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# Theravāda Buddhism, Finite Fine-grainedness, and the Repugnant Conclusion

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# Theravāda Buddhism, Finite Fine-grainedness, and the Repugnant Conclusion

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## Abstract

According to Finite Fine-grainedness (roughly), there is a finite sequence of intuitively small differences between any two welfare levels. The assumption of Finite Fine-grainedness is essential to Gustaf Arrhenius's favored sixth impossibility theorem in population axiology and plays an important role in the spectrum argument for the (Negative) Repugnant Conclusion. I argue that Theravāda Buddhists will deny Finite Fine-grainedness and consider the space that doing so opens up—and fails to open up—in population axiology. I conclude with a lesson for population axiology that generalizes beyond the Buddhist context: to plausibly deny Finite Fine-grainedness, we must locate a

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welfare good—such as the good of awakening (*bodhi*)—with some rather esoteric axiological properties.

## Introduction

Compare an outcome in which one billion people are flourishing in a utopia to an outcome in which those same billion people are suffering in a dystopia. The former outcome is better than the latter. Better in what sense? Better impartially—“from the point of view of the universe.”<sup>2</sup> *Population axiology* asks how we should evaluate outcomes that differ with respect to their size (how many sentient beings they contain) and/or welfare distribution (how well-off each being is).<sup>3</sup> Should we evaluate outcomes by their total welfare (the sum total of well-being they contain)? Average welfare? Something else?

Why should (Theravāda) Buddhists care about population axiology? Loving-friendliness (*mettā*) and compassion (*karuṇā*) are core (Theravāda) Buddhist virtues. They are aimed at promoting the welfare and reducing the suffering of sentient moral patients, respectively. (Buddhaghosa writes that “loving-kindness is characterized here as promoting the aspect of welfare. Its function is to prefer welfare” (*Visuddhimagga* 9.93 in Ñāṇamoli 311).) But what does it mean to “promote” or to “prefer” welfare? Should the virtuous (Buddhist) agent who intends to promote welfare attempt to maximize *total* welfare, maximize *average* welfare, or do something else entirely? Can one promote welfare by *adding* well-off beings to the world? We must take a stand on these and related questions to

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<sup>2</sup>This famous phrase is due to Sidgwick (1907).

<sup>3</sup>Population axiology is also concerned with questions about identity (e.g., does it make sense to compare population A to population B if there’s someone who exists in A but not in B?), but these questions will not feature in our discussion. See Greaves (2017) for an introduction to population axiology.

have any precise understanding of welfare promotion—i.e., of the part of morality that is concerned with *beneficence*, which is clearly something Buddhists care about.

Central to population axiology is the concept of a *lifetime welfare level*, or welfare level for short. A being's welfare level represents how well her life has gone *for her*.<sup>4</sup> To use a Buddhist example, a life spent as a god (*deva*) in a heavenly realm would correspond to a higher welfare level than a life spent suffering in a hell realm.<sup>5</sup> According to:

*Finite Fine-grainedness* (roughly), there is a finite sequence of intuitively small differences between any two welfare levels.<sup>6</sup>

It matters whether Finite Fine-grainedness is true for at least two reasons. First, Gustaf Arrhenius (“Impossibility”) assumes Finite Fine-grainedness in the proof of his most influential impossibility theorem in population axiology. The theorem shows that, under certain assumptions (including

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<sup>4</sup> Our *welfare* is what we seek to promote when we act in our own *self-interest*. Formally, a welfare level is an equivalence class on the set of metaphysically possible lives with respect to the relation “has equal welfare to” (cf. Thomas 811 and Arrhenius, “Conflict-of-Value” 466n18).

<sup>5</sup> Throughout I use the Romanized Pāli for Buddhist terms. I also assume that (Theravāda) Buddhists can recognize the existence of positive welfare levels—which correspond to lives that are worth living for the beings leading them—despite what may be suggested by the simplistic rendering of the First Noble Truth as “life is suffering.” I offer a tentative defense of the existence of positive welfare levels from a Buddhist perspective in Baker “Buddhism and Utilitarianism” and a full defense in Baker “Buddhism Without Re-birth.”

<sup>6</sup> Arrhenius (“Different-Number-Based” 171 and “Conflict-of-Value” 467) and Thomas (815) understand Finite Fine-grainedness as referring to small evaluative differences, whereas Thornley (“Dilemma” 403) understands it as referring to small descriptive differences. This distinction will not matter for our purposes, for the Buddhist view we shall presently consider denies both formulations. Note also that ‘Finite Fine-grainedness’ is used interchangeably with ‘Small Steps’ in the literature.

Finite Fine-grainedness), no population axiology can satisfy each of five intuitively compelling adequacy conditions. If we deny Finite Fine-grainedness, however, we can give a population axiology that satisfies each adequacy condition (Thornley, “Impossibility,” Carlson, “Impossibility Theorems”)—at least in cases of choice under certainty.<sup>7</sup> Second, the implicit assumption of Finite Fine-grainedness supports the infamous spectrum argument (introduced below) for the:

*Repugnant Conclusion*, which says that for any number of lives at a very high positive welfare level, there is a number of lives at a very low positive welfare level that would be better.<sup>8</sup>

Many find Finite Fine-grainedness compelling. Teruji Thomas remarks that he is “not. . . optimistic” about denying Finite Fine-grainedness (830); Gustaf Arrhenius suggests that “it is quite hard to deny the intuitive force” of Finite Fine-grainedness (“Conflict-of-Value” 467); and Elliott Thornley considers Finite Fine-grainedness “difficult to deny” (“Dilemma” 404). I will argue that from within their system, Theravāda Buddhists can plausibly deny that the positive welfare levels are fine grained.<sup>9</sup> However, I will

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<sup>7</sup> See Thornley “Impossibility” for an extension of Arrhenius’s impossibility results to choice under risk, which does not depend on Finite Fine-grainedness.

<sup>8</sup> Positive welfare levels correspond to lives that are good, on the whole, for the beings leading them. See Parfit’s *Reasons and Persons* for the classic introduction of the Repugnant Conclusion, which is surprisingly difficult to avoid. In addition to the spectrum argument given below in the main text, see Ng, Carlson “Mere Addition,” Huemer, and Budolfson and Spears for other arguments for the Repugnant Conclusion.

<sup>9</sup> Theravāda Buddhism is the oldest surviving Buddhist practice tradition and the predominant form of Buddhism in Southeast Asia. I focus on the Theravāda for analytical tractability and presentational simplicity. Buddhism is a big tent; different Buddhist traditions understand the awakening process differently. Focusing on the Theravādin model of awakening (*bodhi*, on which more below) will allow for greater clarity and precision than attempting to treat Buddhism in general terms. I do not suggest, however, that Theravāda Buddhism is the only school that might deny Finite Fine-grainedness.

also argue that they *cannot* plausibly deny that the *negative* welfare levels are fine grained. I will then consider the implications of the resulting picture for population axiology.

Here's the plan, in a bit more detail. I'll begin by offering a Theravādin rationale for denying the fine-grainedness of the positive welfare levels. The key move will be to appeal to the axiological properties of awakening (*bodhi*). I'll then argue that denying the fine-grainedness of the positive welfare levels gives Theravādins a plausible defense against the spectrum argument for the Repugnant Conclusion. Switching gears, I will next consider the negative welfare levels and, correspondingly, the Negative Repugnant Conclusion, which I introduce below. I'll argue that Theravādins cannot plausibly deny the fine-grainedness of the negative welfare levels and, consequently, that they lack a defense against the spectrum argument for the Negative Repugnant Conclusion. Finally, I conclude by drawing a lesson for population axiology that generalizes beyond the Buddhist context.

### Against Finite Fine-grainedness

Finite Fine-grainedness says that there is a finite sequence of intuitively small differences between any two welfare levels. More precisely, according to:

*Finite Fine-grainedness*, for any two welfare levels  $w_0 > w_n$ , there is a finite decreasing sequence  $w_0 > w_1 > w_2 > \dots > w_n$  such that the difference between terms that are adjacent in the sequence is small, in a sense that is primitive but intended to be intuitive (paraphrasing Thomas 815n13).

What does this mean? Imagine two lives, one *excellent* (=df at a very high welfare level) and one *terrible* (=df at a very low welfare level). Finite

Fine-grainedness says that there is a sequence of *metaphysically possible* lives that stretches from the excellent life to the terrible life. There is a finite—though possibly very large—number of lives in the sequence; and each successor life differs from its predecessor only in a small way. An example of a difference that is *small* in the intended sense is the addition or subtraction of a second of pleasure or pain. Thus, Finite Fine-grainedness “just rules out that there are . . . big “jumps” or “holes” in the order of welfare levels” (Arrhenius, “Conflict-of-Value” 467n20).<sup>10</sup>

From within their system, Theravāda Buddhists can plausibly deny the fine-grainedness of the positive welfare levels (which correspond to lives that are good, on the whole, for the beings leading them).<sup>11</sup> For on their model of the path to awakening (*bodhi*, alt. trans. “enlightenment”), there is at least one significant discontinuity as we ascend the welfare levels. Here’s a brief explanation of Theravāda Buddhism that will help us to see this. According to the Theravāda, attaining awakening is a matter of aligning our experience of reality with the true metaphysics. On the Theravādin picture, each of us takes herself to be a substantial, unitary, enduring subject-agent—a self (*attan*)—in a world of enduring substances. In fact, however, each of us is a causally-interrelated series of impersonal mental and physical events (cf. Hume and Parfit *Reasons and Persons*), situated in a world that is similarly characterized by impermanence (*anicca*) and the absence of any personal selves (*anattā*).<sup>12</sup> The mismatch between

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<sup>10</sup> I take it that Arrhenius is not using “jump” or “hole” here in any technical sense, but rather as an intuitive illustration of Finite Fine-grainedness. For further characterization of and intuitive motivation for Finite Fine-grainedness, see Thomas (826-827) and Arrhenius (“Conflict-of-Value” 467), both of whom I draw on in my exposition.

<sup>11</sup> Again, I offer a tentative defense of the existence of positive welfare levels from a Buddhist perspective in Baker “Buddhism and Utilitarianism” and a full defense in Baker “Buddhism Without Rebirth.”

<sup>12</sup> Is the non-self (*anattā*) thesis incompatible with the assumption that populations are sets of lives that are individuated by the beings leading them—an assumption that is



the manifest image and the metaphysical truth results—by way of egocentric craving (*taṇhā*)—in dissatisfaction (*dukkha*, alt. trans. “suffering,” “unease”) that is said to permeate our lives in various ways. The goal of Theravāda Buddhist practice is to remove this dissatisfaction by aligning our experience of the world with what is the case. In advanced stages of Theravādin practice, this is ostensibly accomplished through insight meditation (*vippsanā*), wherein, *inter alia*, one uproots the delusion (*avijjā*) that one is a self (*attan*), thereby attaining an awakening (*bodhi*) to the way things are and, concomitantly, *nibbāna* (lit. “blowing out”).

Buddhaghosa, a fifth century CE Theravādin philosopher-monk, offers a canonical account of the path to awakening in his *magnum opus*, *The Path of Purification (Visuddhimagga)*. On this account, the Buddhist adept advances through seven successive purifications (*visuddhi*). Of interest in the context of Finite Fine-grainedness is that the fourth and seventh purifications represent paradigm shifts in the adept’s phenomenology, which plausibly correspond to significant increases in welfare.

In the fourth purification, the adept gains direct insight into the fact that the law of mutually dependent origination (*paṭiccasamuppāda*) applies just as much to herself as it does to other phenomena. Dependent origination says that no phenomenon exists independently of all others; instead, every phenomenon exists only through a multitude of dependence relations (some causal, some mereological, others conceptual) to other phenomena (Garfield, *Buddhist Ethics* 3). Direct, nonconceptual acquaintance with the fact that she is dependently originated is supposed to

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standard in population axiology (see e.g. Thornley, “Dilemma” 397)? No, because (Theravāda) Buddhists accept the conventional reality of persons and other beings (see e.g. Westerhoff and Garfield *Losing Ourselves*), which is all we need to do ethics—or at any rate, all Buddhists think we need.

detract significantly from—but not erase entirely—the adept’s sense of being a self (*attan*) in the manner described above.<sup>13</sup> This insight is understood as an inflection point on the Buddhist path, for it marks the transition from a merely intellectual understanding of dependent origination and selflessness (*anattā*) to an understanding of these metaphysical truths that is gained via direct experience (Gethin 189).

The seventh purification is the final awakening event. On this it is worth quoting Rupert Gethin for a description:

. . . in a moment [the mind] directly sees and understands suffering, its arising, its cessation, and the way leading to its cessation [i.e., the Fourth Noble Truths, which constitute the doctrinal heart of Buddhism]; it directly sees and experiences *nirvāṇa*. According to the Theravādin sources this understanding quite literally occurs in one moment: the conditioned world that is *saṃsāra* (suffering and its cause) and *nirvāṇa* and the transcendent path (cessation and the path leading to cessation) are finally fully known in a single flash of transcendent insight and peace (192).

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<sup>13</sup> Buddhaghosa writes, “He sees no doer over and above the doing, no experiencer of the result over and above the occurrence of the result” (*Visuddhimagga* 19.19). Rather, he sees that “Phenomena alone flow on / . . . while [action] and result / Thus causally maintain their round” (*Visuddhimagga* 19.20). Inter alia, this insight is supposed to dissolve questions about one’s future, such as whether one will be alive, and if so, in what state (*Visuddhimagga* 19.6). It is fascinating to compare this consequence of insight meditation with Parfit’s famous reflections on his own death in *Reasons and Persons*: “After my death, there will be no one living who will be me. I can now redescribe this fact. Though there will later be many experiences, none of these experiences will be connected to my present experiences by chains of such direct connections as those involved in experience-memory, or in the carrying out of an earlier intention. . . My death will break the more direct relations between my present experiences and future experiences, but it will not break various other relations. This is all there is to the fact that there will be no one living who will be me. Now that I have seen this, my death seems to me less bad” (281).

With these accounts of the fourth and seventh purifications in hand, it is tempting to reason as follows: Finite Fine-grainedness says that we can get from any welfare level to any other in a finite number of intuitively small steps. But compare the welfare level of an unawakened person leading a decent secular life to the welfare level of a fully-awakened person leading a tranquil monastic life. Can we get from the welfare level corresponding to the secular life to the welfare level corresponding to the awakened life in a finite number of small steps? No, because one step along that path will necessarily involve the attainment of the seventh purification, which is not a small step. Similarly, compare the welfare level of a person who is faring well, relative to having attained all and only the first three purifications, to the welfare level of a person who is faring well, relative to having attained all and only the first four purifications. Can we get from the former welfare level to the latter in a finite number of small steps? Again, no, for getting from the former to the latter will necessarily involve the attainment of the fourth purification, which, although not as monumental as the seventh, is not a small step in the sense intended throughout. Therefore, Theravādins will deny Finite Fine-grainedness.

This line of reasoning is too quick.<sup>14</sup> However, the way in which it goes wrong is instructive; and it contains an insight to which we will return at the end of the section. To see the mistake, consider an awakened life and a worldly life. Finite Fine-grainedness says that there is a sequence of metaphysically possible lives stretching from the awakened life to the worldly life such that the welfare levels that map one-to-one onto these lives slightly diminish at every step. The preceding paragraph claims that there is a sequence of lives stretching from the awakened life to the worldly life that does not have this structure, for in this sequence, some successive lives reach successive purifications, with the fourth and seventh purifications representing welfare discontinuities. But even if this

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<sup>14</sup>I thank Gustaf Arrhenius for pointing this out to me.

sequence is not fine-grained, it does not follow that there is no *other* sequence stretching from the awakened life to the worldly life that *is* fine-grained. And all we need for Finite Fine-grainedness is that there is one such sequence.

One of the most common and intuitively powerful ways to argue for Finite Fine-grainedness is to start with an arbitrarily excellent life and construct a sequence of lives via the successive addition of one-second pain increments.<sup>15</sup> Thus, the second life in the sequence is the excellent life plus one second of pain added at the end; the third life in the sequence is the excellent life plus two seconds of pain added at the end; and so on. It seems that with each additional second of pain, the life becomes slightly worse. Moreover, it seems that if we add enough seconds of pain, we can make the life arbitrarily bad (the number of seconds can be as high as we like). If that's true, we can get from an arbitrarily excellent life to an arbitrarily terrible life in a finite number of small steps, each of which solely involves the addition of one second of pain. In particular, returning to our example from the previous paragraph, it seems that we can proceed smoothly from the welfare level corresponding to the awakened life to the welfare level corresponding to the worldly life by appending seconds of pain to the awakened life.

I will offer a response to this *argument from pain* on behalf of the Theravādin. The response appeals to my preferred reading of the (Theravāda) Buddhist understanding of well-being. Buddhists distinguish between pain and suffering on account of pain (*dukkha-dukkhatā*) (see SN 36.6, in Bodhi 31-32). By “pain” I understand Buddhists to mean unpleasant hedonic tone (*vedanā*). Suffering on account of pain, by contrast—as

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<sup>15</sup> See e.g., Carlson “Impossibility Theorems” and Thornley (“Dilemma” 403-04).

opposed to merely experiencing unpleasant sensations—involves responding to pain with *aversion* (*dosa*).<sup>16</sup> We can illustrate the distinction between pain and suffering on account of pain through two examples: strenuous exercise and medical blood work (Baker “Buddhism and Utilitarianism”). Each experience involves unpleasant hedonic sensations (the burn of muscles; the sting of the needle). However, whereas some relish strenuous exercise, others can’t stand it; and whereas some find blood work fascinating, others find it perturbing. Buddhists can explain these divergent experiences in terms of the degree of aversion that is present: people who enjoy exercising and find blood tests fascinating aren’t (very) averse to what’s happening, so they don’t suffer (very much); whereas others are (more) averse to what’s happening, so they suffer (more acutely).

On my reading of Buddhism, the negative welfare we accrue in suffering from painful experiences is solely a function of our aversion—and so not at all a function of raw hedonic tone (see Baker, “Revisionary Implications” §3.1 for defense). This is important because awakened beings have fully uprooted aversion from their mindstreams (alongside craving, by way of uprooting delusion). As AN 8:6 describes the awakened person:

Desirable things don’t charm the mind, / *undesirable ones bring no resistance*. / His welcoming & rebelling are scattered, / gone to their end, / do not exist. / Knowing the dustless, sorrowless state, / he discerns rightly, / has gone beyond becoming, / to the Further Shore. (Ṭhānissaro, emphasis added)

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<sup>16</sup> For defense of this reading of Buddhism, see Baker “Revisionary Implications.” Compare contemporary accounts of the badness of pain in Korsgaard (147), Sumner (105-106), Parfit (*On What Matters* 54), Kahane, and Brady.

One positive way to characterize the resultant state is that awakened beings have unshakeable *equanimity*: no matter what they experience—even if it’s extremely painful in hedonic tone—they remain psychologically undisturbed (see Baker, “Buddhism and Utilitarianism” §2 for further exposition). The upshot for Finite Fine-grainedness is that we can’t make an awakened being’s life worse by appending pain to it. The awakened being will remain equanimous in the face of pain and will thereby avoid any welfare loss. So, the argument from pain fails given Buddhist assumptions.<sup>17</sup>

The other main way to argue for Finite Fine-grainedness is to imagine shortenings of excellent lives.<sup>18</sup> In the Buddhist context, we can imagine a life that is awakened from the outset and lasts for one hundred years (recall that Finite Fine-grainedness scopes over metaphysically possible lives). We can then imagine a sequence of lives that is composed of incremental shortenings of this century of awakening. Assuming that time spent in the awakened state is good (i.e., has positive welfare value), each incremental shortening makes the life slightly worse.<sup>19</sup> Now consider the life at the end of this sequence, which contains nothing but an extremely short moment of awakened experience.<sup>20</sup> To probe Finite Fine-grainedness, we ask whether there is a possible life that is just slightly

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<sup>17</sup> The only way to append episodes of suffering due to pain to the life of an awakened being would be to imagine that the being somehow gets “un-enlightened” and then meets at least one episode of pain with aversion. But Buddhists traditionally regard awakening to be irreversible—as MN 29 says, “he attains perpetual emancipation. And it is impossible for that monk to fall away from that perpetual liberation” (Bodhi 237). Could we try adding the suffering at the *beginning* of the life, prior to the awakening event? We could, but this wouldn’t block the Buddhist response to the argument from pain. For we can imagine a life that is awakened from the outset (recall that Finite Fine-grainedness scopes over metaphysically possible lives).

<sup>18</sup> For a more general version of this argument, see Thomas (826-827).

<sup>19</sup> In support of this assumption, see the next paragraph of the main text for positive descriptions of *nirvāṇa* and Collins (66) for further supporting evidence.

<sup>20</sup> Cf. Portmore on ‘Short-lived Z’, which is one way to cash out the Repugnant Conclusion.

worse than this very short awakened life. For Finite Fine-grainedness is true only if there is. The most obvious place to look is to lives that have attained the sixth, but not the final seventh, purification. Is there an amount of time spent living well at the sixth purification that would be just slightly worse in welfarist terms than the very short moment of full awakening? If there isn't, then the answer to our question is No.

It's plausible that there is no such amount of time. Why? Full awakening is for the Theravādin the unsurpassably highest good—the ultimate soteriological goal (cf. the beatific vision in certain Christian traditions). MN 26 describes *nirvāṇa* as “the *supreme* state of sublime peace” (Bodhi 56, italics added) and MN 75 describes it as the *paramaṃ sukhaṃ*, which we might translate as “highest happiness,” “greatest bliss,” or “highest well-being.” It is therefore plausible that *any* step down from full awakening would not qualify as small in the sense intended in Finite Fine-grainedness. Said differently, the welfare difference between a very short moment of full awakening and any amount of time spent living well at the sixth purification is not small.<sup>21</sup> *A fortiori*, from the Theravādin perspective, the welfare difference between a very short moment of full awakening and any amount of any other good is not small. We therefore have a counterexample to Finite Fine-grainedness.<sup>22</sup> This is the insight that our

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<sup>21</sup> An instantaneous welfare level represents how well a being's life is going for it at a particular moment in time.

<sup>22</sup> For the technically-minded, I take it that the Theravādin will need to claim here that a *strong noninferiority* relation holds between the good of full awakening and all other goods. *x* is strongly noninferior to *y* just in case no quantity of *x* would be worse than any quantity of *y*. Thus, no amount of awakening would be worse than any amount of any other good (even if the other good exhibits linear returns to scale, meaning it does not exhibit diminishing marginal value or other asymptotic behavior). For discussion of strong noninferiority, see Nebel and Baker “Non-Archimedean”; see also Arrhenius and Rabinowicz on the related concept of *value superiority*. For the methodologically-minded, I should be clear that here I am going beyond what is contained in traditional Theravādin

initial line of reasoning implicitly contained: awakening is in an evaluative class of its own; and its unique axiological status grounds a nontrivial gap in the positive welfare levels.

### Finite Fine-grainedness and the Repugnant Conclusion

The implicit assumption of Finite Fine-grainedness plays an important role in one of the main arguments for the Repugnant Conclusion. The argument—a spectrum argument—goes like this (see e.g. Arrhenius *Future Generations* and Temkin): start with an arbitrary number of excellent lives. Then decrease their welfare by a *tiny* amount, but *massively* increase their number. Intuition: the resulting population is better. We're willing to sacrifice a tiny bit of quality for a massive gain in quantity. Now repeat this step: decrease welfare by a tiny amount and scale the population by however large a factor you like. Same intuition: the resulting population is better. If we iterate this step—trading a tiny decrease in quality for an arbitrarily large increase in quantity—we end up with an astronomical number of lives with barely positive welfare. Here's the kicker: if—as we've agreed—each step along the spectrum is a step for the better and 'is all-things-considered better than' is a transitive relation, then the Repugnant Conclusion is true.

Here's a more precise rendition of the spectrum argument: consider an arbitrary very high positive welfare level and an arbitrary very low positive welfare level. We can construct a finite, decreasing sequence of positive welfare levels that begins with the former and ends with the latter. Say that two welfare levels in the sequence are *adjacent* just in case

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sources. To my knowledge, Theravāda philosophy does not contain any quantitative discussion of how to trade competing goods off against one another. The hypothesis I'm advancing about the value of awakening *vis-à-vis* other goods is therefore an interpretive extension of Theravāda Buddhist ethics; it is not intended as historical exegesis.



there is no welfare level between them in the sequence. The Repugnant Conclusion follows if, alongside the transitivity of betterness, we accept the

Spectrum Claim: for any two welfare levels that are adjacent in the sequence, and any number of lives at the higher level, there is a number of lives at the lower level that would be better (all things considered).<sup>23</sup>

This argument is much more plausible if the positive welfare levels are fine-grained than it is if they aren't. For if the positive welfare levels are fine-grained, we can construct a sequence such that the difference between every two welfare levels that are adjacent is small. In that case, the Spectrum Claim is very plausible. However, if the positive welfare levels are not fine-grained, it's easier to reject the Spectrum Claim. For we can claim instead that the pair of adjacent welfare levels across which Finite Fine-grainedness is violated is precisely the location at which the Spectrum Claim also fails to hold. In the Buddhist case, the Theravādin can deny that for any number of fully-awakened lives, there is a number of great-but-not-fully-awakened lives that would be better.<sup>24</sup> When asked to account for this claim, the Theravādin can reply that despite the fact that the lives in question occupy welfare levels that are adjacent in the sequence, there is a nontrivial evaluative difference between them. Attaining awakening is no small step.

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<sup>23</sup> Cf. the *Quantity* condition in Arrhenius ("Conflict-of-Value" 466). We also need to assume that a population can contain an arbitrarily large finite number of beings. This assumption is innocuous since population axiology is concerned with metaphysically possible populations.

<sup>24</sup> For work on population axiologies with this structure—called *lexical* or *non-Archimedean* axiologies—see Nebel and Baker "Non-Archimedean."

### The Repugnant Conclusion Strikes Back?

Although this maneuver may suffice to avoid the Repugnant Conclusion, it does not suffice to avoid the *Weakened Repugnant Conclusion*, which says that for any number of great-but-not-fully-awakened lives, there is a number of lives with very low positive welfare that would be better. The reason is that the positive welfare levels that correspond to lives that are good, but not fully unawakened, appear to be fine-grained. To see why, recall the argument from pain above. The core idea there was that we can make lives worse in small increments by adding seconds of pain to them. In response to the argument from pain, I argued that if we understand the awakened state as one of unshakeable equanimity, we can block the argument from pain for any sequence of lives that begins with a life that is awakened from the outset. However, unawakened beings tend to be averse to pain, and so do tend to suffer when they experience it. So, we can run an argument from pain on any sequence that begins with a great-but-not-fully-awakened life. That is, it seems that we can descend from any high positive welfare level that is shy of full awakening to any lower positive welfare level in a finite number of small steps, which we can accomplish by appending seconds of suffering due to pain (*duḥkha-duḥkhatā*) to the lives in the sequence. And whenever we have a fine-grained sequence of welfare levels, we can run a spectrum argument. So, we must either locate a plausible response to the spectrum argument that does not depend on a violation of fine-grainedness or accept the Weakened Repugnant Conclusion.

One interesting response on behalf of the Buddhist is to accept the Weakened Repugnant Conclusion but attempt to soften its blow by claim-

ing that lives with very low *positive* welfare are much better than we initially suppose.<sup>25</sup> Here's how. (Theravāda) Buddhists tend to take a dim view of unawakened existence (see Baker, "Buddhism Without Rebirth" §2). It is therefore plausible to interpret Buddhists as regarding lives that may strike us as decent enough from a secular perspective as in fact *bad* (i.e., welfare negative). Buddhaghosa, for example, urges us to have compassion even for the apparently well-off person, for "In reality he is unhappy,' because he is not exempt from the suffering" of existence in *saṃsāra* (*Visuddhimagga* 9.81, in Ñāṇamoli 309). A different way to put the point is that Buddhists may place a high bar on what it takes to enjoy a positive welfare level. If so, then what *Buddhists* might think of as a life with very low *positive* welfare may be significantly better than what *we* might initially think of when we imagine such a life (cf. Parfit "Overpopulation," who imagines such lives as consisting of nothing but eating potatoes and listening to muzak). The Weakened Repugnant Conclusion would then lose most or all of its sting.

Of course, non-Buddhists might find this attempt to defuse the repugnance of the Weakened Repugnant Conclusion unsatisfying, for it comes at the intuitive cost of a somewhat widespread pessimism about worldly existence. Buddhists will reply that this intuition is spurious, for we underestimate the extent and badness of the *dukkha* in our lives (see e.g., MN 75, in Bodhi 202-05, and SN 46:55, in Bodhi 270-72). They may also invite the skeptic to see these facts about *dukkha* for herself, by undertak-

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<sup>25</sup> Cf. Tännsjö, who defends the Repugnant Conclusion on the ground that the lives of well-off individuals in developed countries are barely positive in welfare. Fascinatingly, his reasoning bears a close resemblance to the Buddhist critique of the worldly pursuit of happiness—see in particular Tännsjö (§4) and compare Tännsjö's assessment of human existence with descriptions of the proverbial "uninstructed ordinary person" in the Pāli discourses, e.g., in AN 8:6, SN 22:99, and MN 75.

ing the systematic examination of experience that is the backbone of Buddhist insight practice. On this topic I am in some disagreement with Jay Garfield, who writes that the Buddha took

the ubiquity of suffering . . . as a datum, one that is obvious to anyone on serious reflection, though one that escapes most of us most of the time precisely because of our evasion of serious reflection in order not to face this fact. (*Buddhist Ethics* 6)

*Contra* Garfield, the Buddha describes his *dhamma* (teaching, truth) as “profound, hard to see and hard to understand. . . *unattainable by mere reasoning*, subtle, to be experienced by the wise” and elsewhere marks out the First Noble Truth—that of the ubiquity of *dukkha*—as something that “is to be fully understood” (respectively, MN 26, in Bodhi 69, emphasis added, and SN 56:11, in Bodhi 76). These discourses suggest that Buddhists tend to view the First Noble Truth not as something that is obvious upon reflection, but as something that we need to work hard to fully understand *a posteriori*. To my mind, understanding the First Noble Truth as something intended as a non-obvious *a posteriori* truth makes the Buddhist defense of the Weakened Repugnant Conclusion more dialectically satisfying. For the upshot is that the Buddhist’s somewhat pessimistic evaluation of ordinary existence does not simply hang on a bedrock evaluative intuition that her interlocutor is unlikely to share—and has no reason to take up, given her evaluative starting point. Instead, the Buddhist’s pessimism is based on a systematic examination of experience (*vippasanā*) that is (in principle) accessible to everyone. This raises the possibility that the disagreement between the Buddhist and her interlocutor would resolve if her interlocutor engaged in such examination herself.

## Aversion and the Negative Repugnant Conclusion

According to the

*Negative Repugnant Conclusion*, for any number of lives at a very low negative welfare level (*terrible lives*), there is a number of lives at a barely negative welfare level (*barely bad lives*) that would be worse.<sup>26</sup>

We can run a spectrum argument for the Negative Repugnant Conclusion that mirrors the one given above for the Repugnant Conclusion.<sup>27</sup> Can Theravāda Buddhists avoid this spectrum argument and thence the Negative Repugnant Conclusion by denying that the negative welfare levels are fine grained? I argue that they cannot.

As I said above, on my reading of Buddhism, pain, i.e., negative hedonic tone, has no negative welfare value in itself. What has negative welfare value in episodes of suffering due to pain (*dukkha-dukkhatā*) is aversion (*dosa*). This might appear to be crucial when it comes to assessing whether the negative welfare levels are fine-grained. For although raw hedonic tone plausibly admits of incremental strengthening—we can imagine a smooth sequence of increasingly unpleasant hedonic sensations—it is conceptually and empirically possible that aversion does not. That is, it's possible that as we turn the dial up on aversion, there is an inflection point the crossing of which involves a jump rather than a small step. By

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<sup>26</sup> The Negative Repugnant Conclusion is sometimes called the Reverse Repugnant Conclusion;” see e.g. Mulgan.

<sup>27</sup> This argument strikes many, including myself, as more powerful than the spectrum argument for the Repugnant Conclusion, for whereas one might deny the Spectrum Claim on the ground that adding lives with positive welfare to the world doesn't *in itself* make the world better (this is the so-called *intuition of neutrality*, on which see Broome), it is deeply implausible to deny that adding lives with negative welfare to the world makes the world worse.

way of illustration, we might offer a Buddhist reading of the following passage from George Orwell's 1984:

‘By itself,’ [O’Brien] said, ‘pain is not always enough. There are occasions when a human being will stand out against pain, even to the point of death. But for everyone there is something unendurable—something that cannot be contemplated. Courage and cowardice are not involved. . . It is merely an instinct which cannot be destroyed . . . a form of pressure that you cannot withstand, even if you wished to.’  
(289)

On our Buddhist reading of this passage, O’Brien observes that it is possible to maintain a sufficiently low level of aversion to a painful stimulus—even an extremely strong one—that one can “stand out against” it, i.e., successfully resist the urge to flee from it. (Witness: the Buddhist monk Thích Quảng Đức’s self-immolation in 1963 in protest of state persecution of Buddhists.) However, O’Brien goes on to claim that for everyone, there is something that would provoke such a strong aversive reaction that they could not help attempting to escape. (For O’Brien’s interlocutor, Winston, this is having one’s face eaten by rats.) Per Orwell, the Buddhist might claim that the point at which aversion becomes so strong that it cannot be withstood marks a discontinuity on the scale of aversion. Does it follow that the negative welfare levels are not fine grained?

It does not. To see why, suppose that there is a discontinuity on the scale of aversion. Suppose further that the discontinuity lies at the point at which aversion becomes so intense that it constitutes “a form of pressure that you cannot withstand.” Call this level of aversion “intolerable.” Consider an arbitrarily long life filled solely with intolerable aversion. We can make this life slightly less bad incrementally by shortening it in small time increments. (100 years minus 0.1 seconds at the intolerable

level is slightly less bad than 100 years at the intolerable level.) Now consider a strong level of aversion on the other side of the discontinuity: this will be a level of aversion that one *could* voluntarily withstand, despite its constituting an extremely strong form of suffering. Call this level of aversion “awful.” We can now support the fine-grainedness of the negative welfare levels by considering two logically exhaustive cases.

In the first case, there is some amount of time at the awful level that would be slightly less bad than a very short amount of time (e.g., 0.1 seconds) at the intolerable level. If that’s true, then although the discontinuity in the aversion levels may establish that the *instantaneous* negative welfare levels are not fine-grained, it does not supply us with a counterexample to Finite Fine-grainedness, which is concerned with *lifetime* welfare levels.

In the second case, no amount of time at the awful level would be only slightly worse than even a very short amount of time at the intolerable level. That is, the welfare difference between any (large) amount of time at the awful level and any (small) amount of time at the intolerable level would not be small in the sense intended in Finite Fine-grainedness (cf. Klocksien). Still, it doesn’t follow that we have a counterexample to Finite Fine-grainedness. For in addition to aggregating an arbitrarily long amount of time spent experiencing awful aversion, we can also aggregate an arbitrarily long amount of time spent experiencing intense craving (*taṇhā*) (à la Buddhist hungry ghosts or Tantalus)—the other primary component of ill-being in the Buddhist system. And it is incredible that a life containing nothing but a very short duration of intolerable aversion would be so much worse than a life containing an arbitrarily long period of awful aversion *and* an arbitrarily long period of arbitrarily intense craving that it would mark a point at which there is (borrowing Arrhenius’s phrase) a big “jump” or “hole” in the order of negative welfare levels. Generalizing—and here is the key claim of this section—it seems that we can

construct a fine-grained sequence of lives stretching from a life at an arbitrarily low negative welfare level to a life at an arbitrarily high negative welfare level by taking periods of aversion (*dosa*) and craving (*taṇhā*), varying them with respect to duration and intensity, and concatenating them. If so, then the negative welfare levels are fine-grained; and we are left in search of a defense against the spectrum argument for the Negative Repugnant Conclusion.

### Conclusion

I have argued that Theravāda Buddhists can plausibly deny that the positive welfare levels are fine-grained but cannot plausibly deny that the negative welfare levels are fine-grained. Denying that the positive welfare levels are fine-grained gives Theravādins a plausible response to the spectrum argument for the Repugnant Conclusion, but they are left open to the spectrum argument for the Negative Repugnant Conclusion.

The unique properties of the awakened state ground the Theravādin counterexample to the fine-grainedness of the positive welfare levels. Erik Carlson (“Impossibility” 214) suggests that Finite Fine-grainedness could fail for a more mundane reason: supposing that an objective list theory of welfare is true, the presence or absence of an objective good, such as friendship, could make a significant difference to one’s welfare level. However, it seems to me that for the most plausible candidate objective goods, such as friendship, autonomy, aesthetic appreciation, and (meaningful) knowledge, we can construct a *relatively* smooth spectrum of goods that approximate the relevant normative ideal to varying degrees. Consider friendship. Conceptually, we can construct a spectrum of dyadic interpersonal relationships, beginning with total indifference and ending with perfect friendship. As we progress along the spectrum, we strengthen various parameters, such as the levels of affection, intimacy,



trust, and commitment. Even if there is a (vague) cutoff that separates mere friendly acquaintance from *bona fide* friendship, all the relationships in the vicinity of the cutoff will be pleasurable, meaningful, and valuable in their own rights. And I suspect that the same goes for the other candidate objective goods, *mutatis mutandis*. It is therefore unclear to me that such goods support clear counterexamples to Finite Fine-grainedness, and even less clear that the (vague) points at which such goods “drop out” would also be points at which the Spectrum Claim fails.<sup>28</sup> In contrast, *if* it is actualizable, full awakening (*bodhi*) supports a clearer counterexample to Finite Fine-grainedness and marks out a more plausible location for a Spectrum Claim failure. For unlike friendship (etc.), it cannot be approached incrementally (see again Gethin 192); and it is significantly better than everything else—there aren’t any comparable goods in its vicinity. The general lesson I wish to draw is this: to avoid Finite Fine-grainedness—and thus, potentially, Arrhenius’s impossibility theorem and the Repugnant Conclusion—we must locate a welfare good with some rather esoteric properties. Specifically, the good must offer us a plausible way to resist the arguments from pain and shortening covered above. Awakening, as it is characterized in the Theravāda, is one such good.<sup>29</sup> I am uncertain whether awakening, thus characterized, is realizable by flesh-and-

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<sup>28</sup> Recall also that it does not suffice for the goods in question to be qualitatively special in some way. As stated presently in the main text, we additionally require plausible grounds for resisting the arguments from pain and incremental shortening presented above in the main text. Awakening furnishes us with such grounds: awakened beings are immune to suffering on account of pain; and the state of awakening is plausibly construed as a *strongly noninferior* good (see footnote 22). *Pace* Carlson (“Impossibility Theorems” §6), it is not clear to me how we can resist the arguments from pain and shortening by appealing to familiar worldly goods such as friendship and knowledge.

<sup>29</sup> And, unlike the highest goods (*summa bona*) found in many other religious traditions, such as the beatific vision in some forms of Christianity, it is possible to understand awakening in naturalist-friendly terms. (A process of systematic introspection whereby one sees through the illusion of being a metaphysically-enduring substance need not involve any non-natural causation or other non-natural phenomena; cf. Velleman.)

blood human beings in the actual world; but I hold it out as an epistemic possibility.<sup>30</sup>

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### Works Cited

Arrhenius, Gustaf. *Future Generations: A Challenge for Moral Theory*. Ph.D. thesis. Uppsala University, 2000.

\_\_\_\_\_. "The Impossibility of a Satisfactory Population Ethics." In *Descriptive and Normative Approaches to Human Behavior Advanced Series on Mathematical Psychology*, edited by E. Dzhafarov and L. Perry, pp. 1-26. World Scientific Publishing Company, 2011.

\_\_\_\_\_. "Population Ethics and Different-Number-Based Imprecision." *Theoria*, vol. 82, no. 2, 2016, pp. 166–181.

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<sup>30</sup> Cf. Thomas (814) and Nebel (225), who consider it an open and important question whether welfare could have a structure that violates Finite Fine-grainedness, and Bostrom, who notes that the modes of life and experience that are familiar to typical human beings may constitute a small fraction of the physically possible modes of life and experience available to conscious beings in general.

- \_\_\_\_\_. "Population Ethics and Conflict-of-Value Imprecision." In *Ethics and Existence: The Legacy of Derek Parfit*, edited by J. McMahan, T. Campbell, J. Goodrich, and K. Ramakrishnan, pp. 461-477. Oxford UP, 2022.
- Arrhenius, Gustaf and Wlodek Rabinowicz. "Value Superiority." In *The Oxford Handbook of Value Theory*, edited by I. Hirose and J. Olson, pp. 225-248. Oxford UP, 2015.
- Baker, Calvin. "Buddhism and Utilitarianism." In *An Introduction to Utilitarianism*, edited by R.Y. Chappell, D. Meissner, and W. MacAskill, 2022. <https://www.utilitarianism.net/guest-essays/buddhism-and-utilitarianism>.
- \_\_\_\_\_. "Is Buddhism Without Rebirth 'Nihilism With a Happy Face'?" Forthcoming in *Analysis*, 2024. <https://doi.org/10.1093/analys/anae034>.
- \_\_\_\_\_. "Non-Archimedean Population Axiologies." *Economics and Philosophy*, 2024. [doi.org/10.1017/S0266267124000099](https://doi.org/10.1017/S0266267124000099).
- \_\_\_\_\_. "Three Revisionary Implications of Buddhist Animal Ethics." *Philosophy East and West*, vol. 74, no. 4, 2024, pp. 595-616.
- Bodhi Bhikkhu, editor and translator. *In the Buddha's Words: An Anthology of Discourses from the Pāli Canon*. Wisdom Publications, 2005.
- Bostrom, Nick. "Transhumanist Values." *Journal of Philosophical Research*, vol. 30, 2005, pp. 3-14.
- Brady, Michael S. "Suffering as experiential—A response to Jennifer Corns." *Philosophy and Phenomenological Research*, vol. 107, 2023, pp. 24-30.
- Broome, John. *Weighing Lives*. Oxford UP, 2004.

Buddhaghosa. *The Path of Purification (Visuddhimagga)*, 4th ed. Translated by Ñāṇamoli Bhikkhu, Buddhist Publication Society, 2010.

Budolfson, Mark and Dean Spears. “Why the Repugnant Conclusion is Inescapable.” Unpublished manuscript. <https://budolfson.github.io/files/RC.pdf>.

Carlson, Erik. “Mere Addition and Two Trilemmas of Population Ethics.” *Economics & Philosophy*, vol. 14, 1998, pp. 283-306.

\_\_\_\_\_. “On Some Impossibility Theorems in Population Ethics.” In the *Oxford Handbook of Population Ethics*, edited by G. Arrhenius, K. Bykvist, T. Campbell, and E. Finneron-Burns, pp. 204-225. Oxford UP, 2022.

Collins, Steven. *Nirvana: Concept, Imagery, Narrative*. Cambridge UP, 2010.

Garfield, Jay L. *Buddhist Ethics: A Philosophical Exploration*. Oxford UP, 2021.

\_\_\_\_\_. *Losing Ourselves: Learning to Live Without a Self*. Princeton UP, 2022.

Gethin, Rupert. *The Foundations of Buddhism*. Oxford UP, 1998.

Greaves, Hilary. “Population Axiology.” *Philosophy Compass*, 2017. doi: 10.1111/phc3.12442.

Huemer, Michael. “In Defence of Repugnance.” *Mind*, vol. 117, 2008, pp. 899-933.

Hume, David. *A Treatise of Human Nature*. 1739-1740. <https://davidhume.org/texts/t/>.

Mulgan, Tim. “The Reverse Repugnant Conclusion.” *Utilitas*, vol. 14, no. 3, 2002, pp. 360-64.

Kahane, Guy. “Pain, experience, and well-being.” In *The Routledge Handbook for the Philosophy of Well-Being*, edited by G. Fletcher. Routledge, 2016.

- Korsgaard, Christine. *The Sources of Normativity*. Cambridge UP, 1996.
- Klocksiem, Justin. "How to Accept the Transitivity of *Better Than*." *Philosophical Studies*, vol. 173, 2016, pp. 1309–1334.
- Nebel, Jacob M. "Totalism Without Repugnance." In *Ethics and Existence: The Legacy of Derek Parfit*, edited by J. McMahan, T. Campbell, J. Goodrich, and K. Ramakrishnan, pp. 200–231. Oxford UP, 2022.
- Ng, Yew-Kwang. "What Should We Do About Future Generations?: Impossibility of Parfit's Theory X." *Economics & Philosophy*, vol. 5, no. 2, 1989, pp. 235–253.
- Orwell, George. *Nineteen Eighty-Four: A Novel*. Penguin Canada, 2017.
- Parfit, Derek. *Reasons and Persons*. Clarendon Press, 1984.
- \_\_\_\_\_. "Overpopulation and the Quality of Life." In *Applied Ethics*, ed. P. Singer, pp. 145–164. Oxford UP, 1986.
- \_\_\_\_\_. *On What Matters* Vol. 1. Oxford UP, 2011.
- Portmore, Douglas W. "Does the Total Principle Have Any Repugnant Implications?" *Ratio*, vol. 12, 1999, pp. 80–98.
- Sidgwick, Henry. 1907. *The Methods of Ethics*, 7<sup>th</sup> ed. London: Macmillan.  
<https://www.gutenberg.org/files/46743/46743-h/46743-h.htm>.
- Sumner, Wayne. *Welfare, Happiness, and Ethics*. Oxford UP, 1996.
- Tännsjö, Torbjörn. "Why We Ought to Accept the Repugnant Conclusion." *Utilitas*, vol. 14, no. 3, 2002, pp. 339–359.
- Temkin, Larry S. *Rethinking the Good: Moral Ideals and the Nature of Practical Reasoning*. Oxford UP, 2012.

Ṭhānissaro Bhikkhu (trans.). AN 8:6 “*Lokavipatti Sutta: The Failings of the World.*” *Access to Insight*, 1997. <https://www.accesstoinsight.org/tipitaka/an/an08/an08.006.than.html>.

Thomas, Teruji. “Some Possibilities in Population Axiology.” *Mind*, vol. 127, no. 507, 2018, pp. 807–832.

Thornley, Elliott. “The Impossibility of a Satisfactory Population Prospect Axiology (Independently of Finite Fine-Grainedness).” *Philosophical Studies*, vol. 178, 2021, pp. 3671–3695.

\_\_\_\_\_. “A Dilemma for Lexical and Archimedean Views in Population Axiology.” *Economics & Philosophy* vol. 38, 2022, pp. 395–415.

Velleman, J. David. “So It Goes.” In *Beyond Price: Essays on Birth and Death*, Open Book Publishers, 2015, pp. 174–194. <http://www.jstor.org/stable/j.ctt17w8gwg>.

Westerhoff, Jan. *The Golden Age of Indian Buddhist Philosophy*. Oxford UP, 2018.