The Buddha's Lucky Throw and Pascal's Wager

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The Apannaka Sutta, one of the early recorded teachings of the Buddha, contains an argument for accepting the doctrines of karma and rebirth that Buddhist scholars claim anticipates Pascal's wager. I call this argument the Buddha's wager. Does it anticipate Pascal's wager and is it a good bet? Contemporary scholars identify at least four versions of Pascal's wager in his Pensées. This article demonstrates that the Buddha's wager anticipates two versions of Pascal's wager, but not its canonical form. Like Pascal's wager, the Buddha's wager presents a decision problem between two opposing theses in an epistemic context that lacks evidence of their truth or falsity. Like Pascal, the Buddha also tries to solve this problem using dominance, superdominance or 'superduperdominance' reasoning. The Apannaka Sutta likely provides the earliest textual example of such reasoning. While the Buddha's wager does not exhibit the expected utility reasoning of the best-known form of Pascal's wager, the article suggests a reformulation that parallels Alan Hájek's (2018) vector-value reformulation. Is it a good bet? This article argues that it is not if this means we are rationally required to accept its recommendation. This is because, while it avoids two of the major objections levelled against Pascal's wager, it succumbs to one and has two problems of its own.

Keywords: Pascal, Buddhism, karma, rebirth, decision theory, dominance, pragmatism

1. Introduction

Until modern times, the idea of rebirth and its determination by karma was widely accepted and asserted by Buddhists. Indian Buddhist philosophical discourse about karmic rebirth is largely descriptive rather than justificatory. It tends to focus on explaining how this idea is consistent with key Buddhist claims, such as the denial of self, rather than seeking to prove it (Jackson 2022: 153). Some Buddhist arguments were offered to justify its acceptance, however. One such argument is traced to the early teachings of the Buddha recorded in the *Apannaka Sutta* (MN60). Roger Jackson calls it a pragmatic argument that 'anticipates the suggestion by the French philosopher Blaise Pascal (1623-1662) that, in the face of uncertainty, we "wager for the existence of God" (2022: 157). Pragmatic arguments for karmic rebirth are important because the dominant view amongst modern Buddhist scholars is that karmic rebirth, when construed literally, is inconsistent with current science. There is thus much interest in articulating and defending some alternative stance (shy of ignoring or rejecting the idea outright).

Does the *Apannaka Sutta* anticipate Pascal's wager and is it a good bet? It is clearly not a version of Pascal's wager, if this means wagering for God. But does it use the same kind of reasoning to decide what we should accept or believe? Contemporary scholars treat Pascal's wager as a decision-problem that he solves using decision-theoretic machinery. No attempt has been made to critically examine the *Apannaka Sutta* in decision-theoretic terms. Pascal scholars identify at least four versions of Pascal's wager in *Pensées*. No attempt has been made to clarify which of these versions the *Apannaka Sutta* might anticipate. Pascal's wager is also subject to some well-known objections. No-one has critically examined whether the argument in the *Apannaka Sutta* succumbs to these objections. This article fills these gaps.

In this article I reconstruct a general argument structure from several arguments contained in the Apannaka Sutta, which I call the Buddha's wager, and demonstrate that it anticipates at least two versions of Pascal's wager and shares some important properties. I will argue, however, that it does not anticipate the best-known form of the wager, which considers probabilities and the idea of infinite value. Nevertheless, I will demonstrate that, like Pascal, the Buddha uses dominance or superdominance reasoning, if not also Alan Hájek's (2012) notion of 'superduperdominance' reasoning, to solve a decision-problem about what to believe in conditions of uncertainty. This is a significant outcome. James Franklin identifies Arnobius (300CE) as 'the first to express the argument in a form that recognizably involves the rationality of a decision in a case of doubt' (2018: 27). Others identify Lactantius and al-Ghazali as early precursors (Palacios 1920; Ryan 1945). The Apannaka Sutta, is based on teachings estimated to have been given in around 400BCE, which were eventually collected, redacted, and started to be written down in the first millennium BCE (Jackson 2022: 27). The Buddha's wager thus likely provides the earliest example of dominance, superdominance, if not also superduperdominance, reasoning. Moreover, while it does not anticipate the canonical form of Pascal's wager, I will argue that it has properties that might allow a vector-value reformulation along the lines proposed by Hájek (2018).

Is it a good bet? I will conclude that it is not if this means we are rationally required to accept its recommendation. Some well-known objections have been levelled against Pascal's wager in support of this negative conclusion. I will demonstrate that while the Buddha's wager avoids two of the most prominent objections, it succumbs to one and has two problems of its own.

2. The Buddha's Wager: 'a lucky throw'

The *Apaṇṇaka Sutta* opens with a narrative of the Buddha arriving at a village of 'householders'; individuals living an ordinary household life. He asks them if there 'is any teacher agreeable to [them] in whom [they] have acquired faith supported by reasons?' (MN60.4). They say no. He then advises them to 'undertake and practise this incontrovertible teaching, for when this incontrovertible teaching is accepted and undertaken, it will lead to your welfare and happiness for a long time.' (MN60.4).¹

The Buddha then presents five arguments related to five pairs of opposing theses. The first three arguments have an identical structure and describe the choice between these opposing theses in gambling terms, as a 'lucky' or 'unlucky throw'. I call this argumentative structure *the Buddha's wager*. The final two arguments do not use this gambling terminology but clarify that the choice is being made under uncertainty. I will call this *the subsidiary argument*. The theses at issue, I will argue, all relate to karmic rebirth, either explicitly or as a presupposition. While it is assumed that 'good recluses' can have 'direct knowledge' of these matters via contemplative practice, the householders to whom this 'incontrovertible teaching' (*apaṇṇṇaka dhamma*, P.)² is directed do not, themselves, have the relevant evidence and so do not have reason to accept or deny them.

I will begin by reconstructing the Buddha's wager from the first argument presented in the *Apaṇṇaka Sutta* and show how the subsidiary argument fleshes out a hidden premise. I will then briefly introduce the other opposing pairs and argue that they are unified by a common concern with matters relating to karma and rebirth.

2.1 Setting up the Buddha's wager

¹ Although I express these assertions and arguments as made by the Buddha (even describing the underlying argumentative structure as *the Buddha*'s wager) it is to be understood that these claims are attributed to the Buddha in the context of the sutta. The *Apaṇṇaka Sutta* is part of the *Majjhima Nikāya*, one of five collections containing some of the earliest recorded teachings of the Buddha. According to Buddhist scholarship, the Buddha's teachings were oral and transmitted orally from one generation of his disciples to the next for a century or more after his death before being collected, redacted, and eventually written down in languages not spoken by the Buddha. As a result, it is widely agreed that 'these texts undoubtedly reflect the outcome of a long process of redaction, so that even in the case of the Sūtra and Vinaya material, we cannot be confident that what appears in them "is what the Buddha taught" (Jackson 2022: 28)

 $^{^{2}}$ I am, here, using Nāṇamoli and Bodhi's translation. The Pāli-English dictionary (PED) takes *apaṇṇaka* to have the sense of 'certain, true, absolute'. Thanissaro Bhikkhu translates it as 'safe-bet' or 'cover your bets' (2008); Jayatilleke translates it as the 'infallible dhamma' (1963:405); and Buddhagoşa is translated into English as defining it as 'unopposedly leading to what is doubtless, holding onto certainty' (MA 3:116, cited in Gamage 2013).

The Buddha first introduces two theses ('doctrines or views'), A and B, that 'some recluses and brahmins' are said to 'hold' and assert. In the first argument, the thesis, A, is:

There is nothing given, nothing offered, nothing sacrificed; no [karmic] fruit or result of good and bad actions; no this world, no other world; no mother, no father; no beings who are reborn spontaneously; no good and virtuous recluses and brahmins in the world who have themselves realised by direct knowledge and declare this world and the other world. (MN 60.5)

This was the thesis of Ajita Keśakambalī, a contemporary ascetic of the Buddha known for wearing a cloak of human hair (DN2.23). It seems like a radically nihilistic thesis that denies rebirth ('no other world'), the karmic efficacy of actions ('no fruit or result of good and bad actions'), the existence of 'this world', even the existence of mothers and fathers. According to Bhikkhu Bodhi, these are metaphorical claims about karmic rebirth. 'This world' partners with 'other world' as a joint reference to rebirth (1995: 1234). 'No mother, no father' is the denial that beings are reborn from causes and conditions, in contrast to the claim that 'no beings are reborn spontaneously.'³ Following Bodhi, I will treat A as a nihilistic thesis about karmic rebirth. The opposing thesis, B, is an affirmation of these same things:

There is what is given, and what is offered, and what is sacrificed; there is [karmic] fruit and result of good and bad actions; there is this world, and the other world; there is mother and father; there are beings who are reborn spontaneously; there are good and virtuous recluses and brahmins in the world who have themselves realised by direct knowledge and declare this world and the other world (MN 60.6)

I will jointly represent these claims as:

(1) Some recluses believe (and assert) A and some recluses believe (and assert) B

The Buddha then asks if the householders agree that these doctrines are 'directly opposed to each other' (MN60.6), which they do.

(2) A directly opposes B

A hidden premise, affirming epistemic uncertainty, is then implied:

³ This is my interpretation, but consistent with Bodhi's overall treatment of this thesis as concerned with karmic rebirth. Bodhi, himself, interprets 'no mother, no father' to mean that there are no karmic consequences of conduct towards one's mother and father (Bodhi 1995: 234). I find this interpretation unmotivated and less plausible than the one offered here.

(3) (*hidden premise*) Those to whom A and B are asserted have (a) no evidence to accept A as true and B as false (or vice versa) and (b) no reason to doubt the epistemic stance of those who assert A or B (it is assumed possible for a good recluse to gain knowledge of these facts, but there is no evidence to accept one recluse as expressing knowledge and the other falsehood).

This hidden premise is substantiated by the subsidiary argument provided later in the sutta. The Buddha uses the appellation 'the wise man' to represent his recommended position. In the final two arguments, he says that the 'wise man considers thus':

These good recluses and brahmins hold the view '[A]', but that has not been seen by me. And these other good recluses and brahmins hold the view '[B]', but that has not been known by me. If without knowing and seeing, I were to take one side and declare: "Only this is true, anything else is wrong", that would not be fitting for me. (MN60.31, 34)

This remark substantiates 3(a); the one to whom A and B is asserted has no evidence of the truth or falsity of A or B. It substantiates 3(b) by referring to both those who assert A and B as 'good recluses'; they are given equal standing in reliability and authority. It also clarifies what is considered relevant evidence; namely, what is 'seen' or 'known' directly. Canonically, the Buddha is taken to hold that knowledge is fundamentally a matter of experience and the ground on which other means of acquiring knowledge gain validity (Coseru 2013). He is also attributed the view that some matters are experientially verifiable only by someone who has gained proficiency in contemplative practice (a 'good recluse' or someone with the mediative attainments of a Buddha). This includes claims about karma and rebirth. These are the claims relevant to the Buddha's wager, the truth of which the householders lack evidence.

2.2 Wagering for A: an 'unlucky throw'

The Buddha then assesses whether one should accept A or B. He starts by considering the expected implications of accepting A. Given those expected implications, he argues that accepting A would be a bad bet (an 'unlucky throw') on two counts. He then considers the expected implications of accepting B and argues that accepting B would be a good bet (a 'lucky throw') on two counts. We are left to infer that this is what the householder should choose: to accept B.

Starting with A, the Buddha claims that we would expect someone who held this view to avoid 'wholesome states (conduct of body, speech, and mind)', and to engage in 'unwholesome

states (conduct of body, speech, and mind)' because they do not see the dangers of the latter or the benefits of the former for averting those dangers (MN60.7). Wholesome and unwholesome states are to be understood voluntaristically. In the Buddhist context, action $(k\bar{a}ma)$ ranges over conduct of the body, speech, *and mind*. Actions of the mind include intentional mental attitudes such as intentions (to act), hatred, greed, compassion, even the holding of views. While Buddhists tend not to justify this extended definition of 'action', one reason why mental attitudes are included in its scope is that they are considered to be within agential control (directly or indirectly) and so karmically efficacious; since we are responsible for holding and maintaining these attitudes, we experience karmic consequences in a subsequent life. A person who accepts nihilism about karmic rebirth, we are invited to suppose, does not believe their misconduct (of body, speech, or mind) will cause suffering in a subsequent life so won't have avoiding these consequences as reason to avoid misconduct and so can be expected to engage in misconduct. I represent this premise as:

(4) Those who accept A can be expected to engage in misconduct

Next comes a controversial move in the argument. The Buddha states that A is, in fact, a wrong view ('Since there actually is another world, one who holds the view 'there is no other world' has a wrong view' (MN60.8)) which conditions unwholesome conduct of body, speech, and mind (such as 'wrong intention, wrong speech, opposition to noble ones, convincing another to accept an untrue teaching, and self-praise and disparagement of others' (MN60.8)). I will later call this premise into question. Some Buddhist scholars speculate that it may have been inserted into the text by another at some later date (Thanissaro Bhikkhu 2008). For now, I represent it as:

5 A is a wrong view, and believing A conditions misconduct

Now comes the wager regarding A. The Buddha proposes that 'the wise man' draws out the implications of accepting A given two possible states of the world; one where A is true and one where A is false. He first considers the karmic consequences of accepting A, reasoning: If A is true and there is no karmic rebirth then, when the person who accepts A dies, they 'will have made himself safe enough' (MN60.9). This is because, given 4 and 5, it is expected that they would have engaged in misconduct for which there would be no bad karmic consequences. If A is false, however, and there is karmic rebirth, then 'on the dissolution of the body, after death, he will reappear in a state of deprivation, in an unhappy destination, even in hell.' (MN60.9) This is because, given 4 and 5, it is expected that the

person would have engaged in misconduct, for which there *would be* bad karmic consequences. The wise man is then said to consider the social implications of accepting A. He reasons that one who believes A will be 'censured by the wise as an immoral person' (MN60.9) because, given 4 and 5, it is expected that they would have engaged in misconduct:

whether or not the word of those good recluses and brahmins is true, let me assume that there is no other world: still this good person is here and now censured by the wise as an immoral person, one of wrong view who holds the doctrine of nihilism. But on the other hand, if there is another world, then this good person has *made an unlucky throw on both counts:* since he is censured by the wise here and now, and since on the dissolution of the body, after death, he will reappear in a state of deprivation, in an unhappy destination, in perdition, even in hell. (MN60.9, my italics).

Putting this together, the Buddha appears to think that accepting A has bad consequences, whether or not it is true, but that accepting A when it is false is an 'unlucky throw on two counts' because it has two kinds of bad consequence. Thus:

- (6) (Given 4 & 5) If I accept A, and A is true, then there will be bad social consequences but, when I die, there will be no bad karmic consequences
- (7) (Given 4 & 5) If I accept A, and B is true, then there will be bad social consequences and, when I die, there will also be bad karmic consequences

The Buddha then remarks that the person who accepts A, based on this reasoning, has 'wrongly accepted and undertaken this incontrovertible teaching in such a way that it extends only to one side and excludes the wholesome alternative.' (MN60.9). This is because they have not yet considered the other side of the wager; whether to accept B.

2.3 Wagering for B: a 'lucky throw'

The Buddha's reasoning about B is identical to A but with opposing evaluative claims. He starts by identifying an expected consequence of accepting B; namely, 'undertak[ing] and practice[ing] these three wholesome states, namely, good bodily conduct, good verbal conduct, and good mental conduct' (MN60.10) because one sees the dangers of misconduct, its negative consequences, and the benefits of good conduct to avoid those consequences.

(8) Those who accept B can be expected to engage in good conduct

Mirroring the controversial premise 5, the Buddha then claims that B is, in fact, a right view and that accepting B conditions good conduct of body, speech, and mind (MN6.10):

(9) B is a right view and accepting B conditions good conduct

Now comes the wager regarding B. The 'wise man', we are told, initially considers the karmic and social consequences that follow from accepting B when contextualised to two states of the world; one where B is true and one where B is false. The karmic consequences of accepting B in the world where B is true are deemed good, given the expectation stated in 8 and 9 that accepting B conditions good conduct; one will 'reappear in a happy destination, even in the heavenly realm' (MN60.12). The social consequences of accepting B in either world are also deemed good, (again) given the expectation stated in 8 and 9 that one would engage in good conduct; one will be 'here and now praised by the wise as a virtuous person' (MN60.12). The Buddha then remarks that the person who accepts B in the world where B is true 'has made a lucky throw on both counts' since they receive both the good social consequences and the good karmic consequences of the good conduct that their view conditions.

- (10) (Given 8 & 9) If I accept B, and A is true, then there will be good social consequences but, when I die, there will be no karmic consequences
- (11) (Given 8 & 9) If I accept B, and B is true, then there will be good social consequences and, when I die, there will also be good karmic consequences

The Buddha concludes that the one who accepts B 'has rightly accepted and undertaken this incontrovertible teaching in such a way that it extends to both sides and excludes the unwholesome alternative.' (MN60.12) The implied recommendation is that one should wager for, or accept, B rather than A since accepting B has at least one good consequence, if not two, and accepting A has at least one bad consequence, if not two. One should affirm rather than deny karmic rebirth, despite having no evidence of its truth, since to affirm it is beneficial and to deny it detrimental irrespective of its truth.

2.4 Karmic rebirth as key to the relevant opposed thesis pairs

The Buddha repeats this reasoning for two other opposed thesis pairs that relate to karmic rebirth: the affirmation or denial that (b) actions are karmically efficacious (MN60.13-20); and the affirmation or denial that (c) agency is possible and actions are not causally determined by 'destiny, circumstance, and nature' (MN60.22; MN60.21-28). The naked ascetic, Pūraņa

Kassapa, denied (b) (DN2.17-18). The ascetic Makkhali Gosāla denied (c) (DN2.20-21). Both were contemporaries of the Buddha. The Buddha recommends that one should bet on the affirmation rather than denial of (b) and (c).⁴

It matters that these theses relate to karmic rebirth. The Buddha's wager is only relevant to those in a position of uncertainty and unable to acquire direct knowledge themselves. Strictly speaking, Buddhists think *anyone* could gain direct knowledge about karma and rebirth if they have the time and discipline to follow the Buddha's teaching to completion. This is traditionally thought to require becoming a recluse and committing oneself to sustained periods of solitary meditation. In offering this wager to householders, the Buddha recognises that they are not in this epistemic position.⁵ The arguments also hinge on premises 4 and 8; the expectation that a person who accepts A or B will likely act in certain kinds of ways for reasons related to A or B. This makes sense if the relevant theses relate to karmic rebirth. The first argument in the *Apaṇṇaka Sutta* explicitly concerns affirming or denying karmic rebirth. We might view this as the master argument for the Buddha's wager. If the Buddha's wager fails for this first opposed thesis pair, then the rest will fail.

3. Wagering with Pascal

Does the Buddha's wager anticipate Pascal's wager? Pascal scholars identify at least four versions of Pascal's wager. I will now demonstrate that the Buddha's wager anticipates two versions of Pascal's wager and shares some important properties. While it does not anticipate the best-known or canonical form of the wager, I will suggest that it has properties that might allow a vector-value reformulation along the lines proposed by Hájek (2018).

3.1 Wagering as committing to live in accordance

⁴ The Buddha also considers two further opposed thesis pairs: the affirmation and denial of (d) whether it is possible to experience the immaterial realms (the highest sphere of rebirth), and (e) whether one can achieve *nibbāna*, the cessation of suffering, and thus be liberated from the cycle of rebirth. He presents a slightly modified argument for (d) and (e) that I call *the subsidiary argument*. It makes no mention of wagering but draws the same structural conclusion; that one should believe their affirmation rather than denial. The subsidiary argument shares premises 1-3 of the Buddha's wager but is aimed at the 'wise man' who is thinking of undertaking Buddhist practice (a potential recluse) but is unsure which thesis to take as the goal of their practice. While interesting, I will not analyse the subsidiary argument here.

⁵ This appears to contrast with the advice the Buddha offers to the householders in the $K\bar{a}l\bar{a}ma$ Sutta to whom, in similar epistemic circumstances and when presenting the same set of issues, he remarks: 'know for yourselves... then you should live in accordance with [those ideas]' (AN 65.5) There might be ways to reconcile this apparent inconsistency. It might be argued, for instance, that the Buddha in the $K\bar{a}l\bar{a}ma$ Sutta articulates an epistemic ideal, realisable if one abandoned the householder life and became a recluse. Whatever the explanation, the Buddha's wager in the Apaṇṇaka Sutta is best understood as a decision-making strategy for householders who want to live a householder life that accords with one or other of the theses in question.

Pascal claims in his *Pensées* that we are incapable of knowing 'either what He is or if He is' (Pascal 1670: 38). We cannot provide a decisive proof of God's existence; 'Reason can decide nothing here.' (1670: 38) He nevertheless insists that reason *can* decide that we should *wager* that God exists. What does Pascal mean by *wagering* for God?

There is a growing consensus that it does not mean simply *believing* in God (Hájek 2003; Bartha and Pasternak 2018; Franklin 2018; Oppy 2018). This is because, amongst other things, Pascal viewed the passions as obstacles to faith (Pascal 1670: 40) and was a Jansenist, so thought faith was, in some sense, 'a gratuitous and undeserved gift from God' (Franklin 2018: 30). He nevertheless maintained that one can wager for God in the sense of committing oneself to practices aimed at eliminating these obstacles and living the kind of life that helps foster belief in God (Hájek 2003: 28; Bartha & Pasternak 2018: 2). 'Endeavour to convince yourself' Pascal writes 'by acting as if [you] believed, taking the holy water, having masses said, etc' which will 'lessen the passions, which are your stumbling-blocks.' (1670: 40)

The Buddha does not analyse what is involved or required in order to 'accept and undertake' his incontrovertible teaching. There is little doubt, however, that he intends for his audience to 'live in accordance with' (AN 65.5) the doctrine or view accepted as a result. This is implied in premises 4, 5, 8 and 9, where certain (wholesome or unwholesome) conduct is expected to be conditioned by the accepted view. There is also evidence elsewhere of the Buddha recognising that rational considerations can be over ridden by competing influences (e.g., unwholesome mental states) and that non-rational methods (e.g., certain forms of meditation) can facilitate and support knowledge acquisition. He does not argue these points in this context, however.

3.2 Argument from Superdominance

Pascal scholars derive the first of four versions of Pascal's wager from the following passage in the *Pensées*:

Since you must choose, let us see which interests you least. You have two things to lose, the true and the good; and two things to stake, your reason and your will, your knowledge and your happiness; and your nature has two things to shun, error and misery. Your reason is no more shocked in choosing one rather than the other, since you must of necessity choose. This is one point settled. But your happiness? Let us weigh the gain and the loss in wagering that God is. Let us estimate these two chances. If you gain, you gain all; if you lose, you lose nothing. Wager, then, without hesitation that He is. (1670: 40)

Using the tools of decision theory, it is common to analyse this passage as a decision problem solved using dominance or superdominance reasoning (Hacking 1978; McClennen 1994; Saka 2002; Hájek 2012, 2018, 2022; Bartha and Pasternak 2018; Franklin 2018). In decision problems, actions and possible states of the world together determine the outcome for an agent. These outcomes are known as utilities. It is standard to represent actions, states, and utilities in the form of a decision matrix. Following Hájek (2022), we might represent the argument as follows:

	God exists	God does not exist
Wager for God	Gain all	Status quo
Wager against God	Misery	Status quo

Table 1. Pascal's Superdominance Wager

In decisions under uncertainty, the agent must choose between actions based solely on their utilities (without taking probabilities into consideration). A standard rule in decision theory is that we should choose an act that dominates all available actions, if such an act is available. An act (weakly) *dominates* another if it does *at least as well* as the other act in every possible state and *strictly better* in at least one state. In this decision matrix, wagering for God dominates wagering against God, so according to the rule one should wager for God. The decision-matrix also exhibits a stronger mode of dominance reasoning, which some call superdominance.⁶ An act *superdominates* another, according to one analysis, when each of its outcomes is at least as good as *all* of the outcomes of the other, *and* the outcome of at least one state is strictly better than that of the other.⁷ Wagering for God superdominates wagering against God since its

⁶ This term was coined by McClennen (1994) but there is some debate about whether his formulation best represents Pascal's reasoning in this first wager (see Hájek 2012, 2018).

⁷ This formulation of superdominence aligns with Hájek's (2012) notion of 'superdominance+' rather than McClennen's original formulation, which does not include the conjunct. As Hájek argues: "Pascal's case is better than [McClennen's original proposal]: winning everything is *better than* (not merely at least as good as) each of the outcomes associated with wagering against God" (2018: 125). While Hájek identifies several other versions of '(super)dominance' reasoning, they do not matter for the present argument. I do, however, distinguish superdominance from what Hájek goes onto call 'superduperdominance' reasoning. Many thanks to an anonymous reviewer for pressing me to clarify the reasoning involved here, and to Alan Hájek for helping me think through and articulate the position adopted in this paragraph.

outcomes (gain all, the status quo) are at least as good as those of wagering against God (misery, the status quo) and one of its outcomes (gain all) is strictly better than its alternative (misery). This gives even more reason to wager for God.

What is the decision problem in the Buddha's wager, what might the corresponding decision matrix look like, and what kind of reasoning does it employ to resolve it? The master argument for the Buddha's wager presents a choice between two theses; A, there is no karmic rebirth, and B, there is karmic rebirth. There are thus two relevant actions in the matrix: wagering for A (denying karmic rebirth) and wagering for B (affirming karmic rebirth). There are two relevant states of the world: one where A is true (there is no karmic rebirth) and one where B is true (there is karmic rebirth). The Buddha also discusses two kinds of outcomes: social outcomes (good and bad) and karmic outcomes (good and bad). He describes a good social outcome, SO, as being 'praised by the wise as a virtuous person' (MN60.12) and a bad social outcome, KO, is being reborn 'in a happy destination, even in the heavenly world.' (MN60.12) A bad karmic outcome is being reborn 'in a state of deprivation, in an unhappy destination, in perdition, even in hell.' (MN60.9) We might represent this in a decision matrix as follows:⁸

Table 2. The Buddha's Wager

	Karmic rebirth	No karmic rebirth
Wager for B (karmic rebirth)	good SO, good KO	good SO, no KO
Wager for A (no karmic rebirth)	bad SO, bad KO	bad SO, no KO

The states where there is and is not karmic rebirth are the counterparts of the states where God does and does not exist in Pascal's wager. Wagering for and against karmic rebirth, B and A, are the counterparts of wagering for and against God's existence. Just as wagering for God both dominates and superdominates wagering against God, just so wagering for karmic rebirth both dominates and superdominates wagering against it.⁹ Wagering for karmic rebirth, B, *dominates* wagering for no karmic rebirth, A, because the outcomes associated with B are at least as good as those associated with A in every possible state; and an outcome of B in at least one state is strictly better than that of A. Wagering for B also *superdominates* wagering for A

⁸ Jayatilleke (1962) presents a simpler decision matrix, with only social outcomes for the state where karmic rebirth is not, and karmic outcomes for the state where there is karmic rebirth. This inaccurately represents the Buddha's wager by removing the sense in which accepting B can be a lucky throw 'on two counts' (and vice versa for accepting A). It also matters for replies to objections that there are two utilities in each state.

⁹ I will go onto argue that the Buddha's wager also exhibits superduperdominance reasoning.

because the worst outcome associated with B (good SO, no KO) is at least as good as the best outcome associated with A (bad SO, no KO); and, if there is karmic rebirth, the result of wagering for B is strictly better than the result of wagering for A. Without explicitly telling us which to choose, the implied recommendation is that we should wager for B. The Buddha thus employs dominance and superdominance reasoning to recommend accepting karmic rebirth.

3.3 Argument from Dominating Expectation

The best-known version of Pascal's wager considers the expected utility or choice-worthiness of the relevant options. This involves considering their probabilities. It is preceded by an argument which introduces the following ideas:

- The unit of utility is 'lives' of a certain quality ('...if you had only to gain two lives, instead of one you might still wager... But there is an eternity of life and happiness' (Pascal 1670: 40));
- (2) The value of 'gain all' is infinity (an 'infinity of an infinitely happy life to gain' (Pascal 1670: 40)).¹⁰

Pascal goes onto reason:

But there is here an infinity of an infinitely happy life to gain, a chance of gain against a finite number of chances of loss, and what you stake is finite. It is all divided; where-ever the infinite is and there is not an infinity of chances of loss against that of gain, there is no time to hesitate, you must give all. (Pascal 1670: 40)

Is there evidence of expected utility reasoning in the Buddha's wager? The short answer is no, there is no evidence of the Buddha taking the probabilities (or chance) of either states or outcomes into account in presenting his wager or of him considering the possibility of infinite lives of infinite value. There are nevertheless some interesting similarities and differences in assumptions.

3.4 Unit of Utility

The Buddha does not explicitly say what the unit of utility is in his wager, but he does discuss two kinds of outcome: social consequences (being praised or censured) and karmic

¹⁰ There is some debate about how best to represent the utility of 'misery'; whether some negative infinite, representing the idea of eternal damnation, or some finite amount of punishment (Martin 1983; Sobel, 1996; Saka 2002; Hájek 2022).

consequences (heavenly bliss or the excruciating suffering of hell).¹¹ What unifies them as measurable on the same utility scale? The answer seems to be the pleasure and pain, happiness or suffering, they are expected to involve. This might seem to contrast with Pascal's focus on 'lives'. However, it matters to Pascal that the infinite lives one gains from wagering for God are infinitely *happy*. Moreover, in the Argument from Superdominance, Pascal explicitly includes 'your happiness' as part of the utility of wagering for God in the state where God exists, and 'misery' as the utility of wagering against God in the same state.

Does that mean they share the same unit of utility; some quantity of lives of some quality, happy or miserable? Not necessarily. There is reason to think that the Buddha may not agree to (a) treat happiness and suffering as qualities of *lives*, or (b) accept the hypothesis of an *infinity* of happy lives.

One of the Buddha's central teachings is that there is no 'self' (atta, P., ātman, Skt.). This is inconsistent with the idea of reincarnation when understood as the idea of some persisting entity (a self) continuing to exist in another life after a natural death. Indian Buddhists are at pains to show, however, that the Buddha's denial of self is consistent with the idea of rebirth determined by karma. (Finnigan 2022). According to one prominent account, persons are reducible to causally related configurations of physical and psychological elements and events; 'I' am 'reborn' in the sense that the chain of causal dependence that 'I' conventionally designates continues beyond the boundaries of a natural lifespan. For some Abhidharma Buddhists, this is an extension of a more general mereological nominalism that reduces temporally persisting 'whole' substances to an ultimate ontology of causally related momentary particulars (Siderits 2003, 2007). On this account, pleasure and pain, happiness and suffering, are trope particulars of limited duration rather than qualities or properties of persisting substances (Siderits 1997; Ganeri 2001). A Buddhist of this kind might affirm quantities of happiness and suffering as utilities in the above decision-matrix but without necessarily positing them as qualities of lives. This need not mean eliminating the concept of a 'life', or wholes more generally, from everyday discourse. Rather, it is to understand that such categorizations are merely a matter of social practice and linguistic convention.

¹¹ Strictly speaking, these two classes of outcomes need not be exclusive, nor do they necessarily divide into preand post- rebirth. Karmic outcomes can occur in the present life and can include social outcomes. The claims that are relevant to the Buddha's wager, however, concern *karmic rebirth*: the possibility of rebirth given the laws of karma. The Buddha also offers social outcomes in the present life as a contrast to karmic outcomes since he treats karmic and social outcomes as two distinct 'counts' with respect to which a wager can be lucky and unlucky.

The Buddha did speak of lives, in this conventional sense, and answered such questions as how many years is the lifespan in certain modes of rebirth. He may not have accepted the idea of *infinite* lives, however. One of his central teachings is that everything is impermanent. The possibility of eventually gaining liberation from the cycle of rebirth is also central to his soteriology. While the Buddha claimed that the cycle of rebirth (*saṃsāra*) can be indefinitely long and that some 'lives' can last extreme lengths of time and can involve extreme amounts of pleasure or pain (such as in the heavenly and hell realms), these 'lives' are assumed to eventually end. Moreover, if one happens to be reborn in a life that affords the opportunity to learn from a Buddha and if, in that life, one practices that teaching to completion, it is assumed to be possible to bring the entire sequence of lives to an end.

3.5 A vector-value reformulation

It might seem that the quantity of pleasure caused by social praise, and suffering caused by social censure, in the Buddha's wager is vastly outweighed by the aeons upon aeons of bliss or excruciating suffering expected to result from being reborn in a heavenly or hell realm, respectively.¹² Given this, we might expect these kinds of outcome to be weighted differently in the decision-matrix. The Buddha appears to treat them on a par, however. An outcome with good social and karmic outcomes or bad social and karmic outcomes is considered to be a lucky or unlucky throw 'on two counts' and thus win-win or lose-lose. It is the fact and quantity of *kinds* of outcomes (good or bad) that is relevant to the Buddha's wager, not their magnitude.

We might nevertheless try to capture these evident differences in magnitude with a vectorvalue reformulation of the Buddha's wager. This would parallel Alan Hájek's reformulation of the Argument from Dominating Expectation (Hájek 2018).¹³ Hájek invites us to suppose that there are two sorts of value in Pascal's wager: heavenly value and earthly value.

¹² While the numbers of how long these lives last are not consistent or accurate, they all express a very long duration of time (Braarvig 2009). As an example, consider the following exchange in the *Kokālita Sutta*:

Venerable sir, how long is the life span in the Paduma hell? The life span in the Paduma hell is long, bhikkhu. It is not easy to count it and say it is so many years, or so many hundreds of years, or so many thousands of years, or so many hundreds of thousands of years. Then is it possible to give a simile, venerable sir? It is possible, bhikkhu. Suppose, bhikkhu, there was a Kosalan cartload of twenty measures of sesamum seed. At the end of every hundred years a man would remove one seed from there. That Kosalan cartload of twenty measures of sesamum seed might by this effort be depleted and eliminated more quickly than a single Abbuda hell would go by. Twenty Abbuda hells are the equivalent of one Nirabbuda hell; twenty Nirabbuda hells are the equivalent of one Ababa hell; twenty Ababa hells are the equivalent of one Atata hell; twenty Kumuda hells are the equivalent of one Sogandhika hells are the equivalent of one Kumuda hell; twenty Kumuda hells are the equivalent of one Pundarīka hell; and twenty Pundarīka hells are the equivalent of one Paduma hell." (SN 1.6.10)

¹³ Thank you to an anonymous reviewer for suggesting this parallel.

The expected utility is a two-dimensional (vector) quality, of the form (x,y). Salvation has 1 unit of heavenly value, the maximal amount. A probability p of salvation corresponds to p units of "heavenly expectation." Suppose that any increase in heavenly expectation trumps any increase in earthly expectation. We have a lexicographic ordering: when choosing between two actions, we compare first their heavenly expectation; if these are tied, we then prefer the action with the greater earthly expectation. (2018: 138)

Hájek demonstrates that wagering for God beats wagering against God on this reformulation, and is valid; even a tiny chance of heavenly expectation is preferable to any finite amount of earthly expectation.

The decision matrix for the Buddha's wager is already presented in a vector form, with the utilities of social outcomes (SO) and karmic outcomes (KO) of the form (x,y). The qualifiers, 'good' and 'bad', indicate whether these utilities have positive or negative value. Following Hájek, we might argue that good-KO has 1 unit of positive value, the maximal amount, and a probability p of good-KO corresponds to p units of good karmic expectation.¹⁴ We might also suppose that any increase in good karmic expectation trumps any increase in good social expectation. This would give a lexicographic ordering: when choosing between two actions, we compare first their karmic expectation; if these are tied, we then prefer the action with the greater social expectation. The decision matrix would look something like the following:

	Karmic rebirth	No karmic rebirth
Wager for B (karmic rebirth)	good SO, 1	good SO, 0
Wager for A (no karmic rebirth)	bad SO, 0 (or -1) ¹⁵	bad SO, 0

Table 3. A vector-value reformulation of the Buddha's wager

Akin to wagering for God in Hájek's vector-value reformulation, wagering for B (karmic rebirth) has good karmic expectation. Unlike Hájek's reformulation, the vector distinction does

¹⁴ In actual fact, good karmic outcomes are not all equivalent but can be comparatively ranked since one can be reborn into one of a variety of heavenly realms with their own distinct modes and durations of pleasure (and the equivalent for bad karmic outcomes; there are numerous hell realms into which one can be reborn, each with its own distinct mode and duration of excruciating suffering). Precise information about karmic outcomes is not available in the context of the Buddha's wager, however, and so I set this complexity aside.

¹⁵ The disjunction about how best to represent bad karmic outcomes (0 or -1) parallels the same ambiguity as in Pascal's wager about how best to represent misery; whether as the negative counterpart of the alternative (gain all or good karmic outcomes) or as some finite value.

no work in the Buddha's wager since wagering for B also has good social expectation. This beats wagering for A (no karmic rebirth) not because even a small quantity of good karmic outcomes will be of an order of magnitude greater than any amount of good social outcomes but because good karmic outcomes and good social outcomes trump bad. Wagering for B (karmic rebirth) nevertheless uniquely maximises expectations and is the rational choice.

3.6 Argument from Superduperdominance

Hájek (2012) prominently argues that Pascal's Argument for Superdominance and the Argument from Dominating Expectation are invalid. He nevertheless identifies a fourth wager in the following passage of the *Pensées* which he claims is valid:

Now, what harm will befall you in taking this side? You will be faithful, humble, grateful, generous, a sincere friend, truthful. Certainly you will not have those poisonous pleasures, glory and luxury; but will you not have others? I will tell you that you will thereby gain in this life, and that, at each step you take on this road, you will see so great certainty of gain, so much nothingness in what you risk, that you will at last recognise that you have wagered for something certain and infinite, for which you have given nothing. (Pascal 1670: 40)

Hájek takes the reference to 'certainty of gain' in this passage to revert the wager back to a form where utilities alone settle that you should wager for God, without considering their probabilities. The passage also changes the utility of wagering for God in the state where God does not exist from the status quo to some finite gain (acquiring such virtues as faithfulness, humility etc.). Hájek treats this outcome as including the earthly happiness element of the status quo because 'nothing' is risked or lost in wagering for God. With these ideas in place, he analyses the passage as an argument from *superduperdominance*: 'the worst outcome of wagering for God [happiness plus some finite gain] is *strictly better* than the best outcome associated with wagering against God [earthly happiness]. This yields a valid argument for wagering for God, even if we allow that God's existence might be impossible.' (2012: 9).

If we reflect back to the decision matrix for the Buddha's wager, we can see that wagering for B (affirming karmic rebirth), the counterpart of wagering for God, also *superduperdominates* its relevant alternative. The worst outcome for wagering for B (good SO, no KO) is strictly better than every outcome associated with wagering for A. If the Argument for Superduperdominance renders Pascal's wager valid, the same can be said for the Buddha's wager.

4. Objections to the Buddha's Wager

Is the Buddha's wager a good wager? There are several things this could mean. Pascal scholars view this as the question of whether rationality requires us to bet on the existence of God, and bet in the way Pascal recommends. We have demonstrated that the Buddha, like Pascal, uses dominance, superdominance, even superduperdominance, reasoning to recommend accepting that there is karmic rebirth. Does rationality require us to accept his recommendation? One way to approach this question is to examine whether it can avoid (modified versions of) well-known objections to Pascal's wager. I will introduce three of the most prominent objections and demonstrate that the Buddha's wager can avoid the first two but is subject to a version of the third. I will also demonstrate that it faces two objections of its own. Together, they give reason to think we are not, in fact, rationally required to accept the thesis it recommends.

4.1 Undefined probability of God's existence

In the Argument from Dominating Expectation, Pascal assigns the state where God exists either probability ¹/₂ or some finite positive probability. Some have argued that to assign God *any* probability is inconsistent with the framing assumptions of the wager; that we have no evidence whatsoever to decide one way or the other. The Buddha's wager, as well as the first and fourth versions of Pascal's wager, are well placed with respect to this objection since they don't assign probabilities to the relevant acts or states and rely on dominance, superdominance, or superduperdominance reasoning.

4.2 Zero probability for God's existence

Strict atheists insist on assigning probability 0 to God exists (Rescher 1985; Oppy 1990). Some maintain that reason alone *can* settle that God does not exist. This would mean disregarding the entire 'God exists' column in the decision matrix. It would then follow that wagering for and against God have the same outcomes (viz. the status quo), and there would thus be no good reason to wager for God rather than against.¹⁶

¹⁶ As an aside, the Buddha and later Buddhist philosophers were atheists about a creator God, and provide rational arguments against his/her existence (Patil 2009). While many Buddhists believe in a cosmology of deities, gods, and other divine beings, they deny any rational need to posit a God as first cause of all existing things. These arguments were not available to the householders that are the target audience of the Buddha's wager, however.

Since the Buddha's wager does not involve assigning probabilities, it might seem to avoid this objection. One might counter, however, that it *implicitly* assumes that the relevant states in its decision matrix have some finite positive probability. If so, it is possible for someone to assign karmic rebirth probability 0 and deny its possibility outright. But notice how strong a commitment this would have to be.¹⁷ Many non-Buddhists think the idea of karmic rebirth is highly unlikely. Some even argue that it is inconsistent with mainstream physics (Flanagan 2011). But to assign a thesis probability 0 is to be absolutely certain of its falsity. Physics is an incomplete science. While the probability might be low that karmic rebirth will turn out to be consistent with a completed physics, few would be so dogmatic as to assert this with certainty.

Even if someone were to assign probability 0 to karmic rebirth, the Buddha's wager would not thereby be rendered unsound. This is because, even if one excluded the entire 'karmic rebirth' column from the decision matrix, wagering for karmic rebirth would have better *social* consequences than wagering for no karmic rebirth. In this respect, it is akin to the fourth version of Pascal's wager, which recognises virtue acquisition as a consequence of wagering for God.

4.3 The Many Gods objection

In wagering for or against the existence of God, Pascal appears to have in mind the Catholic (or, at least, Judeo-Christian) conception of God. Some argue that, properly speaking, the same considerations in the wager should apply to all other theistic conceptions and so the decision matrix should include these options. As Diderot is frequently quoted to have remarked: an 'imam could reason just as well this way' (cited in Hacking 1978). Pascal cannot rationally require wagering for the Catholic God when there are other theistic options that need also to be weighed (Oppy 1996, 2018; Saka 2001; Hájek 2022).

A version of the Many Gods objection might be directed against the Buddha's wager. Call it the Many Rebirths objection. Buddhism is not the only religion to accept a cosmology of reincarnation or rebirth or to view this process as driven by karma. It shares this view with Hinduism, Jainism and Sikkhism. One might argue that the opposing thesis pairs in the Buddha's wager do not exclude these alternative characterisations, and so the Buddha's wager does not rationally require belief in a distinctively Buddhist view of karmic rebirth.

Some Pascal scholars respond to the Many Gods objection by insisting that the wager was directed towards a specific audience, which excludes other theistic options. According to

¹⁷ Hájek (2012) makes an analogous point in relation to Pascal's wager.

Franklin, Pascal presents a decision-problem for educated 17th century Parisians for whom only certain considerations were genuine options (Franklin 2018). While Pascal's reasoning might not rationally require *us* (educated 21st century philosophers and global citizens) to wager in the way it recommends, it might nevertheless have required *them*. A parallel move might be made in response to the Many Rebirths objection. The householders to whom the Buddha's wager was addressed were considering which views about karmic rebirth to accept of those espoused by the ascetics who happened to wander into their village (e.g. Ajita Keśakambalī, Pūraņa Kassapa, Makkhali Gosāla) Of *those* options, for *those* householders, one might argue, it was rational to wager for karmic rebirth than its denial.

This response to the Many Gods objection is contested. Paul Saka (2001, 2018) argues that more options were available to educated 17th century Parisians than represented in Pascal's wager. 'Pascal's peers knew of Greco-Roman paganism, Judaism, Islam, new-world paganism, and multiple brands of Protestantism; they knew of alleged Satanism, from witchcraft trials and stories of the devil-worshipping Templars; and they knew, from their acquaintance with the foregoing, that still other religions could readily be hypothesised.' (2018: 190). I will not attempt to settle this issue, nor speculate about whether similar things might be said about the brahmin householders in ancient India. Even if we accept that these wagers were intended for specific audiences with restricted sets of genuine options, we can still ask whether they have purchase beyond these restricted contexts. Do these arguments also rationally require *us*, educated 21st century philosophers and global citizens, to accept their recommendations? In response to this more general question, the Many Gods and Many Rebirths objections hold. Insofar as there are more genuine options than these wagers consider, we are not rationally required to accept the views they recommend.

4.4 Redundancy objection

The Buddha's wager contains two controversial premises; 5 and 9. They assert that A is false and B is true and that accepting A and B condition misconduct and good conduct respectively. These premises are problematic because the wager is contextualised to householders, who lack evidence to establish which of the opposing thesis pairs, A or B, is true and don't know whether to accept A or B. Premises 5 and 9 not only violate this epistemic context, they also render the Buddha's wager redundant. What need is there to appeal to consequences of accepting A or B to decide whether to accept A or B if one already knows that A is false and B is true? I believe that these premises can and should be omitted without harm to the Buddha's wager. Some might argue that this omission can be justified if we accept the scholarly view that they were inserted by others and not part of the original argument. This might be true since we know that the teachings recorded in the suttas were heavily redacted (Jackson 2022). But it could also be argued that contemporary scholars identify these passages as insertions *because* they so obviously undermine the wager. Without further evidence, it is difficult to settle the order of inference.

We might nevertheless speculate *why* these premises were inserted; what rational purpose were they thought to serve? One possibility is that they were intended to bolster the expectations asserted in premises 4 and 8. The Buddha's wager hinges on these premises; it is only because those who accept A or B are expected to engage in certain kinds of conduct, respectively, that accepting A or B has the karmic and social consequences relevant to the wager. It may have been thought that premises 5 and 9 substantiate these expectations, by asserting that accepting A and B *in fact* condition misconduct and good conduct, respectively, and exemplifying this fact by describing chains of the relevant kind of conduct. If this were the intended purpose of these premises, however, they do not succeed. Why is it reasonable to expect that someone who denies karma and rebirth will engage in misconduct (and vice versa)? Because they don't anticipate bad karmic outcomes. It doesn't help to add that denying karma and rebirth is a form of misconduct that conditions other forms of misconduct.

4.5 Unnecessary expectations

The Buddha's wager hinges on premises 4 and 8. It is only because those who accept A or B are expected to engage in certain kinds of conduct, respectively, that accepting A or B has the karmic and social utilities represented in the decision matrix. This expectation might seem reasonable but does not necessarily follow. While it is true that the person who denies karmic rebirth will not have karmic consequences as a reason to act well and avoid misconduct, they could still choose to act well and avoid misconduct for other reasons— for example, that they would thereby be praised by the wise, which is a good social consequence. In such case, the social utilities in the decision matrix would be the same whether one accepted or denied karmic rebirth. The karmic outcomes would also be the same since the conduct of the person who denies karmic rebirth is the case. Since accepting A has the same utility as accepting B, irrespective of whether karmic rebirth is the case, accepting B is not rationally required.

It could be countered that one who accepts B nevertheless has (at least) *one more* reason to engage in good conduct than misconduct and so it is more probable that their action will have good social and karmic outcomes. This introduces probabilities into the decision-theoretic evaluation of the matrix, which the Buddha's wager does not take into account. It is also complicated by the fact that the denier of karmic rebirth could have *many other* reasons for acting well that do not necessarily reduce to matters of social praise and censure. The Buddha's wager nevertheless *does* give them one more reason to act well which, even if not decisive, is surely a good thing.

5. Conclusion

The *Apaṇṇaka Sutta* contains an argument for belief in karma and rebirth that Buddhist scholars claim anticipates Pascal's wager. I called this the Buddha's wager and demonstrated that it does indeed anticipate two versions of Pascal's wager; the Argument from Superdominance and the Argument from Superduperdominance. This is significant. Until now, Arnobius has been identified as the earliest precursor of the dominance and superdominance versions of Pascal's wager (Franklin 2018: 27). The Buddha predates Arnobius by about seven hundred years. His teachings thus likely contain the earliest textual example of dominance reasoning.

The claim that the *Apannaka Sutta* anticipates Pascal's wager is weakened by the fact that it does not anticipate the Argument from Dominating Expectation, which is its canonical form. I have nevertheless identified some important similarities (and differences) in assumptions about the relevant unit of utility. I have also suggested that the Buddha's wager has properties that might allow a vector-value reformulation along the lines proposed for Pascal's canonical wager by Hájek (2018).

Is the Buddha's wager a good bet? If by this we are asking whether we are rationally required to accept its recommendation, the answer is no. While its superduperdominance reasoning might be valid, I have shown it to be unsound. This is not to deny that accepting karmic rebirth might provide motivating reason to act well and avoid misconduct to those who need it. Nor is it to deny that such actions might 'lead to [one's] welfare and happiness for a long time.' (MN60.4) Rather, it is to conclude that the Buddha's 'incontrovertible teaching' is not, in fact, incontrovertible.

Abbreviations

AN	Anguttara Nikāya of The Buddha
DN	<i>Dīgha Nikāya</i> of The Buddha
MN	<i>Majjhima Nikāya</i> of The Buddha
Р.	Pāli
Skt.	Sanskrit
SN	Saṃyutta Nikāya of The Buddha
MN P. Skt.	<i>Majjhima Nikāya</i> of The Buddha Pāli Sanskrit

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