

# The Numbers Always Count\*

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In “How Should We Aggregate Competing Claims?” Alex Voorhoeve develops a theory—Aggregate Relevant Claims (ARC)—which aims to reconcile intuitive judgments for and against aggregating claims in different situations. I argue that ARC does not justify these intuitions but instead ultimately relies on them. We ought not to trust the intuition in favor of nonaggregation, so we ought not to trust ARC. I then show that the nonaggregative part of ARC has a number of unacceptable implications. These problems afflict all nonaggregative theories. Finally, I present a positive argument for full-blooded aggregation. The numbers always count.

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In “How Should We Aggregate Competing Claims?” Alex Voorhoeve aims to provide a theory which reconciles intuitive judgments for and against aggregating claims in different situations. I argue that Voorhoeve fails to justify nonaggregation. Furthermore, the nonaggregative part of his theory has a number of unacceptable implications. Its failure is indicative for all nonaggregative theories. If I am right, then the full-blooded aggregative part of consequentialism is true. The numbers always count.

## I. AGGREGATE RELEVANT CLAIMS

Suppose that you are a morally motivated stranger who, using your own resources, can help others at negligible cost to yourself. Consider the following cases:

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**Case 1.** You can either fully cure one young man's terminal illness thereby restoring him to good health for a normal life span or fully cure a number of other young people of an illness which will not shorten their lives but which will leave them completely disabled (they will be mentally unimpaired but permanently bedridden, which for them will entail a life just somewhat better than an early death). Is there a number of people you can save from being completely disabled for which you ought to save them from this disability instead of the one from death?

**Case 2.** You can either cure one young man's terminal illness or cure some number of other young people of an illness which will cause a very minor harm (they will be bedridden for a day). Those facing this minor harm otherwise have good prospects. Is there a number of people you can spare this very minor harm for which you ought to spare them this harm instead of saving the one from death?<sup>1</sup>

Many philosophers and nonphilosophers answer yes and no to these questions, respectively. Voorhoeve aims to provide theoretical support for these judgments by constructing a theory he calls Aggregate Relevant Claims (ARC).

ARC:

1. Each individual whose well-being is at stake has a claim on you to be helped. (An individual for whom nothing is at stake does not have a claim.)
2. Individuals' claims *compete* just in case they cannot be jointly satisfied.
3. An individual's claim is *stronger*:
  - a) the more her well-being would be increased by being aided; and
  - b) the lower the level of well-being from which this increase would take place.
4. A claim is *relevant* if and only if it is sufficiently strong relative to the strongest competing claim.
5. You should choose an alternative that satisfies the greatest sum of strength-weighted, relevant claims.<sup>2</sup>

1. Alex Voorhoeve, "How Should We Aggregate Competing Claims?" *Ethics* 125 (2014): 64–87, 64–65, doi:10.1086/677022.

2. *Ibid.*, 66.

On ARC, we ought to aggregate relevant claims, but we ought not to aggregate irrelevant claims. Relevance is determined by the process of ‘sympathetic identification’. We step into the shoes of each individual claimant one by one, take on her maximally permissible degree of self-concern, and consider what is at stake for her compared to the competing claim. Voorhoeve calls the perspective of maximally permissible self-concern and minimally permissible other-concern the ‘permissible personal perspective’.<sup>3</sup> Self-concern is intuitively permissible in some cases. If I face a choice between my own death and the death of another, I am permitted to save myself. But if I face a choice between a headache and the death of a stranger, I am not permitted to benefit myself. By making the permissible personal perspective determine relevance, ARC interestingly unites the two most common features of nonconsequentialism: permissible self-concern and nonaggregation.

Voorhoeve provides the following precise criterion of relevance: “Person A’s claim is relevant to B’s competing claim just in case, in a one-to-one comparison of their claims from A’s permissible personal perspective, A’s claim is at least as important as B’s.”<sup>4</sup> Relevance is an asymmetric relation: it could be true that A’s claim is relevant to B’s but that B’s is not relevant to A’s. In case 2, from the permissible personal perspective of the terminally ill man, his claim is at least as important as the claim of a person who faces being temporarily bedridden. Therefore, his claim is relevant to that of the person who faces being temporarily bedridden. But from the permissible personal perspective of a person who faces being temporarily bedridden, it is not the case that her claim is at least as important as that of the terminally ill man. So, her claim is not relevant to that of the terminally ill man.

The self-concern inherent in the permissible personal perspective implies that some claims which are weaker than others are nevertheless relevant to those other claims. Being permanently bedridden is not as bad as death, but we would be permitted to prevent ourselves being permanently bedridden at the expense of the death of a stranger. Thus, because of the reliance on the permissible personal perspective, aggregation depends, not solely on the strength of claims but on the relevance of claims, which is in part a function of strength.

ARC produces answers which are in accord with the commonsense intuitive judgments about cases 1 and 2. As discussed above, in case 2 since only the claim of the terminally ill man is relevant, we ought not to aggregate, and so we ought to benefit the terminally ill man, regardless of how many people face being temporarily bedridden.

3. *Ibid.*, 71–72.

4. *Ibid.*, 72.

By contrast, in case 1 if we adopt the permissible personal perspective of the people who face being permanently disabled, then we will believe that our claim is at least as important as that of the man who faces a terminal illness. Likewise, if we adopt the permissible personal perspective of the terminally ill man, then we will believe that our claim is at least as important as that of the people who face being permanently disabled. Therefore, both sets of claims are relevant to one another. So, we ought to aggregate, and so we ought to benefit the people who face being permanently bedridden, provided there are enough of them.

## II. THE FAILURE TO JUSTIFY NONAGGREGATION

The foregoing sketch shows that ARC reaches answers which are in accord with the commonsense intuitive judgments about cases 1 and 2, and it shows how ARC reaches these answers. Voorhoeve aims, in addition, to provide a deeper justification for these answers. That is, he aims to justify the proposition that we ought to aggregate relevant claims and the proposition that we ought not to aggregate irrelevant claims, without appealing only to the intuitive judgments about cases 1 and 2.<sup>5</sup> In this section, I argue that he fails to provide the requisite justification for ARC. This stores up problems for ARC, which I discuss in Section III.

Voorhoeve argues that ARC partially accommodates two conflicting ways of responding to the equal value of each individual's well-being, one aggregative, one nonaggregative.<sup>6</sup> The aggregative approach is attractive because it asserts the equal marginal importance of each person's claim of a given strength. On this approach, satisfying  $N$  claims of a given strength is  $N$  times as important as satisfying one claim of a given strength. This naturally yields the judgment that one ought to satisfy the greatest possible sum of strength-weighted claims. ARC partially accommodates the aggregative approach by saying that we ought to satisfy the greatest possible sum of strength-weighted claims, provided the competing sets of claims have a similar strength.

The nonaggregative approach, by contrast, involves imaginatively stepping into the shoes of each individual taken separately and comparing what she would have to give up in comparison to a person with a competing claim. After performing this process, one does not aggregate claims. Instead, one takes an objective perspective on the importance of each claim taken separately. Voorhoeve then says: "When one does so, it will appear most important to satisfy the strongest claim."<sup>7</sup> As I understand him, Voorhoeve is not suggesting here that the nonaggregative

5. *Ibid.*, 67–68.

6. *Ibid.*, 68–70.

7. *Ibid.*, 69.

approach cannot in principle be applied to claims which have a similar strength, such as those in case 1. Rather, he is considering the implications of the approach for claims with a sufficiently different strength. He argues that the approach of sympathetic identification is essentially non-aggregative. I can sympathetically imagine myself in the shoes of one individual but not in the position of a collection of individuals. In this way, the sympathetic approach is the natural expression of our appreciation of the separateness of persons. ARC partially accommodates this approach by refusing to aggregate sets of competing claims, provided the sets of claims have a sufficiently different strength.

Voorhoeve does not explain why we ought to accept a theory which partially accommodates the two approaches in the way ARC does. He does not explain why persons are separate in case 2, but not in case 1, or why claims have an unvarying marginal importance which aggregates in case 1, but not in case 2. I cannot think of any reason to accept either of these two propositions. We can make an infinite number of modifications to the aggregative and nonaggregative approaches in order to render them consistent, but, in the absence of an adequate justification for these modifications, they will be ad hoc. One implication of these modifications is that they allow us to hold on to the commonsense judgments about cases 1 and 2. Even if we accept that this is a good justification for the modifications, it is not the justification Voorhoeve is looking for. ARC is supposed to be justified without appealing solely to these judgments.

Voorhoeve presents three further arguments for the proposition that we ought to aggregate relevant claims and ought not to aggregate irrelevant claims. I will now argue that none of these rationales for ARC succeed.

The first is that ARC “embodies the key elements of the non-aggregative, sympathetic approach.”<sup>8</sup> The nonaggregative element “is captured by considering claims one to one.” This is not true. On ARC, we also consider claims one-to-one if the claims are relevant and we ought to aggregate. Therefore, it cannot be true that considering claims one-to-one captures the nonaggregative element. Voorhoeve says that the sympathetic element “is captured by taking on each person’s maximally permissible degree of self-concern.”<sup>9</sup> I take it that Voorhoeve means that ARC captures the sympathetic approach underlying nonaggregative ethics, of stepping into the shoes of each person and considering what is at stake for her if her claim were not satisfied in a one-to-one conflict. This is not a tenable rationale for ARC. It cannot be true that the method used by ARC captures the sympathetic approach to ethics because we also use that method in case 1, and yet we ought to aggregate in that case. If the

8. *Ibid.*, 73.

9. *Ibid.*

sympathetic method used by ARC had some justificatory connection to the sympathetic approach to ethics, then it would entail that the numbers never count; it would entail that we should toss a coin between the two options in case 1.<sup>10</sup> In sum, the method used by ARC does indeed mirror the nonaggregative sympathetic approach, but this cannot justify ARC because ARC is a partially aggregative theory.

The second rationale for ARC is that it “tracks an important result of the process of imaginatively taking up each person’s permissible personal perspective within the terms set by the non-aggregative approach.”<sup>11</sup> In case 1, in each of the one-to-one comparisons, there is disagreement about which claim should be satisfied. From each person’s permissible personal perspective, her own claim is at least as important as the competing claim. The process of sympathetic identification leads one to sympathize with a person who will press her claim in this case. In case 2, by contrast, there is a form of unanimity. From the permissible personal perspective of someone with a very weak claim, her claim is much less important than the claim of the terminally ill man. Likewise, from the point of view of the terminally ill man, the trivial claim is much less important. In a one-to-one comparison of claims, we do not sympathize with a person who tries to press her much weaker claim; her claim is ‘silenced’.<sup>12</sup> Voorhoeve says: “There is therefore a solution that is acceptable—indeed, demanded—from the permissible personal perspective of each.”<sup>13</sup> The solution Voorhoeve refers to here is satisfying the stronger claim.

This argument attempts to justify both the aggregative and the nonaggregative aspects of ARC. The argument for the nonaggregative aspect does not succeed.<sup>14</sup> It is true that in case 2 if we ask each person to make a one-to-one comparison of the competing claims at stake from her permissible personal perspective, each person will agree that we ought to satisfy the stronger claim. There is agreement *on the assumption that people ignore the numbers*. We can accept that agreement when people ignore the numbers justifies the proposition that the numbers do not matter, only if we already accept that the numbers do not matter. So, this argument begs the question against aggregative theories. It might be true that commonsense intuitions entail that the numbers do not matter, but then

10. John M. Taurek, “Should the Numbers Count?” *Philosophy and Public Affairs* 6 (1977): 293–316.

11. Voorhoeve, “How Should We Aggregate Competing Claims?” 74.

12. *Ibid.*, 76.

13. *Ibid.*, 74.

14. I also believe that the argument for the aggregative part of ARC does not succeed, although I exclude that discussion here for reasons of space. To set up my refutation of ARC in Sec. III, I only need to prove that the nonaggregative part of ARC ultimately relies on the commonsense intuition about case 2.

these intuitions, not ARC, would be doing the justifying. Analogy: if we compare each of 10,000 grains of rice one by one to a rump steak, for each grain of rice, we will agree that the steak is heavier. This agreement would be relevant to the question of whether the 10,000 grains of rice are collectively heavier than the steak only if the numbers do not count when it comes to rice versus steak comparisons.

Third, Voorhoeve says that ARC provides a powerful explanation to someone whose claim is judged irrelevant. He says: "For one cannot complain that one's claim is not satisfied by an impartial third party when it would not even fall within one's personal prerogative to satisfy it oneself if no moral considerations apart from the minimally required concern for the stranger's well-being stood in one's way."<sup>15</sup> Voorhoeve is right to say that in a one-to-one conflict, it would not fall within one's personal prerogative to satisfy one's much weaker claim oneself if no moral considerations apart from the minimally required concern for the stranger's well-being stood in one's way. Clearly, in a one-to-one conflict, this entails that one may not complain if one's claim is not satisfied. Voorhoeve appears to believe that this entails that, in a one-to-many conflict, a person with a much weaker claim may not complain if her claim is not satisfied. But he does not explain why justifiable complaint on the assumption that people ignore the numbers determines justifiable complaint when people do not ignore the numbers. The only available defense of this is the prior intuition that the numbers do not count. I argue in the next section that those with weaker claims do have a justifiable complaint because nonaggregative views imply that, in some cases, their suffering does not matter.

In one way or another, Voorhoeve's three rationales misunderstand the role that one-to-one comparison plays in his argument. He fails to explain why what we ought to do in one-to-one comparisons bears on what we ought to do in one-to-many comparisons. Consequently, he fails to justify the proposition that we ought not to aggregate irrelevant claims and ought to aggregate relevant claims.

I have one final criticism of the justificatory import of ARC. ARC deals inadequately with the claims animals have against us. Suppose that we face a choice between curing a number of dogs of uncomfortable lice for a day and of preventing a cow from being tortured for three years. Voorhoeve argues that his case for ARC depends on it being true that people have a permissible personal prerogative.<sup>16</sup> But since cows are

15. Voorhoeve, "How Should We Aggregate Competing Claims?" 74.

16. "In this article, I simply assume that, up to a limit, one is indeed morally permitted to be more concerned for oneself than for a stranger and to act on this pattern of concern when no other moral considerations (such as rights or special ties) stand in the way" (*ibid.*, 71).

not rational moral agents, they do not have a permissible personal prerogative. Therefore, the method of sympathetic identification cannot be used to determine how to treat the claims of animals and other nonagents.

This raises two problems for ARC. First, it must be supplemented with a distinct theory for animals. So, ARC loses out in terms of theoretical comprehensiveness and simplicity in comparison to rival theories, like utilitarianism. Second, this provides additional confirmation for my contention that ARC does not do any work in justifying the intuitions about cases 1 and 2. Many people will have the nonaggregative intuition that we ought to save the cow and will have the aggregative intuition that, when we can save one cow from its torment or a large number of dogs from a slightly lesser degree of torment, we ought to save the dogs. The fact that we cannot justify these intuitions by appeal to ARC does not seem to me to require us to have lower credence in our beliefs about aggregation among animals than our beliefs about aggregation among humans. Therefore, ARC does no work in justifying beliefs about aggregation among humans.

Voorhoeve explicitly considers the proposition in the previous sentence, along with other distinct criticisms, including that ARC ‘adds nothing new’ and that it has no implications which are not already commonsense moral judgments.<sup>17</sup> I agree with him that these last two criticisms do not succeed. The connection between permissible self-concern and non-aggregation is not part of commonsense morality, and so ARC adds something new in this respect, even if it is not justificatory. And ARC gives normative guidance when other commonsense judgments are unclear and when commonsense judgments conflict with ARC.<sup>18</sup> The problem is that the intuition about case 2 is the only thing justifying this guidance and, as we will see below, we have very good reason to doubt this intuition. Voorhoeve also argues that ARC plays a crucial role in rebuttals of objections to nonaggregation. Although I cannot consider all of the rebuttals, all of the ones I consider in the next section fail. In sum, ARC does not offer any independent support for commonsense intuitions about cases 1 and 2.

### III. THE INESCAPABLE PROBLEMS WITH NONAGGREGATION

I will now argue that we ought not to accept ARC or any nonaggregative theory. Voorhoeve anticipates most of the arguments made here, but he does not provide a convincing response to them.

17. *Ibid.*, 79–82.

18. I discuss some of those cases at length in the next section.



*Large Numbers*

Proponents of aggregation have a persuasive error theory which explains the mistaken judgment about case 2. People do not have an intuitive grasp of large numbers. Beyond a certain magnitude, all large quantities strike our imagination much the same. We find it hard to sympathetically appreciate the difference between the suffering of 1 million people and the suffering of 1 billion people, even though we know, intellectually, the latter is one thousand times worse than the former. Our emotional states are strongly sensitive to the welfare of the terminally ill man because we can easily sympathize with him but, above a relatively low population level, only weakly influenced by the size of the population with a mild illness. Since, according to the consequentialist, the key to the value of curing large populations with a mild illness lies in the size of the population, curing this population gets the worse of our intuitive evaluation process.<sup>19</sup> Voorhoeve argues that we can have a justified belief in the proposition that irrelevant claims ought not to be aggregated without having to apprehend large numbers.<sup>20</sup> In one-to-one comparisons, all people with much weaker claims are silenced. “What is true of one person with a very weak claim is true of every other such person. Therefore, for determining what one ought to do, it doesn’t matter how many people with such claims there are—no matter how large their number, one ought to satisfy the very strong claim.”<sup>21</sup> As I pointed out in Section II, the fact that all weaker claims are silenced in each one-to-one comparison does not entail that they are collectively silenced in a one-to-many comparison. The only thing which justifies the proposition that weaker claims are collectively silenced is the commonsense intuition in favor of nonaggregation. We cannot trust this intuition because we cannot intuitively grasp large numbers. Since this commonsense intuition is the only thing which justifies ARC, we cannot trust ARC.

*Intransitivity and Irrelevant Alternatives*

Relevance is intransitive. It could be true that claim A is relevant to claim B, that claim B is relevant to claim C, but that claim A is not relevant to claim C. It is this intransitivity which entails the mix of aggregation and nonaggregation, which is an attractive feature insofar as it appears to get the right answers in cases 1 and 2. However, it also produces some very strange results.

Suppose that there is one man with a terminal illness, that there are a million people with a lifelong moderate mobility impairment, and that

19. John Broome, *Weighing Lives* (Oxford: Oxford University Press, 2004), 56–58; Michael Huemer, “In Defence of Repugnance,” *Mind* 117 (2008): 907–11, doi:10.1093/mind/fzn079.

20. Voorhoeve, “How Should We Aggregate Competing Claims?” 75–76.

21. *Ibid.*, 76.

there are a billion people with a mild mobility impairment. The claim to be cured of a terminal illness is relevant to the claim to be cured of a lifelong mobility impairment, and the latter claim is relevant to the claim to be cured of a mild mobility impairment, but the first and the third claims are not relevant to one another. For each treatment that could be delivered, there is a corresponding vial of medicine X, Y, and Z, respectively. For these medicines to work, patients must also receive a very uncommon medicine, but there is only enough of this for one of the treatments (X, Y, or Z) to work. ARC implies that we ought to have cyclical preferences between these options. In a choice between X and Y, we ought to prefer Y because the claims are relevant, and so the numbers matter. In a choice between Y and Z, we ought to prefer Z because the claims are relevant, and so the numbers matter. But in a choice between X and Z, we ought to prefer X because the claims are not relevant, and so the numbers do not matter. Therefore, we ought to have cyclical preferences:  $X < Y$ ,  $Y < Z$ ,  $Z < X$ .

ARC implies that, no matter the numbers at stake, these relations would hold. If there were trillions more people suffering mild mobility impairments, then Z would be enormously preferable to Y but could never be preferable to X, even though Y is preferable to X. The best justification for intransitive preferences is that we ought not to be rationally responsive to mild sweetening of options.<sup>22</sup> ARC, by contrast, produces intransitivity even when there is massive sweetening. This is very counterintuitive.

As a result of the intransitivity of relevance, ARC violates the *Independence of Irrelevant Alternatives*.<sup>23</sup> Voorhoeve considers a form of this objection but does not consider some of the more implausible consequences it throws up.<sup>24</sup> To prove that ARC violates this principle, we first need to be clear on ARC's implications when we face a choice between three sets of competing claims. According to Voorhoeve, in a choice between X, Y, and Z, the doctor ought to choose option Y. This result is given by the following criterion of relevance: "From each feasible set, one simply assesses whether a claim is relevant by comparing it, one to one and from the permissible personal perspective of each, to the strongest competing claim

22. Caspar Hare, "Take the Sugar," *Analysis* 70 (2010): 237–47.

23. My arguments here are borrowed from Nick Beckstead and Toby Ord, "Rationing and Rationality," in *Inequalities in Health*, ed. Nir Eyal et al. (Oxford: Oxford University Press, 2013), 232–39. Beckstead and Ord demonstrate some other very implausible implications of denying the Independence of Irrelevant Alternatives. To my knowledge, this is the best available defense of the Independence of Irrelevant Alternatives.

24. Voorhoeve, "How Should We Aggregate Competing Claims?" 78–79. He calls this the objection from 'basic contraction consistency'.

in that set. A claim is irrelevant if and only if this strongest competing claim takes priority over it from every person's perspective. One then chooses an alternative that satisfies the greatest sum of strength-weighted, relevant claims."<sup>25</sup> So, when we make a pairwise comparison of a weak claim to a strong claim, the weak claim is judged to be less important from the permissible personal perspective of all claimants in the set (including those with the moderate claim). This rules out the weak claim and leaves us with only the moderate and the strong claim. These claims are relevant to one another. Consequently, the numbers count, and we ought to satisfy the aggregated moderate claims (option Y).<sup>26</sup>

This clarified, suppose now that the doctor has only two treatments—Y and Z—to hand. On ARC, the doctor ought to choose option Z. Now a nurse walks in and hands treatment X to the doctor. The mere availability of X makes it the case that he ought to choose Y, even though, when X was not available, he ought to have chosen Z. This is intuitively very odd. Consider this even more bizarre example. Suppose that the doctor knows that treatments Y and Z are available but is not sure whether treatment X is available. If X is not available, then he ought to administer Z, but if X is available, he ought to administer Y. The stakes of his choice are very high, so he ought to spend a significant amount of time and money trying to find out whether X is available or to make a new batch of X, even though he knows he will not actually use X. The usual rationale underlying nonaggregation is that so much is at stake for the terminally ill person compared to each of the mildly impaired people. ARC purports to respect this terminally ill person by telling us to benefit *someone else* when the treatment for the terminally ill person becomes available. Violating the Independence of Irrelevant Alternatives in the way that ARC does is intuitively very strange and at odds with the rationale for nonaggregation.

Voorhoeve's response to this argument is not persuasive. He argues that these choices are justified because of the persuasive rationale given for ARC. There is a moral difference between 'Z when chosen from Y and Z' and 'Z when chosen from X, Y, and Z'. However, as I argued in Section II, Voorhoeve does not provide a compelling rationale for ARC. ARC is only as compelling as the commonsense intuitive judgments about cases 1 and 2. These judgments do not justify the proposition that the availability of X makes a difference to the moral quality of Z. Z is Z, regardless of whether X is available. Thus, the aforementioned implications count strongly against ARC and all partially nonaggregative theories.

25. *Ibid.*, 78.

26. I do not think Voorhoeve's argument for choosing Y succeeds, although I cannot explain why here, for reasons of space.

*A Defense of Full-Blooded Aggregation*

Commonsense morality tells us that we ought not to aggregate in case 2. However, other intuitive judgments count against that judgment. The propositions that death is not infinitely bad and that it is better for people not to suffer appear to pose a serious threat to the judgment about case 2.

Death is bad because it deprives people of the time to experience the good things in life. So, not all deaths are as bad as each other. Preventing someone dying a second earlier than she would have done otherwise is not morally important, but preventing someone dying sixty years earlier than she would have done otherwise is very morally important.<sup>27</sup> According to nonaggregative views, we ought to save someone from dying sixty years earlier than she would have done otherwise, rather than save any number of people from dying a day earlier than they would have done otherwise. Now, consider this:

**Case 3.** You can either cure Dave's terminal illness and thereby provide him with an additional day of life or cure some number of other people of a terminal illness and thereby provide them each with an additional day of life. Is there a number of people you can give an additional day of life for which you ought to give them this additional day of life instead of giving Dave an additional day of life?

Obviously, the answer is yes. ARC says so too. If we adopt the permissible personal perspective of each person involved, then the competing claims are as important as one another. So, the numbers count. There is some number of people,  $x$ , such that we ought to cure them rather than Dave.

It seems obvious that  $x = 2$ . The best explanation of this is aggregative consequentialism. The reason we ought to benefit the two people rather than Dave is that doing so produces more intrinsic value. The intrinsically good-making features of a day of life are the good things that can happen in a day of life, such as eating a chocolate brownie or listening to Otis Redding. Assume for simplicity that neither Dave nor any member of the group is more morally important than the other and that they would each get the same amount of goodness from each day of life.<sup>28</sup> If so, there are twice as many intrinsically good-making features

27. Some people deny this. See, e.g., F. M. Kamm, *Morality, Mortality*, vol. 1, *Death and Whom to Save from It* (Oxford: Oxford University Press, 1998), chap. 1. I will take it for granted here because Voorhoeve accepts it, I have the very strong (prereflective and postreflective) intuition that it is correct, and I would conjecture that the vast majority of people do too.

28. Nonaggregative views do not deny these suppositions. Even if all days are equally worthwhile for each person, the numbers do not count when enough days are at stake for one individual.

present when two people live a day of life each compared to when one person lives a day of life.<sup>29</sup> So, the former option is twice as good as the latter. Consequently, we ought to choose the former option. The key point is that this reasoning can be extended for each additional marginal day of Dave's life. Curing  $x$  people justifies not saving only one day of Dave's life because doing so produces more intrinsic value. For the same reason, curing each marginal  $x$  people justifies not saving each marginal day of Dave's life. This entails that curing  $Nx$  people justifies not saving  $N$  days of Dave's life, where  $N$  varies from one to infinity. If so, ARC and all nonaggregative theories are false. In short, the best justification of aggregation in cases 1 and 3 is full-blooded aggregative consequentialism. Partially nonaggregative views count people's welfare in some cases but not others. They accept that it is important to give Dave (say) ten thousand days of life only because of the aggregated importance of those ten thousand days. But they deny that it is preferable for a large population to collectively enjoy a greater number of days of life than it is for Dave to enjoy a large but overall smaller number of days of life. This amounts to denying that the welfare and suffering of those in the large population matters. ARC elegantly enshrines this position: irrelevant claims are 'silenced'.

Unlike aggregative consequentialism, ARC does not treat the first day of life given to Dave in the same way as each marginal day of life given to Dave. ARC says that relevance determines whether we ought to aggregate and posits a sharp but vague boundary between relevant and irrelevant claims.<sup>30</sup> Thus, extending Dave's life by a certain number of days,  $M$ , ought to be preferred to providing a day of life to any number of people, but extending Dave's life by  $M - N$  days ought to be dispreferred to curing  $(M - N) \times$  people.<sup>31</sup> Up until we can save  $M$  days of Dave's life, curing each marginal  $x$  people justifies not saving a marginal day of Dave's life, but once we can save  $M$  days of Dave's life, not only will curing a marginal  $x$  people not justify not saving a marginal day of Dave's

29. Huemer, "In Defence of Repugnance," 918–22.

30. Technically, whether the boundary is sharp depends on which theory of vagueness is true. For simplicity, I assume epistemicism and standard logic. Voorhoeve himself says that borderline cases are 'unclear', which suggests he endorses epistemicism. See Voorhoeve, "How Should We Aggregate Competing Claims?" 80–81. Many theories of vagueness deny that there is a sharp boundary between the bald and the not bald. However, all nonihilistic theories posit a transition at some stage or over some space. Otherwise, there would be no bald people. The criticisms I make here apply even if we extend the space over which the logical transition occurs through degrees of true, truth value gaps, truth value gluts, or something like that. At some point or over some space, the numbers on one side stop mattering at all. This is implausible.

31. On epistemicism, even though—due to the borderline nature of the case—we cannot know what number  $M$  is,  $M$  nevertheless is a unique number.

life, there is no number of people which would justify not saving that marginal day of Dave's life. It is very difficult to accept that a boundary of this kind could exist. I know of no other case of vagueness which behaves like this. Suppose that we are comparing two artists, Sharon and Michelle, in terms of creativity. We make a series of improvements to each of them in tandem, and Michelle is more creative than Sharon for all of these improvements. However, there is a certain number of improvements to each such that no improvement in the creativity of Michelle could make her more creative than Sharon. We would rightly say of someone who posited a case like this that they have misunderstood creativity. By the same token, we should say that ARC misunderstands what is morally important.

One difference between the two cases is that the creativity comparison does not require us to apprehend large numbers. This provides further confirmation for the error theory for intuitive nonaggregative judgments. A variety of arguments, some of which I have considered here, show nonaggregation to have very implausible implications and show aggregation to have a compelling theoretical justification. This gives us sufficient reason to reject nonaggregation. The numbers always count.