

# *Limited Aggregation's Non-Fatal Non-Dilemma<sup>1</sup>*

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Limited aggregationists argue that when deciding between competing claims to aid we are sometimes required and sometimes forbidden from aggregating weaker claims to outweigh stronger claims. Joe Horton presents a 'fatal dilemma' for these views. Views that land on the First Horn of his dilemma suggest that a previously losing group strengthened by fewer and weaker claims can be more choice-worthy than the previously winning group strengthened by more and stronger claims. Views that land on the Second Horn suggest that combining two losing groups together and two winning groups together can turn the losing groups into the winning groups and the winning groups into the losing groups. This paper demonstrates that the 'fatal dilemma' is neither fatal nor a dilemma. The First Horn is devastating but avoidable and the Second Horn is unavoidable but not devastating. Nevertheless, Horton's argument does help to narrow down the acceptable range of views.

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## **1. Introduction**

Sometimes we must choose between competing claims to aid or assistance, and sometimes those competing claims differ in strength and quantity. In such cases, we

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must decide whether the claims on each opposing side can be aggregated. Limited aggregationists try to capture our intuitions in a variety of cases by sometimes requiring and sometimes disallowing aggregation. They argue that a set of claims can be aggregated only if they are sufficiently strong (compared to the claims with which they compete) to be morally relevant to the decision.

For instance, paraplegia is sufficiently close in strength to death that aggregation is permitted; it is not wrong to treat a large number of paraplegics instead of a dying man and so the claims against paraplegia are relevant. On the other hand, losing a finger is so distant in strength that it would be wrong to treat any number of people who will lose a finger instead of the dying man. Thus, the lost finger claims are not relevant in this competition and we should save a life instead of any number of lost fingers. Naturally, this has significant implications for resource allocation at both the individual and institutional level. Thus, it is vital to determine whether limited aggregation is right or not.

Now, how and when a claim is morally relevant to our decision will depend on the particular limited aggregation account. We might say that it would be disrespectful to the dying person to take a lost finger into consideration (Kamm 1998: Ch. 8-10); or that a lost finger's duty grounding force is defeated by the presence of a death claim (Tadros 2019); or that it would not be permissible for someone to prefer their own finger to be saved over another's life (Voorhoeve 2014); or that the loss of a finger becomes less deserving of sympathy in light of someone dying (Voorhoeve 2017). I shall not delve into which of these views is correct because the dilemma the paper considers, and my solution, do not rely on the details of any of these accounts but applies to all of them. However, it is worth noting that a throughline of all these accounts is the importance of the personal perspective in determining what is permissible, and how that personal perspective is affected by competing claims.

The biggest problem for limited aggregation views is Joe Horton's 'fatal dilemma' (2018). He argues that all limited aggregation views necessarily land on one of two horns. Views that land on the First Horn seem to suggest that a winning group that is strengthened by more claims of at least equal strength, could become the losing group, whilst the losing group strengthened by lesser or weaker claims can become the

winning group. On the other hand, views that land on the Second Horn seem to suggest that combining two losing groups and two winning groups can turn the losing groups into the winning group and the winning groups into the losing group. If Horton is right, this really does seem fatal to the limited aggregation project.

In this paper, I re-examine Horton's argument and demonstrate that the 'fatal dilemma' is neither fatal nor a dilemma. I shall show that the First Horn is devastating but avoidable and the Second Horn is unavoidable but not devastating. Nevertheless, Horton's argument does help us to narrow down the acceptable range of limited aggregation views.

## **2. First Horn**

First let us briefly look at the First Horn of this dilemma. I shall use slightly different examples and a different style to those used by Horton, both for my own ease and to maintain a consistency of style throughout the paper. I shall also talk of 'death claims' instead of 'people facing death' etc. This is entirely for simplicity and does not commit me to a claims-based account of the reasons we have in these cases. The conclusions will not be affected. With this in view, let us consider Case 1 which is made up of two stages:

**Case 1 - Stage 1**     You can save Group A or Group B. Group A contains a death claim. Group B contains one thousand lost finger claims.

**Case 1 - Stage 2**     One hundred lost limb claims are added to Group A. Five lost limb claims are added to Group B

Now for our purposes, let us assume that lost finger claims are irrelevant to death claims. No number of lost fingers ought to be saved instead of a life. But lost limb claims are relevant to death claims, and so a sufficient number of lost limb claims can outweigh the death claim. Again, let us stipulate that four lost limb claims match exactly with a death claim, and so five lost limb claims will outweigh a death claim.

For illustrative purposes I use tables throughout this paper to help visualise these cases and make clearer exactly where the issues and solutions are.

Case 1

Level	Group A	Group B
1 - Death	1	
2 - Paraplegia		
3 - Loss of Limb	(100)	(5)
4 - Loss of Finger		1000

For ease of reference, we will call the Level 1 claims in Group A, A1 claims, the Level 3 claims in Group B, B3 claims, and so on. We will also assume that relevance extends two levels, such that the paraplegia and lost limb claims are relevant to the death claim, but the lost finger claims are not. I shall also stipulate that two claims match with exactly one claim on the level above, and thus four claims will match with exactly one claim two levels above. Lastly, to indicate that Case 1 is split into two stages, Stage 1 claims are those claims without parentheses, and the claims added at Stage 2 are the claims in parentheses.<sup>2</sup>

With this in view, we can see that at Stage 1, the thousand B4 claims are irrelevant to the A1 claim and thus Group A wins. However, at Stage 2 where a hundred Level 3 claims are added to Group A and five Level 3 claims are added to Group B, depending on how we match the claims we might end saving Group B.

For instance, suppose we adopt a limited aggregation view that tells us to match the A1 claim with the B3 claims first.<sup>3</sup> If we match the claims like this then the B3 claims will outweigh the A1 claim, and the B4 claims will outweigh the A3 claims. Thus, the view would tell us we ought to save Group B at Stage 2. Yet, this conclusion seems quite implausible. At Stage 2 we have strengthened Group A by more than Group B, yet it seems to have altered the decision of whom to save.

To make this problem clear, suppose that we are hospital directors choosing which ward to send our limited resources to. At first, Ward A has a dying man in it, and Ward B has a thousand people threatened by the loss of a finger. Because the loss of a finger is not relevant to the loss of a life<sup>4</sup>, we choose to send our resources to Ward A. But just

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<sup>2</sup> This approach is borrowed from Aart van Gils and Patrick Tomlin (2019).

<sup>3</sup> Van Gils and Tomlin's *Match to the Strongest Competing Claim* is such a view.

<sup>4</sup> If one does not find this intuitive, consider broken limbs, or lost toes or something similarly weak that is not relevant to the loss of a life.

before we send the resources to Ward A, five people threatened by the loss of a limb are wheeled into Ward B and a hundred are wheeled into Ward A. But rather than say we have even more reason to send our resources to Ward A, we in fact swap to sending our resources to Ward B. This seems absurd!

In fact, we can sharpen the horn even further than Horton suggests. Consider Case 2:

**Case 2 - Stage 1** You can save Group A or Group B. Group A contains a death claim. Group B contains one thousand lost finger claims.

**Case 2 - Stage 2** One hundred paraplegia claims are added to Group A. Five lost limb claims are added to Group B.

*Case 2*

Level	Group A	Group B
1 - Death	1	
2 - Paraplegia	(100)	
3 - Loss of Limb		(5)
4 - Loss of Finger		1000

In this case Group A is strengthened not just by more claims than Group B but also by stronger claims. Yet at Stage 2 certain limited aggregation accounts will still swap to Group B: the A1 claim will be outweighed by the B3 claims, and the A2 claims will be outweighed by the B4 claims.

To put this in terms of our example, we are in the process of sending the resources to Ward A, to save the dying man, when we find out that four people threatened by the loss of a limb have been wheeled into Ward B, and a hundred people threatened with paraplegia have been wheeled into Ward A. Even though Ward A has more, and stronger claims added to it, some limited aggregation views will still tell us to swap to resourcing Ward B. This consequence is terrible.

Any view that lands on the First Horn of Horton's Dilemma thus violates two highly intuitive principles:

**The Principle of Net Addition** ‘Adding claims of equal strength but differential numbers cannot make the group to which more claims are added less choice-worthy compared with the group to which fewer claims are added.’ (van Gils and Tomlin 2019: 253)

And a new principle I call:

**Greater Consideration for Stronger Claims** Adding claims of differential strength and equal numbers cannot make the group to which stronger claims are added less choice-worthy compared with the group to which weaker claims are added.

These seem like highly plausible principles. Yet any view that lands on the First Horn violates them both! Case 2 seems to me especially problematic, in that saving Group B at Stage 2 would violate both principles simultaneously. Thus, I agree with Horton on the First Horn - it is devastating for any limited aggregation view that lands on it.

The upshot of this, however, is that it will help us to narrow down the range of acceptable limited aggregation views. Any views which land on the First Horn and violate these principles should not be considered. Given the large number of ways in which limited aggregation may be expressed, and the equally large number of different answers in different cases that these views will give, progress like this should not be scoffed at. If it engenders greater agreement among limited aggregationists and brings us closer to understanding the structure of moral aggregation and the right way of comparing and weighing these claims, then this is truly very helpful. Of course, this upshot is reliant upon the Second Horn not being equally devastating, and that is what I will turn to next.

### **3. Second Horn**

I will explain the Second Horn in my own terms, again for consistency of style. Consider the following two cases:

**Case 3a** You can save Group A or Group B. Group A contains a death claim. Group B contains five lost limb claims.

**Case 3b** You can save Group C or Group D. Group C contains one hundred paraplegia claims. Group D contains one thousand lost finger claims.

*Case 3a*

Level	Group A	Group B
1 - Death	1	
2 - Paraplegia		
3 - Loss of Limb		5
4 - Loss of Finger		

*Case 3b*

Level	Group C	Group D
1 - Death		
2 - Paraplegia	100	
3 - Loss of Limb		
4 - Loss of Finger		1000

In 3a, we should save Group B, and in 3b, we should save Group D. Let us use our example to make the case clear. In 3a, we choose to send our resources to Ward B to save the five people from losing their limbs, instead of saving the life of the man on Ward A. In 3b, we choose to send our resources to Ward D to save a thousand lost fingers, instead of sending our resources to the hundred people losing their limbs on Ward C.

Now let us consider Case 3, which is a combination of Cases 3a and 3b. We can save Groups A and C or Groups B and D:

*Case 3*

Level	Group A + C	Group B + D
1 - Death	1	
2 - Paraplegia	100	
3 - Loss of Limb		5
4 - Loss of Finger		1000

To put this in terms of our example, let us say that we realise that Wards A and C are merged by hospital administrators as are B and D. The hundred people in Ward C losing

limbs are moved in with the dying man on Ward A, and the thousand people in Ward D losing fingers are moved in with the five people losing limbs in Ward B, to form very crowded wards. Thus, if we save those on Ward A, we also save those on Ward C, and if we save those on Ward B, then we also save those on Ward D.

Now whom should we save in Case 3? Any view that wants to avoid the First Horn of the dilemma must save Group A+C. We can see this because Case 3 is identical to Case 2 at Stage 2. Thus, if we are to avoid violating the Principle of Net Addition and Greater Consideration for Stronger Claims, we must save Group A+C.

But this seems very odd. When the pairwise comparisons were treated separately, in Cases 3a and 3b, Group B and D were the winning groups. But when we combine the two winning groups and the two losing groups, without adding any more morally relevant features, we have swapped to saving the losing groups - A and C.

In this way, limited aggregation views which land on the Second Horn violate another highly intuitive principle, Weak Additivity.

**Weak Additivity**    If A is preferable to B, and C is preferable to D, then A with C is preferable to B with D.

To make this problem clear, consider our example again. In their individual pairings we would send our resources to Ward B, and save the five lost limbs instead of the person's life on Ward A. Similarly, we would send resources to Ward D and save a thousand lost fingers instead of the hundred paraplegics on Ward C. So, Wards B and D are our winning wards and A and C are our losing wards.

But when Wards A and C, and B and D are merged by hospital administrators, we ought to send our resources to Ward A + C. We have chosen to save the losing patients over the winning patients from the previous match ups, without changing the strength or number of claims; we turn the two losing groups into the winning groups! This is highly counter-intuitive: it does not seem that combining claims in this way should change who wins.



### 3.1 The Second Horn is Unavoidable

Before we consider why the Second Horn is not as devastating as it might first seem, we should first strengthen the problem. Whilst Horton seems to indicate that we could avoid the Second Horn by landing on the First Horn (2018: 170), this is not in fact true. The Second Horn is a bigger problem than perhaps first assumed - it is completely unavoidable for all limited aggregation views.

To see why consider Cases 3c and 3d:

**Case 3c** You can save Group A or Group D. Group A contains a death claim. Group D contains one thousand lost finger claims.

**Case 3d** You can save Group C or Group B. Group C contains one hundred paraplegia claims. Group B contains five lost limb claims.

*Case 3c*

Level	Group A	Group D
1 - Death	1	
2 - Paraplegia		
3 - Loss of Limb		
4 - Loss of Finger		1000

*Case 3d*

Level	Group C	Group B
1 - Death		
2 - Paraplegia	100	
3 - Loss of Limb		5
4 - Loss of Finger		

In Case 3c, limited aggregation views will tell us that we ought to save Group A - the lost finger claims are not relevant to the death claim. In Case 3d, such views will tell us to save Group C. So, Group A and Group C are our winning groups.

But, of course, Case 3c and 3d can be combined to form Case 3 again. I think it should be clear now what the issue is. When split like this A and C are our winning groups, and B and D are our losing groups. But this is the opposite to what we find in Cases 3a and 3b.

In different comparisons the very same claims can be considered the winning claims or the losing claims!

Hence, limited aggregation views cannot avoid the Second Horn, and in one way or another must break Weak Additivity.<sup>5</sup> Therefore, in so far as there is no choice but to land on the Second Horn, it is more prudent for a limited aggregationist to avoid the First Horn of the dilemma. In fact, the above case shows that Horton's dilemma is not really a dilemma at all, with the First Horn avoidable and the Second Horn not. Thus, limited aggregationist should not be concerned with the First Horn at all. We can avoid the First Horn without any downsides. Even if the Second Horn remains a problem, one problem is better than two.

## **3.2 The Second Horn is Not Devastating**

So, we have seen both that the Second Horn violates Weak Additivity, and that all limited aggregation views, necessarily, land on the Second Horn. The obvious next step, therefore, is to consider how problematic it is to reject Weak Additivity and embrace the Second Horn. If doing so is unconscionable, then limited aggregation is sunk. On the other hand, if we can reject Weak Additivity, then we are going to want explanations for why and when we can.

### **3.2.1 Weak Additivity**

So, let us consider how plausible the fundamental presumption of Weak Additivity really is.<sup>6</sup> For starters, there are many day-to-day cases which violate Weak Additivity,

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<sup>5</sup> Bastian Steuwer also recognises the unavoidability of the Second Horn (2021: 31-34). He also attempts to show why this Second Horn is not devastating. Whilst he recognises that Weak Additivity (in his terms the 'Principle of Agglomeration') is the central issue, he fails to fully explain why and when the principle fails and crucially when the principle does not fail. He mentions that there are interactions between the different claims but goes no further in his analysis. In doing so he fails to recognise the structural differences between the individual pairings and the combined case, and the role of dominance in determining the limit of appealing to interaction effects. He also neglects to see the core issue with the First Horn, and so misses that his own view also lands on a version of the First Horn, see Hart 2022. This paper intends to be a more detailed and comprehensive approach to the dilemma, although one which shares some of Steuwer's insights. Thanks are owed to an anonymous reviewer for bringing this paper to my attention.

<sup>6</sup> Much of what I say here mirrors what others say regarding transitivity in these cases. This ground is well enough covered by them and the much wider literature on transitivity, so I will keep my criticism specifically focused on Weak Additivity. For more on transitivity see Temkin 2012; Kamm 2007: 484-486; Voorhoeve 2013; Rachels 1998.

such as complimentary and substitute goods. Such goods violate Weak Additivity because there is some important relation between the relevant values of each good. For instance, a book end is more valuable with its pair and a DVD film is less valuable if you already have a Blu-Ray copy. In principle then, we should not be surprised if there are ethical cases which violate Weak Additivity too.

To make this even clearer, suppose you and I are picking team-mates for our weekly football match. By the time we are finished picking, I tactlessly start gloating, comparing my players to yours. I point out that my striker is better than yours, my goalkeeper is better than yours, and so on. In fact, for each match up, my player is stronger than yours. We then proceed to play, and your team wins comfortably. It turns out whilst I had been picking players by their individual strengths, you had been constructing a team that plays well together. Of course, this should be familiar, especially given that such cases form the basis of many sporting triumphs and the plot of almost every sports film.

Nevertheless, one might object, by arguing that these cases are not analogous. In the football case there are obvious interaction effects between players, yet Weak Additivity only holds when we ignore interaction effects. But in the same way that there are interaction effects in the football case, limited aggregationists argue that there are interaction effects in the aggregation cases.

Limited Aggregationists will appeal to interaction effects in our case by arguing that claims against dying alter the relevance of claims against lost fingers. We saw in the introduction how different limited aggregation accounts give different explanations of relevance. It should also be clear that they all rely on interaction effects. Either it is disrespectful for others to consider my finger (Kamm 1998: Ch. 8-10) or for me to prefer my own finger (Voorhoeve 2014) when your life is on the line, or my claim becomes less sympathetic (Voorhoeve 2017) or loses its duty grounding force (Tadros 2019) in light of your death claim. In this way, we should not be surprised that limited aggregation views do violate Weak Additivity. In fact, given such interaction effects, it would be considerably more unusual if they did not, on occasion, violate Weak Additivity.

Now I need to be clear about what I am and am not saying here. My position here is not that Weak Additivity always fails, but that sometimes, under certain conditions, it fails. Not all violations of Weak Additivity are valid<sup>7</sup> - we need good explanations if we are to accept any violations of Weak Additivity. In this way we might consider Weak Additivity to be a default assumption - we assume Weak Additivity other than where we have reason to doubt it. For instance, we have good reasons to reject Weak Additivity in the bookend, film, and football cases; the first bookend is more useful with the second, the DVD is less valuable because we already own the film, your football team is better because your players understand each other, etc.

Therefore, if we are to accept such violations in the aggregation cases, we will need to give good reasons in each case as to why Weak Additivity is violated. We will need to specify how exactly the interaction effects in our cases lead to the violation of Weak Additivity; if not, then no appeal to the failure of Weak Additivity in the general will suffice.

Thus, let us return to our hospital case. Before we amalgamate the wards, we choose to save the five lost limb claimants in Ward B instead of the death claimant in Ward A. We also choose to save the thousand lost finger claimants in Ward D instead of the hundred paraplegia claimants in Ward C. What then explains the reason we ought to save Ward A+C when the wards are combined?

The first thing to note is that when the wards are amalgamated what each claim is in competition with changes. At first the lost finger claims are only in competition with the paraplegia claims, now they are in competition with a death claim as well as the paraplegia claim. So, the lost finger claims are now in competition with claims they are relevant to and a claim they are not relevant to. Now the lost finger claims might still be relevant to what we ought to do on the whole, but only if the death claim is outweighed by other considerations. If the death claim is not outweighed by other considerations, then the lost fingers are irrelevant and can play no role in our decision.

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<sup>7</sup>For instance, the Principle of Net Addition is a more specific version of Weak Additivity, but one which we do not want to reject; it is independently highly intuitive. See section 3.3 below for more on this.

But we might think this is no explanation of why we ought to swap to Ward A+C when they are amalgamated. In this case, it seems that the death claim is outweighed by other claims, namely the lost limb claims in Ward B. So, the lost finger claims remain relevant, outweigh the paraplegia claims, and so we ought to save Ward B+D.

However, there is a second interaction effect that needs to be considered. The lost finger claims are not the only claims to have had changed what they are in competition with. The other claims also come into competition with different strength claims, and this might further change who we ought to save. In this case, before amalgamation, the five lost limb claimants in Ward B were only in competition with the death claimant. After amalgamation they are now also in competition with the paraplegia claimants.

This change is important, because, depending on how we compare the claims, the lost limb claims might not outweigh the death claims, and if the death claims are not outweighed then the lost finger claims are not relevant and cannot be taken into consideration. In this case, if we say that the lost limb claims are outweighed by the paraplegia claims, then the death claim is not outweighed. So, the question comes down to how ought we to match claims when the wards are amalgamated? What is the best matching principle?

### 3.2.2 Match by Closeness

Now, I do not want to make this paper about my positive account of limited aggregation and my preferred matching principle. Doing so requires a deeper justification and more detailed exposition than I can give in the space remaining here and would distract from the main purpose of the paper which is to shine a light on the failure of Horton's dilemma. Nevertheless, it would be helpful to outline a matching principle which can explain why, and how, we ought to violate Weak Additivity in these Second Horn cases. Of course, it also needs to avoid the First Horn. Such a matching principle would complete the escape from Horton's dilemma. As such, I shall outline a principle I call *Match by Closeness*, which I develop further elsewhere. It is important to note, however, that this need not be the only principle that could avoid Horton's dilemma.

**Match by Closeness**      When matching claims, where possible match claims with closest relevant claims.

By 'closeness' I mean 'closeness of strength', a claim against a lost limb is closer in strength to a claim against a lost finger, than it is to a claim against death. Thus, if we have a choice whether to match lost limb claims with lost finger or death claims, Match by Closeness tells us to match the lost limb claims with the lost finger claims. Already, this seems intuitive.

To see the principle in play, let us reconsider Case 1:

*Case 1*

Level	Group A	Group B
1 - Death	1	
2 - Paraplegia		
3 - Loss of Limb	(100)	(5)
4 - Loss of Finger		1000

In this case, at Stage 2, we have the option of comparing the lost limb claims in Group B with either the death claim or the lost limb claims in Group A. Match by Closeness suggests that the most appropriate matching is to compare the lost limb claims with lost limb claims, such that all the lost limb claims in Group B are taken out of consideration. Doing so means that the death claim remains in competition, and so Group A wins. Thus, Match by Closeness avoids the First Horn.

It is important to note that this is not just an artifact of this particular case. Match by Closeness necessarily avoids the First Horn and the Principle of Net Addition and Greater Consideration for Stronger Claims. It does so because whenever claims of equal strength but differential numbers (or equal number but differential strength) are added to a competition the less numerous (or weaker) claims are by necessity fully matched either by the other added claims or by some other set of weaker claims. This means that the less numerous (or weaker) claims cannot match with the strongest claims in the competition, alter the relevance of other claims in the competition, and cause us to change which group we would save.

Now, in defence of Match by Closeness I will quickly make two points<sup>8</sup>. Firstly, this matching principle captures the underlying justification of and motivation behind limited aggregation accounts. We saw very briefly in the introduction that most limited

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<sup>8</sup> I develop extended versions of these arguments elsewhere (2023).

aggregation views involve taking the personal perspective of each claimant seriously when determining what is permissible. For our purposes, a simple way to express this is to say that each claimant is owed a reasonable justification for (a) how their claim is matched and (b) (if they lose) why they have not been saved.

Now, Match by Closeness does a better job than other matching principles at both (a) giving each matched claimant a better explanation as to why they have been taken out of consideration and (b) giving each losing claimant a strong and respectful justification as to why they have not been saved. This is because the justification given to each claimant is more likely to refer to other similar claims. Thus, a paraplegia claimant would be given a justification referencing other paraplegia claimants or similarly strong claims, rather than weaker claims such as lost finger claims. Such a justification will be more acceptable from the claimant's perspective and thus more respectful of her claim. At its most basic it is better to say to someone 'I am sorry we cannot save you from paraplegia, because we are busy saving others from paraplegia' than it is to say 'I am sorry we cannot save you from paraplegia, because we are busy saving others from lost fingers'.

Secondly, even without reference to the personal perspective, it strikes me that there is a plausible pro tanto reason to treat equal claims equally and similar claims similarly. This pro tanto reason already plays a role in limited aggregation views. Patrick Tomlin argues that limited aggregation views ought to maintain a principle he calls *Equal Consideration for Equal Claims*. This principle states that 'all claims of equal strength ought to be given equal weight in determining which group to save' (Tomlin 2017: 11). Match by Closeness simply takes this logic a step further and tells us that we ought to match equal claims with each other wherever possible. This prevents one set of equal claims being compared with stronger claims and the other set being compared with weaker claims.

Similarly, Match by Closeness seems like a natural extension of what Kamm calls the *Substitution of Equivalents* (Kamm, 1998: Ch. 6). Substitution of Equivalents recognises that 'it is morally permissible to balance off equal and opposing individual claims or needs [... and] that neither of two equal and opposing claims or needs can finally decide an outcome, the "unbalanced" members of one side must do that' (Kamm, 1998: 101).

For instance, in Case 1 at Stage 2 we have added equal strength claims to both sides but in differential numbers. Now if we change to saving Group B at Stage 2, then the B3 claims have decided the outcome. But Substitution of Equivalents indicates, intuitively, that no claim with an equal and opposing claim should be decisive. Instead, Kamm suggests we should set aside equal strength claims until at least one group is entirely set aside, such that only the unbalanced claims can be decisive. Whilst we might be able to balance the death claim with lost limb claims, we would better respect the claimants if we balanced the lost limb claims with other lost limb claims. This, of course, is exactly what Match by Closeness suggests.

Match by Closeness simply takes the logic of Equal Consideration for Equal Claims and Substitution of Equivalents a step further. It widens this approach to near-equivalents. Match by Closeness suggests that it would be better to balance lost limb claims with lost finger claims, than with death claims, because the lost finger claims are closer in strength. Doing so is more respectful to the claimants. Thus, Match by Closeness says that we should substitute equivalents where possible, and balance similar claims before comparing more distant claims.

With this in view we can see how Match by Closeness gives us a good justification for violating Weak Additivity and thus can explain why the Second Horn is not devastating. Reconsider Case 3:

*Case 3a*

Level	Group A	Group B
1 - Death	1	
2 - Paraplegia		
3 - Loss of Limb		5
4 - Loss of Finger		

*Case 3b*

Level	Group C	Group D
1 - Death		
2 - Paraplegia	100	
3 - Loss of Limb		
4 - Loss of Finger		1000



*Case 3*

<u>Level</u>	<u>Group A + C</u>	<u>Group B + D</u>
1 - Death	1	
2 - Paraplegia	100	
3 - Loss of Limb		5
4 - Loss of Finger		1000

Views which land on the Second Horn of Horton's dilemma tell us to save Group B and Group D in Cases 3a and 3b, but to save Group A+C in Case 3. Match by Closeness explains this by telling us that a better way of comparing claims becomes possible when the groups are combined.

In Cases 3a and 3b, there is only one way to compare and match the claims. We are thus forced to compare the death claim with the much weaker, but still relevant, lost limb claims. Similarly, we have no choice but to compare paraplegia claims with dissimilar lost finger claims. This is not an ideal way to compare claims, as it means giving weaker justifications to the claimants we cannot save. But given there are no other options we must compare the relevant claims.

However, when the groups are combined it becomes possible to compare claims with less dissimilar claims. To be precise, we can match the paraplegia claims and lost limb claims together. This is more respectful of those claimants as they receive a stronger justification as to why their claims have been taken out of consideration, and it better satisfies our pro tanto reason to treat similar claims similarly. Of course, by matching the paraplegia claims and the lost limb claims, the lost limb claims are taken out of consideration and can no longer outweigh the death claim. Given that there are no other claims which can outweigh the death claim, we thus must save Group A+C. In doing so, we also provide the lost finger claimants with a reasonable justification as to why they have not been treated. We tell them 'We are sorry that we could not save your fingers, but we had to prioritise saving another's life'.

Thus, Match by Closeness can give us independently good reason to swap how we match claims in cases like Case 3. The swap is justified because a more appropriate and respectful way to match and compare claims arises, and because the justifications we can give to those we do not save are stronger if we save Group A+C. Now, of course, there are several potential objections to Match by Closeness and further details that

need to be worked out. I do this work elsewhere (2023). But this should give a sufficiently strong sketch of a view that can embrace the Second Horn and defang Horton's dilemma.

### 3.2.3 Horton's Example

Lastly, we ought to look at Horton's argument against embracing the Second Horn. Horton provides an example which purports to show that embracing the Second Horn is terrible:

Suppose that on your left are two buttons marked [A]<sup>9</sup> and [B], and on your right are two buttons marked [C] and [D]. If you press a button, that will save the corresponding group. But you can press only one button in each pair. Suppose next that your arm span is just slightly too short for you to reach both pairs of buttons simultaneously. It follows, on the view that we are considering, that you should press button [B] on your left and then button [D] on your right, even though, had your arm span been just slightly longer, it would have been permissible for you to simultaneously press buttons [A] and [C]. (2018: 173)

Horton's illustration seems to suggest that if your arm span is too short to press the buttons simultaneously, then you are dealing with Cases 3a and 3b separately. But if your arm span is long enough you are dealing with Case 3. Given the answer we get in Case 3 is different to the answer we get in Cases 3a and 3b, whom you save is implausibly dependent on your arm span, despite no other features of the case changing.<sup>10</sup>

This example does seem devastating at first glance. However, Horton misapplies his example. It does not provide pressure against violating Weak Additivity like Horton supposes, but instead puts pressure on when we should treat decisions as two separate decisions or one larger decision.

Thus, whether we treat the decision between A and B and the decision between C and D as one decision is not about whether the buttons are pressed simultaneously, but

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<sup>9</sup> Button letters changed to match Case 3.

<sup>10</sup> This is not a case of ought implies can. I can save any of the claimants, the only thing that changes with my arm span is whether I can save people simultaneously.

whether we have true free choice across the groups or whether there are interaction effects. If there are interaction effects between the cases, such as considerations of relevance or restricted choice across the groups, then we should treat the decision as one. If not, then we should treat the decisions separately.

In this way, Horton's example fails to capture an important interaction effect of the Second Horn cases. In his example, the choices are completely independent of each other: we could choose to save Group B in the first competition and then still have an open choice between saving Group C or D. But in the Second Horn cases, such as Case 3 – where the choice is between Group A+C and Group B+D, we can only choose to save Group B if we also choose to save Group D. By making a choice in one of the competitions we constrain whom we can save in the other competition.

So, we must amend Horton's example if it is to accurately capture the Second Horn cases. Suppose, then, that if I choose to press button B on my left, I cannot press button C on my right – let us say both buttons use the same wire, and two signals cannot be sent down the same wire. Similarly, if I choose to press button D on my right then I cannot press button A on my left, and vice-versa.

With a more accurate illustration in view, we can see that relevance is going to be important once again. Suppose I choose to address the buttons on my right first. If I press button D and save a thousand fingers, then I can no longer press button A on my left and save the dying man. Here, by choosing to save a thousand fingers I leave a person to die. Of course, this is impermissible on any limited aggregation view.

Similarly, suppose I go to press button B on my left first. If I press button B and save five limbs, then I can no longer press button C on my right and save one hundred paraplegics. Of course, this too would be impermissible. Thus, there is no way to handle these cases independently. Making a choice in one case changes the available options in the other case, and so the only way we can handle the situation is to treat both choices together.

Therefore, neither the length of one's reach nor whether the buttons are pressed simultaneously has any effect on whether the context changes. We should treat the

choices separately if there are no interaction effects, even if we can press the buttons simultaneously. Correspondingly, we should treat the choices as one if there are sufficiently strong interaction effects, even if we cannot press the buttons at the same time. Horton's illustration therefore fails to show what it purports to.

### **3.3 Dominance**

One last question remains however: if we are going to allow that combining two losing groups can turn them into the winning group, then why do we not go the whole-hog and abandon the Principle of Net-Addition and Greater Consideration for Stronger Claims? Why is the First Horn devastating but the Second Horn not? It certainly seems that the problem with the First Horn cases is that the addition of claims should not make the group to which the losing claims are added more choice-worthy. If we are to maintain that the First Horn should be avoided, then we need a reason to treat violations of the Principle of Net-Addition and Greater Consideration for Stronger Claims differently to violations of the Second Horn.

Firstly, I think it is important to reiterate that not all violations of Weak Additivity are valid. As I have argued above, Weak Additivity should be treated as a default assumption - we need good reason to abandon it. Furthermore, whilst the Principle of Net Addition and Greater Consideration for Stronger Claims are more specific versions of Weak Additivity, they are not principles we should want to reject; they are independently highly intuitive. It is important to note that whilst rejecting the Principle of Net Addition or Greater Consideration for Stronger Claims entails rejecting Weak Additivity, rejecting Weak Additivity does not entail rejecting the Principle of Net Addition or Greater Consideration for Stronger Claims. If the engine of my car is broken, it entails that my car is broken, but my car being broken does not entail that the engine is broken.

Thus, my argument against Weak Additivity should not be taken as a sufficient reason to reject the Principle of Net Addition or Greater Consideration for Stronger Claims by itself - if one wants to reject these principles one needs separate reasons to do so. As it stands, I see no particularly good reason to reject them, and if an account, like Match by

Closeness, can be developed which maintains the principles, it will have one less bullet to bite.

Secondly, I think we have good theoretical reason to want to distinguish between Weak Additivity and the Principle of Net Addition and Greater Consideration for Stronger Claims, and good reason not to violate the latter two principles. The reason lies in the notion of dominance.

**Dominance**            A claim, or set of claims, dominates another claim, or set of claims, if it is better in some respects and at least equal in all other respects.

We can see that in the cases that violate the Principle of Net-Addition and Greater Consideration for Stronger Claims the stronger claims dominate the weaker claims. They are (at least) equal in all relevant respects and stronger in at least one. So, views that land on the First Horn violate a principle I call:

**Principle of Added Dominance**            Adding claims cannot make the group to which dominant claims are added less choice-worthy compared with the group to which the dominated claims are added.

But why does dominance matter? What is wrong with violating the Principle of Added Dominance? The answer is that if we violate the Principle of Added Dominance, we are ignoring some morally relevant features when all other features are equal. One group is made stronger in one respect and not made weaker in any respect - yet we still swap to saving the other group.

Compare this to the Second Horn cases which do not violate this Principle of Added Dominance. In the Second Horn cases we add claims that are stronger than each other in different ways. One set of claims is greater in number, the other set of claims has stronger individual claims. So, in the Second Horn cases, the winning claims do not dominate the losing claims. They might be on balance stronger, but they are still weaker in one dimension.

This explains why we can save the two losing groups in the Second Horn cases. According to limited aggregation views, whether the numbers matter depends on the other claims in the competition. Weak claims cannot aggregate their large numbers if

they are in competition with much stronger claims. Thus, when the groups are combined in the Second Horn cases, we need to reconsider whether the numbers matter. Claims, that were previously irrelevant in a two-way tie, might now find themselves relevant again when the claims they were irrelevant to are matched by other claims. Similarly, claims that were relevant in their individual pairings might now come into competition with significantly stronger unmatched claims and thus lose relevance.

To see this, consider again Case 3, but this time split into two stages:

**Case 3 - Stage 1** You can save Group A or Group B. Group A contains a death claim. Group B contains five lost limb claims.

**Case 3 - Stage 2** Group C is added to Group A, Group D is added to Group B. Group C contains one hundred paraplegia claims. Group D contains one thousand lost finger claims.

*Case 3*

Level	Group A + C	Group B + D
1 - Death	1	
2 - Paraplegia	(100)	
3 - Loss of Limb		5
4 - Loss of Finger		(1000)

At the first stage Group B wins. At the second stage Group B is strengthened by the winning Group D claims, whilst Group A is strengthened by the losing Group C claims. However, Group B is strengthened by a greater number of claims, whilst Group A is strengthened by stronger claims. We can see that the additional lost finger claims are now irrelevant to the strongest claim in the competition. Thus, it should not be surprising that Group A + C becomes the winning group. Group A has been strengthened by claims that are relevant in all match ups, whilst Group B has been strengthened by claims that are irrelevant in at least one match up.

## 4. Summary

Horton's dilemma then is not a problem for limited aggregationists. Firstly, I have shown that it is not really a dilemma, with the First Horn avoidable and the Second Horn not. The First Horn then is only a problem for a certain range of limited aggregation accounts. Given the severity of the First Horn and the unavoidability of the Second Horn, I suggest all limited aggregationists abandon accounts that land on the First Horn of the dilemma. Even if one is not convinced by my argument that the Second Horn is not a problem for limited aggregation views, two Horns are worse than one. Thus, at the very least, this paper shows that limited aggregationists should focus on the Second Horn.

Horton accuses limited aggregation views of having implausible implications in the Second Horn cases. However, the example that Horton provides is faulty and does not capture all the important features of the Second Horn cases. Once we amend his example to properly capture these features then the limited aggregation approach seems not just plausible but in fact quite intuitive.

Furthermore, once we recognise that the Second Horn rests on an assumption of Weak Additivity, we can see exactly why limited aggregationists should not be concerned with the Second Horn. Weak Additivity is an implausible assumption for any limited aggregationist to hold. Where limited aggregationists maintain that numbers sometimes count and sometimes do not, that sometimes it is right to add claims and sometimes it is not, then the very core of limited aggregation is to reject claims about additivity.

Not only is Weak Additivity an implausible assumption for limited aggregationists to hold in principle, but we also identified exactly where it goes wrong in these Second Horn cases. Particular interaction effects indicate a deeper justification to the rejection - namely that more appropriate comparisons arise when the groups are amalgamated. Thus, Horton fails to establish that limited aggregation views, necessarily, have implausible consequences, either in principle or in practice.

Hopefully, this paper shall put to bed this criticism, and allow limited aggregationists to focus their energies on developing the most plausible versions of their views.

Nevertheless, Horton's dilemma, in bringing to the fore the issues contained in the First Horn, and thus shining a light on several principles any plausible limited aggregation view will need to maintain, will help us to realise the range of acceptable views. I shall leave further discussion of acceptable views for elsewhere.

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