When Is Forgone Value Proportionate?

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Abstract: In "Individualist Theories and Interpersonal Aggregation", Erik Zhang attempts to reconcile partial aggregation with the individualist restriction: the aggregate value we forgo to satisfy a claim enters moral deliberation indirectly as a criterion for equal consideration. We argue that Zhang's understanding of forgone value is flawed and requires two refinements. First, Zhang remains vague on which interests can count for forgone value. To accommodate partial aggregation, however, forgone value must be restricted to relevant interests. Second, his account entails an implausible principle of outweighing: we ought to satisfy weaker claims only if their number is much greater than their relative strength suggests. We offer a better understanding of forgone value that avoids the problem. While both refinements revise Zhang's account, they retain its individualist character.

1 Introduction

Individualist theories face the challenge of explaining why numbers can matter in rescue cases, why we have duties to save the greater number in cases like

> *One vs. Two Deaths*: You can save either one person (A) or two persons (B and C) from death.

Erik Zhang (2024) offers a novel account for making the numbers count in individualist morality: the aggregate value we forgo to satisfy a claim enters as a criterion for equal consideration. The account isn't only intended to explain the relevance of numbers in cases with equal burdens, such as One vs. Two Deaths, but also in cases involving unequal burdens, like

> *Death vs. Paraplegias*: You can save either one person from death (the One) or *n* people from paraplegia (the Many).

Zhang wants to reconcile individualist morality with partial or limited aggregation – and he's among the first to give a detailed account.

We argue that Zhang's understanding of the forgone value is flawed and requires two refinements. First, in section 3, we demonstrate that forgone value cannot be understood as total aggregate value and propose a clear solution: it should be limited to the value of relevant – that is, sufficiently strong – interests. (We use "value of interest" as shorthand for the value of the satisfaction of the interest or its object.) Second, even with that refinement, Zhang's rationale for saving the greater number implies that, to outweigh a stronger claim, the number of relevant weaker claims must be several times higher than their relative strength would suggest, as we show in section 4. In section 5, we thus propose a further revision of Zhang's understanding of forgone value that remains consistent with Zhang's individualist ambitions but avoids the problem: the value we forgo by satisfying a claim isn't the total value of all relevant interests that remain dissatisfied, but only a proportionate part of that value. To set the stage, we outline Zhang's view in the next section.

2 Zhang's Proportionate Consideration

Individualist approaches to morality state that interpersonal moral deliberation is exclusively concerned with the personal claims that individuals have towards an agent. Spelt out as the *individualist restriction,* individualist morality holds that only single individuals can raise claims, which concern only effects on the individual's well-being, interests, or status.[1]

While the individualist restriction is generally taken to conflict with the moral relevance of numbers, Zhang (2024: 485) suggests that considerations about numbers can enter moral deliberation indirectly if they give rise to claims that individuals can make on their own behalf. In particular, if we don't save the greater number in cases like One vs. Two Deaths, the claims of the larger group aren't considered equally. B and C would therefore have personal complaints against our choice, rendering the chosen action wrong. To avoid these complaints, we must save the greater number.

[1] Cf. Zhang 2024: 481–482. See also Scanlon 1998: 219–220.

We dissect Zhang's (2024: 494–497) approach into three assumptions. First, according to what we call the *axiological assumption*, greater sums of well-being have greater aggregate value. The second assumption we call *consideration in the value-forgoing sense*: a person's claim is considered to the degree to which we're willing to give up aggregate value in its favour. If, for instance, we must invest resources to satisfy a person's claim, the amount of resources we're prepared to invest reflects a judgment about the importance of the claim. The third assumption holds that we ought to treat individuals' claims with *equal consideration.*

Together, the three assumptions explain, consistent with the individualist restriction, why we ought to save the greater number in cases with equal burdens. In One vs. Two Deaths, we can save either A's life or the lives of B and C. Compared one by one, their claims seem equally strong and, thus, tied. However, based on the axiological assumption, the aggregate values we must forgo to save the two groups are unequal. If we save A, we forgo the value of two lives. If we save B and C, we forgo the value of just one life. Consequently, if we save A, consideration in the value-forgoing sense implies that we're considering A's claim important enough to forgo the value of two lives. As all claims are equally strong, equal consideration demands that B's and C's claims are considered as important as A's, that is, important enough to be satisfied at the cost of two lives. But since we can save B and C at just half that cost, there is an even stronger reason to save them. If we nonetheless save A, we're considering B's and C's claims as less important. Both B and C can thus complain that their claims aren't being equally considered. Since no such complaint is available to A if we save B and C, we ought to save B and C.

How does the reasoning extend to unequal burdens? Zhang (2024: 498) suggests that his approach also entails the more general principle that relevant claims must be considered proportionately: the value we're willing to give up for a claim must be proportionate to the claim's strength. The restriction to relevant claims ensures that a weaker claim must be taken into account only if it's sufficiently close in strength to the

stronger claim, a popular assumption suggested by Frances Kamm (1993: 146) and Tim Scanlon (1998: 239–240).[2] Zhang adopts what we call

> *Proportionate Consideration*: The value we have reason to forgo for the sake of the relevant interests of the individuals must not be disproportionate to the relative weightiness of their interests.

Accordingly, any situation in which relevant claims are disproportionately considered in the value-forgoing sense entails a complaint for the holder of the underconsidered claim.

Reconsider Death vs. Paraplegias. The burden faced by the One is more severe than that faced by each of the Many. Therefore, the One has a stronger well-being-based claim to be saved. By assumption, however, if a claim is relevant, it provides a reason to satisfy it and needs to be considered proportionately. Since the claims of the Many are relevant, the value we're willing to forgo to save any of the Many must be proportionate to the value we're willing to forgo to save the One. If we save the Many, we forgo the value of a life; if we save the One, we forgo the value of preventing *n* paraplegias. Thus, while the cost to save the Many stays constant, the cost to save the One increases with the number of the Many. It follows that there must be some number *n* beyond which saving the One at the cost of *n* paraplegias would show disproportionate consideration of the claims: underconsideration of the Many and overconsideration of the One. If we save the One nonetheless, for such numbers, each of the Many can raise a personal complaint against our choice.

3 Relevance and Aggregate Value

Individualist morality prohibits aggregate value from playing a direct role in moral deliberation. Yet, Zhang insists that "aggregate value can play an indirect role" (Zhang 2024: 495): unequal consideration is "revealed by a difference in the amount of value

[2] For our discussion, the distinction between global (Voorhoeve 2014), local (Tadros 2019), and binary (Mann 2022) accounts is irrelevant.

that we're prepared to forgo for the respective interests" (Zhang 2024: 496). This section clarifies the understanding of forgone value as aggregate value and the interests that count for it.

Zhang's (2024: 492) theory holds that, while claims or interests with close enough strength are relevant to each other, much weaker claims or interests are irrelevant to much stronger ones. The reason-giving force of, for example, mild headaches is normatively disabled by the presence of a claim against death. However, as Zhang (2024: 489) also explicates, the distinction between relevant and irrelevant claims or interests doesn't influence the aggregate value. Irrelevant interests are normatively disabled at the level of reasons, but not at the level of aggregate value. In addition, Zhang claims that his theory is compatible with standard axiology:

> "It does not challenge the continuity or transitivity of the "better than" relation, nor does it deny that forgoing the lifesaving option for the sake of preventing sufficient many headaches may generate more well-being overall." (Zhang 2024: 500.)

Initially, it therefore seems that we should accept

> *Total Aggregate Value*: The aggregate value we forgo by choosing an option is the total value of all interests that aren't satisfied by that option.

However, Total Aggregate Value conflicts with the motivation of Zhang's account. Consider the following case.

> *Death vs. Paraplegia and Headaches*: You can save either one person from death, or one person from paraplegia and *n* people from mild headaches.

People who accept that we should save one person from death rather than arbitrarily many people from mild headaches will also believe that we should save the one person from death rather than the people from mild headaches together with one person from paraplegia.

However, Total Aggregate Value implies otherwise. The value we must forgo to save the person from paraplegia is one life. The value we must forgo to save the person

from death is the total value that we don't realise by saving the person from death: the total lost value of one person becoming paraplegic and *n* people experiencing mild headaches. Depending on *n*, that value can be significantly higher than the value of one life. Thus, for some number *n*, we would have to forgo a disproportionate amount of value to save one person from death rather than one person from paraplegia. Consequently, for sufficiently large *n*, Total Aggregate Value implies that we ought to let one person die to save one person from paraplegia and many others from mild headaches. For partial aggregationists, this is absurd, and it conflicts with the decision procedure that Zhang (2024: 505–506) proposes to deal with such cases. The *Partial Primacy Account* implies that the many headaches play *no* role in offsetting the deaths because they're not relevant to any competing claim. Consequently, Total Aggregate Value is false.

Zhang is aware of the problem. He claims:

> "while my argument from equal consideration does make indirect appeal to considerations of aggregate well-being, the proper application of the argument calls for the settlement of a prior issue in line with an individualist framework, namely, the aggregation of *which* values may play this kind of indirect role." (Zhang 2024: 499, italics added.)

The value of curing headaches and sore throats isn't meant to play the indirect role in the cases above and, thus, cannot contribute to the value we forgo by satisfying a competing claim. Unfortunately, however, Zhang leaves open which interests can contribute to the forgone value.

There is an obvious way to refine the understanding of forgone value, though, that might be implicit in Zhang's (2024: 499–500) discussion. The category of relevance – whether a claim or the underlying interest is sufficiently strong compared to a stronger claim – not only applies to the reasons that people's interests provide, but also to the forgone value. We should accept

> *Relevant Aggregate Value*: The aggregate value we forgo by choosing an option is the value of all *relevant* interests that aren't satisfied by the option.

Relevant Aggregate Value accounts for the intuitive assessment of Death vs. Paraplegia and Headaches. The interests of the many people facing mild headaches are irrelevant given one person's interest in not dying. Thus, the mild headaches don't count towards the aggregate value. In other words, the value we must forgo to save the person from death remains constant regardless of the number of headaches: the aggregate value of the relevant interests is the value of one person's interest to avoid paraplegia.

Relevant Aggregate Value also avoids further complexities. Zhang (2024: 485) suggests that, in the absence of a deeper explanation, invocations of relevance are unconvincing. He already argues that interests are normatively disabled in light of sufficiently stronger competing interests, and Relevant Aggregate Value builds on the same reasoning. It merely adds that normative disabling applies not only to the reasons the interests provide, but also to their corresponding value. Given the results that Zhang intends and the theoretical thriftiness of our solution, we will assume Relevant Aggregate Value going forward.

We're now also better positioned to understand Zhang's claim that his theory is compatible with standard axiology. If we understood the forgone value as aggregate value in terms of standard axiology, it would not be. As we just argued, saving sufficiently many headaches cannot realise more forgone value than saving one person from death. The only way to maintain the compatibility of Zhang's account with standard axiology is to say that standard axiology has no impact on the theory. Forgone value is *not* value in the standard axiological sense but rather value of another kind. Consequently, Zhang's theory is compatible with standard axiology only in the restricted sense that it doesn't make use of it.

4 Zhang's Understanding of Forgone Value

Even given Relevant Aggregate Value, Zhang's understanding of forgone value is vulnerable to a more severe objection, concerning the following question: When is a stronger claim outweighed by weaker but relevant other claims? Note that Zhang's (2024: 505–506) *Partial Primacy Account* determines how claims outweigh each other in cases involving heterogeneous groups by a complex method that matches and offsets

claims. For our objection, we can keep things simple and consider only cases without heterogeneous groups that don't need the complex matching and offsetting of the Partial Primacy Account. Nonetheless, the objection also applies to the offsetting step within that account.

Let's assume that the strength of claims can be represented by real numbers and the value realised by satisfying a claim is equal to the claim's strength.[3] We can now spell out Death vs. Paraplegias in more detail. Let C_X represent the strength of person X's claim and C_Y the strength of person Y's claim. So, C_{One} represents the strength of the One's claim and C_{Many} the strength of any of the Many's claims. Suppose, for illustration, that we have determined the relative strength of the competing claims: a claim against death is four times stronger than a claim against paraplegia, such that $C_{One} = 4$ and $C_{Many} = 1$.

Intuitively, the claim against death is outweighed if there are more than four claims against paraplegia. And if so, we ought to save the Many rather than the One. This suggests

> *Outweighing by Strength:* A stronger claim C_X is outweighed by n relevant weaker claims C_Y if and only if the stronger claim is less than n times as strong as any of the weaker ones, that is, iff $C_Y \times n > C_X$ or $n > \frac{C_X}{C_Y}$.

Applied to Death vs. Paraplegias, Outweighing by Strength implies the intuitive judgment. Since the claim of the One is outweighed by the claims of the Many if $C_{Many} \times n > C_{One}$, and $C_{One} = 4$ and $C_{Many} = 1$, the claim of the One is outweighed whenever $n > 4$.

Outweighing by Strength is plausible for three reasons. First, it explains our initial intuition. Of course, we can disagree about the relative strength of claims against death and claims against paraplegia. But if we assume that the relative strength of claims has

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[3] We are concerned with the strength of the claims, not of the interests, and stay neutral on how the latter determines the former, for example, whether the burdens of worse-off people receive extra weight.

been determined, it's intuitive that one claim of strength 4 is outweighed by more than four claims of strength 1.

Second, Outweighing by Strength is implied by a plausible definition of the relative strength of claims: a claim *c* is *n* times as strong as another claim *c** if and only if *n c*s* exactly counterbalance *c*. This offers an informative account of the relative strength of claims, and an alternative definition that would prove similarly plausible isn't in sight.

Third, Outweighing by Strength is widely assumed in the literature on partial aggregation. In homogeneous cases, we ought to save the greater number if it satisfies the greater sum of strength-weighted, relevant claims.[4] In heterogeneous cases, if we match particular claims, those claims offset each other in accordance with the sum of their strength.[5] Since Zhang doesn't formulate an intention to diverge from Outweighing by Strength despite its prominence in the debate, we assume that this is the principle he intends to capture.

However, Zhang's account violates Outweighing by Strength. Let VF_X be the value forgone by saving *X,* and VF_Y the value forgone by saving *Y*. We can now express Zhang's proportionality requirement as follows.

> *Proportionality Condition:* In a choice between saving some *X*s or some *Y*s, the value we have reason to forgo for the respective interests of the individuals is proportionate to the relative weightiness of their interests if and only if $\frac{C_X}{C_Y} = \frac{VF_X}{VF_Y}$.

In prose, the difference between the value we're willing to give up for either claim must be proportionate to their difference in strength. A person's claim isn't proportionately considered if a decision against them violates the Proportionality Condition in their direction, that is, if the value forgone by saving the other group is too great. More formally:

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[4] Cf. Voorhoeve 2014: 66, Henning 2024: 771.

[5] Cf. van Gils/Tomlin 2020: 230.

> *Disproportionality Complaint:* A person X has a disproportionality complaint if and only if $VF_Y > \frac{C_Y \times VF_X}{C_X}$.

Relevant Aggregate Value, which we argued for in section 3, tells us how much value we forgo when choosing one option. But as the proportionality requirement relates to the value forgone for single claims, we must determine how much value we forgo to satisfy a single claim in that option. Unfortunately, Zhang doesn't play that through for unequal burdens. His explanation for *One vs. Two Deaths*, however, makes it clear:

> "if one decides to save A [...], then each of B and C may raise a personal complaint [...]: "If you treat A's life as being so important that you are willing to let two other people die for A's sake, then since my life is just as important, giving equal consideration to my life means that you should treat my life as giving you a comparatively stronger reason to forgo just a single life for my sake. [...]" Or, even more pithily, "Why are you willing to save A at the cost of two lives but no more willing to save me at the cost of just one life?" (Zhang 2024: 497.)

Evidently, Zhang identifies the value we forgo for a claim with the value we must forgo for the option that satisfies the claim. When choosing between saving A's life or the lives of B and C, we must forgo the value of two lives to save A, and the value of one life to save B. That is, although the claims of B and C can be jointly satisfied, the cost associated with saving either one is the entire cost of the option that satisfies them. More formally:

> *Total Forgone Value*: The value we forgo by satisfying a claim *c* is the total forgone value – the value of all relevant interests that aren't satisfied by the option that satisfies *c*.

However, Total Forgone Value violates Outweighing by Strength. Return to Death vs. Paraplegias and recall that C_{One} is four times as strong as C_{Many}. Proportionality thus requires that we forgo four times as much value to save the One. Since saving the Many comes at the cost of C_{One}, we must forgo four times the value of C_{One} to save the One. And because the value of C_{One} is four times that of C_{Many}, we ought to forgo four times

four, or 16, times the value of C_{Many} to save the One. Thus, only when the Many are more than 16, should we save them.

In formal terms, according to Total Forgone Value, the value we must forgo to rescue the One from death is $VF_{One} = C_{Many} \times n$; the value we must forgo to rescue any member of the Many is $VF_{Many} = C_{One}$. We substitute VF_{One} and VF_{Many} in the Proportionality Condition and solve for n.

$$C_{Many} \times n > \frac{C_{One} \times C_{One}}{C_{Many}} \Leftrightarrow n > \frac{{C_{One}}^2}{{C_{Many}}^2}$$

Consequently, the Many are treated with underproportionate consideration only if $n > \frac{{C_{One}}^2}{{C_{Many}}^2}$, so if $n > 16$. On Zhang's account, therefore, we ought to save the Many from paraplegia rather than the One from death only if they're more than 16.

Furthermore, as the difference in strength between claims increases, the number of additional weaker claims required to outweigh a stronger claim increases exponentially on Zhang's account. If C_{One} is ten times stronger than C_{Many}, Outweighing by Strength requires eleven claims of the Many, whereas Zhang's account requires 101 to outweigh the claim of the One. Consequently, Total Forgone Value contradicts Outweighing by Strength and, thus, the reasons favouring it: the intuitive assessment, the plausible definition of the relative strength of claims, and the common way in which outweighing is done in the literature.

5 A Proportionate Understanding of Forgone Value

The value we're willing to forgo to satisfy a relevant claim should be proportionate to the strength of that claim. Zhang's account, however, entails, at best, a strange kind of proportionality: We ought to forgo the value of a strong claim only if we could satisfy more than the squared number of weaker claims that together would be as strong as the strong claim. Thus, Zhang overrates strong claims and underrates relevant weaker claims.

We suggest a different account. The crucial difference is the understanding of the value we forgo by satisfying each claim. Zhang identifies that value with the total value

of all relevant interests that we thereby fail to satisfy. In Death vs. Paraplegias, the value we must forgo to satisfy each of the Many's claims is the value of the One's life. By satisfying four claims against paraplegia, we would thus forgo four times the value of a life. That doesn't seem right. There is just one life we can save. Hence, Zhang's understanding of forgone value is disproportionate.

Instead, we should understand the value forgone to satisfy a claim as the proportionate share of the forgone value. Call this

> *Proportionate Foregone Value*: The value we forgo by satisfying a claim *c* is the share of the aggregate value of relevant interests we forgo by choosing the option that satisfies *c* in proportion to *c*'s share of the aggregate value of relevant interests realised by choosing that option.

If we save the Many in Death vs. Paraplegias, each claim's share of the aggregate value of relevant interests realised is $\frac{1}{n}$. Correspondingly, the value foregone for each claim of the Many should be $VF_{Many} = \frac{C_{One}}{n}$. Given this, the Proportionality Condition entails that C_{One} is outweighed if $C_{Many} \times n > C_{One}$. That is, Proportionate Foregone Value implies Outweighing by Strength. For example, a claim of strength 4 can be outweighed by more than four claims of strength 1.

In sum, Zhang's Total Forgone Value has implausible implications. Our revision – Proportionate Forgone Value – implies Outweighing by Strength and thus aligns with the intuitive way of counterbalancing claims that is common in the literature and implied by a plausible definition of the relative strengths of claims.

You might object that Proportionate Forgone Value undermines Zhang's individualist ambitions: it would be incompatible with the individualist restriction. If the value we must forgo to satisfy an individual's claim is determined in proportion to its share of the value of all relevant interests that could be jointly fulfilled, we're not considering the individual alone anymore. Rather, the justification of our action would appeal to the aggregate value of interests that could be satisfied conjointly with the claim under consideration.

Proportionate Forgone Value might indeed be incompatible with a strong understanding of the individualist restriction. However, it's in line with Zhang's understanding, which allows considerations about aggregate value to enter the content of a claim:

> "an individualist approach bars considerations of aggregate well-being from directly figuring in the content of people's moral claims." (Zhang 2024: 494.) Nevertheless, "aggregate value can play an indirect role [...]. Specifically, [...] facts about aggregate well-being can serve as the background against which individuals can then derive personal reasons in favor of saving the greater number." (Zhang 2024: 494.)

On our revision, considerations about aggregate value don't enter the content of claims more directly than they do on Zhang's understanding. The only difference is that Total Forgone Value merely considers the aggregate value in the option we forgo to satisfy a claim, while Proportionate Forgone Value also appeals to the aggregate value in the option that satisfies that claim. Neither of the two understandings, however, considers aggregate value directly. And it's unclear why an individualist morality would allow for the appeal to aggregate value that one option realises but disallow the appeal to aggregate value that another option realises. Thus, Proportionate Forgone Value doesn't violate the individualist restriction – at least not more than Total Forgone Value does.[6]

Our proposed revision also maintains Zhang's individualist appeal that, with increasing numbers, "each individual in the larger group has an increasingly stronger claim to being saved" (Zhang 2024: 499). If we can save the greater number from the same burden, we owe each individual in the larger group to save them because only then do we consider their claims proportionately. Since an individual's complaint against considering their claims disproportionately is a function of that disproportionality, the larger the number of people we fail to save relative to the smaller number, the larger the

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[6] For discussion of the claim that *any*, including Zhang's, appeal to aggregate value violates the individualist restriction, see Bourguignon/Harney/Mossé ms.

disproportionality and, thus, the complaint and the wronging. Consequently, Proportionate Forgone Value upholds the individualist ambition of Zhang's account.

6 Conclusion

We have criticised and revised Zhang's understanding of the value we forgo by satisfying claims – the central feature of his account intended to explain why numbers matter even for individualist morality. First, forgone value cannot be the total value of all interests. Adopting the mechanism of normative disabling that Zhang already has in place, we have proposed Relevant Aggregate Value: only relevant interests count towards forgone value.

Second, Zhang's account implausibly implies that outweighing a stronger claim requires the squared number of weaker claims that together would be as strong as the stronger claim. Instead, we should accept Outweighing by Strength: the number of weaker claims needed for outweighing a stronger claim is determined by the mere ratio of the strength of the stronger claim to the strength of a weaker claim. Therefore, we suggest a further revision of Zhang's view: the value we need to forgo to satisfy a claim isn't the total forgone value of dissatisfied relevant interests, but only the proportionate share of that value. We should accept Proportionate Forgone Value.

7 References

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