

Gustaf Arrhenius & Julia Mosquera<sup>1</sup>

# Positive Egalitarianism

According to Positive Egalitarianism, not only do relations of inequality have negative value, as Negative Egalitarians claim, but relations of equality also have positive value. The egalitarian value of a population is a function of both pairwise relations of inequality (negative) and pairwise relations of equality (positive). Positive and Negative Egalitarianism diverge, especially in different number cases. Hence, an investigation of Positive Egalitarianism might shed new light on the vexed topic of population ethics and our duties to future generations. We shall here, in light of some recent criticism, further develop the idea of giving positive value to equal relations.

---

<sup>1</sup> Institute for Futures Studies; Gustaf.Arrhenius@iffs.se, Julia.Mosquera@iffs.se. Gustaf Arrhenius and Julia Mosquera contributed equally to this work.

## I. Introduction

The topic under discussion here, following in the tracks of Larry Temkin's influential work on inequality, is how to rank populations with regard to their egalitarian value, that is, how they can be ordered by the relation "is at least as good as with respect to egalitarian concerns".<sup>2</sup> One should distinguish this undertaking from the project of how such a ranking would play into the all things considered rankings of populations, where we also have to consider other aspects, such as the total welfare in a population, and from the project of ranking populations in terms of the primarily descriptive relation "is at least as (un)equal as".<sup>3</sup> Another way of putting it is that we are asking what our well-informed preference from a moral perspective would be if we only cared about inequality and equality (of some sorts).<sup>4</sup>

Several authors, for example Larry Temkin, Ingmar Persson, and Shlomi Segall, have argued in favour of the view that inequality among people is bad but equality among people is neither good nor bad but of neutral value.<sup>5</sup> It is fair to say that this is the received view on the value of inequality and equality. (Arrhenius 2013) formulated a version of this view with a bit more content:<sup>6</sup>

*Negative Egalitarianism:* The egalitarian value of a population is a strictly decreasing function of pairwise relations of inequality.

Negative Egalitarianism can be contrasted with a novel view that, in addition to the negative value of unequal relations, also ascribes positive value to relations of equality, as suggested by (Kawchuk 1996), (Arrhenius 2013), and (Mosquera 2017b). We shall refer to this position as Positive Egalitarianism:

---

<sup>2</sup> Cf. (Temkin 1993; Arrhenius 2009, 2013). For simplicity, we are here only considering human populations but the framework could easily be extended to include other sentient beings.

<sup>3</sup> We say "primarily" since this relation might be partly evaluative because the currency might involve an evaluation. For example, to say that Tim has higher welfare than Orri in outcome X is an evaluation to the effect that Tim is *better off* than Orri in X. For the same point, see (Rabinowicz 2003), fn. 7.

<sup>4</sup> See (Arrhenius 2013) for a more detailed discussion of this topic.

<sup>5</sup> (Persson 2001), p. 30, holds the same view: "According to this conception [of egalitarianism], the intrinsic value of just equality will be neutral, consisting in the mere absence of something intrinsically bad, namely unjust inequality". Larry Temkin's position seems to be similar. Although Temkin doesn't explicitly address the question of whether equality has positive value, he provides a number of arguments for why the mere addition of equally well-off people doesn't improve a population from the point of view of equality, but rather worsens it, since such addition can increase the inequality in a population in various different respects. See for example (Temkin 1993), pp. 23, 211. See also (Segall 2016), pp. 74-86.

<sup>6</sup> See (Arrhenius 2013). Negative Egalitarianism wasn't separately stated in Arrhenius's paper but it makes up the "inequality part" of his definition of Positive Egalitarianism (p. 85).

*Positive Egalitarianism:* The egalitarian value of a population is a strictly decreasing function of pairwise relations of inequality and a strictly increasing function of pairwise relations of equality.<sup>7</sup>

Let's us expand on what these two positions involve. First, they presuppose a currency of egalitarian justice which is a contested subject.<sup>8</sup> For simplicity, let's assume that the egalitarian currency is welfare (or, to put it differently, "welfare" is a place-holder for whatever is the correct currency of egalitarian justice) and that individual welfare is measured on an interpersonally comparable ratio scale. Moreover, again for simplicity, let the measure of pairwise relations of inequality be the absolute value of the difference in welfare between the two involved individuals.<sup>9</sup>

Consider a population A consisting of three persons,  $p_1, p_2, p_3$ , with welfare 10, 20, and 20 respectively. We can represent this as  $A = \langle 10, 20, 20 \rangle$ . According to Negative Egalitarianism, the egalitarian value of A is a function of the absolute value of the welfare differences of all distinct pairs of different individuals in A, that is,  $(p_1, p_2)$ ,  $(p_1, p_3)$ , and  $(p_2, p_3)$ .<sup>10</sup> In this case, there are two pairwise relations of inequality of size 10 between  $p_1$  and  $p_2$ , and  $p_1$  and  $p_3$  respectively, which are of negative value. According to Positive Egalitarianism, the egalitarian value of A isn't only a function of the two inequalities of size 10 but also of the equality between  $p_2$  and  $p_3$ , which is of positive value.

Negative and Positive Egalitarianism can diverge in both same and different number cases. An example of a same number case is that Negative Egalitarianism will always consider populations like A bad from the perspective of egalitarian concerns, whereas some version of Positive Egalitarianism might evaluate such populations as good, e.g., when the involved inequality is so small that its negative value is outweighed by the positive value of the equal relation. As we shall see, however, these views come apart even more in different number cases. Moreover, these views are substantial positions that rule out some positions regarding the value of equality (more on this below).

There are at least three good reasons for why considering egalitarian aspects of

---

<sup>7</sup> (Arrhenius 2013).

<sup>8</sup> For this debate, see e.g., (Rawls 1971), (Sen 1992b, 1993, 1980), (Dworkin 1981a, 1981b, 2000), (Cohen 1989, 1993), (Arneson 1989), and (Nielsen 1996).

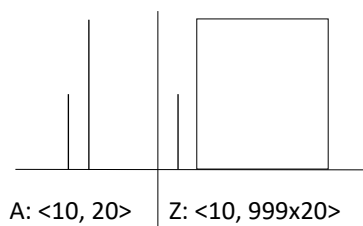
<sup>9</sup> One might also reasonably make this measure more sophisticated to take into account that, for instance, differences at low levels matter more than differences at high levels (by, for example, transforming the individual welfare levels with a strictly increasing concave function). There are other more sophisticated functions that could be used but since this won't be relevant for the discussion below, we shall leave this issue aside here.

<sup>10</sup> Hence, it's not a function of the identity pairs, e.g.,  $(p_1, p_1)$ , and each pair of distinctive individuals are only counted once, e.g.,  $(p_1, p_2)$  and  $(p_2, p_1)$  is counted as one pair.

population change and different number cases is interesting. Firstly, doing so might shed new light on the vexed topic of population ethics and our duties to future generations since equality is one aspect in the ranking of future populations of different sizes. Secondly, if we want to measure the value of equality and inequality over time, we have to take into account that the size of the compared populations might have changed. For example, when one tries to measure the development of global equality and inequality during the last thirty years or so, one has to take into account the great population expansion in countries such as India and China.<sup>11</sup> Moreover, climate change is very likely to affect not only future peoples' welfare but also the size of future populations.<sup>12</sup> Thirdly, this new dimension of egalitarian theory is a fruitful way of probing our ideas about egalitarian concerns and reveals as yet underdiscussed and surprising complexities and problems in our current conceptualization of the value of equality, as the discussion above indicates.

## II. Mere Addition of Better off People

Let us first consider a different-number case from (Arrhenius 2013):



**Diagram 1. Mere Additions of Better off People**

In Diagram 1 above, the height of the vertical lines and the rectangle represent people's welfare according to some suitable measure or proxy. Each vertical line represents one individual whereas the rectangle represents a group, the size of which is indicated by the width of the rectangle. All the lives in the above diagram have positive welfare, or, as we also could put it, have lives worth living, which is represented by positive numbers.<sup>13</sup> Population A consists of two persons, one with

---

<sup>11</sup> See, e.g., (Bosmans, Decancq, and Decoster 2014) for some important results in this area.

<sup>12</sup> For a discussion of some of the relationship between climate change and demography, see (Hales et al. 2014; Bommier, Lanz, and Zuber 2015; Mejean et al. 2017; T. Carleton et al 2018; Geruso and Spears 2018).

<sup>13</sup> For a discussion of alternative definitions of a neutral life, many of which would also work fine in the present context, see (Arrhenius 2000b, forthcoming, ch. 2 and 9). See also (Broome 1999) (Broome

half of the welfare of the other, 10 and 20 units respectively. In Z, we have added another 998 best off people with 20 units of welfare.

Intuitively, Z seems to be better with respect to egalitarian concerns since Z is very close to perfect equality. A, on the other hand, is a straightforwardly unequal population. Here's how we can analyse the above intuition. In A, there are no relations of equality but one relation of inequality. In Z, on the other hand, there is a staggering 498 501 relations of equality, which in comparison outweighs the puny 999 relations of inequality.<sup>14</sup> Hence, one might reasonably judge Z as better than A in regard to egalitarian concerns, and a natural way to account for this intuition is to claim that from an egalitarian perspective, we should not only care about relations of inequality but also about relations of equality, as suggested by Positive Egalitarianism.

Notice that it doesn't follow from Positive Egalitarianism that Z is better than A in respect to egalitarian concerns since it is compatible with any ranking of these populations. The ranking depends on what weight we give to the great increase in equal relations as compared to the relatively small increase in unequal relations.

Interestingly, that Z is better than A in regard to egalitarian concern is implied by the Gini Coefficient (and some other standard economic measures, for example, Relative Mean Deviation).<sup>15</sup> The Gini Coefficient is approximately 0.17 for A and only 0.0005 for Z.<sup>16</sup>

Negative Egalitarianism, on the other hand, implies that Z is worse than A with regard to inequality since in the change from A to Z, the number of unequal relations increases, from 1 to 999, and the size of the gaps are the same.<sup>17</sup> This shows, interes-

2004), and (Parfit 1984, 357–58), and appendix G).

<sup>14</sup> Since the number of pairwise relations in a population of size  $n$  is  $\frac{1}{2}n(n-1)$ , we get that the number of equal relations in Z is  $999(999-1)/2 = 498501$ .

<sup>15</sup> See (Kawchuk 1996,p.159), (Arrhenius 2013, 2016) for a discussion of such measures. One might also be interested in *Average Per Pair Inequality (APPI)*: The sum of the absolute value of all welfare differences for all distinct pairs of individuals in the population divided by the number of such pairs (see (Rabinowicz 2003) and (Arrhenius 2013)). APPI also ranks Z as better than A with respect to inequality since  $APPI(A) = (|10-20|)/2(2-1)/2 = 10$  whereas  $APPI(Z) = (999|10-20|)/(1000*999)/2 = 0.02$ . A measure proposed by Derek Parfit is likely to have the same implication. Parfit compares two populations, A+ and Alpha. A+ consists of two groups of people of the same size, one with 100 units of welfare per person, and one with 50 units of welfare per person. Alpha consists of one group of the same size as A+ but with 105 units of welfare per person and a very large group of people with 45 units of welfare per person. He writes: "The inequality in Alpha is in one way worse than the inequality in A+, since the gap between the better-off and the worse-off people is slightly greater. But in another way the inequality is less bad. This is a matter of the relative numbers of, or the *ratio* between, those who are better-off and those who are worse-off. Half of the people in A+ are better off than the other half. This is a worse inequality than a situation in which almost everyone is equally well off, and those who are better off are only a fraction of one per cent. - - - All things considered, the natural inequality in Alpha is not worse than the natural inequality in A+." (Parfit 1986, p.156).

<sup>16</sup> The Gini Coefficient is defined as:  $\frac{1}{2n^2y} \sum_{i=1}^n \sum_{j=1}^n |y_i - y_j|$ .

<sup>17</sup> Likewise according to Temkin's Individual Complaint Theory (Temkin 1993, ch. 2) since the worst off person has many more complaints in Z as compared to in A, 999 complaints versus 1.

tingly, that the Gini Coefficient is ruled out by Negative Egalitarianism. The reason is that Gini not only takes into account the number of unequal pairs but is also sensitive to the number of equal pairs in a population since they figure in the denominator. Hence, Gini isn't, as one might believe, a measure that only gives weight to unequal relations, but it rather belongs to the family of positive egalitarian theories that also give weight to equal relations.<sup>18</sup>

(Segall 2016) has considered this case and disagrees with the judgement explained above of positive egalitarians and others who rank Z as better than A in regard to egalitarian concerns:

In A there are two individuals living in inequality. But in Z the sense of inequality of that one worse off person is magnified (almost) a thousand times. And the fact that there are 999 better-off individuals living in equality amongst themselves does not detract from that badness, and potentially even emphasises her isolation as a worse-off individual in that society.<sup>19</sup>

However, Positive Egalitarianism doesn't claim that the "999 better-off individuals living in equality amongst themselves ... detract from ... [the] badness" of the inequality. On the contrary, Positive Egalitarianism implies that Z is worse in one respect that is relevant for egalitarian concerns, namely in respect to the number of unequal relations to which the worst off person is subjected. It is just that positive egalitarians also value equal relations, and since there are so many of them in Z, this may outweigh the badness of the unequal relations when it comes to egalitarian concerns. Again, in A, there are no relations of equality and one relation of inequality, whereas in Z there is a staggering 498 501 relations of equality, which in comparison outweighs the few 999 relations of inequality.

Secondly, let us again stress that it doesn't follow from Positive Egalitarianism that Z is better than A in respect to egalitarian concerns, but it is compatible with that judgement. It depends on what weight we give to the increase in unequal relations as compared to the increase in equal relations. Hence, Positive Egalitarians could accommodate Segall's intuition by changing the relative weight of the value of equal and unequal relations. To make Segall's claim into a real argument against Positive Egalitarianism, one would have to show that there are no cases of

---

<sup>18</sup> Strictly speaking, Gini is ruled out by Positive Egalitarianism as we have defined it above since adding equal relations to a perfectly equal population won't increase the egalitarian value according to Gini (it will be the same) whereas this follows from Positive Egalitarianism. Gini is, however, compatible with a weaker version of Positive Egalitarianism according to which the egalitarian value of a population is a decreasing function of pairwise relations of inequality and an increasing function of pairwise relations of equality.

<sup>19</sup> (Segall 2016), p. 76

the type depicted in Diagram 4, that is, cases in which the positive value of an increase in equal relations outweighs the negative value of a much smaller increase in unequal relations, possibly involving very small inequalities. This is a rather tall order, we surmise, since it is tantamount to showing that irrespective of how small the inequalities are and how many more equal relations there are, the positive value of the equal relations cannot outweigh the negative value of the unequal relations.

Segall's point regarding the isolation of the worst off can be understood in different ways. It could be taken as a psychological claim regarding the welfare of the worst off individual, that she suffers from being the only worst off person. Taken this way, the objection misses its target since any effects on the welfare of the person is already taken into account in the diagram and the worst off has the same welfare in both outcomes.

More interestingly, Segall hints at the putative badness of the isolation of a single worse off individual in a society in the quote above. This might be a further aspect to take into account when we rank A and Z with respect to egalitarian concerns. (Mosquera 2017a) has a more developed proposal that also takes account of this intuition. Her idea is that the way in which relations of inequality are distributed should also matter when accounting for the egalitarian value of a population. It is for example pro tanto worse if the inequalities are concentrated on a single individual rather than on many individuals. Mosquera refers to this as "Distribution-Sensitive Pairwise Egalitarianism". Going back to the case with A and Z, there are more relations of inequality concentrated on the worse off individual in Z, as compared to A. In this respect, Z is worse than A.

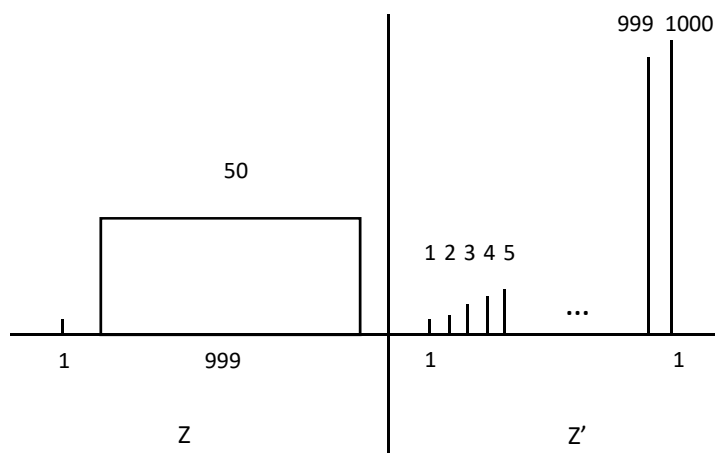
However, the question is what weight should be assigned to those considerations as compared to other egalitarian considerations. Mosquera doesn't commit to any particular weighing and would not claim that her account implies that Z is worse than A, taking into account all the relevant egalitarian concerns. It is indeed possible for an egalitarian to assign such an extremely high weight to the putative badness of the 'isolation' of a single worse-off individual in a society, such that the ranking of A and Z in respect to egalitarian concerns would be reversed as compared to the ranking provided by Positive Egalitarianism and Gini. But it is hard to find a convincing argument for such a radical view, and very few people would be attracted to such a view, we surmise.

To sum up, we think that Segall's ranking of A and Z is partly based on an equivocation of inequality and egalitarian concerns. Furthermore, it overlooks the great number of the equal relations in Z as compared to the small number of unequal relations. It is this difference that makes it intuitively attractive to rank Z as better than A in respect to egalitarian concerns and along the lines of reasonable versions of Positive Egalitarianism and other theories such as the Gini Coefficient. The

appeal to ‘isolation’ or ‘concentration’ isn’t sufficient to reverse the ranking in this case.

### III. The Progression Case

As we showed above, Negative and Positive Egalitarianism come apart in different-number cases. But as we also mentioned in the introduction, Negative and Positive Egalitarianism can also diverge in same-number cases. In fact, Segall suggests another criticism against Positive Egalitarianism that is based on a same-number case where he claims that Positive Egalitarianism yields the wrong result. It might be instructive to look at it now. Consider the following two same-sized populations of a thousand people each:



**Diagram 2. The Progression Case**

In diagram 2, the numbers above the height of the vertical lines and the rectangle represent people’s welfare. The number of people at each welfare level is indicated by the numbers below the neutral welfare line.

Segall claims that  $Z'$  is better than  $Z$  in regard to egalitarian concerns:

My intuition is that  $Z'$  is better than  $Z$  with respect to equality. This is so even though  $Z'$  contains many more incidents of inequality, and no relations of equality at all.<sup>20</sup>

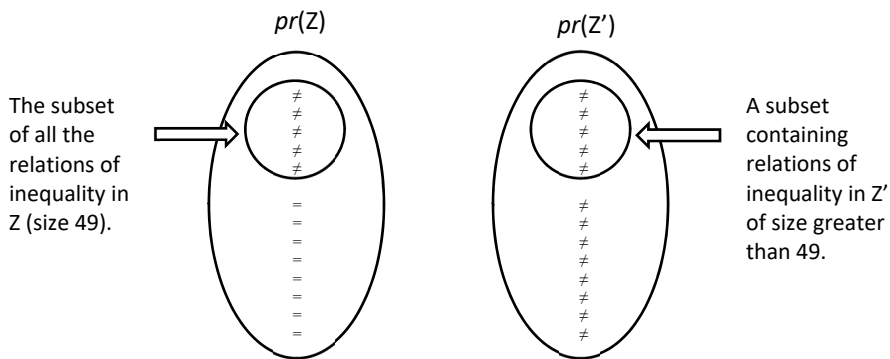
---

<sup>20</sup> (Segall 2016), p. 76



Positive Egalitarianism of course yields the opposite ranking. One might get the impression from Segall’s discussion that what makes Z better than Z’ according to Positive Egalitarianism is the fact that Z contains a lot of relations of equality, while Z’ has no relations of equality. As we shall show below this is wrong since Negative Egalitarianism also ranks Z as better than Z’ in respect to egalitarian considerations. Positive Egalitarianism gives extra reasons for this ranking because of the positive value of the relations of equality in Z, but it is not the main reason for why Z is better than Z’.

It might not be evident that both Negative and Positive Egalitarianism imply that Z’ is worse than Z with respect to equality so let us informally demonstrate it. We can do a one-to-one mapping of all the 999 unequal pairs in Z to a corresponding unequal pair in Z’ with a greater gap. According to Negative Egalitarianism, this subset of unequal pairs from Z’ will be worse with respect to equality than the set of unequal pairs from Z. Since all the pairs in Z’ that remain unmapped after this are equal, this will only further decrease the egalitarian value of Z’. The same demonstration holds for Positive Egalitarianism since the equal relations in Z will increase the egalitarian value of Z further, as compared to the egalitarian value of Z’. Here’s a figure illustrating the same point:



**Diagram 3. A one-to-one mapping of the unequal relations in Z to unequal relations of greater size in Z’**

In the diagram above, the two ellipses denoted  $pr(Z)$  and  $pr(Z')$  represent the set of all pairwise relations of equality and inequality in populations Z and Z’ respectively. Relations of equality are represented by “=” whereas relations of inequality are represented by “≠”. The horizontal arrows from  $pr(Z)$  to  $pr(Z')$  represent the mapping of all the relations of inequality from  $pr(Z)$  to relations of inequality of

greater size in  $pr(Z')$ . Hence, the circle in  $pr(Z)$  represents the set of all relations of inequality in  $pr(Z)$  whereas the circle in  $pr(Z')$  represents some subset containing relations of inequality in  $pr(Z')$  of size greater than 49. The latter subset will be worse with respect to equality than the former according to Negative Egalitarianism. As we can see in the diagram, all the pairs in  $pr(Z')$  that remain unmapped are unequal, and thus will further decrease the egalitarian value of  $Z'$ . Moreover, all the unmapped pairs in  $pr(Z)$  are equal and thus will increase the egalitarian value of  $Z$  further as compared to the egalitarian value of  $Z'$ .

Does Segall's case show that we have to reject both Positive and Negative Egalitarianism? We don't think so. Segall's ranking of  $Z$  and  $Z'$  overlooks the great magnitude of the inequalities in  $Z'$ .

Firstly, as Segall concedes, population  $Z'$  contains a greater number of relations of inequality than  $Z$ .<sup>21</sup> However, it is important to notice how much greater the number of such relations is in  $Z'$  as compared to  $Z$ . As Mosquera (2017) has pointed out, the latter population contains only 999 relations of inequality of size 49 whereas  $Z'$  contains a whopping 499 500 relations of inequality of sizes ranging from 1 to 999.<sup>22</sup>

Secondly, the vast majority of the relations of inequality in  $Z'$  involve a bigger gap than the inequalities in  $Z$ . In  $Z'$ , 450 775 relations out of a total of 499 500 relations of inequality are of size greater than 50. In  $Z$ , on the other hand, the relatively puny 999 relations of inequality are all of size smaller than 50.<sup>23</sup>

As an illustration only of the magnitude of the inequality contained in  $Z'$ , consider individual 1 in  $Z'$  who is subject to 949 relations of inequality greater than 49. As pointed out by Mosquera (2017), these 949 relations of inequality range from size 50 to size 999, whereas, again, the relations of inequality in  $Z$  are of size 49.<sup>24</sup>

Hence, there are many more and greater inequalities in  $Z'$  as compared to  $Z$ . Thus, pace Segall, it makes eminent sense for an egalitarian to rank  $Z'$  as worse than  $Z$  in respect to egalitarian concerns.

Finally, let us here take the opportunity to point out a simple misunderstanding of Positive Egalitarianism on Segall's behalf. He writes:

---

<sup>21</sup> The formula for calculating the number of pairwise relations in a population of size  $N$  is  $N(N-1)/2$ . In the case of  $Z'$ , where there are no equal relations, the number of unequal relations coincide with the total number of pairwise relations in the population as defined above. In the case of a population with both unequal and equal relations, the number of unequal relations equal the total number of relations minus the number of equal relations.

<sup>22</sup> See (Mosquera 2017b, 186).

<sup>23</sup> Moreover, of the 1000 individuals in  $Z'$ , 949 individuals are subject to at least one relation of inequality greater than 50 (which represents 94.9% of population  $Z'$ ) as opposed to 1 individual in  $Z$  (which represents only 0.1% of the population).

<sup>24</sup> See (Mosquera 2017b, 186).

A major difference [between Segall's and Positive Egalitarianism's verdicts on Z and Z'] of course is that Arrhenius's positive egalitarianism *simply counts the number of incidents of both equality and inequality but does not take into consideration the magnitude of the latter*.<sup>25</sup>

Positive Egalitarianism, however, does take into account the size of the inequalities in the distribution since it is an extension of Negative Egalitarianism. The set of all pairs of individual welfare levels in a population contains information about the size of the gaps and the number of unequal pairs. Negative and Positive Egalitarianism take into account both of these aspects so that the greater the gap, and the more of such unequal relations, the worse in regard to egalitarian concerns. This is rather clear from Gustaf Arrhenius' original paper in which there is extensive discussion on how to take into account the size of inequalities, but also on how to weigh them against the positive value of equal relations.<sup>26</sup> For example, Arrhenius writes that "it seems appropriate that both the number and the size of inequalities matter".<sup>27</sup>

More importantly, Negative and Positive Egalitarianism, as defined above, rule out egalitarian views according to which the egalitarian value of a population sometimes isn't affected by an increase in the gaps or by an increase in the number of unequal pairs. A simple example is the range measure where the egalitarian value only depends on the gap between the best and worst off in the population. On this view, the egalitarian value doesn't change with an increase in the number of pairwise inequalities as long as the distance between the best and worst off is preserved (by, for example, adding more worse off people). Likewise, the view that Segall ascribes to Arrhenius above, which ignores the size of the inequalities and only counts the number of unequal pairs,<sup>28</sup> is actually incompatible with Negative and Positive Egalitarianism.<sup>29</sup>

---

<sup>25</sup> (Segall 2016), p. 76., last emphasis added.

<sup>26</sup> For just one example of the latter, see Arrhenius (2013), pp. 85-86, where he discusses how to weigh the goodness of an increase in equal relations against an increase in slightly unequal relations. There are many more examples.

<sup>27</sup> (Arrhenius 2013), p.79.

<sup>28</sup> Mosquera labels this kind of view "Aggregative Pairwise Inequality" in (Mosquera 2017b, 149).

<sup>29</sup> This feature makes Positive and Negative Egalitarianism unsuitable as a general characterisation of all egalitarian views and shows that they're substantial positions. For the former we would need something weaker not to exclude positions such as the range measure. Indeed, Negative Egalitarianism rules out Gini in different number cases since, as shown by (Arrhenius, mimeo), according to Gini, a mere increase in unequal relations by adding more individuals to the population might sometimes improve the situation in respect to inequality. Another principle that Negative Egalitarianism rules out is Temkin's BOP (The Relative to the Best-Off Person View of Complaints) in combination with his Additive Principle of Equality (Temkin 1993). According to this combined principle, all the individuals but the very best off have a complaint and the badness of the inequality of a population is equivalent to the aggregated number of complaints of all but the very best off in that population. A principle like this, in difference to Negative Egalitarianism, is insensitive to the addition of better off people (i.e., adding more people at the level of the better off doesn't increase the badness of inequality) since it only looks at

## IV. Class Division

Are there any other reasons to rank  $Z$  as worse than  $Z'$  with respect to egalitarian concerns? (Segall 2016) again hints at the putative badness of the isolation of a single worse-off individual in a society (see quote in the preceding section). But analogously to our reasoning above regarding the case in Diagram 1, this putative badness can hardly outweigh the greater number and the greater size of the inequalities in  $Z'$  as compared to  $Z$ .<sup>30</sup>

More interestingly, one might argue that  $Z$  is worse than  $Z'$  regarding another egalitarian consideration, namely class division. In  $Z$ , there is a clear class division with one group of better off people and another group with (only) one worst off person. In  $Z'$ , one might argue, there is no clear class division since there is only a small difference in wellbeing between each adjacent individual (see Diagram 2). Hence, there seems to be no distinct upper or lower classes in  $Z'$ , or so the argument goes.<sup>31</sup>

Several things can be said in response to this argument. Firstly, whether  $Z$  and  $Z'$  can be interpreted as containing a class division depends on the conception of welfare involved in the case or whether an index or proxy for welfare is used. For some conceptions or proxies of welfare, welfare differences might very well track class differences, understood in terms of social or economic status, the most common elements used to define class.<sup>32</sup> For others, there is no clear connection. For example, conceptions or proxies of welfare such as income and wealth are likely to track class differences.

On the other hand, with conceptions of welfare such as experientialist, desire satisfaction, and objective lists theories the connection between welfare and class is weaker. For example, given these conceptions, the reasons for why the welfare of individual 1 in  $Z$  is significantly lower than the others' may be due to a painful medical condition that others in that population don't suffer, but she might otherwise enjoy high social and economic status. She might, for example, be a mem-

---

the difference with the best-off person, irrespective of the number of people who happen to be at this level. Although a general characterisation of all egalitarian views is an interesting question, we set this issue aside for now.

<sup>30</sup> Moreover, one might argue that there is isolation in population  $Z'$  too since no one has the same level of welfare. On the other hand, the badness of isolation might depend on how big the welfare difference is. We shall not pursue this line of argument further here.

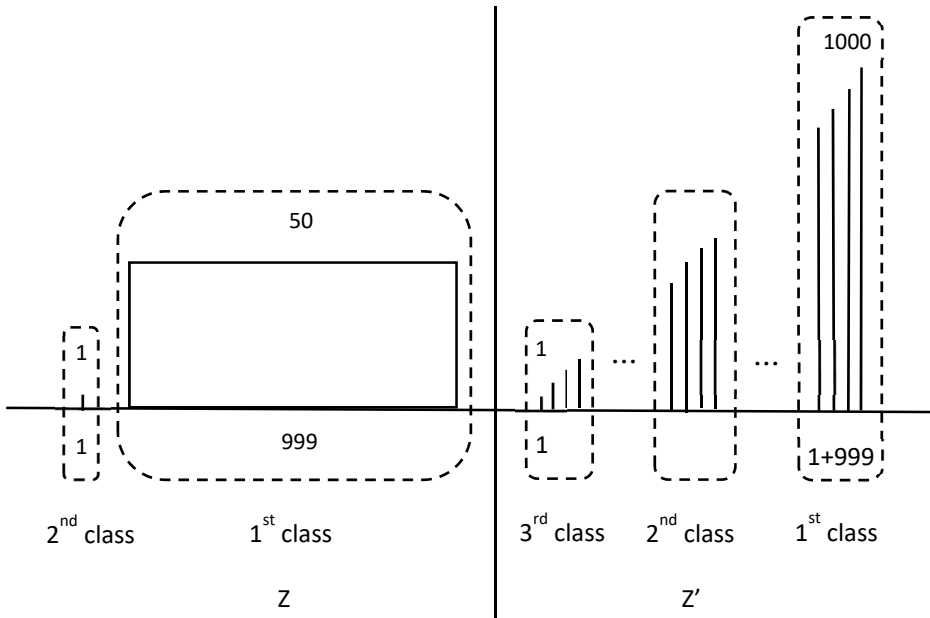
<sup>31</sup> As suggested by Shlomi Segall in personal communication.

<sup>32</sup> Notice that there isn't consensus on what is the right definition of 'class'. While contemporary political scientists tend to identify class with income or wealth (i.e., they refer to class differences mainly as income or wealth differences), sociologists tend to include other elements in the definition, such as educational background, parental background, and/or the relation to the means of production. We would like to thank Malcolm Fairbrother, Chandra Kumar, and Stefan Svallfors for a discussion of this issue.

ber of a wealthy aristocratic family despite suffering from such a painful condition. Such interpretations are not ruled out by the very abstract description of the case that we have provided here. In conclusion, these conceptions of welfare differences don't always track class differences.

The notion of welfare used in this paper is a broad one and is compatible with experientialist, desire satisfaction, and objective list theories.<sup>33</sup> Given that we use a broad notion of welfare, one cannot infer from the description of Z and Z' that those populations contain any particular social stratification, or that the individuals involved in those populations belong to any particular class.<sup>34</sup>

However, let's for the sake of the argument accept that Z and Z' can be compared in terms of class division. Even so, it would not be true that Z is worse than Z' from the point of view of class division. This becomes clearer with the following representation of the case:



**Diagram 4. Possible class divisions in Z and Z'**

<sup>33</sup> For experientialist theories, see e.g., (Sumner 1996), (Feldman 1997, 2004), and (Tännsjö 1998). For desire theories, see e.g., (Barry 1989), (Bykvist 1998), (Griffin 1990), and (Hare 1981). For objective list theories, see e.g., (Braybrooke 1987), (Hurka 1993), (Rawls 1971), and (Sen 1980, 1992a, 1993).

<sup>34</sup> One might also object to the conceptual possibility that a single person can constitute a 'class' (the single person at low level in Z). We shall not pursue this line of argument further here.

Although the difference in welfare between each pair of adjacent people in  $Z'$  is small, by looking at diagram 3 above we can clearly see that there are groups whose individuals are much better off than the individuals in other groups, such as the people in the 1<sup>st</sup> and 2<sup>nd</sup> class as compared to the people in the 3<sup>rd</sup> class. Indeed, we can imagine that these groups represent the lower class, middle class, and the upper class in that population. And the fact that there are people in between these three classes that cannot be clearly classified as belonging to any of these classes doesn't refute the existence of this class division in  $Z'$ .

Perhaps one might object here that it is not clear how the grouping into classes would be made in a society that looked like  $Z'$ , or that there is no salient way of doing it, while such a grouping is rather natural in  $Z$ . As true as this might be, it is of no normative significance. That there are many ways of grouping people doesn't show that there wouldn't be some ways (or at least one) that are more relevant from the perspective of egalitarian concerns. And our point is that there is at least one such grouping that shows that  $Z'$  is also a class society. Hence, it is not the case that  $Z$  is worse than  $Z'$  regarding this egalitarian consideration.

## V. Perfect and rough equality

At this point, one might worry that the question of whether equality can have positive value is only interesting if people can in fact have *exactly* the same level of the currency that ought to be distributed equally, in a wide range of cases. For example, in realistic cases, perfect equality of welfare will almost never hold, or so one might argue. Now, if welfare is the correct egalitarian currency, and if it is so rare that two or more individuals will be perfectly equal in respect to welfare, what is then the point of determining the positive value of equality? Doesn't this make the focus on equality albeit theoretically interesting, practically irrelevant? Larry Temkin has recently put forward this argument.<sup>35</sup>

There are at least two answers to Temkin's worry. Firstly, whether people can achieve perfect equality depends on how the egalitarian currency is specified. In realistic cases, perfect legal equality (e.g., the same laws for different ethnic groups) is arguably much easier to obtain than perfect equality of welfare and has already been achieved among large groups of people in many countries, or so one might argue. Hence, if one cares about legal equality, then the value of equality is practically relevant. Moreover, one could care about inequality and equality for several currencies at the same time, for example both legal equality and equality of welfare.

---

<sup>35</sup> In personal communication.

In that case, even if perfect equality of welfare is rare, the value of equality is still practically relevant since perfect legal equality isn't rare.

Secondly, Arrhenius (2013) has suggested a version of Positive Egalitarianism in terms of what he calls "rough equality". Small differences in welfare, that is, small inequalities, can equally well be described as "rough equalities". One might then ask whether it is only perfectly equal relations that have positive value or if this is also true of roughly equal relations. A promising idea is that inequality has negative value when the inequality is sufficiently big ('strict inequality' as we can call it) but when it gets smaller we reach the border for rough equality, which is of neutral value, and when the welfare difference gets even smaller, rough equality has positive value, and this value increases the closer we get to perfect equality. So, for example,  $\langle 5, 10 \rangle$  might have negative value from an egalitarian perspective;  $\langle 8, 10 \rangle$  neutral value since we have reached the border for rough equality;  $\langle 9, 10 \rangle$  positive value since we are getting close to perfect equality; and lastly  $\langle 10, 10 \rangle$  has maximal positive value regarding egalitarian concerns.

We can formulate Rough Positive Egalitarianism in the following way:

*Rough Positive Egalitarianism:* The egalitarian value of a population is a strictly decreasing function of pairwise relations of strict inequality and a strictly increasing function of pairwise relations of rough and perfect equality.<sup>36</sup>

This view, we suggest, can accommodate the worry raised by Temkin. Rough Positive Egalitarianism incorporates the idea that individuals don't need to be at the *exact* same level of equality in order for there to be some positive value of equality in the relation that holds between them. There is a point at which individuals' welfare is close enough to each other's to elicit this value. This view, we believe, fits the natural way in which people think about equality. When people claim that people ought to be equal, they rarely mean that people ought to be perfectly equal but rather, roughly equal, we surmise.

Segall is one of the few authors who has discussed Rough Positive Egalitarianism. He has put forward a claim that involves  $Z$  and  $Z'$  (the populations involved in the Progression Case discussed in the previous sections). According to Segall, Rough Positive Egalitarianism judges  $Z$  as worse than  $Z'$ . And this, Segall argues, contradicts the ranking of Positive Egalitarianism for these populations:

There are reasons to think that Arrhenius himself ought to also be committed to the view that  $Z'$  is better than  $Z$  with respect to equality. When considering the

---

<sup>36</sup> Cf. (Arrhenius 2013), p. 89.

badness of small inequalities he says that a promising approach is ‘that inequality has a negative value when the inequality is sufficiently big but, when it gets smaller, we have rough equality that is of neutral value’.

And he continues, referring to the supposed implications of Rough Positive Egalitarianism:

On this reading [of Rough Equality], in Z we have 999 relations of sufficiently big inequalities and hence negative value, whereas in Z’ we have almost half a million relations of small inequalities and hence neutral value. So it seems that even on Arrhenius’ intuition Z’ is better than Z, even though the former contains no relations of equality.<sup>37</sup>

It is important to note, though, that it is not the case that “in Z’ we have almost half a million relations of small inequalities and hence neutral value”. Sure, there are small inequalities between adjacent or close pairs in the progression and they might be of neutral value. But, as we pointed out above, the vast majority of the relations of inequality in Z’ involve big and greater gaps than the inequalities in Z. Hence, we can conclude that also for those who adhere to Rough Positive Egalitarianism, there are very strong reasons to hold that Z’ is worse than Z with respect to egalitarian considerations. The same reasons that support the ranking provided by Negative and Positive Egalitarians also apply for Rough Positive Egalitarianism.

## VI. The Repugnant Equality Objection

Finally, one may think that upholding to a view like positive egalitarianism, which attributes positive value to relations of equality, might lead to a version of Derek Parfit’s famous Repugnant Conclusion, which, following Mosquera (2017b), we will call “Repugnant Equality”:

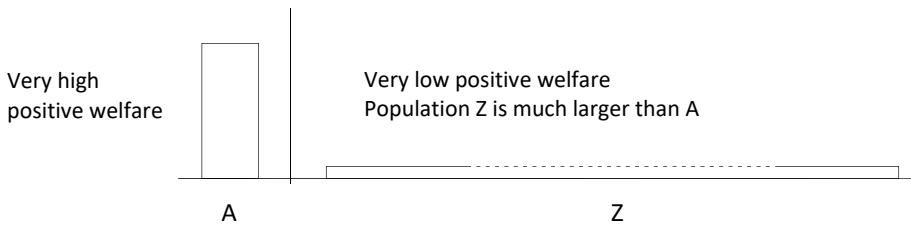
*Repugnant Equality:* For any population consisting of people enjoying the same very high positive welfare, there is a better population with respect to egalitarian concerns in which everyone has the same very low positive welfare.<sup>38</sup>

---

<sup>37</sup> (Segall 2016), p. 76, fn. 7.

<sup>38</sup> Our formulation. See (Segall 2016) and (Mosquera 2017b) for a similar formulation.





**Diagram 5. Repugnant Equality**

According to Segall, Positive Egalitarianism “probably” ranks Z as better than A from the point of view of equality even when the lives in Z are barely worth living since Z “contains many more relations of equality” as compared to A.<sup>39</sup> Hence, Positive Egalitarianism implies that Z is better than A in one respect, namely in respect to egalitarian concerns, that is, Repugnant Equality. He finds this implication counterintuitive.<sup>40</sup>

Repugnant Equality is a variation of Derek Parfit’s well-known Repugnant Conclusion.<sup>41</sup> It is also, in a way, a version of the levelling down objection. According to the levelling down objection, one cannot make a situation better *in any respect* by only decreasing welfare of the better off (to the same level as the worse off). Many conceptions of the value of equality, like those discussed here, have this implication, but, along with many egalitarians, we don’t find the objection persuasive. It would be a different matter if a theory implied that it was all things considered better to level down, which of course would be highly counterintuitive.<sup>42</sup> Likewise, it doesn’t follow from Repugnant Equality that one has to accept that Z is better than A all things considered but only that Z is better in one respect. We reject the first position but, pace Segall, don’t find the other position counterintuitive.

The very idea that it can be a decisive argument against a theory that it implies that an outcome is better or worse *in one respect* is often question-begging. The reason is that this kind of objection can be launched against any theory according to which the value can vary in at least two dimensions. This is, however, an unsurprising feature of such theories. Take Hedonistic Total Utilitarianism, according to which the value of an outcome is determined by the total sum of pleasure over pain,

<sup>39</sup> (Segall 2016), p. 77.

<sup>40</sup> (Segall 2016), p. 77.

<sup>41</sup> See (Parfit 1984), p. 388.

<sup>42</sup> Cf. (Arrhenius 2013), p. 92. (Segall 2016), p. 78, agrees with this: “Levelling down would bring about equality. This is, for sure, a defeasible reason, but it’s a reason nevertheless.” For a further discussion of the levelling down objection where he, correctly in our view, argues that a theory “may judge a scenario to make an outcome better (in one respect), even when it’s better for no one, is not self-evidently problematic”. (Segall 2016), p. 350

as an example. Consider the value of adding a person with negative lifetime total sum of pleasure and pain. Of course, this would be all things considered bad according to Hedonistic Total Utilitarianism. However, assume that this life involves one minute of pleasure in addition to all the pain and suffering. Then it is true that in one respect, from the perspective of Hedonistic Total Utilitarianism, it is good to add this life. Clearly, this isn't much of an objection to this version of Utilitarianism. Likewise for the levelling down objection against egalitarian theories in general and the 'in-one-respect-better objections' raised above by Segall against Positive Egalitarianism. There is nothing counterintuitive about this feature of multidimensional axiologies for which outcomes can be both good and bad in different respects.

Moreover, positive egalitarians are not even committed to ranking Z as better than A in respect to egalitarian concerns, that is, to Repugnant Equality. As Arrhenius has pointed out, "how valuable equal relations are might arguably depend on the level of welfare involved".<sup>43</sup> This is analogous to the commonly held belief among egalitarians that the negative value of unequal relations partly depends on the welfare levels of the involved individuals such that inequalities at low levels are worse than inequalities at high levels. Hence, it is open to positive egalitarians to give different values to equal relationships at different welfare levels such that, for example, no number of equal relationships at a very low positive welfare level is better in regard to egalitarian concerns than a certain number of equal relationships at a very high positive welfare level. This could, to take a simple example, be achieved by aggregating the value of equal relationships at high welfare levels linearly while the value of equal relationships at low positive welfare levels is aggregate by a strictly concave function with an upper limit.<sup>44</sup> Of course, there are more elaborate ways of developing this idea, for example, by having concave functions with different limits for each level of welfare. Hence, pace Segall, Positive Egalitarianism doesn't imply Repugnant Equality.<sup>45</sup>

Similar considerations hold for the following putative objection to Positive Egalitarianism discussed by Arrhenius:

---

<sup>43</sup> (Arrhenius 2013), p. 89.

<sup>44</sup> This is of course analogous to how one can avoid Parfit's Repugnant Conclusion even if one is committed to the positive contributive value of lives enjoying positive welfare. See e.g., (Arrhenius 2000a, 2005; Arrhenius, Ryberg, and Tännsjö 2014). Of course, any theory of this sort (and many other, e.g., Prioritarianism) faces the epistemic problem of how to determine the right shape of the concave function. This problem has no relevance for our discussion here, however.

<sup>45</sup> A broader version of Positive Egalitarianism according to which the egalitarian value is just an increasing function (instead of a strictly increasing function) of equal relations opens up another way of avoiding Repugnant Equality since it's compatible with a reachable upper limit to the total value of equal relations that has already been reached in A. Hence, this view would rank A and Z as equally good regarding egalitarians concerns. However, we don't find this view compelling.

if one does assign some small positive value to such relations of equality, then one would have to accept an implication akin to the levelling down objection: Adding people with negative welfare to a population might make it in one respect better, although not all things considered better, since it might increase the value of equality in the population.<sup>46</sup>

As with Repugnant Equality and the levelling down objection, there are two possible answers here. One can bite the—in our minds just imaginary—bullet and accept a defeasible egalitarian reason to add equal people with negative welfare. Or, in extending Positive Egalitarianism to negative welfare levels, one can assign neutral value to equal relationships of negative welfare. In such case, it wouldn't follow that adding people with negative welfare to a population would make such population in one respect better. We prefer the first option since we are not persuaded by the levelling down objection and since we find it hard to motivate the second option.<sup>47</sup>

## VII. Conclusion

Positive Egalitarianism is the view that ascribes positive value to relations of equality in addition to negative value to relations of inequality. In this paper, we have developed this view, argued that it is a distinctive view from the 'received' view on the value of equality, Negative Egalitarianism, and shown how some of the recently presented criticisms against Positive Egalitarianism are unconvincing.

In section II, we discussed a case of mere addition. Against Segall, we argued that the population that results from the mere addition of better off individuals can be judged as better than the original one by Positive Egalitarianism given that it contains many more relations of equality. This judgement, we also argued, will depend on what weight to give to bigger increases in relations of equality as opposed to smaller increases in relations of inequality.

In section III, we introduced and discussed the Progression Case. Segall raised this case aiming to show the alleged counterintuitive implications of Positive Egalitarianism. Contrary to Segall, we argued that it is not only Positive Egalitarianism that ranks population Z as better than Z' in the Progression Case. Negative Egalitarianism coincides with Positive Egalitarianism in this judgement. We provided a demonstration that supports the ranking of Z as better than Z' for both of these views.

---

<sup>46</sup>(Arrhenius 2013, p. 89). It's repeated as an objection in (Segall 2016), p. 78.

<sup>47</sup>The motivating idea could be that equality only has value when it's equality of something good. This seems doubtful, however, since we seem to value equality among bad things too, such as carrying burdens equally or equal punishment for similar crimes.

In section IV, we discussed another argument that has been provided to support that  $Z'$  is better than  $Z$  with respect to egalitarian concerns, namely that  $Z$  contains a clear class division while  $Z'$  doesn't. Against Segall, we argued that given the broad notion of welfare we use, the welfare differences cannot be taken as proxies for class differences. And if they could, just because the grouping leading to class division is more obvious in  $Z$  than in  $Z'$ , this doesn't imply that there wouldn't be ways in which the individuals in  $Z'$  could be also grouped to lead to a class division.

In section V, we responded to an argument posed by Temkin against Positive Egalitarianism that says that ascribing positive value to relations of equality is only significant if people can have the exact same amount of welfare, and given that this is often not the case, Positive Egalitarianism, although theoretically interesting, is of no practical relevance. To respond to this criticism, we provided a view called Rough Positive Egalitarianism. This view ascribes positive egalitarian value to relations of individuals that are roughly equal to each other which, we argue, fits the way people often think about the value of equality. We also defended Rough Positive Egalitarianism from the criticism that it entails the judgement that in the Progression Case,  $Z'$  is better than  $Z$  with respect to equality. Although  $Z'$  contains a lot of relations of rough equality since the differences in welfare between every adjacent individual are very small, this doesn't outweigh the fact that  $Z'$  also contains a great number of relations of inequality, and of a great size.

Finally, in section VI we argued that the so-called Repugnant Equality isn't clearly counterintuitive for egalitarians since this conclusion involves a claim just about betterness in regard to egalitarian concerns but not about all things considered betterness. Moreover, Repugnant Equality doesn't follow from Positive Egalitarianism since positive egalitarians can give different values to relations of equality depending on at which level these hold.

All in all, we think, the arguments so far presented against Positive Egalitarianism are unpersuasive and thus don't give us any decisive or new reasons to reject views that ascribe positive value to equality. Hence, it might still play an important role in population ethics and in the evaluation of future population outcomes, and as such, deserves further attention. Of course, there are many interesting unresolved issues that remain for positive egalitarians to address, to which we hope to return in future work.<sup>48</sup>

---

<sup>48</sup> We would like to thank Krister Bykvist, Tim Campbell, Nils Holtug, Kasper Lippert-Rasmussen, Shlomi Segall, Orri Stefánsson, and Folke Tersman for very helpful discussions. Thanks also to the audiences at: the Society for Applied Philosophy Conference, Copenhagen, June 2017; the workshop *Ethics and Political Philosophy*, University of Copenhagen, October 2017; the Institute for Futures Studies' PPE-seminar, September 2017; and the higher seminar at the Department of Philosophy, Uppsala University, October 2017, for useful questions and comments. Financial support from the Swedish Research Council and Riksbankens Jubileumsfond is gratefully acknowledged.

## References

- Arneson, Richard J. 1989. 'Equality and Equal Opportunity for Welfare'. *Philosophical Studies* 56 (1): 77–93.
- Arrhenius, Gustaf. forthcoming. 'Population Ethics: The Challenge of Future Generations'. Oxford University Press.
- . 2000a. 'An Impossibility Theorem for Welfarist Axiologies'. *Economics and Philosophy* 16 (02): 247–266.
- . 2000b. *Future Generations: A Challenge for Moral Theory*. Uppsala: University Printers. <http://www.diva-portal.org/smash/record.jsf?pid=diva2:170236>.
- . 2005. 'Superiority in Value'. *Philosophical Studies* 123 (1/2): 97–114.
- . 2009. 'Egalitarianism and Population Change'. In *Intergenerational Justice*, edited by Axel Gosseries and Lukas Meyer, 1st Edition, 325–49. Oxford: Oxford University Press.
- . 2013. 'Egalitarian Concerns and Population Change'. In *Measurement and Ethical Evaluation of Health Inequalities*, edited by Ole Frithjof Norheim, 74–91. Oxford: Oxford University Press.
- . 2016. 'Inequality and Population Change'. Mimeo, Institute for Futures Studies. Stockholm.
- Arrhenius, Gustaf, Jesper Ryberg, and Torbjörn Tännsjö. 2014. 'The Repugnant Conclusion'. In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta, Spring 2014. <http://plato.stanford.edu/archives/spr2014/entries/repugnant-conclusion/>.
- Barry, Brian. 1989. 'Utilitarianism and Preference Change'. *Utilitas* 1 (02): 278–282.
- Bommier, A., B. Lanz, and S. Zuber. 2015. 'Models-as-Usual for Unusual Risks? On the Value of Catastrophic Climate Change'. *Journal of Environmental Economics and Management* 74: 1–22.
- Bosmans, Kristof, Koen Decancq, and Andre Decoster. 2014. 'The Relativity of Decreasing Inequality Between Countries'. *Economica, LSE* 81 (322): 276–92.
- Braybrooke, David. 1987. *Meeting Needs*. Studies in Moral, Political, and Legal Philosophy. Princeton, N.J.: Princeton Univ. Press.
- Broome, John. 1999. *Ethics out of Economics*. Cambridge: Cambridge University Press.
- . 2004. *Weighing Lives*. Oxford: Oxford University Press.

- Bykvist, Krister. 1998. *Changing Preferences: A Study in Preferentialism*. Uppsala: Acta Universitatis Upsaliensis.
- Cohen, Gerald A. 1989. 'On the Currency of Egalitarian Justice'. *Ethics* 99 (4): 906–944.
- . 1993. 'Equality or What? On Welfare, Goods and Capabilities'. In *The Quality of Life*, edited by Amartya Sen and Martha Craven Nussbaum. WIDER Studies in Development Economics, 99-0851294-3. Oxford: Clarendon Press.
- Dworkin, Ronald. 1981a. 'What Is Equality? Part 1: Equality of Welfare'. *Philosophy & Public Affairs* 10 (3): 185–246.
- . 1981b. 'What Is Equality? Part 2: Equality of Resources'. *Philosophy & Public Affairs* 10 (4): 283–345.
- . 2000. *Sovereign Virtue: The Theory and Practice of Equality*. Cambridge, Mass: Harvard University Press.
- Feldman, Fred. 1997. *Utilitarianism, Hedonism, and Desert: Essays in Moral Philosophy*. Cambridge Studies in Philosophy. Cambridge: Cambridge University Press.
- . 2004. *Pleasure and the Good Life: Concerning the Nature, Varieties, and Plausibility of Hedonism*. Oxford: Oxford University Press.
- Geruso, Michael, and Dean Spears. 2018. 'Heat, Humidity, and Infant Mortality in the Developing World'. *IZA - Institute of Labor Economics* IZA DP No. 11717.
- Griffin, James. 1990. *Well-Being: Its Meaning, Measurement, and Moral Importance*. Oxford: Clarendon Press.
- Hales, S., S. Kovats, S. Lloyd, and D. Campbell-Lendrum. 2014. *Quantitative Risk Assessment of the Effects of Climate Change on Selected Causes of Death, 2030s and 2050s*. Geneva: WHO.
- Hare, Richard M. 1981. *Moral Thinking: Its Levels, Method, and Point*. Oxford: Clarendon.
- Hurka, Thomas. 1993. *Perfectionism*. Oxford Ethics Series. New York: Oxford University Press.
- Kawchuk, Risa. 1996. *(In)Equality*. MPhil-Thesis. Dept. of Philosophy, University of Calgary.
- Mejean, Aurelie, Antonin Pottier, Setephane Zuber, and Marc Fleurbaey. 2017. 'Intergenerational Equity under Catastrophic Climate Change.' *Documents de Travail Du Centre d'Economie de La Sorbonne*.
- Mosquera, Julia. 2017a. 'An Egalitarian Argument against Reducing Deprivation'. *Ethical Theory Moral Practice* 20 (5): 957–968.

- . 2017b. 'Disability, Equality, and Future Generations'. PhD-thesis. University of Reading.
- Nielsen, Kai. 1996. 'Radical Egalitarianism Revisited: On Going Beyond The Difference Principle'. *Windsor Yearbook of Access to Justice* 15: 121–58.
- Parfit, Derek. 1984. *Reasons and Persons*. 1991st ed. Oxford: Clarendon.
- . 1986. 'Overpopulation and the Quality of Life'. In *Applied Ethics*, edited by Peter Singer, 1 edition, 145–64. Oxford: New York: Oxford University Press.
- Persson, Ingmar. 2001. 'Equality, Priority and Person-Affecting Value'. *Ethical Theory and Moral Practice* 4 (1): 23–39.
- Rabinowicz, Wlodek. 2003. 'The Size of Inequality and Its Badness: Some Reflections Around Temkin's Inequality'. *Theoria* 69 (1–2): 60–84.
- Rawls, John. 1971. *A Theory of Justice*. Cambridge, Mass.: Belknap Press.
- Segall, Shlomi. 2016. *Why Inequality Matters: Luck Egalitarianism, Its Meaning and Value*. Cambridge: Cambridge University Press.
- Sen, Amartya. 1980. 'Equality of What?' In *The Tanner Lectures on Human Values*, edited by S. McMurrin. Cambridge: Cambridge University Press.
- . 1992a. *Inequality Re-Examined*. Reprint edition. New York: Harvard University Press.
- . 1992b. 'Justice and Capability'. In *Inequality Reexamined*, 73–101. New York: Russell Sage Foundation; Harvard University Press.
- . 1993. 'Capability and Well-Being'. In *The Quality of Life*, edited by Amartya Sen and Martha Craven Nussbaum. WIDER Studies in Development Economics. Oxford: Clarendon Press.
- Sumner, Leonard Wayne. 1996. *Welfare, Happiness, and Ethics*. New York: Clarendon Press.
- T. Carleton et al. 2018. 'Valuing the Global Mortality Consequences of Climate Change Accounting for Adaptation Costs and Benefits'. *Becker Friedman Institute Working Paper No 2018-51*.
- Tännsjö, Torbjörn. 1998. 'Utilitarianism and Common Sense Morality'. In *Hedonistic Utilitarianism*, 153–71. Edinburgh: Edinburgh University Press.
- Temkin, Larry S. 1993. *Inequality*. Oxford Ethics Series. New York: Oxford University Press.