

Equality and Priority

MARTIN PETERSON AND SVEN OVE HANSSON
Philosophy Unit, Royal Institute of Technology, Sweden

This article argues that, contrary to the received view, prioritarianism and egalitarianism are not jointly incompatible theories in normative ethics. By introducing a distinction between weighing and aggregating, the authors show that the seemingly conflicting intuitions underlying prioritarianism and egalitarianism are consistent. The upshot is a combined position, equality-prioritarianism, which takes both prioritarian and egalitarian considerations into account in a technically precise manner. On this view, the moral value of a distribution of well-being is a product of two factors: the sum of all individuals' priority-adjusted well-being, and a measure of the equality of the distribution in question. Some implications of equality-prioritarianism are considered.

I. INTRODUCTION

Prioritarians believe that benefits to those who are worse off should count for more than benefits to those who are better off, but, as Derek Parfit explains, 'that is only because these people are at a lower absolute level. It is irrelevant that these people are worse off *than others*.'¹ Prioritarianism is commonly taken to be different from, and incompatible with, egalitarianism – the view that relative differences in well-being among individuals ought to be minimized.² The prevailing dichotomy between prioritarianism and egalitarianism is, however, groundless. People who accept prioritarianism may, without inconsistency, accept egalitarianism, and vice versa. The aim of this article is to render the foregoing sentence more precisely, and to provide an argument in support of it.

The joint compatibility of prioritarianism and egalitarianism has recently been discussed by Wlodek Rabinowicz and Larry Temkin.³ Rabinowicz proposed one way in which prioritarianism and egalitarianism could be accepted simultaneously. In response to Rabinowicz, Temkin argued that Rabinowicz's proposal is not 'in any *deep* sense prioritarian', because it does not capture fundamental

¹ Derek Parfit, 'Equality or Priority?', *Ratio* 10 (1997), p. 202. (Also *The Lindley Lectures* 1991, p. 27), italics added.

² See e.g. John Broome, 'Equality versus Priority: A Useful Distinction', *Fairness and Goodness in Health*, ed. Daniel Wikler (forthcoming); Parfit, 'Equality or Priority?'; Wlodek Rabinowicz, 'Prioritarianism for Prospects', *Utilitas* 14 (2002).

³ Wlodek Rabinowicz, 'The Size of Inequality and Its Badness', *Theoria* 69 (2003), p. 60; Larry Temkin, 'Measuring Inequality's Badness: Does Size Matter? If So, How, If Not, What Does?', *Theoria* 69 (2003), p. 85. In a special issue of *Theoria*, on Temkin's book *Inequality* (Oxford, 1993).

prioritarian intuitions.⁴ We agree with Temkin on this point, but we also show that there is another way in which to combine prioritarianism and egalitarianism – a way that leaves reasonable room for both prioritarian and egalitarian intuitions.

Of course, whether two positions are compatible or not is ultimately a matter of definitions. Surely, *any* pair of words can be defined in a way that makes them jointly compatible. The claim advocated in this article is, however, non-trivial. We show that two moral intuitions, one generally accepted by prioritarians but denied by egalitarians, and one generally accepted by egalitarians but denied by prioritarians, may be accepted simultaneously.

The standard accounts of prioritarianism and egalitarianism are outlined in section II. Section III is devoted to the combination of prioritarianism and egalitarianism that Temkin thinks is not in any deep sense prioritarian. In section IV, we present another combination of prioritarianism and egalitarianism that we argue is both prioritarian and egalitarian in a ‘deep’ sense.

II. PRIORITARIANISM, UTILITARIANISM AND EGALITARIANISM

Prioritarianism is a view according to which the moral value of an individual’s well-being is a strictly increasing and concave function of that individual’s well-being. Prioritarianism is also assumed to include the further standpoint that the moral value of a distribution of individual well-beings is (just as in utilitarianism) the sum of the moral values of the individual well-beings. This definition, proposed before Parfit coined the term ‘prioritarianism’, has become the *de facto* standard account. Broome notes that it was discussed by economists, under a different name, long before Parfit’s Lindley Lecture.⁵ In discussions of economic poverty, a partly analogous distinction between absolute poverty and relative poverty has been proposed.⁶

To clarify the prioritarian view, take a fixed population of n individuals, and suppose that the well-being of each individual i can be described by a real number w_i .⁷ A vector $D = \langle w_1, w_2, \dots, w_n \rangle$ is a distribution of well-being. In the present analysis we are only concerned with distributions of certain outcomes, i.e. we leave distributions

⁴ Temkin, ‘Measuring Inequality’s Badness’, p. 97.

⁵ Broome makes this claim in ‘Equality versus Priority’, and gives a reference.

⁶ See e.g. Beverly Shaw, ‘Poverty: Absolute or Relative?’, *Journal of Applied Philosophy* 5 (1988).

⁷ The term ‘well-being’ is more precise than the term ‘welfare’. As noted below, the former is usually conceived of as mental state, whereas ‘welfare’ can refer to both external and internal objects.

containing risky outcomes aside. It should be emphasized that well-being is a 'non-moral' property in the sense that adherents of different moral views can agree on how much well-being is contained in a given distribution, and on how it is distributed, even if they do not agree on its moral value. We therefore assume that what advocates of prioritarianism and their critics disagree about is how to rank possible distributions of well-being D, D', D'' .⁸

According to the standard account, prioritarianism ascribes to a distribution $\langle w_1, w_2, \dots, w_n \rangle$ of well-being the value

$$F(\langle w_1, \dots, w_n \rangle) = f(w_1) + f(w_2) + \dots + f(w_n) \quad (1)$$

where f is some strictly increasing concave function. That is, the graph for f slopes upwards but bends downwards.

A somewhat less formal definition of prioritarianism equates it with the view that well-being has a decreasing marginal value, in roughly the same sense as decision theorists and economists from Bernoulli onwards have observed that most people have a decreasing marginal utility for money. It should be emphasized that well-being and utility – as defined in contemporary decision theory and economics – are two distinct concepts. Well-being is often taken to denote some more or less vaguely characterized state (usually a mental state, but sometimes a non-mental one) whereas utility has many other, often technically precise, senses. In decision theory, for instance, the concept of utility is used to describe a set of preferences among lotteries that satisfy certain structural conditions.

The intuition that prioritarianism attempts to capture is that it is more important to improve the situation for people who are worse off than for people who are well off in terms of well-being, but not because of the differences in well-being; we should help the worse off because they are at a low *absolute* level. Whether or not this intuition can be reasonably upheld seems to depend on the situation under consideration. When distributing foreign aid to starving people it seems reasonable to give priority to the worst-off person. If all members of a population have a decent living standard but there are large inequalities, foreign aid is arguably not warranted. On the other hand, a father distributing Christmas presents to his children may legitimately consider the differences in well-being that the presents give rise to for his children, in order to assure a fair distribution.

Utilitarianism and egalitarianism are the two major alternatives to prioritarianism. In the present framework, utilitarianism is the view

⁸ A more thorough critic of prioritarianism can question that the socially relevant distribution refers to well-being and claim that, for instance, distributions of resources or capabilities should be considered instead. We will not deal with that criticism here.

that the moral value of a distribution of well-being is the non-weighted sum of each individual's well-being, i.e. $w_1 + w_2 + \dots + w_n$.

One of the basic tenets of utilitarianism is that the total sum of well-being is all that matters, regardless of how that sum is distributed. For instance, if we can either increase the well-being for someone who is very well off by 100 units, or improve the situation for some one who is much worse off by 99 units, utilitarianism tells us to opt for the former alternative – something that runs counter to many people's considered intuitions. Prioritarianism and egalitarianism tend to deal with such examples differently.

Egalitarianism comes in many different versions.⁹ We propose to use the term 'strict egalitarianism' for egalitarian standpoints that only pay attention to relative positions. More precisely, an egalitarian standpoint is strict if and only if for all distributions $\langle w_1, w_2, \dots, w_n \rangle$ and all positive constants k , it implies indifference between $\langle w_1, w_2, \dots, w_n \rangle$ and $\langle kw_1, kw_2, \dots, kw_n \rangle$. Admittedly, strict egalitarianism has few real-life adherents, but it is a 'purified' standpoint that represents an important element in many practical standpoints, and it is useful to treat it in isolation in a theoretical analysis. Some non-strict egalitarian standpoints (but none of the strict ones) satisfy the Paretian principle that Broome calls 'the principle of personal good', saying that 'if one distribution gives some person more well-being than another distribution does, and if it gives no person less well-being than the other does, then it is better than the other'.¹⁰

Gini-egalitarianism is a version of strict egalitarianism that considers one distribution to be at least as good as another if and only if its Gini index is at most as high. The Gini index, which economists commonly use to measure inequality, is defined in relation to Lorenz curves. If individuals are ordered along the horizontal axis according to their well-being, from the worst-off to the best-off, then the Lorenz curve is the cumulative sum of well-being for this distribution. Hence, if the distribution of well-being is perfectly equal, the Lorenz curve is a diagonal line going from the lower left corner to the upper right one. If a single individual enjoys all well-being, then the Lorenz curve is a straight horizontal line that turns up at the right end of the vertical axis.

The Gini index is defined as the area trapped by the hypothetical straight line corresponding to perfect equality and the actual Lorenz curve for the distribution, divided by the area of the entire triangle. Depending on the shape of the Lorenz curve, the Gini index assigns a

⁹ See Sven Ove Hansson, 'Equity, Equality, and Egalitarianism', *Archiv für Rechts- und Sozialphilosophie* 87 (2001), and Rabinowicz, 'The Size of Inequality and Its Badness'.

¹⁰ Broome, 'Equality versus Priority', p. 1.

number between 0 (perfect equality) and 1 (perfect inequality) to every distribution of well-being. The following formula summarizes the Gini index (\bar{w} is the mean of w_1, \dots, w_n):

$$g(w_1, \dots, w_n) = \frac{1}{2n^2\bar{w}} \sum_{i=1}^n \sum_{j=1}^n |w_i - w_j| \tag{2}$$

Inspired by Allais’s counter-example to the independence axiom in expected utility theory, Broome has constructed the following four distributions:¹¹

$$C = \langle 2, 2, 2, 2, 2, 2, 2, 2, 2, 2 \rangle$$

$$D = \langle 4, 1, 2, 2, 2, 2, 2, 2, 2, 2 \rangle$$

$$E = \langle 2, 2, 1, 1, 1, 1, 1, 1, 1, 1 \rangle$$

$$F = \langle 4, 1, 1, 1, 1, 1, 1, 1, 1, 1 \rangle$$

If defined as an additively separable function, prioritarianism implies that C is better than D if and only if E is better than F.¹² This is because the only difference between C and D is the well-being of the first two individuals, and the same holds for E and F. However, egalitarians might reasonably claim, without violating the principle of personal good, that C is better than D (because C is perfectly equal and D is not), even though F is better than E (because F has a higher total sum of well-being than E). This ranking cannot be accounted for in terms of an additively separable function.

Broome thinks that this example provides lines of demarcation for a reasonable version of egalitarianism.¹³ However, Broome’s version of egalitarianism is rather unspecific. As far as we know, it has not yet been described in terms of a mathematical function, and this makes the theory difficult to assess. One might wonder whether Broome’s version of egalitarianism is just a form of lexicographic egalitarianism, according to which egalitarian considerations should be allowed to play a role just in case the principle of personal good does not prescribe any particular distribution.

III. WEIGHING AND AGGREGATING

The standard accounts of prioritarianism and egalitarianism do not pay sufficient attention to a significant difference between the two positions,

¹¹ Broome, *Equality versus Priority*, p. 3.

¹² An additively separable function is a function that can be written as: $F(w_1, \dots, w_n) = f_1(w_1) + \dots + f_n(w_n)$.

¹³ Broome, *Equality versus Priority*, p. 3.

namely that prioritarianism tells us to weigh each *individual's* well-being in a certain way, whereas egalitarianism tells us how relational aspects in a *distribution* of well-being should be properly handled. If one focuses on this difference, it is evident that prioritarianism and egalitarianism are jointly compatible.

As before, let $D = \langle w_1, w_2, \dots, w_n \rangle$ be a distribution of well-being. In some authors' vocabulary the term 'moral value' is only applied to distributions,¹⁴ but we find it fruitful also to distinguish between well-being and moral value on the individual level. In the same way that we distinguish between the (total) amount of well-being in a distribution and its moral value, we can also distinguish between an individual's well-being and the moral value of that well-being. As pointed out in section II, well-being can be defined without reference to a particular ethical position; however, the moral value of an individual's well-being differs according to different ethical theories. For instance, some non-consequentialists (who focus on factors other than well-being) assign well-being a low moral value that is in some sense undeserved. The relationship between well-being and moral value is non-trivial from a consequentialist's point of view. Of course, most consequentialists believe that a higher amount of well-being has a higher moral value, although this is not a part of consequentialism as such. To observe this, it is illustrative to construct a position (sadism) according to which lower amounts of well-being (pain) have a higher moral value.

We can now see that prioritarianism and egalitarianism are concerned with different issues. Prioritarianism is primarily a claim about the moral value of individual well-being, which is determined by a strictly increasing concave function. This position is compatible with different positions on how the goodness of a distribution relates to that of its individual components, and does not require additive separability. In contrast, egalitarianism is, of course, not concerned with the moral value of an individual's well-being. This position is a claim about the moral value of a distribution.

In order to spell out the difference between prioritarianism and egalitarianism in more detail, it is useful to introduce a temporary distinction (which can be omitted in the final analysis) between weighing and aggregation. Weighing is the process in which well-being is assigned some moral value; for example, by applying prioritarian (strictly increasing concave), sadistic (strictly decreasing) or utilitarian (linear) functions. Aggregation is the process in which a distribution of individual moral value is assigned a total value that is based on the individual moral values. The two major aggregation

¹⁴ See e.g. Broome, 'Equality versus Priority'.

mechanisms discussed in the literature are additive aggregation and equality-aggregation. Additive aggregation is advocated by utilitarians and prioritarrians, while equality-aggregation is favoured by strict egalitarians. A sadistic position is compatible with either additive aggregation or equality-aggregation. The following table summarizes the positions discussed so far:

1. *Utilitarianism*: linear¹⁵ weighing + additive aggregation
2. *Prioritarianism*: strictly increasing concave weighing + additive aggregation
3. *Strict egalitarianism*: linear weighing + equality-aggregation
4. (*Sadism1*: strictly decreasing weighing + additive aggregation)
5. (*Sadism2*: strictly decreasing weighing + equality-aggregation)

IV. RABINOWICZ'S PROPOSAL

It is not clear who first suggested that prioritarianism may be combined with egalitarianism. As mentioned in section I, Wlodek Rabinowicz has recently discussed the idea *en passant* in a paper on Temkin's book, *Inequality*.¹⁶ In a footnote, Rabinowicz acknowledges that his proposal is similar to an earlier proposal by Temkin, and Temkin agrees on this in his reply to Rabinowicz.¹⁷ We nevertheless refer to the suggested combination of prioritarianism and egalitarianism as 'Rabinowicz's proposal':

6. *Rabinowicz's proposal*: strictly increasing concave weighing + equality-aggregation

For clarity of comparison, we will interpret Rabinowicz's proposal as a principle comparable to utilitarianism and strict egalitarianism – that is, as a mechanism for evaluating a distribution 'all things considered'. In a comment on an earlier version of this article, Rabinowicz informed us that his proposal is primarily meant as a 'recipe for the evaluation of distributions with respect to their inequality'; in other words, as an evaluation of only one aspect.¹⁸ As we show below, even this weaker interpretation of his proposal is vulnerable to the same sort of criticism usually directed against strict egalitarianism.

Rabinowicz's proposal is, of course, distinct both from (standard, additively separable) prioritarianism and from (strict) egalitarianism, so there are situations in which the three positions rank alternative

¹⁵ One could also call this proportionate weighing, since we take for granted that $a > 0$ and $b = 0$ in the equation of the straight line $y = ax + b$.

¹⁶ Rabinowicz, 'The Size of Inequality and Its Badness', pp. 69–71.

¹⁷ Temkin, 'Measuring Inequality's Badness', p. 97.

¹⁸ Rabinowicz, personal communication, April 2004.

distributions differently. The following example illustrates this point:

$$E = \langle 2, 2, 1, 1, 1, 1, 1, 1, 1, 1 \rangle$$

$$F = \langle 10, 1, 1, 1, 1, 1, 1, 1, 1, 1 \rangle$$

$$G = \langle 1000, 1, 1, 1, 1, 1, 1, 1, 1, 1 \rangle$$

A prioritarian might rank F higher than E, and in that case must also rank G higher than F, because the only difference between these two distributions is the well-being of the first individual. A Gini-egalitarian will rank E ($g = 2/15$) slightly higher than F ($g = 81/190$), which is of course ranked much higher than G ($g \approx 9/10$).

An advocate of Rabinowicz's proposal, however, might reasonably rank F higher than E, and E higher than G. Suppose, for instance, that the priority function is a diagonal line up to two, but divides the surplus exceeding two by a hundred (10 becomes 2.08, etc.). This yields the following distributions of individual moral values:

$$E' = \langle 2, 2, 1, 1, 1, 1, 1, 1, 1, 1 \rangle$$

$$F' = \langle 2.08, 1, 1, 1, 1, 1, 1, 1, 1, 1 \rangle$$

$$G' = \langle 11.98, 1, 1, 1, 1, 1, 1, 1, 1, 1 \rangle$$

In a Gini-aggregation of individual moral values F' ($g \approx 19/220$) is ranked higher than E' ($g = 30/225 = 2/15$), which is ranked higher than G' ($g \approx 96/220$). The reason why G' (which contains the highest amount of individual moral value) is not ranked at the top is that according to this view it would be unfair to opt for such an unequal distribution of well-being.

Seen from a mathematical point of view, Rabinowicz's proposal puts less emphasis on equality than (strict) egalitarianism does. This is because the priority function generates a more 'compressed' distribution for insertion into the Gini-formula (or some other preferred mechanism for equality-aggregation) compared to the non-weighted distribution. Prioritarian weighing and equality-aggregation can be conceived, then, as two counterbalancing mechanisms.

In his reply to Rabinowicz's paper, Temkin raised the question whether Rabinowicz's proposal is 'in any *deep* sense prioritarian, or only superficially so'.¹⁹ Temkin himself does not provide any answer. However, in our view it is *not* in any deep sense prioritarian. This is because Rabinowicz's proposal is sensitive to the levelling-down objection:²⁰ For

¹⁹ Temkin, *Measuring Inequality's Badness*, p. 97.

²⁰ Parfit, *Equality or Priority?*.

every unequal distribution in which all individuals enjoy high levels of well-being, there is some perfectly equal distribution in which all individuals suffer from extremely low levels of well-being, which is ranked higher by Rabinowicz's proposal. For example, it will rank the distribution $\langle 1, 1 \rangle$ higher than $\langle 99, 100 \rangle$, which is absurd. In our view, this objection is relevant even if the proposal is only used to evaluate one aspect (i.e. equality) of a distribution. Rabinowicz is of course aware of the problematic implications of his proposal, but he proposes that it is 'philosophically coherent' and that it is 'better suited for an *evaluative* measure of equality rather than for a descriptive one'.²¹ Our conclusion is that this proposal suffers from the same normative defect as strict egalitarianism, i.e. the levelling-down objection, and for that reason cannot capture deep prioritarian intuitions.

V. EQUALITY-PRIORITARIANISM

Although Rabinowicz's proposal for combining prioritarianism with egalitarianism is vulnerable to the levelling-down objection, this does not apply to all combinations of these two positions. In particular, there is another way to combine them (which we will refer to as equality-prioritarianism) that is not susceptible to this objection. According to this position, the moral value of a distribution of well-being is a product of two factors: the sum of all individuals' priority-adjusted well-being, and a measure of the equality of the distribution in question. As a measure of the equality of a distribution D , we can for instance use $1 - g(D)$, where $g(D)$ is its Gini-index. Equality-prioritarianism can be described by the following formula:

$$(1 - g(\langle w_1, \dots, w_n \rangle)) \times (f(w_1) + \dots + f(w_n)) \quad (3)$$

Or equivalently:

$$(1 - g(D)) f(w_1) + \dots + (1 - g(D)) f(w_n) \quad (4)$$

Expression (4) makes it evident how equality-prioritarianism can be expressed in terms of the distinction between weighing and aggregation: the aggregation mechanism is purely additive, but the weighing mechanism is a two-step procedure in which each individual's priority-adjusted well-being is multiplied by a measure of the equality of the distribution to which it belongs. Hence, the weighing mechanism is not entirely individual, since the amount of well-being faced by other

²¹ Rabinowicz, 'The Size of Inequality and Its Badness', pp. 70–1.

people also matters:

7. *Equality-prioritarianism*: two-step weighing + additive aggregation

As mentioned in section III, the distinction between weighing and aggregation is not a fundamental ethical distinction; it just helps us to sort out different positions in a structured way. From a mathematical point of view, weighing can always be subsumed under aggregation, i.e. for each pair of an aggregation function F and a weighing function f there is an aggregation function F' such that $F'(\langle w_1, \dots, w_n \rangle) = F(f(w_1), \dots, f(w_n))$ for all distributions $\langle w_1, \dots, w_n \rangle$. Hence, all positions described in this article can be conceived of as aggregation functions that take a set of distributions as input and return value assignments for those distributions as output.

There are several other versions of equality prioritarianism. First of all, the Gini-index can be replaced by some other evaluative measure of equality, such as Atkinson's or Theil's indices, or the coefficient of variation.²² There are also other ways to construct an aggregation mechanism that takes both prioritarian and egalitarian intuitions into account. The equality-prioritarian view can be expressed, more generally, as a claim that the moral value of a distribution of well-being can be described by a function of the form:

$$h(w_1, D) + \dots + h(w_n, D), \quad (5)$$

where h is strictly increasing and concave with respect to w_i and strictly increasing with respect to the degree of equality of distribution D . We leave it as an open question whether or not any of the versions of equality-prioritarianism that are included in (5) is an improvement over the more restricted version presented in (4).

A merit of equality-prioritarianism is that it succeeds in what other theories fail to do, namely explaining and incorporating both our intuitions about priority *and* our intuitions about equality. Equality-prioritarians maintain that benefits to the worse-off should count for more than benefits to the better-off, because worse-off people are at a low absolute level. But relational aspects also matter: if some people are much better off it is even more important to improve the situation for the worse-off, thereby reducing the gap.

Equality-prioritarianism is not vulnerable to the levelling-down objection. Of course, advocates of equality-prioritarianism may choose to rank a perfectly equal distribution higher than an unequal distribution

²² For an overview, see Temkin, *Inequality*, and David G. Champenowne and Frank A. Cowell, *Economic Inequality and Income Distribution* (Cambridge, 1998), ch. 5.

containing a slightly higher amount of well-being. However, contrary to strict egalitarianism and proponents of Rabinowicz's construction, equality-prioritarians are not committed to ranking the distribution $\langle 99, 100 \rangle$ lower than $\langle 1, 1 \rangle$.

We conclude that there is at least one moral theory that incorporates both prioritarian and egalitarian intuitions, and which differs from the previous in avoiding the levelling-down objection.

martinp@infra.kth.se, martin.peterson@ltu.se
soh@infra.kth.se