Parity, incomparability and rationally justified choice

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Abstract This article discusses the possibility of a rationally justified choice between two options neither of which is better than the other while they are not equally good either ('3NT'). Joseph Raz regards such options as incomparable and argues that reason cannot guide the choice between them. Ruth Chang, by contrast, tries to show that many cases of putative incomparability are instead cases of parity—a fourth value relation of comparability, in addition to the three standard value relations 'better than', 'worse than' and 'equally good as'. It follows, she argues, that many choice situations in which rationally justified choice seems precluded are in fact situations within the reach of practical reason. This article has three aims: (1) it challenges Chang's argument for the possibility of parity; (2) it demonstrates that, even if parity would exist, its problematic implications for practical reason would not differ from those of Raz's incomparability; (3) it discusses the underlying cause of hard cases of comparison: the fact that none of the three standard value relations applies ('3NT'). It will be shown that the problematic implications for the rational justification of the choice are due to 3NT itself, irrespective of whether 3NT is explained as incomparability or parity.

Keywords Parity · Incomparability · Rationally justified choice

1 Introduction

Suppose we are confronted with a choice between two alternatives, one of which is better in one respect, while the other is better in another respect. If we cannot say that one respect is less important than the other, the decision may be hard. Suppose, for instance, we have to make a choice between two careers, one of which has a

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higher salary while the other has a more pleasant working environment; or we hesitate between two moral requirements such as a duty to tell the truth and a requirement to avoid causing harm; or we have to decide between a policy that promotes economic growth versus one that is more favourable for the environment. Before we decide we shall want to compare and weigh the alternatives carefully. However, suppose that the options are incomparable, how can we make a rationally justified choice? The possibility to make such a choice seems to depend on the possibility to compare the options. Indeed, if they are incomparable, what reason could there be for choosing one rather than the other?

Raz (1986, Chap. 13) thinks that the alternatives mentioned above are indeed incomparable, due to the incommensurability of the relevant values. He does not believe, however, that the choice between incomparable options is beyond the scope of reason. Reason checks whether the alternatives for choice are 'rationally eligible', but it cannot guide the choice *between* rationally eligible but incomparable options. The final choice depends on the agent's will. The decisive role of the will renders the choice arbitrary, but the rational eligibility of the options entails that the choice is still rationally justified.

Chang (1997, 2001, 2002, 2005), by contrast, endorses the view that incomparability of options precludes a rationally justified choice. She tries to show, however, that in many putative cases of incomparability, like those mentioned above, the relevant options are 'on a par' instead of 'incomparable'. Chang regards parity as a fourth relation of comparability, in addition to the standard value relations, 'better than', 'worse than' and 'equally good as'. She suggests that the preservation of comparability in the case of parity secures the possibility of a rationally justified choice.

1.1 Aim and significance

This article consists of three parts. Part 1 challenges Chang's argument for the possibility of parity. Chang's demonstration of parity is based on what she calls the 'Small Improvement Argument' and the 'Chaining Argument'. The Small Improvement Argument shows that with respect to alternatives for choice it may be the case that none of the three standard value relations applies.[1] Raz (1986, Chap. 13) regards this as a sign that the relevant options are incomparable. Chang (2002, pp. 673–679), by contrast, adduces the 'Chaining Argument' to show that the relevant options are comparable. This would demonstrate the existence of a fourth positive value relation, parity: a value relation that does not belong to the three standard value relations but still entails comparability. I shall challenge the Chaining Argument by demonstrating that the premise on which it is based—the so-called 'Difference Principle'—is mistaken. This undermines Chang's argument for

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[1] The Small Improvement Argument is based on the *small improvement phenomenon*: Although *A* is neither worse nor better than *B*, a small improvement of *A* does not make *A* better than *B*. This means that *A* is not equally good as *B*, because, if this were the case, a small improvement of *A* would make it better than *B*. In combination with the fact that *A* is also neither worse nor better than *B*, this means that none of the three standard value relations applies. See also Chang (2002, pp. 667–673). Raz (1986, p. 325) calls the small improvement phenomenon the 'failure of transitivity'.

the possibility of parity and corroborates Raz's view that the Small Improvement Argument supports the existence of incomparability instead of the existence of a fourth comparative value relation.

Part 2 shows that even if 'parity' would be a real possibility within the domain of comparability, its implications for practical reason would not differ from those of Raz's incomparability. Parity would not avoid that reason under-determines the choice. This makes the final choice not less arbitrary—that is, decisively dependent on the agent's will—than in the case of Raz's incomparability. I shall conclude that the rational under-determination, and therefore arbitrariness, of the final choice makes the decision incompletely rationally justified, because the reasons for the actual choice do not outweigh the reasons for choosing the alternative option.

This conclusion has far-reaching consequences for the scope of practical reason. As Chang argues, 'hard cases of comparison are ubiquitous … and are plausibly at the root of moral dilemmas and the most intractable sorts of practical conflict generally' (2002, p. 659). While Chang believes that, in those cases, parity gives practical reason a "voice" (2005, p. 333), it will be shown that reason remains as incapable of guiding the final decision as in the case of Raz's incomparability.

Part 3 discusses the underlying cause of hard cases of comparison: the fact that none of the three standard value relations applies. I shall call this fact '3NT' ('triply not-true'), indicating that it is neither true that one of the options is better or worse than the other nor true that the options are equally good. It will be shown that the problematic implications for the rational justification of the choice are due to 3NT itself, irrespective of whether 3NT is explained as incomparability or parity.

2 Part 1: challenge of the argument for parity

Let us consider one of Chang's putative examples of parity. It concerns the comparison of two careers A and B with respect to the value 'goodness as a career', containing two contributory values: 'salary' (S) and 'pleasant working environment' (E) (Chang 2002, p. 676). Career A has a very good salary (10S) and an average working environment (5E) while career B has an average salary (5S) and a very pleasant working environment (10E). The question is whether careers A and B are comparable (see the horizontal line in Fig. 1). Raz thinks they are incomparable due to the incommensurability of salary and quality of working environment. Chang, by contrast, thinks that the Chaining Argument can demonstrate that they are comparable.

The Chaining Argument consists of two parts. The first one, which she calls a 'nominal/notable comparison', runs as follows:

> If we slightly decrease the salary of *notable* career A (10S, 5E) we are left with a career identical to this career but slightly worse in salary, e.g. career (9S, 5E). In this way we can create a continuum of careers starting with *notable* career A (10S, 5E) and ending with *nominal* career C (1S, 5E), a career with a very bad salary and an average working environment (see Fig. 1). It is clear that *nominal* career C (1S, 5E) is definitely comparable with *notable* career B (5S, 10E): it is worse.
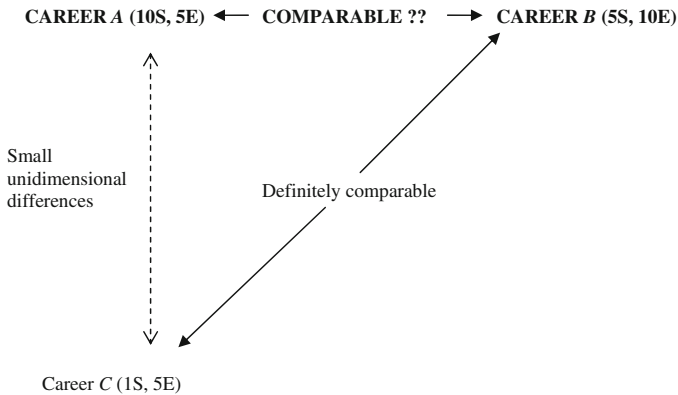
CAREER *A* (10S, 5E) ⟵ COMPARABLE ?? ⟶ CAREER *B* (5S, 10E)

Small
unidimensional
differences

Definitely comparable

Career *C* (1S, 5E)

Fig. 1 Is career *A* (very good salary [10S] and average working environment [5E]) comparable with career *B* (average salary [5S] and very pleasant working environment [10E])?

The second part of the 'Chaining Argument' is meant to show that if career *C* (1S, 5E) is comparable with career *B* (5S, 10E), career *A* (10S, 5E) too is comparable with career *B* (5S, 10E). This part crucially depends on the 'Difference Principle', which states that 'a small uni-dimensional difference in value *cannot trigger incomparability where before there was comparability*':

> If career *B* (5S, 10E) is comparable with career *C* (1S, 5E), then it is also comparable with a career *C+* [say, career (2S, 5E)] of which the salary is only slightly higher than that of career *C*, for the difference between the two careers is a small uni-dimensional one, and by hypothesis, such a difference can't trigger incomparability between different items where before they were comparable. And if career *B* is comparable with career *C+*, then applying the principle anew, it follows that career *B* is comparable with career *C++* [say, career (3S, 5E)], and so on. Comparability with career *B* is preserved through the continuum of small uni-dimensional differences, and thus we arrive at the conclusion that career *B* (5S, 10E) is comparable with career *A* (10S, 5E).

We shall see that the Difference Principle is the weak link of the Chaining Argument. On the face of it the Principle seems plausible. Indeed, how could merely uni-dimensional changes in amount of value render comparable options incomparable? However, such changes may trigger other changes that may be relevant for (in)comparability. That is why Chang recognizes that the Difference Principle is not universally applicable. In her book *Making Comparisons Count* (2001) she formulates two provisos. The first ('Aristotelian') proviso requires that every small improvement of a respect makes the item indeed better than its unimproved counterpart.[2] The second ('Hegelian') proviso is that the small improvement does

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[2] Chang argues that this is not always the case, because, 'To paraphrase Aristotle, you can have too much of a good thing.' See Chang (2001, p. 132).

not 'trigger' a new value in the improved item that is lacking in its predecessors.[3] The Aristotelian and Hegelian changes, correlated with increases in amounts of value, only occur in specific cases. However, Sects. 2.1, 2.2 and 2.3 will show that small uni-dimensional increases in amounts of value trigger at least three relevant changes that are independent of specific values or cases. This entails that the Difference Principle is not only 'not universally applicable' but not applicable altogether (that is, even if the provisos are satisfied). In order to demonstrate this we shall again consider our example of the two careers which Chang herself regards as satisfying the conditions (2002, p. 676).

2.1 Change I: from uni- to bi-directionality

The first part of the Chaining Argument—the notable/nominal comparison—poses no problems. There is demonstrable comparability of nominal career C (1S, 5E) and notable career B (5S, 10E): the former is definitely worse than the latter because it is worse in both salary and working environment. However, the second part of the Chaining Argument is the weak link. Small uni-dimensional increments of value (small increases in salary), starting from career C (1S, 5E), trigger a change from 'uni-directionality' to 'bi-directionality'[4]: if the salary becomes larger than 5S, the career becomes better than career B (5S, 10E) with respect to salary, while career B is better with respect to working environment. Paradoxically, a one-dimensional change creates a two-dimensional problem of comparison. While before the uni-dimensional increments there is no need of a trade-off between different dimensions, the new situation cannot avoid such a trade-off. The controversy with respect to comparability of the relevant options A and B concerns precisely the question whether such a trade-off is possible. So, although it is demonstrably true that career B is comparable with career C (the *diagonal* in Fig. 1) and although career C is connected with career A by merely small uni-dimensional differences (the *vertical* line), this does not demonstrate the comparability of career B and career A (the *horizontal* line).

After a similar 'penetrating comment' on the Difference Principle, raised by an anonymous referee, Chang added the following condition to the Aristotelian and Hegelian provisos:

> [The Difference Principle] presupposes that the comparability of two evaluatively very different items is a matter of balancing or trading off the way one relevant respect is borne against the way another relevant respect is borne. In determining how two evaluatively very different careers compare, we balance the high salary of one career, for example, against the pleasant

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[3] Chang: 'To paraphrase Hegel, with enough of a change of one kind, a change of another kind kicks in.' See Chang (2001, p. 132). In response to a 'penetrating comment of an anonymous referee', Chang adds later on (2002) a third condition. See the next section.

[4] 'Uni-directionality' means that one option is better or worse than the other option in all aspects; so it has the same meaning as 'Pareto-superior' respectively Pareto-inferior'. 'Bi-directionality' means that one option is better with respect to one aspect while the other option is better with respect to another aspect.

working environment of the other; the ways in which respects relevant to the comparison are borne can be traded off against one another (2002, p. 676).

In other words, the Difference Principle supposes that neither option is Pareto-superior/inferior (that is, better/worse in all respects).[5] The next section will take this additional condition into account.

2.2 Change II: from insignificance into significance

Let us adapt our career example in such a way that the *nominal* career C is worse than the *notable* career B without being 'Pareto-inferior'. We can take career (6S, 5E) as the *nominal* career C. Then there is bi-directionality between career C (which is better with respect to salary) and career B (which is better with respect to working environment), while C seems to be worse than B, because C is considerably ('5 points') worse with respect to working environment and only slightly ('1 point') better with respect to salary. In that case the Difference Principle could be applied to show that notable A too must be comparable with B without being undermined by the objection of absent 'bi-directionality'. However, in order to be capable of concluding that '5 points better working environment' represent definitely more value than '1 point better salary' we must assume comparability between these heterogeneous values while this is precisely what has to be demonstrated.

One could reply that a career with an only trivially higher salary (say, a few cents) is definitely worse than (and therefore comparable to) a career with a much better working environment.[6] In that case, one could argue, the Difference Principle shows that notable career A too is comparable with notable career B. However, a negligible difference (like a difference in salary of a few cents), can be virtually disregarded. Indeed, it is not rationally required—even not rational—to assign significant weight to insignificant differences. That is why, in this case, we can conclude that career B is definitely better than career C without trading-off the difference in quality of working environment and the difference in salary. Indeed, the difference in salary can be ignored because the extent to which C's salary is better than that of B is negligible. So we have only to consider the difference in quality of working environment in order to determine which career is the better one. If, by contrast, the difference in salary is significant, it cannot be disregarded. Then weighing the difference in salary against the difference in quality of working environment becomes unavoidable. In the relevant example small uni-dimensional differences gradually trigger significant differences where before the difference was insignificant. Consequently, small uni-dimensional differences trigger the need of a trade-off between heterogeneous values—a trade-off that could be avoided before.

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[5] The reason why I maintain the objection mentioned in this section while Chang has adapted her conditions, is that she does not take into account this objection in her book (2001) and that the Mozart/Michelangelo example which Chang adduces to show the possibility of parity (see below) seems vulnerable to the objection of Pareto-inferiority of Talentlessi, a key figure in the supposed demonstration of the comparability of Mozart and Michelangelo with respect to creativity. See the next section and footnote 11.

[6] Probably Chang will not give this but another reply which I shall discuss in the next section. Below it will become clear why it is still relevant to discuss the present reply.

The inference of comparability *after* the 'insignificance/significance turn' from comparability *before* this turn is a specious way of reasoning, which I call the 'insignificant amount fallacy' (Boot 2007).[7] This inference can be summarized as follows:

P and q are comparable → P and Q are comparable

P, Q and q represent different options (e.g. different careers) having the following characteristics:

– *P* contains a *significantly* larger amount of value *V1* (e.g. 'quality of working environment') than *Q* and *q*;
– *Q* contains a *significantly* larger amount of value *V2* (e.g. 'salary') than *P*;
– *q* has an *insignificantly* larger amount of value *V2* than *P*.

The inference of comparability of *P* and *Q* from the comparability of *P* and *q* is a *non-sequitur* because *P* and *q* can be compared without weighing the difference in amounts of *V1* against the difference in amounts of *V2*, while a comparison of *P* and *Q* cannot avoid such a trade-off. That is why 'incomparabilists' may, without being inconsistent, confirm the comparability of *P* and *q* and deny the comparability of *P* and *Q*.[8] Therefore, although the turn from insignificance into significance results from small uni-dimensional increases, it cannot demonstrate that comparability is preserved.

Although Chang's nominal-notable comparison is not a manifest instance of the 'insignificant amount fallacy', it may be a latent one. This becomes clear when we analyse Chang's description of the 'nominal-notable test':

Call a bearer 'notable' with respect to a value if it is an exceptionally fine exemplar of that value and 'nominal' if it is an exceptionally poor one. Mozart and Michelangelo, for instance, are notable bearers of creativity and Talentlessi, a very bad painter, a nominal one. Now suppose that Talentlessi bears the same contributory values of creativity as Michelangelo - only in a nominal way… [W]e know that Mozart is better than Talentlessi with respect to creativity… Consider, now, Talentlessi+, just a bit better than Talentlessi with respect to creativity and bearing exactly the same contributory values, but a bit more notably… Thus we can construct a 'continuum' of painters including Talentlessi and Michelangelo… Therefore, given that Mozart is comparable with Talentlessi, he is comparable with Michelangelo.'[9]

The nominal/notable test infers, via the Difference Principle, comparability of two excellent alternatives from the comparability of an excellent alternative and a 'very bad'/'exceptionally poor' one. The first objection we can make is that Chang does not show that Talentlessi is not Pareto-inferior to Mozart. Pareto-inferiority

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[7] In my dissertation (2007) I show that both 'incomparabilists' and 'comparabilists' perpetrate this fallacy.

[8] Cf. Williams (1981, p. 77). Williams regards options representing significant differences in amounts of incommensurable values as incomparable, but regards them as comparable if the amount of one value in one option only trivially differs from the amount of the same value in the other option.

[9] Chang, 'Introduction' in Chang (ed.), *Incommensurability*, pp. 14–16.

would render the relevant nominal-notable test invalid according to the argument given in Sect. 2.1. But even if we assume that Talentlessi is better than Mozart in a relevant and important aspect of creativity, the phrases 'very bad' and 'exceptionally poor' do not differ much from the term 'insignificant' of the 'insignificant amount fallacy'. That is why the nominal/notable comparison is vulnerable to a similar objection.[10] The Difference Principle cannot take away the doubt whether comparability of an excellent composer (Mozart) and an excellent painter (Michelangelo) can be inferred from the comparability of an excellent composer (Mozart) and a very bad painter (Talentlessi). The betterness of an option representing a perfect and 'complete' value (excellent composing) compared to an option representing a 'deficient', 'incomplete' and 'eroded' value (bad painting) does not say much about the comparability of two alternatives both representing 'full' and 'intact' values, in spite of the fact that an 'incomplete value' is connected with a complete instance of the same value by a series of small uni-dimensional differences. These differences trigger a change from an incomplete and deficient value into a complete and perfect value—a change that may be relevant for the (in)comparability of the alternatives.[11]

2.3 Change III: from rational determination into rational under-determination of the choice

Let us return to our career example. Chang will reply that we can take a notable option B that is very much better with respect to working environment while nominal option C is only somewhat—but not insignificantly—better with respect to salary. She could argue that in that case, if other things are equal, career B is definitely better than and therefore comparable to career C (after which the Difference Principle can do the rest to show that A and B are equally comparable).

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[10] Chang may reply that 'very poor' need not be 'insignificant'. This reply will be discussed in the next section.

[11] To avoid misunderstandings I want to emphasize that my aim is to challenge Chang's *argument* for comparability rather than to defend the incomparability of Mozart and Michelangelo. I think it is perfectly possible to compare Mozart and Michelangelo with respect to their creative talent if there is no significant bi-directionality of relevant contributory values of creativity between the two artists. This is the case if both artists are (roughly) equally good with respect to all contributory values of creativity; or if one of the artists is better with respect to all these contributory values. Genres (painting or composing) need not be different contributory values with respect to creativity. They may be different forms in which the same contributory values are expressed. We do not want to compare Mozart and Michelangelo with respect to their skill in composing or painting but with respect to their creativity. This makes it less relevant that Mozart is a composer (and is better in composing) and Michelangelo a painter (and is better in painting). The Mozart/Michelangelo example would be more relevant for the issue under consideration (comparability of heterogeneous alternatives) if Mozart and Michelangelo (instead of merely differing in genres of creativity) would 'bi-directionally' differ in distinct and important contributory values of creativity, for instance originality and technical skill: e.g. if Mozart would have a greater originality and less technical skill than Michelangelo. If there is no bi-directionality there is no need of showing comparability because, in that case, comparability is evident. The absence of explicit bi-directionality between Mozart and Michelangelo makes Chang's example less adequate than the career example in which the bi-directionality of the contributory values is explicitly shown. Besides, the absence of unambiguous bi-directionality between Mozart and Talentlessi (Talentlessi seems Pareto-inferior to Mozart), makes the relevant nominal-notable test vulnerable to the objection described in Sect. 2.1.

Still the definite betterness of B compared to C cannot be taken for granted. It would entail that we could rationally prefer only B (the career with the much better working environment) and not C (the career with the not-insignificantly higher salary). However, there is no reason to believe that it is irrational to choose the latter career. And if both B and C can be rationally chosen, this may be a sign of their incomparability.[12]

But let us suppose it *would* be irrational to choose nominal career C instead of notable career B. It would mean that notable B and nominal C are comparable. In that case the Difference Principle seems to be capable of showing comparability between notable A (career with a very high salary) and notable B (career with a very good working environment) without being undermined by the bi-directionality and significance objections. However, if notable B is better than (and therefore comparable to) nominal C, this does not show that notable B and notable A are comparable. While in the case of nominal C and notable B only the latter option is rationally eligible (which may be regarded as a sign of comparability between these two options), reason cannot guide the choice between notable A and notable B. The 'rational under-determination' of the choice or the rational permissibility of either choice (while the options are not equally good), is, according to several thinkers, a sign that the relevant options are incomparable.[13] Therefore, Chang cannot maintain that the Difference Principle demonstrates that these thinkers are mistaken without making this Principle a *petitio principii*.[14] In the relevant case small uni-dimensional differences trigger a change that may be relevant for the comparability of the options: a change from rational determination into rational under-determi-nation of the choice. This change undermines the Difference Principle because this Principle requires that, apart from the uni-dimensional differences, everything else that may be relevant to (in)comparability remains the same.[15]

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[12] Several theorists regard two not-equally-good options as 'comparable' if we can rationally choose only one of them, and as 'incomparable' if we can rationally choose either. Cf. Raz (1986, Chap. 13), Parfit (unpublished manuscript, Chap. 2, Sect. 6, 'Sidgwick's Dualism'), and Sinnott-Armstrong (1985, pp. 321–329).

[13] See the previous footnote.

[14] To be sure, Chang could say something similar about those who take the position she denies. My aim is not to take sides with the latter thinkers (although I think they are right) or to argue that the onus of proof falls on Chang (although I think that this is the case, because her ambition is to replace a traditional and widely accepted view [the trichotomy-thesis] by a new, controversial and counter-intuitive one [the existence of a distinct fourth positive value relation 'parity']). As said in the introduction, the aim of the present article is to challenge Chang's argument for the possibility of parity, rather than to demonstrate incomparability.

[15] Still another objection against the Difference Principle can be raised, which is analogous to the 'significance' objection discussed in the previous section. Notable B may be regarded as better than nominal C, not so much on the basis of a *trade-off* between the contributory values as on the basis of a highly significant difference between the amounts of one contributory value (pleasant working environment) and a much less significant difference between the amounts of the other contributory value (salary). The latter difference (albeit not insignificant in an absolute sense) may 'pale into insignificance' relative to the highly significant former one. The comparison of notable A and notable B, by contrast, cannot be based on such differences in significance. In this case the comparison has to be based on a *trade-off* between the different amounts of the contributory values, the possibility of which is denied by incomparabilists and has to be demonstrated. Indeed, incomparabilists may recognize the comparability of notable B and nominal C, and simultaneously deny the comparability of notable B and notable A,

2.4 Conclusion Part 1

The previous sections have shown that the Difference Principle is incapable of demonstrating comparability in hard cases of comparison without becoming a *petitio principii*. Because the three changes (discussed in Sects. 2.1, 2.2 and 2.3), which are triggered by uni-dimensional changes in amounts of value, are independent of specific values and examples under consideration,[16] they take the edge off the Difference Principle, not only in cases that do not satisfy the Aristotelian and Hegelian provisos, but in all hard cases of comparison. This undermines the Chaining Argument for the possibility of parity because it crucially depends on the Difference Principle.

3 Part 2: parity, incomparability and choice

Chang believes that parity enables a rationally justified choice in hard cases of comparison. She argues as follows:

> Parity expands the range of cases in which justified choice is possible; choices between items about which practical reason might otherwise appear to be silent are in fact choices between comparable items and thus within the scope of practical reason. Parity, it might be said, is what gives practical reason a 'voice' in hard cases (2005, p. 333).

Part 1 has falsified Chang's argument for the possibility of parity. The present part will show that even if parity would be a real possibility, it would—contrary to what Chang suggests in the above quotation—fail to determine the choice in hard cases, because its practical implications would not differ from those of Raz's incomparability.

3.1 Definitions

I shall first define some ambiguous notions. A choice may be 'rationally justified' in at least three different cases: if the chosen option is (1) 'not worse than', (2) 'equally

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Footnote 15 continued

although only small uni-dimensional differences connect nominal *C* with notable *A*. Cf. Joseph Raz's similar argument that "more of one thing may be better than a certain amount of another, even if less of the first is incommensurate [incomparable] with that amount of the other" (1989, p. 1221, note 145). Donald Regan gives the following example as explanation of this sentence: "… a highly successful life of one kind may be more valuable than a modestly successful life of another kind, even though modestly successful lives of the two kinds might be incommensurable [incomparable]" (1997). Although Raz's statement differs from the one to which this footnote refers, the point it shows is similar, namely that 'asymmetry of significances' (that is, the significance of one difference is dominated by the significance of the other) may imply comparability, while this does not mean that 'symmetry of significances' implies comparability, although both situations are connected by a chain of small uni-dimensional differences. Cf. Schaber's (2004) distinction between asymmetrical and symmetrical reasons.

[16] We can replace our career example by any other example to which the 'small improvement phenomenon' (see footnote 1) applies, because the arguments mentioned in Sects. 2.1, 2.2 and 2.3 are independent of the specific relevant values (in this case salary and quality of working environment).

good as', or (3) 'better than' the non-chosen one. Let us call the first choice 'rationally permissible' [or, in Joseph Raz's terminology, 'rationally eligible' (1986, Chap. 13)], the second choice 'rationally indifferent' and the third one 'rationally required'. 'Rationally permissible/eligible' means that reason permits either choice but remains silent with respect to which option *should* be chosen ('reason *under-determines* the choice'). 'Rationally indifferent' means that (reason shows that) it does not matter which option is chosen.[17] 'Rationally required' means that reason shows which option should be chosen ('reason guides the choice'). A rationally indifferent and a rationally required choice are both completely rationally justified because the chosen option is at least as good as the non-chosen one.

A central notion, relevant for our discussion, is '*rational irresolvability*' which can be defined as follows:

> Inability to decide between two options on the basis of an overall reason that justifies the choice of one option *rather than* the other, because the reasons for choosing one option do not determinately outweigh the reasons for choosing the other (while the options are not equally or roughly equally good and have significantly different consequences).[18]

The last part of the definition between the brackets is a necessary addition because in the case of (roughly) equally good options (that is, options that are more or less interchangeable with respect to what is relevant to the choice) it is true as well that there is no reason to choose one option rather than the other. But in those cases there is no rational irresolvability or undecidability because it does not matter which option is chosen. Indecisiveness in those cases would be tantamount to

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[17] Commenting on an earlier draft Joshua Gert argues that it may be odd to assert that in cases of equal goodness 'it does not matter which option is chosen', because it suggests that 'mattering is (merely) a matter of difference in (total amount of) value'. But, Gert continues, 'it could matter a great deal which of two equally valuable things one chooses: not because one would get more value from one than from the other, but simply because of the important differences (in kind) between the items.' I agree. However, I follow Chang's definition of 'equal goodness', namely 'the state of being identical with respect to what is relevant to the choice'. In that case we can be indifferent between the options. Chang: 'If alternatives are equally good, practical reason tells us that it does not matter which alternative is chosen, for the alternatives are, with respect to whatever matters to the choice, exactly the same' (2001, p. 171). Cf. Broome (1995, p. 7): 'If [the alternatives] were equally good, you would be indifferent about which was chosen.' And Raz (1986, pp. 333–334): '[Incomparability] is unlike the situation where one course of action is as good as the other. It is indifferent which action we take. They are equally good and equally bad.' So 'equal goodness' is an ambiguous phrase. Option A and B may be 'equally good' in the following two senses: (1) A and B are identical with respect to what is relevant to the choice'; (2) A is not better and not worse than B, while A and B are not identical with respect to what is relevant to the choice. (1) and (2) are different phenomena. In order to avoid confusions we shall reserve the term 'equal goodness' to (1). Interestingly, a (neutral) name for the value relation mentioned under (2) does not exist. For reasons discussed in Part 3 I call this value relation '3NT'. This is the value relation that Chang explains as 'parity', but it can be explained in many other ways (see Part 3). Whatever be the right explanation, 'equal goodness' in the sense of 'equal (amount of) value' seems not to be the correct one, if (as many theorists think) the so-called 'small improvement phenomenon' applies (see footnote 1).

[18] Rational irresolvability in the defined sense is similar to Raz's 'under-determination of the choice by reason' (1986, Chap. 13).

Buridan's ass's irrational paralysis.[19] By contrast, if options differ (very much), it matters (very much) which one is chosen.

3.2 Parity, incomparability and rationally justified choice

Let us now examine whether parity expands the scope of practical reason and whether its implications for a rationally justified choice favourably differ from those of Raz's incomparability and rational eligibility. To start with the latter, neither of two incomparable options can be worse than the other because 'being worse' requires comparability. Therefore, either choice between incomparable but rationally eligible options is 'rationally permissible'. Raz's incomparability further implies that none of the options is overall better than the other. This means that neither choice is 'rationally required'. Finally, incomparable options are not equally good, which means that the choice is not 'rationally indifferent'.

The same implications for practical reason apply to parity, because—like incomparability—it excludes the three traditional value relations. (1) Because neither option is worse than the other, either choice is 'rationally permissible'. (2) Because the options are not equally good, the choice is not 'rationally indifferent'. (3) Because neither option is better than the other, neither choice is 'rationally required'.

So both incomparability and parity entail that either choice is rationally permissible[20] and neither choice is rationally required, while the choice is not 'rationally indifferent' either. And in both cases reason under-determines the choice. In other words, not less than Raz's incomparability, parity results in 'rational irresolvability' in the sense defined above. Chang is right that in the case of

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[19] In Amartya Sen's explanation of *Buridan's ass*, the donkey died of hunger due to his own irrationality. He was confronted with two roughly equal haystacks and, having no reason to choose one rather than the other, he could not make a choice. But his indecisiveness was ungrounded because he could have rationally chosen either. After all, if options are roughly equally good, it does not matter much which one is chosen. See Sen (2003, pp. 67–68).

[20] Chang: 'There are three different cases in which choice between either alternative is *rationally permissible*: when the alternatives are (1) equally good, (2) incomparable, or (3) on a par' (2005, p. 345). However, two pages later (p. 347) she argues that in the case of incomparability reason ('rational choice function') 'fails to give an answer as to… whether it is rationally permissible to choose either.' This turn is not entirely transparent and contradicts the above quotation. 'Rationally permissible' means 'permissible from the view point of reason'. It is not easy to understand how something can be 'permissible from the view point of reason' and at the same time beyond the reach of reason. If neither option is worse than the other (which is the case if the options are incomparable), either choice is permissible from the view point of reason, as Chang recognizes in the above quotation. In any case, the distinction between two kinds of rational permissibility seems irrelevant with respect to the implications for *practical* reason. Not only in the case of parity but also in the case of overall incomparability the agent is capable of concluding that (i) option A is better with respect to 'value V1' and option B is better with respect to 'value V2' (indeed, overall incomparability does not exclude, and usually maintains, comparability with respect to the separate contributory values), and that (ii) neither option is overall worse than the other. Suppose that, after careful considerations, the agent decides to choose A. Because (ii) prevents a rationally impermissible choice in both cases, it is unclear why the considered choice would be '*not* rationally permissible' if A and B are 'overall incomparable' (but still comparable with respect to the separate contributory values), while the same choice, based on the same considerations, would be 'rationally permissible' if the options are 'on a par'.

incomparability 'the rational choice function fails to give an answer to whether one should rationally choose one alternative':

> … if two alternatives are incomparable, no consideration will be able to justify choosing one *over* the other in that choice situation. For if they are incomparable, it seems that there is no fact concerning everything that matters that could provide choosing one *over* the other (2001, p. 56, emphasis added).

But it is clear that the same applies to parity. An 'all things considered' reason for choosing one option *over* the other exists if the relevant option is 'all things considered' better than the other. Not only incomparability but also parity excludes the overall betterness of one option. That is why reason under-determines the choice in both cases. Reason permits either choice (because neither option is *worse* than the other), but fails to guide the choice with respect to which option should be chosen (because neither option is better than the other). In other words, parity and incomparability entail the same 'rational irresolvability'[21] in the sense defined in Sect. 3.1.

3.3 'Value-pump' and rationally justified choice

In her *Making Comparisons Count* (2001) and 'Introduction' (1997) Chang adduces the so-called 'value-pump' problem[22] to challenge the possibility of a rationally justified choice between incomparable options. Chang:

> All those who think that there can be justified choice among incomparables, then, must provide a well-motivated, non-ad hoc account of how practical reason prohibits agents from becoming "merit pumps" (2001, p. 58; 1997, p. 11).

But parity is not less than incomparability susceptible to the value-pump problem. If the value-pump challenges the possibility of a rationally justified choice between incomparable options, it equally challenges the possibility of a rationally justified choice between options on a par. Chang admits this now, but she tries to adduce the value-pump to demonstrate 'the distinctive role parity plays in reason'. She argues as follows. If alternatives are equally good, it is rationally permissible to choose either, regardless of one's other choices (because there is no value-pump

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[21] Joshua Gert argues in a comment on an earlier version of this paper that the phrase 'rational irresolvability' may lead to 'begging the question'. Indeed, Chang will give a different explanation of rational resolvability: for instance 'the possibility of a rational choice in the presence of a reason *RA* to choose *A* instead of *B* that is not defeated or rendered ineligible by a reason *RB* to choose *B* instead of *A*'. This is true, but this 'rational resolvability' is the same as what we mentioned above 'rational permissibility' or (in Raz's terminology) 'rational eligibility' which merely requires that the chosen option is not worse than the non-chosen one. This is the case, not only if the options are on a par but also if they are incomparable.

[22] The value-pump means that, in a series of choices, one ends up with less value than one started with. Suppose *A* is incomparable with *B*, *B* is incomparable with *A+*, and *A+* is better than *A*. If one is faced with a choice between *A+* and *B*, it is rationally permissible to choose either since they are incomparable. Suppose one chooses *B*. Now suppose that one is offered a choice between *B* and *A*. Since they are incomparable, again it is rationally permissible to choose either. Suppose one chooses *A*. But now one is left with *A* where before one might have had *A+*, which is better than *A*.

problem). If, by contrast, alternatives are *on a par*, it is rationally permissible to make a particular choice only if it is consistent with previous choices (in order to avoid the value-pump). Chang concludes that

> If we think that there are choices in which whether it is rationally permissible to choose either alternative depends on our other choices, then there is a distinctive role for parity to play in practical reason (2005, p. 345).

However, not only either choice between options on a par, but also either choice between Raz's incomparable options is rationally permissible, as Chang recognizes elsewhere.[23] And, in order to circumvent a value pump, not only parity but also incomparability renders the rational permissibility of a choice dependent on previous choices.[24]

3.4 Decision by 'the will'

Chang criticizes Joseph Raz's solution of 'the will' as justifying the ultimate decision in cases of incomparable options. If 'the will' would refer to a special reason already belonging to all that matters to the choice, this would mean double counting (2001, p. 57). Raz's 'will' as 'brute want' (not motivated by a special reason), does not work either, because, according to Chang, a decision based on a 'brute desire' is only rationally justified if it does not much matter which alternative one chooses, that is, in cases of (roughly) equal goodness or trivial importance (2001, p. 63). However, Chang too cannot avoid making the choice between options on a par dependent on the will. Today she admits this: "… the consideration relevant to determining what one should do, faced with items on a par, is 'the will'."[25] This makes the choice between options on a par not less arbitrary than the choice between Raz's incomparable but rationally eligible options.

Chang argues that parity creates room for free and autonomous choices not dictated by reason and still remaining within the constraints of reason. This, she continues, is a kind of freedom different from the freedom to choose between equally good options. This is the same autonomy, within the limits of rational

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[23] See footnote 20.

[24] In a footnote Chang (2005, footnote 18, p. 346) admits this. "But", she continues, "we can distinguish two sorts of value pump puzzles: those in which the value pump is created by choices delivered by a choice function, and those in which it is created by the failure of a choice function to deliver a correct choice. My focus here is on the puzzle arising when the choice function is not silent." I wonder whether this distinction between the two sorts of value pump puzzles is correct and relevant. In both cases reason remains silent, under-determines the choice and does not show which option should be chosen. Besides, the theoretical distinction does not change the fact that in both cases either choice is rationally permissible and that in both cases the value-pump problem has to be avoided. So all implications of parity relevant to *practical* reason are identical to those of Raz's incomparability.

[25] Personal communication. In a forthcoming article ('Voluntarist Reasons') Chang argues as follows (summarized in her personal communication): "When items are on a par, there is a new kind of reason that comes into play—'personal' reasons—or 'will-based reasons'—that have to do with one's normative identity. When things are on a par, we have rational space to 'create' reasons for ourselves through an active attitude involving the will that constitute our normative identities." Nothing in this formulation differs from what Raz says about the will with respect to a choice between incomparable but rationally eligible options.

permissibility, described by Raz with respect to the choice between incomparable but rationally eligible options.[26]

3.5 Conclusion Part 2

All implications of parity for *practical* reason are identical to those of Raz's incomparability.

- In both cases reason under-determines the choice.
- In both cases either choice is 'rationally eligible' and neither choice is 'rationally required' or 'rationally indifferent'.
- Whether we regard hard cases of comparison as instances of Raz's incomparability or Chang's parity, the resulting practical problem is the same: how to take a final decision if we lack an overriding reason to choose one option *rather than* the other, while the respective choices have significantly different consequences.
- In both cases the absence of an overriding reason makes it impossible to give a complete rational justification of the choice, that is, a justification for choosing one option *rather than* the other.
- Parity is not less than incomparability vulnerable to the value pump.
- Both parity and incomparability create room for free and autonomous choices not dictated by reason and still remaining within the constraints of reason.
- Like incomparability, parity renders the final decision arbitrary, that is, dependent on the subjective will of the agent.

These identical implications undermine Chang's belief that 'parity plays a distinctive role in practical reason'. Besides, they corroborate the conclusion of Part 1 that the argument for the possibility of parity as a distinct positive value relation is unfounded.

4 Part 3: '3NT' and rationally justified choice

The value relation between two alternatives for choice, say *A* and *B*, that underlies hard cases of comparison, has the following characteristics:

It is

(1) not true that A is definitely better than B
(2) not true that A is definitely worse than B
(3) not true that A and B are (roughly) equally good

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[26] Raz (1986, pp. 333–334): 'Where the considerations for and against two alternatives are incommensurate, reason is indeterminate. It provides no better case for one alternative than for the other. Since it follows that there is no reason to shun one of the alternatives in favour of the other, we are in a sense *free to choose* which course to follow. That sense of freedom is special, and may be misleading. It is unlike the situation where one course of action is as good as the other. It is indifferent which action we take. They are equally good and equally bad. Incomparability does not ensure equality of merit and demerit. It does not mean indifference. It marks the inability of reason to guide our action, not the insignificance of our choice.'

I call this value relation '3NT' ['Triply-Not-True'] (Boot 2007). Chang interprets many cases of 3NT as 'parity', while Raz explains 3NT as 'incomparability'. Other theorists, who equally recognize the existence of 3NT, give still other names and explanations of this value relation (e.g. 'imprecise equality', 'vagueness' or 'indeterminacy').[27] The controversy about the correct interpretation of 3NT tends to obscure the more important question of its implications for the rational resolvability of value conflicts. The problem of a rationally justified choice in cases of 3NT is caused by 3NT itself, irrespective of how it is explained. It is not difficult to see why. Practical reason is capable of guiding the choice if one of the trichotomy value relations applies, that is, if (i) A is better than B, or (ii) B is better than A, or (iii) A and B are equally good. In the first case, to be rational, A should be chosen, in the second case B, and in the third case it does not matter. But what does practical reason prescribe if 3NT applies, that is, if it is neither true that A and B are equally good, nor true that A is better than B or B is better than A? Unlike in cases (i) and (ii), practical reason under-determines the choice. And unlike in case (iii), reason cannot conclude that it does not matter which option is chosen. This entails '*rational irresolvability*' in the sense defined in Sect. 3.1 and makes the final choice dependent on the will and, consequently, arbitrary. This shows that the implications for practical reason are related to 3NT itself and not to the explanation of it. Just as an untreatable disease does not become curable by explaining it differently, so does a rationally irresolvable conflict not become rationally resolvable if the explanation of 3NT in terms of overall incomparability is replaced by an explanation in terms of parity. That is why the question of interpretation may easily become a red herring if we are interested in *practical* implications.[28] Explanation in terms of 'comparability', as happens in Chang's parity approach, misguidedly suggests that 3NT does not pose significant problems for practical reason. The question asked in the introduction—'If options are incomparable, what reason could there be for choosing one alternative rather than the other?'—is not resolved and not easier to answer if we replace 'incomparable' by 'on a par': the practical problem of knowing how to choose is just as difficult.[29]

Summarizing, if the relevant hard cases of comparison, like those mentioned in the introduction, are instances of 3NT (which is confirmed by many theorists[30]), the final choice is arbitrarily made by the will instead of guided by reason.

We need not exaggerate the problem of incomplete rational justification when it concerns *personal* decisions. Individuals usually do not experience insurmountable problems in making a final choice between 3NT options, at least if these alternatives do not form a moral dilemma. Besides, we have seen that 3NT creates room for free

[27] Raz (1986, Chap. 13) and Morton (1991, Chap. 3) explain 3NT as 'incomparability'; Parfit (1984, p. 431) explains 3NT as 'imprecise equality', Broome as 'vagueness' (1999, pp. 123–144), Seung and Bonevac as 'indeterminacy' (1992, pp. 799–813), Gert explains 3NT as 'cases in which the justifying strength of the reasons favoring each option exceeds the requiring strength of the reasons favoring the other' (2007, pp. 533–562); and I explain it as 'incomplete comparability' (2007).

[28] In a similar context John Broome too speaks of a 'red herring' (1999, p. 154).

[29] Cf. Broome's conclusion with respect to 3NT cases: Reason "leaves us, as it were, on our own. We must simply decide without the guidance of reason" (2004, p. 185; 1999, p. 155).

[30] See footnote 27.

and autonomous choices not dictated but permitted by reason, constituting one's personal identity within the limits of rationality.

When, by contrast, it concerns *collective* decisions between important but incompatible alternatives with considerably divergent consequences, one would hope that reason could guide the decision and that an arbitrary choice could be avoided. However, we have seen that, in the relevant cases, this seems impossible. This means that we cannot rationally justify the final choice because the reasons for the chosen option do not outweigh the reasons for the non-chosen one.[31] Besides, unlike arbitrariness in personal choices, arbitrariness in collective decisions cannot be positively explained as constituting a specific identity, if, as usually is the case, consensus and a collective will are lacking.

An anonymous reviewer put the issue in a wider perspective and gave the following interesting comment, referring to Arrow's Impossibility Theorem: 'The possibility that collective decisions could be always rationally resolvable is independently implausible, so its loss is not such a tragedy'. I am not certain whether this really mitigates the predicament under consideration. The problem of 'incomplete rational justification of a choice' described in this article (call this 'rationality problem I') becomes particularly significant in connection with the collective choice problem described by the Impossibility Theorem (call this 'rationality problem II'). These two rationality problems are both distinct and interrelated. They are distinct because 'rationality problem I' concerns a problem of rational *justification*, remaining within the constraints of reason, while 'rationality problem II' concerns collective *irrationality*. They are interrelated because in both cases incommensurability of the relevant values constitutes an underlying and linking cause. Without incommensurability a 3NT value relation (the central issue of this paper) would not exist (Boot 2007). Something similar applies to Arrow's collective choice problem. Lewis Kornhauser (1998):

> Arguments concerning incommensurability have a formal structure that parallels the structure of arguments concerning the appropriate aggregation of interests of different individuals. … The structure of the problem of incommensurability thus parallels the problem of collective choice.[32]

Democratic decision rules are often regarded as the solution to 'rationality problem I' (rationally irresolvable conflicts). The Impossibility Theorem shows, however, that majority rules—instead of resolving 'rationality problem I'—run the risk of adding 'rationality problem II': 'collective irrationality' in the sense of intransitive orderings of preferences ('voting paradox' or *Condorcet profile*[33]). Collective *irrationality* only occurs in specific cases[34] but the problem of collective

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[31] Compare Nagel (1979, p. 129): '… either choice will mean acting against some reasons without being able to claim that they are *outweighed*' (emphasis original).

[32] See also Kornhauser and Sager (2004).

[33] See also D'Agostino (2003, pp. 6–17).

[34] Intransitive orderings may only occur (and even then not necessarily) if more than two alternatives have to be ranked.

rational *justification* discussed in this article continues to exist even if collective irrationality is avoided.

References

Boot, M. (2007). *Incommensurability, incomplete comparability and the scales of justice*. DPhil dissertation, University of Oxford.

Broome, J. (1995). *Weighing goods: equality, uncertainty and time*. Oxford: Blackwell Publishers.

Broome, J. (1999). *Ethics out of economics*. Cambridge: Cambridge University Press.

Broome, J. (2004). *Weighing lives*. Oxford: Oxford University Press.

Chang, R. (1997). Introduction. In *Incommensurability, incomparability and practical reason*. Cambridge, Mass.: Harvard University Press.

Chang, R. (2001). *Making comparisons count*. New York: Routledge.

Chang, R. (2002). The possibility of parity. *Ethics, 112*, 659–688. doi:10.1086/339673.

Chang, R. (2005). Parity, interval value, and choice. *Ethics, 115*, 331–350. doi:10.1086/426307.

Chang, R. (forthcoming). Voluntarist reasons. In D. Sobel & S. Wall (Eds.), *Practical reason and action*. Cambridge: Cambridge University Press.

D'Agostino, F. (2003). *Incommensurability and commensuration. The common denominator*. Burlington, USA: Ashgate.

Gert, J. (2007). Normative strength and the balance of reasons. *The Philosophical Review, 116*(4), 533–562. doi:10.1215/00318108-2007-013.

Kornhauser, L. A. (1998). No best answer? *University of Pennsylvania Law Review, 146*, 1599–1637. doi:10.2307/3312815.

Kornhauser, L. A., & Sager, L. G. (2004). The many as one: Integrity and group choice in paradoxical cases. *Philosophy and Public Affairs, 32*, 249–276.

Morton, A. (1991). *Disasters and dilemmas: Strategies for real-life decision making*. Oxford: Basil Blackwell.

Nagel, T. (1979). *Mortal questions*. Cambridge: Cambridge University Press.

Parfit, D. (1984). *Reasons and persons*. Oxford: Clarendon Press.

Raz, J. (1986). *The morality of freedom*. Oxford: Oxford University Press.

Raz, J. (1989). Facing up: A reply. *Southern California Law Review, 62*, 1221, n. 145.

Regan, D. (1997). Value, comparability, and choice. In Ruth. Chang (Ed.), *Incommensurability, incomparability and practical reason*. Cambridge, Mass.: Harvard University Press.

Schaber, P. (2004). Are there insolvable moral conflicts? In P. Baumann & M. Betzler (Eds.), *Practical conflicts*. Cambridge: Cambridge University Press.

Sen, A. (2003). *On ethics and economics*. Oxford: Blackwell Publishers.

Sinnott-Armstrong, W. (1985). Moral dilemmas and incomparability. *American Philosophical Quarterly, 22*, 321–329.

Seung, T. K., & Bonevac, D. (1992). Plural values and indeterminate rankings. *Ethics, 102*, 799–813. doi:10.1086/293449.

Williams, B. (1981). *Moral luck*. Cambridge: Cambridge University Press.