PARITY DEFINED IN TERMS OF BETTERNESS

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ABSTRACT: Ruth Chang has defended a concept of “parity”, implying that two items may be evaluatively comparable even though neither item is better than or equally good as the other. This paper is an attempt to make this notion of parity more precise, by defining it in terms of the relation “better than”. Given some plausible assumptions, the suggested *definiens* is shown to state a necessary and sufficient condition for parity.

1. The Trichotomy Thesis

What value relations may hold between two items, *a* and *b*? The obvious possibilities are that *a* is *better than b*, that *a* is *worse than b* (or, equivalently, that *b* is better than *a*), and that *a* and *b* are *equally good*. Let us refer to these three relations as the *standard trio* of value relations, and to pairs of items related by a relation from the standard trio as *standardly related*. It is often assumed that the standard trio exhaust the space of positive value relations, in the sense that if *a* and *b* are *comparable* with respect to value, then they are standardly related. If none of the three relations obtains, *a* and *b* are *incomparable*, as regards value. Following terminology

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introduced by Ruth Chang, let us call this view the "trichotomy thesis", and those who adhere to the thesis "trichotomists".[1]

Of course, the trichotomist acknowledges that there are more value relations than the standard trio. For example, it may be that *a* is *at least as good as b*, or that *b* is *much better than a*. If the trichotomy thesis is true, however, the obtaining of either of these relations entails that the items in question are standardly related. Thus, if *a* is at least as good as *b*, then *a* is either better than or equally good as *b*. And, obviously, if *b* is much better than *a*, then *b* is better than *a*. It must also be admitted that there are non-trivial value relations, such as "at least half as good as", or "roughly equally good as", that are compatible with all three relations in the standard trio. The trichotomist would nevertheless claim that any such relation entails that a relation from the standard trio obtains. In the case of "roughly equally good", there are two steps in the trichotomist's inference to the standard trio. First, if *a* and *b* are roughly equally good, then either *a* and *b* are equally good, or *a* is slightly better than *b*, or *b* is slightly better than *a*. Secondly, "slightly better than" entails "better than".

The trichotomy thesis is eminently plausible, and often regarded as a conceptual truth. Recently, however, it has come under attack. A seminal criticism has been levelled by Chang. She argues that there is a fourth positive value relation, "on a par with", that is incompatible with each of the relations in the standard trio. Thus, if two items are on a par, they are comparable with respect to value, although neither item is better than the other, and they are not equally good.[2]

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[1] Chang 1997, p. 4; 2002, p. 660f.

[2] Chang, 1997; 2002.

According to Chang, cases of parity abound. As possible examples she mentions, *inter alia*, the value relationships between two artists, such as Mozart and Michelangelo, or between two careers, such as one in accounting and one in skydiving, or between two Sunday enjoyments, such as an afternoon at the museum and one hiking in the woods.[3] In many such cases, she claims, the items are not standardly related.[4] But, she argues extensively, they may nevertheless be comparable.[5] If so, they are on a par.

2. Chang's Conception of Parity

Chang's argument against the trichotomy thesis, which will not be recapitulated here, is elaborate and careful. In contrast, her positive characterization of the parity relation is sketchy and somewhat obscure. She maintains that an evaluative difference can be either *nonzero* or *zero*, and either *biased* or *unbiased*. If *a* is better than *b*, the evaluative difference between the two items is nonzero and biased. It is nonzero because it has extent, and it is biased because it "favours" *a* over *b*. If *a* and *b* are equally good, their evaluative difference is zero and unbiased, since it has no extent and does not favour either item over the other.

When two items are on a par, Chang suggests, the evaluative difference between them is nonzero and unbiased. This kind of difference is expounded as follows:

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[3] Chang, 2002, p. 659.

[4] 1997, p. 23ff; 2002, section 1.

[5] 2002, sections 2 and 3.

> The notion of a nonzero, unbiased difference is familiar. We might want to know the unbiased difference in the time it takes to get to London by two different routes. Is the difference between going via Oxford and going via Cambridge greater than an hour? Or we might want to know the nonzero, unbiased difference in length between two novels or in price between two kitchen appliances or in mass between two heavenly bodies. In mathematics, the unbiased—'absolute'—difference between 3 and 5, and 5 and 3, is 2. Of course, these examples of unbiased differences correlate with an underlying biased difference. I want to suggest that *in the evaluative realm there can be unbiased differences without there being underlying biased differences.* If we analogize evaluative differences between items to distances between points, an unbiased evaluative difference between two items is like the absolute distance between two points. The absolute distance between London and Glasgow is 345 air miles—not 345 *northerly* air miles. Like biased differences, unbiased differences can be lesser or greater.[6]

Clearly, there can be nonzero, unbiased evaluative differences. Suppose that *a* has 5 units of value, while *b* has 3 units. The unbiased difference in value between *a* and *b*, as well as between *b* and *a*, is then 2 units. Like Chang's mathematical example, however, this is obviously a case where there is an underlying biased difference. Since *a* has more units of value than *b*, it is better than *b*. Much more controversial is the suggestion that there could be nonzero, unbiased evaluative differences without an underlying biased difference. The purported analogy with distance is meant to lend plausibility to this suggestion. However, the analogy is seriously flawed. Unlike goodness, length, price, and mass, absolute distance is not a prop-

[6] 1997, p. 26; first emphasis added.

erty, and, *a fortiori*, not a *comparative* property of an item. While an item can be better, longer, heavier, or more expensive than another item, i.e., have greater goodness, length, mass, or price, it cannot have "greater absolute distance". There is no comparative, "distancier than".[7] To make a relevant analogy between value and distance, we must therefore assume that the absolute distance between two items reflects the degrees to which they possess some comparative property, for instance "northerliness". But this assumption, of course, reintroduces an underlying biased difference.

At this point, Chang might perhaps deny that the evaluative difference between two items on a par concerns *quantity* of value. In other words, it is not a difference with respect to *how good* the items are.[8] But if so, in what sense is it an "evaluative" difference? The existence of evaluative differences that are not differences in quantity presupposes that value is a two-dimensional concept, so that an item has both a certain quantity and a certain "quality" of value. The relations "better than", "worse than", and "equally good as" would then concern quantity, while the parity relation concerns quality. Since parity is supposed to exclude each of the relations "better than", "equally good as", and "worse than", non-zero differences in value quality must be assumed to obtain only between items that are not quantitatively related. In other words, whenever two items are equally good, or one is better than the other, they have the same value quality.

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[7] Of course, absolute distance is a comparative property of *pairs* of items. The absolute difference between *a* and *b* can be compared to that between *c* and *d*. But this is of little help, since what we are after is a difference between individual items, not between pairs of items.

[8] The term 'quantity' is not meant to imply measurability on a scale stronger than an ordinal scale.

The trouble with this interpretation of Chang’s idea is that it seems to reflect the notion of incomparability, rather than parity. If there are indeed different value “qualities”, such that any positive quantitative relation between items presupposes sameness of quality, it lies close at hand to conclude that the value qualities mark the boundaries for meaningful evaluative comparisons. At the very least, some further distinction is needed to separate parity from incomparability.

Chang’s tentative explication of the notion of parity is thus less helpful than one might wish. In what follows, I shall suggest a definition of parity in terms of “better than”. While capturing, I believe, the intuitions underlying Chang’s defence of parity, this definition dispels the air of mystery surrounding the concept. Moreover, it makes explicit the logical properties of the parity relation. I will not, however, argue that there actually are cases of parity. My conclusion is merely conditional. Given that parity exists, roughly as envisaged by Chang, I believe that it can be defined according to my proposal.

3. Parity Defined

Consider all possible bearers of some specific kind of value. We take “better than”, denoted by $\succ$, as a primitive relation among these items. It will be assumed that $\succ$ is a strict partial order, i.e., transitive and asymmetric. The relation “equally good as” will be denoted by $\approx$, and assumed to be an equivalence relation, i.e., reflexive, symmetric, and transitive. The symbols $\nsucc$ and $\not\approx$ will refer to “not better than” and “not equally good as”, respectively. Further, we define a relation $\succcurlyeq$, which we may call "almost better than",[9] as follows:

(Def. $\succcurlyeq$) $a \succcurlyeq b$ iff $a \nsucc b$ and either (i) for all c, $c \succ a \supset c \succ b$, or (ii) for all c, $b \succ c \supset a \succ c$.

Now, the relation "on a par with", denoted by $\sim$, is defined thus:

(Def. $\sim$) $a \sim b$ iff $a \nsucc b$ & $b \nsucc a$, and there is a c, such that $(c \succ a$ & $c \succcurlyeq b) \vee (c \succ b$ & $c \succcurlyeq a) \vee (a \succ c$ & $b \succcurlyeq c) \vee (b \succ c$ & $a \succcurlyeq c)$.[10]

As regards the formal properties of the parity relation, symmetry should obviously hold. If *a* is on a par with *b*, then *b* is on a par with *a*. Further, since parity is assumed to be incompatible with equality, and since equality is a reflexive relation, parity must be irreflexive. A symmetric and irreflexive relation cannot be transitive.[11] Since *in*transitivity is out of the question, parity, at least as conceived by Chang, thus has to be nontransitive; i.e.,

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[9] This label may be slightly misleading, since $a \succcurlyeq b$ holds if $a \approx b$.

[10] This definition bears some resemblance to an alleged necessary condition for parity, suggested by Sven Danielsson (2005, p. 8). He maintains that if *a* and *b* are on a par, then there are *c* and *d*, such that either (i) $a \succ c \succ d$ & $b \succ d$ & $b \nsucc c$ & $c \nsucc b$, or (ii) $d \succ c \succ a$ & $d \succ b$ & $b \nsucc c$ & $c \nsucc b$. If our definition is correct, Danielsson's condition is in fact not necessary.

[11] Let *R* be any binary relation, and suppose that *aRb*. Assuming symmetry, *bRa* follows. If *R* is transitive, *aRb* & *bRa* implies *aRa*, contradicting irreflexivity.

neither transitive nor intransitive.[12] There are also independent reasons to assume nontransitivity, whether or not we take parity to be irreflexive. Typically, it is thought to be possible, for example, that a is on a par with b, and b is on a par with c, while a is better than c.[13]

Let us check that our relation $\sim$ has these properties. Symmetry of $\sim$ is obvious. Irreflexivity is likewise trivial, since $a \sim a$ implies the contradiction $(c \succ a \;\&\; c \nsucc a) \vee (a \succ c \;\&\; a \nsucc c)$. To see that $\sim$ is not transitive, assume that $d \succ a \succ c$, and $d \nsucc b \nsucc c$. Hence, $a \nsucc b \;\&\; b \nsucc a \;\&\; d \succ a \;\&\; d \nsucc b$, implying that $a \sim b$. Further, it follows that $c \sim b$, and by symmetry, $b \sim c$. But $a \sim c$ does not hold, since $a \succ c$. To verify that $\sim$ is not intransitive, suppose that a, b, c, d, and e are the only items in the relevant domain, and that $d \succ a \;\&\; e \succ b$ are the only instances of betterness. It follows that $a \sim b$, $b \sim c$, and $a \sim c$.

Thus, we conclude that $\sim$ has the desired logical properties of irreflexivity, symmetry and nontransitivity. Let us now try to show that (Def. $\sim$) is plausible also with respect to the more substantial properties of the parity relation.

[12] I have not been able to find any discussion of the logical properties of parity in Chang's published work. But she has informed me, in personal communication, that she indeed understands the relation as symmetric, irreflexive, and nontransitive.

[13] But see Danielsson, 2005, p. 7, where parity is, implausibly I think, assumed to be an equivalence relation.

4. The Definition Vindicated

Our argument for (Def. $\sim$) has six premises. The first premise states the incompatibility between parity and the standard trio of relations:

(1) If a and b are on a par, then $a \nsucc b$ & $b \nsucc a$ & $a \not\approx b$.

Secondly:

(2) If, for all c, ($c \succ a$ iff $c \succ b$) & ($a \succ c$ iff $b \succ c$), then a and b are not on a par.

Given that c ranges over all possible value bearers, the antecedent of (2) is at least arguably a sufficient condition for a and b being equally good.[14] And, by (1), if two items are equally good, they cannot be on a par.[15]

Thirdly, the following principle should hold:

(3) If a and b are on a par, there is an item that is either (i) better than any item that is better than exactly one of a and b, or (ii) worse than any item that is worse than exactly one of a and b.

Let us call an item satisfying (i) a *superior* item, and an item satisfying (ii) an *inferior* item, relative to a and b.

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[14] See, e.g., Broome, 2004, p. 21.

[15] Chang (1997, p. 25f; 2002, p. 667ff.) seems to regard the fact that the antecedent of (2) is false, when a and b are on a par, as a feature distinguishing parity from equality.

It is very reasonable to suppose that, for any value-bearer, there is either a possible item that is much better, or one that is much worse. Suppose that, in the case of a particular item *a*, there is a much better item, *c*. Now, as Chang recognizes, parity should imply a certain degree of similarity, with respect to value.[16] Hence, if *a* is on a par with *b*, and *c* is *much* better than *a*, then *c* must be better than *b*, as well. Further, if *d* is an item such that $d \succ a$ & $d \nsucc b$, then, by the same token, *d* is not much better than *a*. Since *c* is much better than *a*, and *d* is better, but not much better, than *a*, *c* is better than *d*.[17] Hence, *c* satisfies clause (i) of assumption (3). A parallel argument shows that if *c* is assumed to be much worse than *a*, it satisfies clause (ii). This vindicates assumption (3).

Further, we assume that the items are discretely ordered, as regards betterness:

(4) If $a \succ b$, then every chain of items $a \succ c \succ \ldots \succ d \succ b$ is finite.

Let us say that *a* is *minimally better than b* iff $a \succ b$, and there is no *c*, such that $a \succ c \succ b$. Assumption (4) implies that if there is an item better than a given item, there is a minimally better one.

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[16] Chang, 1997, pp. 5, 25.

[17] If an argument for this contention is needed, it can be stated as follows. To claim that *c* is much better than *a*, while *d* is better, but not much better than *a* is to claim that there is a positive value difference between *c* and *a*, as well as between *d* and *a*, and that the former difference is greater than the latter. This implies that there is a positive value difference between *c* and *d*. Equivalently, *c* is better than *d*.

Notice that (4) does not exclude the possibility that there are infinitely many items better than a given item. An ordering may be infinite and yet discrete, as exemplified by the natural numbers, ordered by $>$. Nevertheless, there may be kinds of value the bearers of which are densely or even continuously ordered by $\succ$. If so, we may partition the items into equivalence classes, in such a way that these classes form a discrete $\succ$-ordering. Consider the real numbers, ordered by $>$, and let an "integer interval" be a semi-open interval $]n, n + 1]$, where n is an integer. By partitioning the reals into equivalence classes under the relation "lies in the same integer interval as", we have constructed a discrete $>$-ordering. Moreover, such a discrete ordering can be arbitrarily fine-grained. Instead of intervals of length 1, we could choose intervals of length $1/m$, for any natural number m. Thus, for any given pair of unequal reals, we can choose the length of the intervals so that the two numbers belong to different equivalence classes.[18]

If the value bearers form a continuum as regards $\succ$, then $\succ$ is isomorphic to $>$ among the real numbers. Hence, an arbitrarily fine-grained, discrete $\succ$-ordering can be constructed in a way strictly analogous to that described in the last paragraph. Any plausible claim, relevant to our argument, about the original ordering will then be equally plausible as regards the constructed, discrete ordering. In putative cases where (4) does not hold, therefore, we may justifiably apply our argument to (representatives

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[18] This holds since there is a rational number between any two reals. Of course, however narrow the intervals are, some pairs of unequal reals will fall in the same interval.

of) the relevant equivalence classes, rather than to the entire set of value bearers.

Given assumptions (1) to (4), we can prove that our definition yields a *necessary* condition for parity. Suppose that a and b are on a par. Hence, by (1), they are not standardly related. By (3), there is a superior or an inferior item, relative to a and b. Assume that there is a superior item, c. By (2), there is an item that is better, or an item that is worse, than exactly one of a and b. Assume that the first possibility obtains, e.g., that $d \succ a$ & $d \nsucc b$. It follows from these assumptions that either $d \succcurlyeq b$, or there is an e, such that $c \succ e \succ d$, and $e \nsucc b$. Then either $e \succcurlyeq b$, or there is an f, such that $c \succ f \succ e \succ d$, and $f \nsucc b$. And so on. It follows by (4) that there is a g, such that $g \succcurlyeq b$. Further, $g \succ a$, since $g \succ d$ & $d \succ a$. Hence $a \sim b$. Clearly, if we assume instead that $d \succ b$ & $d \nsucc a$, it follows, by a parallel argument, that there is an h, such that $h \succcurlyeq a$ & $h \succ b$, and thus, again, that $a \sim b$.

Now, assume that there is no item that is better than exactly one of a and b. By (2), there must then be an item that is worse than exactly one of the two items. Assume, thus, that $a \succ d$ & $b \nsucc d$. Since c is superior to a and b, there is an item better than b. Further, since, by assumption, any item that is better than b is better than a, and since $a \succ d$, it holds for all e that $e \succ b \supset e \succ d$. Hence, $b \succcurlyeq d$, and so $a \sim b$. Obviously, the same conclusion follows if we assume that $b \succ d$ & $a \nsucc d$.

We have thus shown that if a and b are on a par, (1), (2) and (4) imply that $a \sim b$, given the existence of an item superior to a and b. A similar argument shows that $a \sim b$ follows from (1), (2) and (4), if there is an inferior item. Hence, assumptions (1) to (4) imply that if a and b are on a par, then $a \sim b$. That is, our definition states a necessary condition for parity.

Does the definition also state a *sufficient* condition? In other words, is it always true that if $a \sim b$, then a and b are on a par? By definition, $a \sim b$ implies $a \not\succ b$ & $b \not\succ a$. Since $\sim$ is irreflexive, $a \sim b$ also implies $a \not\approx b$. Thus, $\sim$ is incompatible with the standard trio of relations. Further, Chang, at least, should accept the following claim:

(5) If $a \sim b$, then a and b are comparable.

The argument for this assumption is as follows. Suppose that $a \sim b$, and consider any one of the four disjuncts in (Def. $\sim$). Assume, for example, that there is a c such that $c \succ a$ & $c \succcurlyeq b$. By (Def. $\succcurlyeq$), either (i) any item minimally better than c is better than b, or (ii) any item minimally worse than b is worse than c. Assume that (i) holds, and let d be an item minimally better than c. Since c and d range over all possible value bearers,[19] d is presumably only very slightly better than c. Thus, b and d are comparable, while c and d are very nearly equally good. Chang accepts an argument she calls the "chaining argument", which "moves from the claims that a is comparable with b and that b differs from c by a small unidimensional improvement or detraction to the conclusion that a is comparable with c."[20]

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[19] Or, alternatively, over arbitrarily fine-grained equivalence classes of value bearers, discretely ordered by $\succ$.

[20] 2002, p. 675; changes in notation made. A difference in value between two items is "unidimensional" if the items differ in only one evaluatively relevant respect. (Ibid., p. 673.) Chang restricts the applicability of the chaining argument to cases in which "there is a continuum of small unidimensional differences connecting a with some c that is both clearly comparable with a and clearly comparable with b" (p. 675; notation altered). Assuming the relevant domain to be all possible

Under the plausible assumption that the difference between *c* and *d* is unidimensional, the chaining argument in our case implies that *b* and *c* are comparable. If (ii) holds, comparability between *b* and *c* follows by a similar argument. Now, let *f* be an item minimally worse than *c*. Applying the chaining argument again, we infer that *f* and *b* are comparable. Iterating the argument it follows, by (4), that *a* and *b* are comparable.[21] Parallel arguments establish the same conclusion, with respect to each of the three remaining disjuncts in (Def. ~).

The most controversial step in this application of the chaining argument is the first one; i.e., the inference from the comparability of *b* and *d* (assuming that (i) holds) to the comparability of *b* and *c*. Since *b* and *d* are standardly related, while *b* and *c* are not, a committed trichotomist will refuse to take this step. If this first step is granted, on the other hand, the remaining steps seem less problematic. At least, they cannot be objected to by appealing to the trichotomy thesis. Our argument is hence strengthened if there is some additional reason, apart from the small unidimensional difference between *c* and *d*, to judge that *b* and *c* are comparable. Indeed, assumption (i) constitutes such a reason. Given (i), comparability holds not only between *b* and *d*, but between *b* and *any* item minimally better than *c*. That is, no matter in what value relevant aspect *c* is minimally improved, we get an item better than *b*. This gives further plausibility to the claim that

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value bearers of a given kind, it seems plausible to assume that this condition will be satisfied for most kinds of value.

[21] Note that this conclusion follows even if the evaluative difference between *a* and *b* is multidimensional. The argument requires only that each step in the chain from *d* to *a* involves a unidimensional difference. Different steps may involve changes in different dimensions.

b and *c* are comparable. If (ii) holds, this fact similarly indicates comparability between *b* and *c*.

Thus, our definition arguably gives a sufficient condition for parity, unless there is a fifth fundamental, positive value relation, apart from "better than", "worse than", "equally good as", and "on a par with". Chang denies the existence of such a fifth relation, claiming that parity, together with the standard trio of relations, "exhausts the logical space of comparability".[22] That is, she accepts this assumption:

(6) If $a \nsucc b$ & $b \nsucc a$ & $a \not\approx b$, and *a* and *b* are comparable, then they are on a par.

Given assumptions (1) to (6), then, (Def. ~) states a sufficient as well as necessary condition for parity. At least, this is so if we accept the somewhat strengthened version of Chang's chaining argument, employed in our defence of (5). All the assumptions seem plausible, assuming that parity exists. Since our definition is based entirely on the betterness relation, it makes the concept of parity considerably clearer and more precise than most previous discussions.[23]

5. Concluding Remarks

There may of course be believers in parity who do not accept all of the above assumptions and arguments. In particular, assumptions (5) and (6)

[22] 1997, p. 4f.

[23] An exception is Wlodek Rabinowicz's (2004) very lucid, but less general account of parity, in terms of rational preferences.

are debatable. Our case for the former assumption rested on a strengthened version of Chang's chaining argument. As Chang herself admits, this argument looks suspiciously similar to invalid sorites arguments.[24] Nevertheless, she goes on to argue that it is not really a sorites.[25] The issue is complex, and I shall not try to settle it here. If the chaining argument is rejected, however, there is no obvious way of defending (5). And if (5) is false, (Def. ~) obviously does not state a sufficient condition for parity. On the other hand, the chaining argument is crucial to Chang's defence of the claim that items may be comparable, although not standardly related. Thus, if the chaining argument turns out to be invalid, the entire case for parity may be considerably weakened.

Assumption (6) is given little support by Chang. The contention that parity and the standard trio of relations exhaust the logical space of comparability is, she admits, "a substantive [claim] about which philosophers can disagree".[26] Thus, it cannot be ruled out *a priori* that there are further fundamental value relations.[27] I shall not pursue this issue, either. However, assumptions (2) and (3) seem plausible also if we substitute 'on a par' by the phrase 'comparable, but not standardly related'. (Assumption (1) will be trivially true.) If these versions of (2) and (3) are accepted, along with assumption (5), (Def. ~) defines the broader relation denoted by the

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[24] 2002, p. 680.

[25] Ibid., p. 681ff.

[26] 2002, p. 663.

[27] Understanding value relations in terms of rationally permissible preferences, Rabinowicz (2004, p. 223f.) defines no less that 14 mutually incompatible relations, incomparability excluded. Seven of these relations imply "full comparability".

latter phrase. We may then rest content with having provided such a definition.

Let us end by noting an interesting implication of assumptions (3), (4), and (6), together with the strengthened chaining argument. These assumptions imply the falsity of the following, stronger version of (2):

(2*) If, for all c, $c \succ a \supset c \succ b$, then a and b are not on a par.

Assume that a and b are on a par, and that there is a superior item, c, relative to a and b. By (2*), there is an item d, such that $c \succ d \succ a$ & $d \nsucc b$. Now, either, for all f, $f \succ d \supset f \succ b$, or there is an e, such that $c \succ e \succ d \succ a$ & $e \nsucc b$. If the second possibility obtains, either for all f, $f \succ e \supset f \succ b$, or there is a g, such that $c \succ g \succ e \succ d \succ a$ & $g \nsucc b$. And so on. By (4), we will eventually reach an item h, such that $h \succ a$ & $h \nsucc b$, and for all f, $f \succ h \supset f \succ b$. Obviously, $b \nsucc h$ & $b \not\approx h$. Hence, by (6), b and h are on a par, unless they are incomparable. Since any item minimally better than h is better than b, however, the strengthened chaining argument establishes that b and h are comparable. We have thus shown that b and h are on a par, although it holds that, for all f, $f \succ h \supset f \succ b$. Hence, (2*) is false. (A similar argument disproves the claim that if, for all c, $a \succ c \supset b \succ c$, then a and b are not on a par.)

Although the falsity of (2*) is a somewhat surprising conclusion, it should not, I believe, worry friends of parity. It is sufficient that the following principle holds:

(2**) If, for all c, ($c \succ a \supset c \succ b$) & ($b \succ c \supset a \succ c$), then a and b are not on a par.

Obviously, (2**) is stronger than (2), but weaker than (2*). The antecedent of (2**) arguably implies that *a* is *at least as good as b*. Even if the relation "at least as good as" does not imply "better than or equally good as", it is very doubtful whether it is compatible with parity.[28] As far as I can see, however, (2**) is consistent with assumptions (1) and (3) to (6), in conjunction with the strengthened chaining argument.[29]

References

Broome, John, 2004, *Weighing Lives* (Oxford: Oxford University Press).

Chang, Ruth, 1997, "Introduction", in R. Chang (ed.), *Incommensurability, Incomparability, and Practical Reason* (Cambridge, Mass. and London: Harvard University Press), pp. 1-34.

Chang, Ruth, 2002, "The Possibility of Parity", *Ethics* 112: 659-688.

Danielsson, Sven, 2005, "Parity and Comparability", unpublished ms.

Rabinowicz, Wlodek, 2004, "Modeling Parity and Incomparability", in W. Rabinowicz and T. Rønnow-Rasmussen (eds.), *Patterns of Value*, vol. 2, Lund University, pp. 201-228.

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[28] See Rabinowicz, 2004, p. 224.

[29] An earlier draft of this paper was presented at the seminar in practical philosophy in Uppsala. I wish to thank the participants, especially Peter Ryman and Jan Österberg, for helpful comments.