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Skepticism about Saving the Greater Number

I

Suppose that each of the following four conditions obtains:

(1) You can save either a greater or a lesser number of innocent people from (equally) serious harm.
(2) You can do so at trivial cost to yourself.
(3) If you act to save, then the harm you prevent is harm that would not have been prevented if you had done nothing.
(4) All other things are equal.[1]

A skeptic about saving the greater number rejects the common-sensical claim that you have a duty to save the greater number in such circumstances.

The skeptic that I have in mind is not an amoralist. She affirms the existence of some moral duties. Nor is she a skeptic regarding the existence of duties to aid in general, as one might be if one thought that our duties extended only so far as the imperative to refrain from harming others and did not encompass an imperative to provide benefits to others. This skeptic is, for example, happy to affirm that you have a duty to save the life of a single individual if your only alternative is to save nobody. More generally, she is happy to affirm the following duty to save

Section II of this article originated as a commentary on Véronique Munoz-Dardé's "The Distribution of Numbers and the Comprehensiveness of Reasons." (Her piece is now forthcoming in the *Proceedings of the Aristotelian Society*.) I have delivered subsequent versions of this article at the University of Reading, UCLA, the University of Bristol, the University of Leeds, and the University of Oxford, and thank all who commented on those occasions. I am also grateful to G. A. Cohen, Iwao Hirose, Véronique Munoz-Dardé, Alex Voorhoeve, and the Editors of *Philosophy & Public Affairs* for their written comments.

1. In all of the cases I discuss below, it should be assumed that all four of these conditions hold unless I indicate otherwise.

the greater number in cases involving *no conflict*: for any sized set of people (including a singleton set) all of whose members you can save, if you are faced with the choice either to save everyone in this set or to save everyone in this set plus some number of people outside of this set you ought to do the latter.[2] She affirms that you ought, for example, to save the lives of both A&B rather than the life of A alone. This skeptic is also moved by pairwise comparisons of the strength of the claims of each of two individuals. Hence she is happy to affirm that if you can save either one person from serious harm (e.g., loss of life) or another person from harm that is less serious to a nontrivial degree (such as paralysis), you ought, other things being equal, to save the former from the greater harm. All of the skeptic's beliefs enumerated in this paragraph are at one with common-sense morality.[3]

What the skeptic denies is a duty to save the greater number from equally serious harm in cases involving a *conflict of interests*. She denies the following: if you can save some number greater than n rather than n from equally serious harm, then you ought to save the larger set of people when it does not overlap at all with the smaller set.[4] She denies that you ought, for example, to save the lives of B&C rather than the life of A if you can either save B&C together, or A alone, and you have no other options.[5] It is her denial of such a duty that constitutes her skepticism about saving the greater number.[6] This denial follows from a more

2. This is a "no-conflict case" because saving the greater number does not come at the cost of saving the lesser number.

3. "Common-sense morality" is, I shall stipulate, that which is in full accord with widely shared intuitions about what one ought and ought not to do.

4. This is a "conflict case" because saving the greater number comes at the cost of saving the lesser number.

5. More precisely, she denies that you ought to save B&C on the grounds that they are greater in number than A. Some such skeptics as John Taurek recommend that you give each person an equal chance of being saved by, e.g., flipping a coin and saving A if it comes up heads and B&C if it comes up tails. Taurek would recommend that you save B&C if they win the coin toss while denying an obligation to save them on the grounds that they are greater in number. See John Taurek, "Should the Numbers Count?" *Philosophy & Public Affairs* 6 (1977): 293–316, at pp. 303–07.

6. As shorthand, I shall call such skepticism *numbers skepticism*. Both Elizabeth Anscombe and John Taurek reject a duty to save the greater number in conflict cases. They do not, however, necessarily subscribe to all of the claims that conform to common-sense morality that I have attributed to the numbers skeptic in the second paragraph of this section. See Elizabeth Anscombe, "Who is Wronged?" *The Oxford Review* no. 5 (1967): 16–17, and Taurek.

general principle of nonaggregation according to which one's duties to come to the aid of others are to be determined by the claims of individuals considered one by one rather than by any aggregation of the claims of individuals.

The numbers skeptic's denial of a duty to save the greater number flies in the face of common sense, and hence there is the temptation simply to dismiss the view as too outlandish to take seriously. But, as in the case of other reputable forms of skepticism (e.g., skepticism regarding our knowledge of an external world, our grounds for induction, or the freedom of the will), this would be a mistake. We must acknowledge that the reputable skeptic's outlandish conclusion is not derived from foreign premises. Rather it is derived from claims that find a secure home among the beliefs of non-skeptics and skeptics alike.

In the case of numbers skepticism, the argument originates from a widely shared unease regarding the propriety of the aggregation of the claims of different individuals. This unease has been reinforced by over thirty years of anti-utilitarian writings in the mainstream of moral philosophy. It traces back to Rawls's complaint that utilitarian aggregation fails to take seriously the distinction between persons and Nagel's defense of an impartial concern for persons that is grounded in the pairwise comparison rather than the aggregation of the claims of separate individuals.[7] More recently, Scanlon has defended a contractualist alternative to consequentialism that debars any appeal to the combined claims of different individuals.[8] It is not surprising that these three thinkers share an aversion to aggregation, given their shared commitment to a Kantian contractualism that calls for the justification of ethical principles to individuals one by one.[9] Yet this aversion is not limited to those who share their theoretical commitments: Scanlon's

7. See John Rawls, *A Theory of Justice* (Cambridge, Mass.: Harvard University Press, 1971), sec. 5, and Thomas Nagel, "Equality," in his *Mortal Questions* (Cambridge: Cambridge University Press, 1979), pp. 106–27.

8. See Thomas Scanlon, *What We Owe to Each Other* (Cambridge, Mass.: Harvard University Press, 1998), pp. 229–41.

9. In rejecting the aggregation of the claims of different individuals, Scanlon maintains that it is "central to the guiding idea of contractualism" and "one of the most appealing features of such a view" that "the justifiability of a moral principle depends only on various *individuals*' reasons for objecting to that principle and alternatives to it" (ibid., pp. 229, 241).

own stance regarding aggregation draws heavily, for example, on Frances Kamm's noncontractualist deontology.[10]

Nagel's aforementioned rejection of aggregation is also, and not coincidentally, a defense of an individualistic conception of equality, which provides another foothold for the numbers skeptic. John Taurek maintains, for example, that the appropriate way to show "equal concern and respect for each person" is to give each individual in a conflict case an equal chance of being saved. He points out that an agent who acts from a duty to save the greater number deprives someone who is not among the greater number of any chance at all of being saved.[11]

How might one defend common sense against numbers skepticism? One strategy would be to try to show that the principle of nonaggregation does not entail the denial of a duty to save the greater number in conflict cases. I doubt that this strategy will succeed.[12] I shall therefore consider a different strategy of resistance, one that argues that the numbers skeptic's moral commitments as sketched in the second and third paragraphs of this section are irrational. In Section II, I shall consider the claim that the numbers skeptic's commitments are irrational because she cannot consistently hold both that one has a duty to save the greater number in no-conflict cases and that one has no duty to save the greater number in conflict cases. In Section III, I shall argue that numbers skepticism is irrational insofar as it gives rise to a choice-defeating cycle of intransitive preferences. More precisely, the combination of the skeptic's endorsement of the principle of nonaggregation and her affirmation of pairwise comparisons of harms gives rise to this intransitivity.[13]

10. See Frances Kamm, *Morality, Mortality*, vol. I (Oxford: Oxford University Press, 1993), pp. 101 and 114–19.

11. Recall that Taurek recommends that, rather than always saving the greater number in conflict cases, one flip a coin to determine whom to save. See n. 5 above.

12. Kamm and Scanlon have both argued that one can justify the saving of the greater number in conflict cases without aggregating the claims of different individuals. See Kamm, pp. 101 and 114–19, and Scanlon, pp. 229–41. I reject their argument in Michael Otsuka, "Scanlon on the Claims of the Many versus the One," *Analysis* 60 (2000): 288–93.

13. This particular charge of irrationality threatens not only philosophers such as Anscombe and Taurek who deny a duty to save the greater number in conflict cases. It also threatens the position of Scanlon, who affirms a duty to save the greater number in such cases. See n. 24 below.

These two charges of irrationality presuppose that the numbers skeptic is committed to one or another of the common-sense claims sketched in the second paragraph of this section. Hence the numbers skeptic could escape the first charge by renouncing a duty to save the greater number in no-conflict cases, and she could escape the second charge by renouncing pairwise comparisons. She could do so while still retaining her core belief that one has no duty to save the greater number in conflict cases. But each move would be highly problematic. In each case, the numbers skeptic would be driven to embrace an even more radically counterintuitive claim than the denial of a duty to save the greater number in conflict cases. Moreover, unlike a denial of a duty to save the greater number in conflict cases, each of these more radical claims is unsupported by the sorts of considerations that have generated widespread moral unease in the case of the aggregation of the claims of different individuals. They are also unsupported by other moral convictions that have a foothold in common sense.

II

A numbers skeptic, as I have spelled out her position, affirms a duty to save the greater number in no-conflict cases while denying a duty to save the greater number in conflict cases. If her affirmation of the former duty could be shown to imply an affirmation of the latter duty, then her view would be refuted because shown to be internally inconsistent.

A numbers skeptic might try to argue as follows on behalf of a duty to save the greater number in no-conflict cases without also committing herself to a duty to save the greater number in conflict cases. She might argue that in a no-conflict case you should, for example, save A&B rather than A alone because saving A&B rather than A is better for *one* and worse for none, whereas saving A rather than A&B is worse for *one* and better for none. So this case is relevantly similar to a case in which you can either save A or save nobody: saving A rather than nobody is better for one and worse for none, and saving nobody rather than A is worse for one and better for nobody. In a conflict case, by contrast, saving A is better for one, and saving B&C is better for *two*. But a numbers skeptic might offer special reason to reject the aggregation of the claims of two or more individuals and thereby deny that one has any stronger reason to save B&C rather than A.[14] She might argue, as indicated in Section I above, that one should appeal only to the strength of the claims of single individuals rather than to the claims of groups of individuals in determining what one ought to do, since the latter would involve the denial of the moral significance of the separateness of persons and a failure to show equal concern and respect for each individual.[15]

I shall show in this section that it is not so straightforward for a numbers skeptic to distinguish no-conflict from conflict cases. I shall do so by means of an example that bridges the two types of case. In this example, each of three people—A, B, and C—will die if he does not receive medical attention. You have a drug that can save any one of them. Suppose that you are about to save A. But now imagine that you discover an herb with which you can mix the drug, thereby rendering it potent enough to save any two of them. What should you do?

Presumably, the numbers skeptic would not want to say that you may nevertheless follow through with your decision to save A alone. She would want instead to say that you ought to mix the drug with the herb and save two. The following is an implication of the numbers skeptic's commitment to saving the greater number in a no-conflict case: it would be wrong of you to save A alone, since saving A alone is trumped by the saving of either A&B or A&C. It is trumped because saving A&B is better for one and worse for none in comparison with saving A alone, as is saving A&C in comparison with saving A alone; whereas saving A alone is worse for one and better for none in comparison with saving A&B, and the same holds when we compare saving A alone with saving A&C.[16]

But the numbers skeptic would not want to say that you ought to save *B&C rather than A alone*. This is because she denies that you ought to save the greater number in conflict cases.

Is the numbers skeptic entitled to say what it would make most sense to say about this case: namely, that you ought to save *any* two—it does

14. The argument on the numbers skeptic's behalf that I have just sketched would meet some of the objections to numbers skepticism raised by Gregory Kavka, "The Numbers Should Count," *Philosophical Studies* 36 (1979): 285–94, at pp. 291–92, and Jonathan Glover, *Causing Death and Saving Lives* (New York: Penguin, 1977), pp. 207–09. See also David Wasserman and Alan Strudler's response to Kavka on the numbers skeptic's behalf in their "Can a Nonconsequentialist Count Lives?" *Philosophy & Public Affairs* 31 (2003): 71–94, at pp. 74–75.

15. Taurek advances such an argument against aggregation. See Taurek, pp. 303–10.

16. Of course, similar reasoning would condemn the saving of B alone or C alone.

not matter which two? So you discharge your obligation by saving either A&B, or A&C, or B&C. This would be a disjunctive obligation.

I believe that the numbers skeptic can consistently affirm such a disjunctive obligation. Suppose, for the sake of argument, that she affirms it. She thereby commits herself to the claim that you would discharge your obligation if you went ahead and saved B&C. But she does not thereby commit herself to an obligation to save *B&C rather than A alone*. And it is only obligations like that, i.e., obligations to save the greater number in conflict cases, which the numbers skeptic must deny. Such obligations differ from the disjunctive obligation to save *any two rather than A alone*.

But now suppose that it becomes impossible to save A&B, and that it also becomes impossible to save A&C. Now the only two whom you can save are B&C. (We shall assume that it remains possible to save any *one* of A, B, or C.) Would the numbers skeptic maintain that it follows that you have an obligation to save B&C rather than A, whom you were about to save before you discovered that you could save two? If it does follow, then we will have shown that the commitments of the numbers skeptic actually imply an obligation to save the greater number in a conflict case. Hence we will have refuted numbers skepticism.

To avoid refutation, the numbers skeptic must maintain that the elimination of two of the three disjunctive options does not leave you with an obligation to do that which is specified by the remaining disjunctive option. It does not leave you with an obligation to save B&C in the case just described. For the numbers skeptic must, on pain of abandoning her numbers skepticism, maintain that you are permitted to save A alone rather than B&C in this case. And if you are permitted to save A alone, then you are not obligated to save B&C.

It will strike some as a surprising result that the elimination of the two disjuncts does not preserve the obligation to save B&C. For typically, when one has a disjunctive obligation, the elimination of all but one of the disjuncts implies an obligation to do that thing specified by the remaining disjunct.[17] Typically, for example, if one is obliged to do x or y

17. The numbers skeptic's commitments in the case I have just sketched are surprising for the following distinct reason. The numbers skeptic would maintain that saving B&C, while not obligatory, is to be *preferred* to saving A when the feasible set includes saving A&B and saving A&C. But she would deny that one must prefer saving B&C to saving A

and it becomes impossible to do x, then one is left with an obligation to do y. When you apply for a credit card, you enter into an agreement either to pay off your balance by the end of the month or to pay interest on what you have received on credit. If you are unable to fulfill the one disjunct of this obligation, then you must fulfill the other. If, that is, you find yourself unable to pay off your balance by the end of the month, then you must pay interest on what you have received on credit.

Things are no different in at least some cases involving saving lives. If, for example, you can save A, B, or C, but no more than one of them, then you have a disjunctive obligation to save either A or B or C. But if it turns out that you are unable to save either A or B, then the disjunctive obligation reduces to an obligation to save C.

Why are things different in the case under discussion? Why does a disjunctive obligation to save any two in the case under discussion—i.e., to save A&B, or A&C, or B&C—not reduce to an obligation to save B&C when one cannot save A&B or A&C? Why does the numbers skeptic maintain, instead, that we are left with an obligation to save either B&C or A alone?

The numbers skeptic can offer the following answer to these questions: It had previously been impermissible to save A alone because of the possibility of saving A plus someone else, i.e., the possibility of saving A&B or A&C. For the reasons offered in the second paragraph of this section, the numbers skeptic can affirm a duty to save the greater number in a no-conflict case. But when the possibility of saving A&B or A&C is eliminated, the numbers skeptic's reason against saving A alone also evaporates. This is why she is entitled to say that the disjunctive obligation to save any two reduces to an obligation to save either A or B&C. Hence, the numbers skeptic's commitments do not drive her to a contradiction in the case under discussion.

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when the feasible set is reduced. This, however, is in violation of the following plausible principle: "If x is to be preferred to y when they are element of the feasible set S, then x must be preferred to y when they are elements of the feasible set T which is a subset of S." This principle is very similar to a principle of rational choice, which Amartya Sen calls *basic contraction consistency*, according to which "an alternative that is chosen from a set S and belongs to a subset T of S must be chosen from T as well." See Amartya Sen, "Internal Consistency of Choice," *Econometrica* 61 (1993): 495–521, at p. 500. Cf. John Nash, "The Bargaining Problem," *Econometrica* 18 (1950): 155–62, at p. 159.

III

In this section, I turn finally to the task of mounting a different, and this time successful, critique of numbers skepticism. This critique applies to anyone who is moved, in common with the numbers skeptic, both by the principle of nonaggregation and by the pairwise comparison of the strength of the claims of different individuals.[18]

Suppose that four people have recently been afflicted by a disease that has paralyzed all of their limbs. These people divide into a group of three and a fourth person who is distinct from the three. A numbers skeptic possesses three pills. These pills can benefit these people in the following ways:

> *Each member of the group of three:* If he consumes a single pill, he will have the use of both of his arms restored. Any additional pill will do him no more good.
>
> *The fourth person:* If he consumes one pill, he will have the use of one of his arms restored. If he consumes a second pill, he will have the use of both of his arms restored. He will have the use of both arms and one leg restored if he consumes a third pill.

Assuming that she is determined to put all three of her pills to good use, the numbers skeptic must select one of the following four courses of action:

(i) Give each member of the group of three a pill.
(ii) Give two of the members of the group of three a pill and give the remaining pill to the fourth person.
(iii) Give one of the members of the group of three a pill and give the remaining two pills to the fourth person.
(iv) Give all three pills to the fourth person.

These four courses of action give rise to the following distributions of benefits:

18. See Section I above.

	Group of three	Fourth person
i.	3 have 2 limbs restored	He has no limbs restored
ii.	2 have 2 limbs restored, and 1 has no limbs restored	He has 1 limb restored
iii.	1 has 2 limbs restored, and 2 have no limbs restored	He has 2 limbs restored
iv.	3 have no limbs restored	He has 3 limbs restored

What should a numbers skeptic do in these circumstances? I shall argue below that the skeptic can provide no answer to this question and that this inability exposes a fatal flaw in her position.

A numbers skeptic believes that one ought, at least when other things are equal, to give the drug to one person to restore the use of two limbs rather than to another person to restore the use of one limb.[19] Hence, a numbers skeptic will prefer (i) to (ii). Rather than giving a pill to the fourth person, restoring the use of one of his limbs, she will prefer to give that pill to one of the members of the group of three, thereby restoring the use of two of his limbs.

A numbers skeptic will also prefer (ii) to (iii) and (iii) to (iv). These are, once again, choices between restoring the use of one limb to one person versus restoring the use of two limbs to another person. Hence the reason mentioned in the above paragraph for the numbers skeptic to prefer (i) to (ii) will also impel her to prefer (ii) to (iii) and (iii) to (iv). Moreover, the numbers skeptic has an additional reason to prefer (ii) to (iii) and (iii) to (iv). For in opting for (ii) rather than (iii) and for (iii) rather than (iv) she would give a greater benefit to someone who would, in addition, be *worse off* in absolute terms if not aided than the fourth

19. This follows from the numbers skeptic's affirmation of pairwise comparison. I assume throughout this discussion that the restoration of the use of two limbs is about twice as good for an individual as the restoration of one limb, of three limbs about three times as good, and of four limbs about four times as good. Those who regard this assumption as unrealistic should imagine other states of mobility and dexterity ranging from quadriplegia to complete use of all four limbs that bear the same relations to one another as I assume the aforementioned states bear to one another.

person would be if not aided.[20] It is, other things being equal, better to direct aid to someone who would otherwise be worse off in absolute terms.[21]

The numbers skeptic will also prefer (iv) to (i). For in choosing (iv), she would restore the fourth person's use of three limbs, and she would leave three without the use of any of their limbs. By a numbers skeptic's lights, such a state of affairs is preferable to (i) in which the fourth person lacks the use of any of his limbs and three have the use of two limbs. She thinks it preferable for the following reason: A numbers skeptic thinks that one ought, when other things are equal, to restore one person's use of three limbs rather than another person's use of two limbs.[22] Since a numbers skeptic is opposed to the aggregating of the claims of different people, she will not distinguish this case from a case in which one can restore either one person's use of three limbs or *three* people's use of two limbs. Therefore, the numbers skeptic will opt for the restoration of one person's use of three limbs rather than the restoration of three people's use of two limbs. She will, in fact, opt for the restoration of one person's use of three limbs rather than the restoration of *any number* of people's use of two limbs.

I have established in the preceding discussion that the numbers skeptic's preference ordering is as follows:

$$\text{(i)} > \text{(ii)} > \text{(iii)} > \text{(iv)} > \text{(i)}.$$

Hence, numbers skepticism constitutes an irrational set of moral commitments insofar as it generates a choice-defeating cycle of intransitive preferences. None of the skeptic's options is justified, since another is always to be preferred to it. It is therefore impossible to conform to numbers skepticism in this case.

20. Consider the preference for (iii) rather than (iv). The difference between these two options is the difference between a pill's going to someone in the group of three or being given to the fourth person. If the numbers skeptic elects not to direct her pill to someone in the group of three (i.e., if she chooses option [iv]), then that person in the group of three will lack the use of all four limbs. If she elects not to direct this pill to the fourth person (i.e., if she chooses option [iii]), then that fourth person will lack the use of only two of his limbs.

21. For a defense of this claim, see Derek Parfit, "Equality or Priority?" *The Lindley Lecture* (Lawrence: University of Kansas, 1991).

22. Once again, this follows from the numbers skeptic's affirmation of pairwise comparison.

A common-sense aggregator, by contrast, is not faced with such a cycle of intransitive preferences, since her preferences depart from the numbers skeptic's insofar as she ranks (i) over (iv).[23] In comparing (i) with (iv), the common-sense aggregator would acknowledge, along with the numbers skeptic, that (iv) is in one way preferable to (i): someone in (iv) would have the use of three limbs restored, whereas nobody in (i) would have the use of more than two limbs restored. But the common-sense aggregator, unlike the numbers skeptic, would also acknowledge that (i) is in another way preferable to (iv): *three* people in (i), rather than merely one person in (iv), would receive a great benefit that would rescue them from the dire fate of quadriplegia by reducing that state to something no worse than paraplegia. Even though none of the three would be benefited to as great a degree as the one whose state would be reduced all the way to monoplegia in (iv), the fact that three rather than one would receive a great benefit that would rescue them from such a dire fate would be sufficient to move the common-sense aggregator to opt for (i) over (iv).[24]

The numbers skeptic might concede that her principles, unlike the common-sense aggregator's, give rise to a choice-defeating cycle of intransitive preferences in the case under discussion. But she might respond that there are other cases in which the common-sense aggregator's principles, but not the numbers skeptic's, give rise to a choice-defeating cycle of intransitive preferences. So numbers skepticism is no worse than common-sense aggregation for that.

Consider the following cycle of intransitive preferences to which a common-sense aggregator's principles give rise: An agent is presented with twenty-six buttons labeled (a) through (z), and she must choose which one to press. If she presses button (a), then one person will be spared from suffering an afternoon of the most excruciating pain. If she

23. A "common-sense aggregator" is, I shall stipulate, someone whose views regarding aggregation are in full accord with widely shared intuitions about what one ought and ought not to do.

24. Scanlon, however, is tempted by the claim that one should not save the greater number from harm in cases such as this one in which the harm to each of the greater number, though serious, is less serious to a nontrivial degree than the harm to the one. He also acknowledges that it is difficult for him to resist this claim, given the individualistic commitments of his contractualism. (See Scanlon, pp. 239–41.) If he is moved to embrace this claim, then his view will join the numbers skeptic's in falling prey to the intransitive cycle under discussion.

presses button (b), then two different people will be spared from suffering an afternoon of slightly less excruciating pain. If she presses button (c), then four different people will be spared from suffering an afternoon of yet slightly less excruciating pain. If she presses button (d), then eight different people will be spared from suffering an afternoon of yet slightly less excruciating pain. And so forth, until one reaches (z): if she presses button (z), then thirty-four million different people will be spared an afternoon of the mildest of pain.[25]

Unlike the numbers skeptic, a common-sense aggregator believes that if there are two non-overlapping groups of people, one of which is twice as large as the other, then one ought to save the larger group from harm, at least when other things are equal. A common-sense aggregator also maintains, again unlike the numbers skeptic, that one ought to save twice as many from harm when not all other things are equal and the harm suffered by the greater number is only *slightly less* great than the harm suffered by the lesser number.[26] Hence, as between any button and another button one letter further down the alphabet, the common-sense aggregator will, unlike the numbers skeptic, always prefer to press the button further down the alphabet. In other words: (a) < (b) < (c) < (d) . . . (x) < (y) < (z). Note, however, that the common-sense aggregator also believes that that (z) < (a): i.e., she believes that it is preferable that one person be saved from an afternoon of excruciating pain rather than that thirty-four million be saved from an afternoon of the mildest of pain.[27] So the common-sense aggregator is confronted with a choice-defeating cycle of intransitive preferences in this case.

Now it is not clear upon initial inspection how great a threat this example poses to the common-sense aggregator. His intransitive cycle consists of a large number of steps each of which involves a very slight difference along a given dimension. One might therefore suspect that the cycle is generated by a mistake that is similar to one or more of the fallacies thought to have been exposed in familiar sorites cases involving a

25. This example is based on an example of Stuart Rachels's. See his "Counterexamples to the Transitivity of 'Better-than'," *Australasian Journal of Philosophy* 76 (1998): 71–83. See also Larry Temkin, "A Continuum Argument for Intransitivity," *Philosophy & Public Affairs* 25 (1996): 175–210.

26. See Scanlon, pp. 238–39.

27. The numbers skeptic shares this particular belief with the common-sense aggregator.

large number of very small steps.[28] Whether or not there is a solution to the sorites paradox that resolves the common-sense aggregator's cycle, there may be a relatively costless and minor revision to the aggregator's system of beliefs that will provide an escape from this intransitivity. One suggestion is that the intuition that it is always better to save twice as many from a slightly less great harm is based on a mistaken human tendency to discount the moral significance of very small differences in the benefits and burdens to different individuals.[29] This mistaken tendency might be excisable from the common-sense aggregator's system of beliefs without undermining his fundamental moral commitments. By contrast to the common-sense aggregator's cycle, the numbers skeptic's intransitive cycle does not exploit a repetition of steps involving very small differences. Hence it cannot be resolved in any of the ways just suggested.

Even if more thorough scrutiny reveals the common-sense aggregator's cycle to be as problematic to him as the numbers skeptic's cycle is to her, one does not, however, vindicate the numbers skeptic against an objection simply by showing that one of her opponents is equally vulnerable to a relevantly similar objection. For we cannot foreclose the possibility that neither numbers skepticism nor common-sense aggregation is immune from decisive objection. Perhaps there is some third set of moral principles regarding our duties to aid, neither numbers skeptical nor common-sense aggregative, which is immune from intransitive cycles, and which does not give rise to other, equally embarrassing difficulties. Or it might turn out that no set of moral principles regarding our duties to aid, either numbers skeptical, aggregative, or otherwise, is immune from decisive objection.

28. Temkin, however, would maintain that the common-sense aggregator's intransitive cycle is not generated by means of any of the fallacies associated with sorites reasoning. See Temkin, pp. 197–202. For a general discussion of the sorites paradox, see Mark Sainsbury, *Paradoxes*, 2nd ed. (Cambridge: Cambridge University Press, 1995), ch. 2.

29. Ken Binmore and Alex Voorhoeve offer this suggestion in "Transitivity, the Sorites Paradox, and Similarity-Based Decision-Making" (unpublished). For defenses of the moral significance of very small benefits or burdens, see Derek Parfit, *Reasons and Persons* (Oxford: Oxford University Press, 1986), ch. 3, and Michael Otsuka, "The Paradox of Group Beneficence," *Philosophy & Public Affairs* 20 (1991): 132–49.