards protection against existential risk (4.76; 95% CI: 4.50 to 5.05), followed by protection against discrimination towards future generations (4.62; 95% CI: 4.34 to 4.91), provision granting standing to future generations (4.22; 95% CI: 3.92 to 4.53), state goal to protect future generations (4.15; 95% CI: 3.88 to 4.43), and commission or ombudsperson to oversee the protection of future generations (4.13; 95% CI: 3.83 to 4.42).

<sup>&</sup>lt;sup>22</sup> It's also worth noting that the fact that the law professors gave similar responses for each mechanism may indicate a high level of uncertainty among law professors regarding which mechanism would provide the strongest type of protection.

<sup>&</sup>lt;sup>23</sup> While Martínez and Winter (2021b) do not describe the demographic findings related to future generations in the U.S. Layperson Survey, the datasets for the study can be found on OSF at https://osf.io/2hfx6/?view only=25d06cdb33004cfa88ac76ae4a28a5b6.

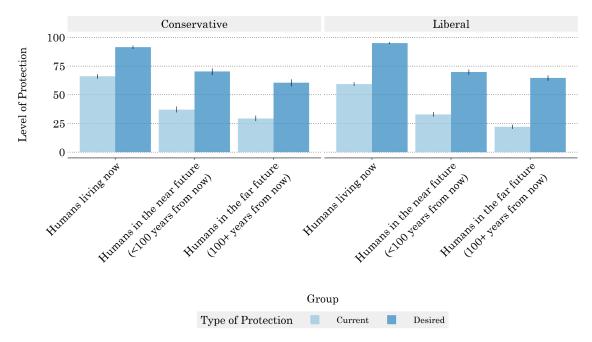


Figure 4: Current vs desired protection for present and future humans by political affiliation (U.S. Layperson Survey).

Additionally, a fourth study indicates that at least some of these beliefs are held not only by people across the anglosphere but across cultures as well. In the Global Layperson Survey, which covered ten countries, Martínez & Winter (forthcoming b) asked participants about their beliefs regarding the current and desired level of legal protection afforded to future generations and other groups. Unlike the U.S. Layperson Survey, the Global Layperson Survey asked participants about protection at both the national level and international level. At the national level, the wording of the prompts was as follows:

- 1) On a scale of 0–100, how much does your country's legal system protect the welfare (broadly understood as the rights, interests, and/or well-being) of the following groups?
- 2) On a scale of 0–100, how much should your country's legal system protect the welfare (broadly understood as the rights, interests, and/or well-being) of the following groups?

At the international level, the wording of the prompts was as follows:

3) On a scale of 0–100, how much do international organizations (such as the United Nations) protect the welfare (broadly understood as the rights, interests, and/or wellbeing) of the following groups?

4) On a scale of 0–100, how much should international organizations (such as the United Nations) protect the welfare (broadly understood as the rights, interests, and/or well-being) of the following groups?

For each prompt, participants were asked about the same groups as in the U.S. Layperson Survey. Results for the national-level prompts are visualized in Figure 5.

The results were convergent with those of the U.S. Layperson Survey. In each country: (a) the desired level of protection for humans living in the near and far future was higher than the perceived current level of protection afforded to them; and (b) the difference between the desired and current level of protection was disproportionately higher for humans living in the near and far future than for other groups as a whole.

As with the U.S. Layperson Survey, the Global Layperson Survey asked participants whether their country's legal system should grant personhood and standing to at least some subset of humans living in the near and far future. In each of the ten countries, the majority of participants endorsed personhood for at least some individuals within the categories of "humans living in the near future" and "humans living in the far future," indicating that granting personhood to future humans is widely supported cross-culturally. With regard to standing, both the majority of participants and the majority of each of the ten countries endorsed standing both for humans living in the near future (58.2%) and for humans living in the far future (55.6%), indicating that granting standing to humans living in the future likewise enjoys substantial cross-cultural support outside the English-speaking world.

Finally, the Global Layperson Survey also asked whether people believed that the welfare (broadly understood as the rights, interests, and/or wellbeing) of future generations should ever outweigh that of the present generation. The majority across all participants, and the majority of countries in the sample (7 of 10), endorsed the proposition that there are at least some possible scenarios in which the welfare of future people should outweigh that of present people, both in the context of national law-making (51.4%) and in the context of international law-making (54.1%). This suggests that there is widespread intuitive appeal, not only for increasing legal protection to future generations, but for prioritizing this protection over other groups in certain cases, both at the national and international level.

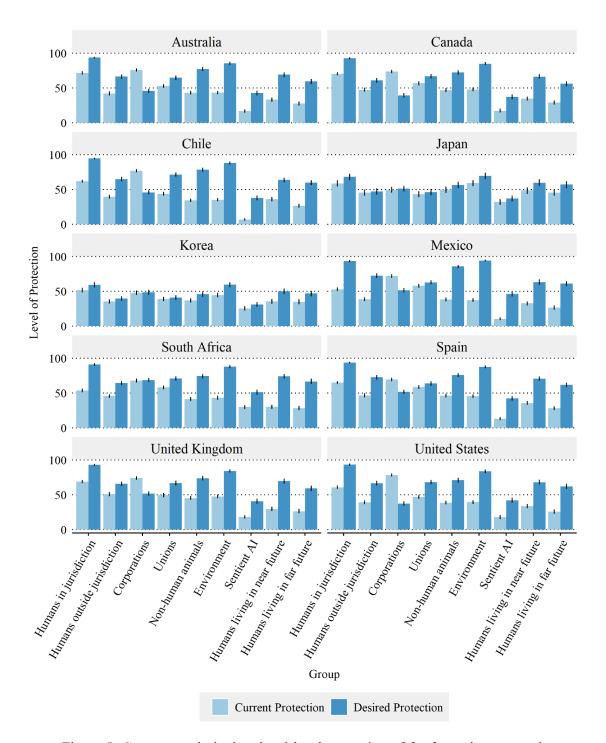


Figure 5: Current vs. desired national legal protection of far-future humans and other groups as judged by participants across countries (Global Layperson Survey).

# IV. Discussion

In this section we discuss objections and implications of the results presented in Section III. First, we present and discuss some evidence suggesting that some of the strongest forms of legal longtermism may not be as intuitive as the basic principles (Section IV.A). Second, we discuss some legal-philosophical and legal-doctrinal implications of our results for the legal system and for the validity of legal longtermism (Section IV.B). Third, we discuss the implications of our results for applied longtermism (Section IV.C).

# A. Limitations of Legal Longtermism's Intuitive Appeal

Despite evidence that people across major demographic groups believe that the law can and should protect the long-term future more than it does currently, there is also evidence that they do not prefer equal protection for the near and far future. Although people may intuitively accept that future people count and law can protect them, people may *not* intuitively accept (a) that far future people count *just as much* as near future or present people, nor (b) that law can predictably and feasibly influence the *very* long-term future, nor (c) that there could be many future people. We discuss each of these in turn, then describe the potential for further disagreement regarding how best to influence the long-term future.

With respect to whether far future people count just as much as near future or present people, re-consider the Global Law Professor Survey, U.S. Layperson Survey, and Global Layperson Survey, all of which asked participants about their beliefs regarding the current and desired level of legal protection afforded to future generations and other groups. In all studies participants rated the desired level of legal protection for humans living in the far future as two-and-a-half to three times greater than what is currently afforded to them, and in the Global Layperson Survey the majority of participants endorsed the proposition that there are at least some possible scenarios in which the welfare of future people should outweigh that of present people; however, in all studies the desired level of legal protection for humans living in the far future was still significantly lower than for humans living in the present. This indicates that, although legal experts and laypeople believe that future generations should be legally protected to a greater degree than they are currently, and should even be prioritized over present generations in at least some scenarios, they by-and-large also believe that future generations should not be legally protected to the same degree as humans living now.<sup>24</sup>

<sup>&</sup>lt;sup>24</sup> Note also that the max endpoint of the scale (i.e. 100 out of 100) of the prompt was "as much as possible," indicating that the lower desired level of legal protection for future generations was not a result of participants' simply believing it to be less tractable to protect future generations through the law.

Consider also the U.S. Law Professor Survey, in which participants were asked to endorse or reject personhood for future humans and other groups. Although the majority of participants endorsed personhood for humans who do not yet exist but will be born within the next 50 years, the majority of participants did not endorse personhood for humans who will only exist in the distant future. Even more participants endorsed personhood for present humans living within the jurisdiction. Taken together, these indicate that U.S. law professors do not believe that the law should provide humans living in the future the same legal status as humans living in the present.

With respect to whether the law can protect the far future, consider again the Global Law Professor Survey. Although the vast majority of law professors agreed with the prompt that there were predictable, feasible mechanisms through which the law could influence the long-term future (understood as at least 100 years from now), only a plurality agreed with the prompt regarding the *very* long-term future (understood as at least 1000 years from now). Similar results were observed with respect to individual areas of law (e.g. constitutional law, criminal law, environmental law), indicating that most law professors are less confident regarding law's ability today to predictably and feasibly positively influence the future a thousand or more years from now.<sup>25</sup>

Finally, in addition to whether future people count and whether law can protect them, it remains largely an open question whether people intuitively accept the idea that many will exist in the future. As mentioned before, the fact that legal experts are confident that there are feasible, predictable legal mechanisms through which the law can influence the long-term future may imply that legal experts believe there will be people in the future for law to influence. However, there remains no direct evidence of *how many* people are intuited to exist in the far future by people living in the present. Given that stronger versions of longtermism assume high numbers of future people in expectation,<sup>26</sup> and it remains unclear whether people intuitively accept this threshold, it therefore remains unclear whether people endorse the abstract principles underlying stronger forms of longtermism.<sup>27</sup>

<sup>&</sup>lt;sup>25</sup> For further discussion of the typical time frames considered by longtermists and strong longtermists, see Greaves and MacAskill (2021).

<sup>&</sup>lt;sup>26</sup> Greaves and MacAskill (2021) consider different scenarios in estimating the number of future beings and conclude that "any reasonable estimate of the expected number of future beings is at least 10<sup>24</sup>," with upper estimates of 10<sup>36</sup> future beings if humanity settles the Milky Way at carrying capacity or 10<sup>45</sup> if digital life is included. Their arguments regarding strong longtermism also consider more conservative estimates: a *restricted estimate* of 10<sup>14</sup> if civilization exists on Earth for 1 million years, using the average lifespan of mammalian species as a reference class, at a carrying capacity of 1 trillion lives per century, and a *low estimate* of 10<sup>18</sup> if Earthbound civilization includes digital life or has a very small change of expanding to the solar system. See also Roser (2022) (providing further estimates).

As discussed in Martínez and Winter (forthcoming a), in terms of justifying legal longtermism, the extent to which the different premises must be true arguably depends on the extent to which the other premises turn out to be true. For example, the greater in size the future turns out to be, the more one can be confident in longtermism despite less feasible, predictable ways of influencing the long-term future. Conversely, the more feasible and predictable one believes it is to influence the long-term future, the smaller

Furthermore, those who agree with the basic premises of legal longtermism may still disagree with proponents of longtermism on how best to influence the long-term future. For example, whereas reducing risk from artificial intelligence is typically seen as one of the leading cause areas within longtermism (Greaves & MacAskill 2021: 13-15; Hilton 2022; Karnofsky 2016; Open Philanthropy 2023) and legal longtermism (Winter et al. 2021), fewer than 50% of all participants in the Global Law Professor survey agreed that law could feasibly and predictably influence the long-term future in the context of artificial intelligence. This agreement rate was lower than for any other type of risk surveyed on.<sup>28</sup>

Similarly, although longtermism often emphasizes the importance of law in governing emerging technologies (Winter et al. 2021), the field of law and technology is not considered normatively or descriptively central by U.S. law professors. Law and technology was the third lowest ranked area of law in terms of descriptive centrality in the U.S. Law Professor survey, and although its mean normative centrality rating was higher, it was still lower than 5 out of 10, indicating that U.S. law professors, on average, do not believe it should be central to the legal academy. Similarly, international law—recently speculated by longtermists to be a neglected area in the U.S. legal academy (Winter et al. 2021)—had a mean normative centrality rating comparable to that of local government law, an area not typically considered important by legal longtermism. These results might indicate a rejection of longtermism in favor of more near-term and traditional areas of law. However, given that the majority of participants displayed a preference for protecting the future (as indicated by endorsing personhood for those living in the near-future), these results might also reflect a disparate evaluation of how to protect the long-term future. In either case, they serve as further evidence of a mismatch between the priorities of those within and outside the field of legal longtermism.

# B. Implications for the Validity of Legal Longtermism

There is a burgeoning literature in the area of experimental jurisprudence dedicated to advancing philosophical, doctrinal, and policy arguments on the basis of experimental results (Tobia 2022; Prochownik 2021), including in the context of providing legal protection to the long-term future (Martínez & Winter forthcoming a). To that end, in addition to the descriptive psychological and sociological contributions of uncovering

the number of future individuals required for one to conclude that longtermism is true. Note that the interrelation of these premises/assumptions influences not only confidence in longtermism, but also confidence in weaker versus stronger forms of longtermism; that is, depending on such calculations, one might not only conclude that law should be "particularly" but rather "primarily" concerned with ensuring that the long-run future goes well.

<sup>&</sup>lt;sup>28</sup> As another example, the legal community identified climate change as the most promising risk for law to address, while longtermist and legal longtermist scholarship has typically identified climate change as one of, though not the leading cause area. For a thorough discussion on longtermism and climate change, see Halstead (2022). See also Bertram (2022).

people's views on legal longtermism, some may also view the results as having normative weight in determining (a) the appropriate level and form of legal protection for future generations *independent* of existing legal doctrine; and (b) the appropriate level and form of legal protection for future generations according to *existing* legal doctrine.

With regard to (a), let us consider the basic abstract principle of legal longtermism that future people ought to count under the law. Within the aforementioned experimental jurisprudence literature, there is considerable debate as to to what degree and how lay judgments—as opposed to legal expert judgments—should inform or dictate such questions of legal philosophy and policy, depending largely on the degree to which one views law through a democratic (as opposed to, say, technocratic) lens (Martínez & Winter forthcoming a). The fact that experts and laypeople rated the desired level of legal protection for humans living in the far future as two-and-a-half to three times as high as the perceived current level, as well as the fact that the difference between the desired and perceived current level of protection was higher than any other group, arguably implies (through both a democratic and technocratic lens) that the existing legal institutions should be reformed so as to increase protection of humans living in the far future well beyond the current level afforded to them.

In terms of the principle that the law can protect the long-term future, consider that participants in the Global Law Professor Survey by-and-large agreed that there were predictable, feasible mechanisms through which the law could influence the long-term future. Insofar as law professors are experts on the potential long-term effects of law,<sup>29</sup> it follows that their endorsement would strengthen the same empirical premise underlying legal longtermism (i.e. that law can protect the long-term future), which in turn would provide some evidentiary and normative weight to legal longtermism.

With regard to (b), determining the appropriate level and form of legal protection for future generations according to *existing* legal doctrine, recall that the majority of participants in the Global Law Professor Survey also endorsed standing for humans living in the near and far future in at least some possible cases. Insofar as legal academic opinion reflects or is indicative of legal doctrine as it is or ought to be interpreted, the fact that the majority of legal academics believed there to be a reasonable *legal* basis for granting standing to future generations suggests that according to at least one area of legal doctrine, future generations ought to be provided more legal protection than they are currently being granted based on existing legal doctrine. Similar reasoning applies to the U.S. Law Professor Survey, in which the majority of participants endorsed personhood for humans who will be born within 50 years in at least some cases. That is, insofar as U.S. law

<sup>&</sup>lt;sup>29</sup> Some might doubt the validity of this claim by arguing that although legal academics are experts in law, they are not experts in forecasting the impact of law. As mentioned in the original manuscript of the Global Law Professor Survey, future work (potentially surveying forecasting experts, or groups consisting of both forecasters and legal scholars) could help resolve this uncertainty.

professors can be considered experts in legal personhood in the United States legal system, then the fact that the majority of U.S. law professors endorse personhood for some subset of future humans should provide some normative weight in favor of granting future humans personhood in at least some cases under U.S. legal doctrine.<sup>30</sup>

# C. Implications for Applied Legal Longtermism

If advocates of philosophical and legal longtermism believe that the basic abstract principles of legal longtermism are true, we would expect longtermists to want to convince others of those principles. After all, many legal scholars have postulated that both the creation and application of the law is sensitive to—and perhaps even determined by—the will of the people. According to this view, a legal provision theoretically granting party X certain privilege Y will only be (a) passed by a legislature, (b) interpreted as such by a judge in a relevant judicial decision, and/or (c) commensurately enforced as such insofar as a sufficient proportion of the public is in favor of it being interpreted as such (see e.g. Post & Siegel 2007; Bliss 2021; but see Rodriguez Ferrere 2022). Thus, to the extent that the public does not already support granting certain privileges to future generations, this would dictate in favor of first convincing them of those principles.

However, the data presented in this chapter suggests that such convincing may not be as necessary as previously assumed, given that many, if not most, already agree with these principles. The fact that (legal) longtermism is yet a niche approach may not be due to its counter-intuitiveness but could well be explained by the fact that most people simply have not heard about it.<sup>31</sup> In other words, the abstract principles underlying longtermism may be intuitively appealing when asked about, despite not coming to mind easily. Consequently, one possible takeaway is that the goal of applied legal longtermism should not be so much to convince people of the validity of the abstract principles of legal longtermism but rather to raise awareness of those principles and transform those principles into concrete action and, ultimately, effective legal policy.

Future empirical work could seek to determine how best to enshrine these principles in law to protect the long-term future. While traditional approaches to evaluate the efficiency of laws and policies, such as cost-benefit analysis, are based on the assumption

<sup>&</sup>lt;sup>30</sup> Note that the original prompt displayed by participants in the U.S. Law Professor Survey and U.S. Layperson Survey was: "Insofar as the law should protect the interests of 'persons,' which of the following groups contains at least some 'persons?" Under one interpretation of people's responses, participants rated whether they believed the law should extend personhood to future generations beyond existing legal doctrine as opposed to merely recognizing them as persons according to existing legal doctrine. If so, one might argue that these responses provide evidence in favor of legal longtermism at the philosophical level as opposed to the doctrinal level.

<sup>&</sup>lt;sup>31</sup> This interpretation is consistent with previous literature regarding EA values more generally, finding that "[m]ost students who would agree with EA ideas haven't heard of EA yet" (Caviola, Morrissey & Lewis 2022).

that humans are purely rational actors, previous work has identified various cognitive biases and heuristics that could interfere with our ability to reason about the long-term future, particularly with regard to existential and other catastrophic risks (Yudkowsky 2008; Schubert et al. 2019). Since law is ultimately made, interpreted, and applied by humans, future laws, policies, and institutions should be designed to account for these biases. For example, given that (a) humans, including judges, have been found to have difficulty in reasoning about low-probability scenarios (Gatowski et al. 2001), and (b) many of the most severe risks facing future generations involve low-probability scenarios, it follows that (c) legislation aimed at mitigating existential risk ought to appropriately account for these limitations, such as by specifying the precise probability range to which the provision is to be applied as opposed to more open-ended language (see Martínez & Winter 2022).

# V. Conclusion

This chapter has reviewed four recent empirical studies indicating that, despite the recency of legal longtermism, the basic abstract principles underlying the theory have more resonance with legal experts and laypeople than existing laws and policies suggest. Although people do not display an equivalent preference for protecting the far future as for protecting the near-term future or present, the evidence does suggest that legal experts and laypeople across several major demographic subgroups—including political affiliation, culture, and gender—believe the law can and should protect the long-term future more than it does currently. This chapter has also discussed the implications of these results from both a theoretical and applied standpoint. From a legal theory perspective, the fact that legal experts and laypeople largely agree that law should take seriously the interests or well-being of future people supports the validity of legal longtermism at both the philosophical and doctrinal level. From an applied standpoint, the results suggest that the goal of applied legal longtermism should perhaps not be so much to convince people of the validity of such abstract principles of legal longtermism beyond raising awareness, but to determine how best to enshrine those principles into concrete and effective law and policy.

# References

- Araújo, R., and Koessler, L. (2021), *The Rise of the Constitutional Protection of Future Generations* (Legal Priorities Project, Working Paper No. 7-2021).
- Baier, A. (1981), 'The Rights of Past and Future Persons', in E. Partridge (ed.), *Responsibilities to Future Generations: Environmental Ethics* (Prometheus Books), 171-83.
- Baude, W. (2015), 'Is Originalism our Law', in Columbia Law Review, 115/8: 2349-2408.
- Baude, W., & Sachs, S. E. (2018), 'Grounding Originalism', in *Northwestern University Law Review*, 113/6: 1455-91.
- Bertram, D. (2022), 'Extreme Climate Change', Legal Priorities Project, https://www.legalpriorities.org/research/extreme-climate-change.html.
- Bliss, J. (2022), Existential Advocacy (Legal Priorities Project, Working Paper No. 4-2022).
- Bogojević, S. (2020), 'Human Rights of Minors and Future Generations: Global Trends and EU Environmental Law Particularities', in *Review of European, Comparative & International Environmental Law* 29/2: 191-200.
- Bourget, D., and Chalmers, D. J. (2021), 'Philosophers on Philosophy: The 2020 PhilPapers Survey', https://philpapers.org/rec/BOUPOP-3.
- Brand, S. (2000), 'Taking the Long View', in *Time*, https://content.time.com/time/subscriber/article/0,33009,996757,00.html.
- Caviola, L., Morrissey, E. S., and Lewis, J. (2022), 'Most Students Who Would Agree with EA Ideas Haven't Heard of EA Yet (Results of a Large-Scale Survey)', in *EA Forum*, https://forum.effectivealtruism.org/posts/mNRNWkFBZ2K6SHD8a/most-students-who-would-agree-with-ea-ideas-haven-t-heard-of.
- Gaba, J. M. (1999), 'Environmental Ethics and Our Moral Relationship to Future Generations: Future Rights and Present Virtue' in *Columbia Journal of Environmental Law* 24: 249-88.
- Gatowski, S. I., Dobbin, S. A., Richardson, J. T., Ginsburg, G. P., Merlino, M. L., & Dahir, V. (2001), 'Asking the Gatekeepers: A National Survey of Judges on Judging Expert Evidence in a Post-*Daubert* World', in *Law and Human Behavior* 25/5: 433-58.
- Greaves, H. (2016), 'Cluelessness', in *Proceedings of the Aristotelian Society* 116/3: 311-39.
- Greaves, H., and MacAskill, W. (2021), *The Case for Strong Longtermism* (Global Priorities Institute, Working Paper No. 5-2021).
- Greaves, H., MacAskill, W., O'Keeffe-O'Donovan, R., Trammell, P., Tereick, B., Mogensen, A., Tarsney, C., Alexandrie, G., and Cugnon de Sévricourt, M. (2020), *A Research Agenda for the Global Priorities Institute* (Global Priorities Institute).

- González-Ricoy, I., and Gosseries, A. (eds.) (2016), *Institutions For Future Generations* (Oxford University Press).
- Halstead, J. (2022), 'Climate Change & Longtermism', Supplementary Material in MacAskill, W., *What We Owe the Future* (Basic Books), https://drive.google.com/file/d/14od25qdb4sdDoXVDMoiSrTwuzYAMSpxK/vie w.
- Hart, H. (1961), The Concept of Law (Clarendon Press).
- Hilton, B. (2022), 'Preventing an AI-Related Catastrophe', in *80,000 Hours*, https://80000hours.org/problem-profiles/artificial-intelligence/.
- John, T. M., and MacAskill, W. (2022), 'Longtermist Institutional Reform', in N. Cargill and John, T. M. (eds.), *The Long View: Essays on Policy, Philanthropy, and the Long-term Future* (First).
- Jones, N., O'Brien, M., and Ryan, T. (2018), 'Representation of Future Generations in United Kingdom Policy-Making', in *Futures* 102: 153-63.
- Kannan, V. (2021), 'The Fundamental Problem with Longtermism', in *Medium*, https://medium.com/@venky.physics/the-fundamental-problem-with-longtermism-33c9cfbbe7a5.
- Karnofsky, H. (2016), 'Potential Risks from Advanced Artificial Intelligence: The Philanthropic Opportunity', in *Open Philanthropy*, https://www.openphilanthropy.org/research/potential-risks-from-advanced-artificial-intelligence-the-philanthropic-opportunity/.
- Lewis-Kraus, G. (2022), 'The Reluctant Prophet of Effective Altruism', in *The New Yorker*, https://www.newyorker.com/magazine/2022/08/15/the-reluctant-prophet-of-effective-altruism.
- MacAskill, W. (2015), Doing Good Better: Effective Altruism and How You Can Make a Difference (Random House).
- MacAskill, W. (2017), 'Effective Eltruism: Introduction' in *Essays in Philosophy*, 18/1: 1-5.
- MacAskill, W. (2022), What We Owe The Future (Basic Books).
- Mansfield, M. (1955), 'Nuclear Weapons and the Future of Man', in *Mike Mansfield Speeches, Statements and Interviews*: 165.
- Martínez, E., and Tobia, K. (2022), 'What Do Law Professors Believe about Law and the Legal Academy? An Empirical Inquiry', https://dx.doi.org/10.2139/ssrn.4182521.
- Martínez, E., and Winter, C. (2021a), *Protecting Future Generations: A Global Survey of Legal Academics* (Legal Priorities Project, Working Paper No. 1-2021).
- Martínez, E., and Winter, C. (2021b), 'Protecting Sentient Artificial Intelligence: A Survey of Lay Intuitions on Standing, Personhood, and General Legal Protection', in *Frontiers in Robotics and AI* 8: 788355.

- Martínez, E., and Winter, C. (forthcoming a), 'Experimental Longtermist Jurisprudence', in S. Magen and K. Prochownik (eds.), *Advances in Experimental Philosophy of Law* (Bloomsbury Academic).
- Martínez, E., and Winter, C. (forthcoming b), 'Cross-Cultural Perceptions of Rights for Future Generations', in K. Tobia (ed.), *Cambridge Handbook of Experimental Jurisprudence* (Cambridge University Press).
- Martínez, E., and Winter, C. (2022), Ordinary Meaning of Existential Risk (Legal Priorities Project, Working Paper No. 7-2022).
- Martínez, E., and Winter, C. (unpublished manuscript), 'Automating the Judiciary: A Global Survey of Legal Academics' (on file with authors).
- Minors Oposa (1993), Juan Antonio Oposa et al. v. the Honourable Fulgencio Factoran Jr, Secretary of the Department of the Environment and Natural Resources et al., Supreme Court of the Philippines, 30 June 1993, G.R. No 101083 (224 S.C.R.A. 792).
- Moss, D. (2020), 'EA Survey 2019 Series: How Many People Are There in the EA Community?', in *EA Forum*, https://forum.effectivealtruism.org/posts/zQRHAFKGWcXXicYMo/ea-survey-2019-series-how-many-people-are-there-in-the-ea.
- Moss, D. (2021), 'EA Survey 2020: Engagement', in *EA Forum*, https://forum.effectivealtruism.org/s/YLudF7wvkjALvAgni/p/4xczoALF6adpQk3 TN.
- Moynihan, T. (2020), *X-Risk: How Humanity Discovered Its Own Extinction* (Urbanomic). Neumann, J. von (1955), 'Can We Survive Technology?', in *Fortune* 51/6, 106-108, 151-52.
- Olawuyi, D. (2021), 'Embedding Intergenerational Justice across Government: Regional Trends in Africa', in M-C. C. Segger, M. Szabó, and A. R. Harrington (eds.), Intergenerational Justice in Sustainable Development Treaty Implementation: Advancing Future Generations Rights through National Institutions (Cambridge University Press), 638-55.
- Open Philanthropy (2023), 'Potential Risks from Advanced Artificial Intelligence', https://www.openphilanthropy.org/focus/potential-risks-advanced-ai/.
- Ord, T. (2020), *The Precipice: Existential Risk and the Future of Humanity* (Hachette Books).
- Ord, T. (2018), *Fireside Chat with Toby Ord*, EA Global: London 2018, https://www.effectivealtruism.org/articles/ea-global-2018-toby-ord-fireside-chat.
- Parfit, D. (1984), Reasons and Persons (Oxford University Press).
- Pellegrino, G. (2017), 'Effective Altruism and the Altruistic Repugnant Conclusion', in *Essays in Philosophy* 18/1: 44-67.

- Post, R. & Siegel, R. (2007), 'Roe Rage: Democratic Constitutionalism and Backlash', in *Harvard Civil Rights-Civil Liberties Law Review* 42: 373-433.
- Prochownik, K. M. (2021), 'The Experimental Philosophy of Law: New Ways, Old Questions, and How Not To Get Lost', in *Philosophy Compass* 16/12: e12791.
- Rabab Ali v Pakistan (2016), Constitutional Petition / 1 of 2016, Supreme Court of Pakistan, April 2016.
- Rodriguez Ferrere M. B. (2022), 'Animal Welfare Underenforcement as a Rule of Law Problem', in *Animals (Basel)* 12/11: 1411.
- Roser, M. (2022), 'Longtermism: The Future Is Vast—What Does This Mean for Our Own Life?', in *Our World in Data*, https://ourworldindata.org/longtermism.
- Russell, B., and Einstein, A. (1955), *The Russell-Einstein Manifesto*, https://ahf.nuclearmuseum.org/ahf/key-documents/russell-einstein-manifesto/.
- Sagan, C. (1994), Pale Blue Dot (Random House).
- Sahoutara, N. (2016), 'Seven-year-old Girl Takes on Federal, Sindh Governments', in *The Express Tribune*, https://tribune.com.pk/story/1133023/seven-year-old-girl-takes-federal-sindh-governments.
- Schell, J. (2000), The Fate of the Earth and the Abolition (Stanford University Press).
- Schoch-Spana, M., Cicero, A., Adalja, A., Gronvall, G. et al. (2017), 'Global Catastrophic Biological Risks: Toward a Working Definition', in *Health Security* 15/4: 323-28.
- Schubert, S., Caviola, L., Faber, N. S. (2019), 'The Psychology of Existential Risk: Moral Judgments About Human Extinction', in *Scientific Reports* 9:15100.
- Setzer, J. & Vanhala, L. C. (2019), 'Climate Change Litigation: A Review of Research on Courts and Litigants in Climate Governance', in *WIREs Climate Change* 10/3: e580.
- Sidgwick, H. (1907), *The Methods of Ethics* (7th ed., Macmillan).
- Thorstad, D. (2021), *The Scope of Longtermism* (Global Priorities Institute, Working Paper No. 6-2021).
- Tobia, K. (2021), 'Law and the Cognitive Science of Ordinary Concepts', in E. Brożek, J. Hage, N. Vincent (eds.), *Law and Mind: A Survey of Law and the Cognitive Sciences* (Cambridge University Press).
- Tobia, K. (2022), 'Experimental Jurisprudence', in *University of Chicago Law Review* 89/3: 735-802.
- UNESCO (1997), Declaration on the Responsibilities of the Present Generations Towards Future Generations.
- Viña, A. G. M. la, and Bueta G. R. P. (2021), 'Institutions for Future Generations in Asia', in M-C. C. Segger, M. Szabó, and A. R. Harrington (eds.), *Intergenerational Justice in Sustainable Development Treaty Implementation: Advancing Future Generations Rights through National Institutions* (Cambridge University Press), 671-702.

# Draft

- Whittlestone, J. (2022), 'The Long-Term Future', in *Effectivealtruism.org*, https://www.effectivealtruism.org/articles/cause-profile-long-run-future.
- Winter, C., Schuett, J., Martínez, E., Van Arsdale, S. et al. (2021), *Legal Priorities Research: A Research Agenda* (Legal Priorities Project), https://www.legalpriorities.org/research agenda.pdf.
- Wu, M. (2022), 'Effective Altruism: Not Effective and Not Altruistic', in *The Phoenix*, https://swarthmorephoenix.com/2022/03/31/effective-altruism-not-effective-and-not-altruistic/.
- Yassif, J. (2017), 'Reducing Global Catastrophic Biological Risks', in *Health Security* 15/4: 329-30.
- Yudkowsky, E. (2008), 'Cognitive Biases Potentially Affecting Judgment of Global Risks', in N. Bostrom and M. M. Ćirković (eds.), *Global Catastrophic Risks* (Oxford University Press), 91-119.
- Zhuang, J., Liang, Z., Lin, T., and De Guzman, F. (2007), *Theory and Practice in the Choice of Social Discount Rate for Cost-Benefit Analysis: A Survey* (Asian Development Bank, Economics and Research Department Working Paper No. 94).