

Loosening the betterness ordering of lives: a response to Rabinowicz

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1. Introduction

This paper is a response to Wlodek Rabinowicz's 'Getting personal – the intuition of neutrality reinterpreted'. Rabinowicz's main concern is to incorporate the intuition of neutrality into an account of personal good – of what is good for a person. But he also does something else very interesting in his paper. He takes on board an obvious fact about personal good that has so far generally been ignored in the formal theory of value. So far, philosophers have generally assumed in their formal theories that personal betterness is a *tight* ordering, as I shall put it; it contains no indeterminacy, vagueness or incommensurability. Between any two states of affairs, and for any person, we have assumed that either one of the states is determinately better for the person than the other or they are determinately equally good. This is obviously false. Goodness is a nebulous, imprecise property and betterness is a loose sort of ordering. Rabinowicz takes account of this in his paper, and explores its consequences for the theory of the value of population.

I am more interested in this aspect of his paper than in Rabinowicz's interpretation of the intuition of neutrality. I am one of those philosophers who made the obviously false assumption that personal betterness is tight. I did so explicitly in my book *Weighing Lives*.¹ I thought it a reasonable simplifying assumption because I thought it would make little difference to the book's conclusions about the value of population. Now Rabinowicz's new work offers me the opportunity of testing whether I was right. Sections 2–6 of this paper of mine are given over to doing so. I shall hubristically conclude that actually I was right.

In section 2 I shall formalize the loose ordering of personal betterness. Then in sections 3–5, I shall outline the conventional utilitarian theory of the value of population. In section 6 I shall inject into it a loose ordering of personal betterness. In all of this, my methods and conclusions follow Rabinowicz's. Only a minor disagreement will emerge. But I cast the analysis in a significantly different light from his.

Only in section 7 will I come to Rabinowicz's interpretation of the intuition of neutrality. I am sorry to say that there I shall disagree with him more strongly.

2. A loose betterness ordering

In analysing betterness, it is best to work with just one primitive relation. If we were to work with two – such as betterness and equality of goodness – we would have to explain why no pair of things ever satisfies both of them. This would be hard if they were truly primitive.

I choose betterness as my primitive relation. It is transitive, reflexive and asymmetric. I define the relation of being equally good in terms of betterness: two things are equally good when anything that is better or worse than one of them is correspondingly better or worse than the other. This definition ensures that equal goodness satisfies two conditions it must satisfy. First, when two things are equally good then neither is better than the other; it is easy to see that this follows from the definition. Second the definition also ensures that the relation of being equally good is an equivalence relation.²

It is more conventional to take the relation 'at least as good as' to be primitive. I do not adopt this convention for two reasons. First, 'at least as good as' is plainly not primitive. It is a complex notion equivalent to 'better than or equally as good as'. Second, it implies an incorrect definition of 'equally as good as'. Two things are defined to be equally good when

each is at least as good as the other. But two things that satisfy my definition may not satisfy this one: it might be that neither of them is at least as good as the other. In that case, they would conventionally be defined as incommensurable. However, they are not incommensurable. As Rabinowicz notes,³ the recognized mark of incommensurability is that, if two things are incommensurable, there is a small improvement or a small worsening of one of them that does not remove their incommensurability. Because these two things satisfy my definition of ‘equally as good as’, a small improvement or a small worsening of one of them makes it better or worse than the other. It does remove their incommensurability. So this pair of things does not bear the mark of incommensurability. They are in fact equally good, as my definition says.

An objection to my definition is that it is sensitive to changes in the domain of things.⁴ Two things that are equally good according to my definition might cease to be equally good if the domain were enlarged. But the domain I am referring to is everything; ‘anything’ in my definition means anything. So the domain cannot change. I stick with my definition.

Like Rabinowicz’s, my account of personal betterness and goodness will be an account of personal betterness and goodness among *lives*. Like him, I assume that living a particular life would be just as good for one person as it would be for another person were she to live that same life. This is the way I achieved interpersonal comparability of good in *Weighing Lives*.⁵ Mine is an account of *personal* goodness and betterness among lives: when I say one life is better than another, I mean it is better for a person who lives that life. The goodness of a person’s life is sometimes called the person’s *lifetime wellbeing*.

I shall develop an account of a loose betterness relation, but I start with a tight one. Imagine initially that the betterness ordering among lives is tight. This implies that if two lives are not equally good, one is better than the other. Imagine also that there is a tight ordering of *pairs* of lives, which is to be interpreted as an ordering of the differences in goodness between pairs. In traditional theory, this ordering of differences is derived from a betterness ordering among gambles on lives.⁶ But it could be derived in some other way; it does not matter here. I shall call a betterness ordering of lives together with an ordering of differences of goodness a *cardinal ordering* of lives. Since an ordering of lives is implied by an ordering of differences, there is really only one ordering here. From now on, when I mention an ordering of lives, I mean a cardinal ordering.

A representation theorem tells us that a cardinal betterness ordering between lives can be represented by a goodness measure, which assigns to each life a number that measures its goodness.⁷ One life gets a greater numerical goodness than another if and only if it is better. Moreover the theorem tells us that the goodness measure can correctly reflect the ordering of differences. A goodness measure that does so is called a *cardinal* measure of goodness.

A tight ordering actually has many cardinal measures. If $g()$ is one, then so is any measure $g'()$ that is an *affine transform* of $g()$ – that is, if $g'(l) = ag(l) + b$ for all lives l , where a is a positive constant, and b is a positive, negative or zero constant. The cardinal measures of a tight betterness ordering form a family, each an affine transform of the others. We arbitrarily pick just one of them as the measure to use, standing in for the family. This means that the zero of the measure is arbitrary, and so is the size of the unit in the scale of goodness.

Now I come to a loose betterness ordering. What are the possible relations between a pair of lives k and l ? First, it may be that k is better than l . Second, it may be that l is better than k . Third, it may be that k and l are equally good. Fourth, it may be that k is not better than l , and l is not better than k , and also that k and l are not equally good. In this case I say k and l are ‘incommensurate’. (I prefer this term to ‘incommensurable’.) Fifth, there is no determinate answer to the question of whether k is better than l and no determinate answer to the question

of whether l is better than k . In this case the relations are vague.

Incommensurateness and vagueness are different sorts of looseness in the ordering. It seems indubitable that betterness is vague to some extent. I am more doubtful that incommensurateness also exists in betterness orderings.⁸ But many people including Rabinowicz think it does, so I need to allow for it. It would be possible to allow for both incommensurateness and vagueness together, and at first I tried to do that in this paper. But I found it led to undesirable complications. I have therefore decided to ignore vagueness in this paper, as Rabinowicz does in his. So I ignore the fifth possibility.

Not much is lost in doing so. Vagueness can be treated formally in a similar way to incommensurability. This means that the arguments of this paper can easily be extended to vagueness.

Before coming to a formal treatment, I need to mention a feature of the betterness ordering among lives that will become important in section 6. Although this ordering is loose, it is locally tight in one particular way. Pick any life l . There is always a better life that is as close to it as you like, and always a worse life that is as close to it as you like. For example, a life is better than l if it is the same as l but has an extra period of good life added in a way that does not damage the rest of the life. This period can be made as short as you like. A life is worse than l if it is the same as l but contains an extra moment of pain at some time, unconnected with anything else that happens in the life. This extra moment can be made as short as you like. These are only examples; there are many ways of improving or degrading a life by a tiny bit.

This local tightness is a feature of betterness among lives in particular. Not all loose orderings are locally tight in this way. For example, I doubt that the ordering of paintings by their beauty is locally tight.

Now the formal treatment of the loose betterness ordering of lives. We treat a loose ordering as a set of tight orderings. No member of the set is the actual betterness ordering, but the whole set together defines the actual ordering. Each member may be called a *proto-betterness* ordering. It describes one way in which betterness might formally be tightened up. I shall call it a *tightening*.

Rabinowicz treats tightenings as permissible preference relations among lives. But there is no need to give them such a substantive interpretation. I take them simply as a formal, theoretical device for describing a loose ordering.

In comparing two lives, the relation between the tightenings and the actual ordering is this. One life is actually better than another if and only if it is better in all tightenings. If neither of two lives is better than the other in all tightenings, the two lives are either incommensurate or equally good. Which is not determined just by the relative position of the two lives in the tightenings. The definition of equality shows it depends also on their positions relative to other lives.

Because the betterness ordering is locally tight in the way I described, we know that, given any life, there are two lives – each as similar to it as you like – such that every tightening rates one of them proto-better than the given life and the other proto-worse.

I assume that each tightening is a cardinal ordering. Each can therefore be represented by a cardinal measure of proto-goodness. The loose ordering is represented by the set of these measures, one for each tightening. Do not be confused. A single cardinal measure stands in for a family of proto-goodness measures, each an affine transform of the others and each representing the same cardinal ordering. This family is not what I am talking about. Out of the family of functions that represent a single proto-betterness ordering, we arbitrarily pick one as a measure to stand in for the family. Because we have a set of proto-betterness

orderings, we end up with a set of measures. These are not affine transforms of each other.

3. Utilitarianism for a fixed population

I am now in a position to start formulating the utilitarian theory of goodness. For a moment suppose that betterness among lives is a tight cardinal ordering. Then there is a cardinal measure $g()$ of the goodness of lives. Suppose also for this section that the population of people is fixed. Utilitarianism makes a claim about the relative goodness of different *distributions* of lives across the population. It is the claim that one distribution is better than another that has the same population if and only if the total goodness of lives in the first is greater than the total goodness of lives in the second. It follows that, if two distributions have the same total goodness, they are equally good.

Put differently, utilitarianism makes the claim that the goodness of distributions can be measured by the total goodness of the lives they contain. A distribution can be described by the vector of the people's lives (l_1, l_2, \dots, l_I) , where I is the number of people. One person's life is l_1 , the next person's l_2 and so on. According to utilitarianism, the total

$$(1) \quad G(l_1, l_2, \dots, l_I) = \sum_i g(l_i)$$

measures the goodness of the distribution.

Goodness and betterness among distributions is *general* rather than personal. When comparing lives, I took their goodness and betterness to be personal: goodness and betterness for the people whose lives they are. But now we come to comparing distributions over many people, we are concerned with general goodness and betterness: goodness and betterness for humanity as a whole. The utilitarian formula (1) is a claim about the relationship between people's personal goodness and general goodness.

To avoid constantly repeating 'according to utilitarianism', from here on I shall take it for granted that the utilitarian theory of goodness is true.

Because we are assuming there is tight cardinal betterness ordering of lives, there is a determinate answer to the question of whether the total goodness of lives is greater in one distribution than in another. The answer to this question depends only on the information contained in a cardinal measure of the goodness of lives, and we have one. The answer is independent of the zero of this measure of goodness and of the size of the unit. Also, if neither of two distributions has a greater total than the other, they have the same total. The upshot is that a tight cardinal betterness ordering for lives implies a tight ordering of distributions by betterness.

When the betterness ordering of lives is loose, it has a set of tightenings. Each tightening is cardinal and tight. Each therefore implies a tight ordering of distributions by proto-betterness, in the way I have just explained. Take any pair of distributions. It may be that all the tightenings agree that one of them is proto-better than the other. Then that one is actually better. Or it may be that some sharpenings rate one proto-better and some rate the other proto-better. Then neither will be determinately better than the other. So there will be looseness in the actual betterness ordering of distributions. Looseness in the betterness ordering of lives is transmitted to looseness in the betterness ordering of distributions of lives. Nothing else was to be expected.

4. Neutral-life utilitarianism with tight betterness among lives

Next I extend utilitarianism to variable populations. We have to compare the goodnesses of distributions of lives (l_1, l_2, \dots, l_I) , where now the total number of people I is not a constant.

As a foundation for this work, I shall simply take for granted *neutral-level utilitarianism*. Arguments for it are to be found in work by Charles Blackorby, Walter Bossert and David

Donaldson⁹ and in my *Weighing Lives*.

Once again I start with a version of the theory that assumes the betterness ordering of lives is tight and cardinal. There is then a cardinal goodness measure of lives $g()$. Neutral-level utilitarianism claims that there is a neutral life n such that the goodness of a distribution is the total – added up across people – of the difference between the goodness of each life and the goodness of the neutral life. That is:

$$(2) \quad G(l_1, l_2, \dots, l_i) = \sum_i (g(l_i) - g(n))$$

where i ranges over all the lives in the population, whatever its size. This is a goodness measure for the distribution. So long as the betterness of lives is cardinal, it is determinate which distributions are better than which. There is a tight betterness ordering of distributions.

The neutral level referred to in the name ‘neutral-level utilitarianism’ is the goodness $g(n)$ of the neutral life. Without changing the theory, I rename it *neutral-life utilitarianism*. I adopt my name because in section 6 I shall allow for looseness in the betterness ordering of lives. A loose betterness ordering is described by many tightenings, each of which has a cardinal proto-betterness measure. There is no basis for comparing levels of proto-goodness across these different measures. So sharpenings cannot have a neutral level in common. On the other hand, they can have a neutral life in common, and in section 6 I shall assume they do.

What is the significance of the neutral life? Think about starting from some distribution of lives, and adding to it one new person who lives the neutral life. The formula implies that the resulting distribution is equally as good as the original one. This is true also if we add a person who lives any life that is equally as good as the neutral one. In fact, any of these lives is also neutral. A neutral life is neutral in the sense that adding it to a distribution leaves the distribution equally as good as it was before. I call this *strong* neutrality.

Adding a life that is better than the neutral life makes the distribution better and adding a life that is worse makes the distribution worse.

Neutrality is defined in terms of the contribution a life makes to general goodness, not in terms of the person’s own good. A neutral life is generally – not personally – neutral.

5. *Neutral-range utilitarianism with tight betterness among lives*

Neutral-life utilitarianism conflicts with something I call ‘the intuition of neutrality’.¹⁰ Many of us have the intuition that adding a person to a population is *typically* neutral. We think intuitively that it is a bad thing to add a person if her life would be full of suffering. Some of us think intuitively it is a good thing to add a person whose life would be wonderful. Others of us think intuitively that adding a person to the population is never a good thing. But most of us think intuitively that there is a wide range of lives – at least from mediocre lives up to very good ones – such that adding them to the population is neutral. That is the intuition of neutrality. Simple neutral-life utilitarianism denies this. It implies that only the single neutral life and other equally-good lives are neutral.

The intuition of neutrality is a small-scale intuition about the creation of a single person. It can be reinforced by a pair of large-scale intuitions. The first is this. Take a distribution containing only a large number of very good lives full of happiness. Formula (2) implies that this distribution is worse than one that contains only lives that are a little bit better than the neutral life, provided there are enough of those lives. This conclusion is counter to most people’s intuition unless the neutral life is rather good. Derek Parfit calls it ‘repugnant’.¹¹

The second intuition is the mirror image of this one. Take a distribution containing only a large number of very bad lives full of suffering. Formula (2) implies that this distribution is better than one that contains only lives that are a little bit worse than the neutral life, provided there are enough of those lives. This conclusion is counter to most people’s intuition unless

the neutral life is rather poor. It seems impossible to find a neutral life that does not conflict with one or the other of these intuitions. To accommodate the first we need the neutral life to be rather good and to accommodate the second we need it to be rather poor.

However, neutral-life utilitarianism can be extended to accommodate the intuition of neutrality and the large-scale intuitions. Through a means I shall explain, we can say that all the lives from the wide range that are intuitively neutral are indeed neutral. So now we have many neutral lives n^r . I index them by r , where r takes values in some index set R . Not all these lives are equally good; some are better than others in the range.

Making this change comes at a cost. It forces us to adopt a weaker notion of neutrality. Previously a neutral life was one such that adding it to a distribution leaves the distribution equally as good as it was before. These many neutral lives can only be *weakly* neutral, in the sense that adding one of them to a distribution leaves the distribution neither better nor worse than it was before.

The way to extend utilitarianism is to loosen the betterness ordering of distributions. Instead of a single tight betterness ordering, we recognize a set of tight proto-betterness orderings – one for each neutral life. They are indexed by r . Each is given by the same cardinal goodness measure for lives $g()$, but each has its own neutral life n^r :

$$(3) \quad G^r(l_1, l_2, \dots, l_i) = \sum_i (g(l_i) - g(n^r))$$

One distribution is actually better than another if and only if all these tightenings agree it is proto-better. We now have a loose betterness ordering for distributions, but we retain a tight betterness ordering for lives.

Adding to a distribution a life that is better than all the neutral lives makes the distribution better. Adding a life that is worse than all the neutral lives makes the distribution worse. Adding a life that is neither better nor worse than all the neutral lives makes the distribution neither better nor worse. There is a range of neutral lives that extends from the worst of the neutral lives to the best of them. The resulting theory is *neutral-range utilitarianism*.¹²

This theory accommodates the intuition of neutrality and the large-scale intuitions. However, it suffers from a new problem of its own, which I call the problem of *greediness*. I shall illustrate it using a stylized example of climate change.

Let the goodness of the best neutral life be 40 and the goodness of the worst neutral life 10. (Remember that the scale of goodness is only cardinal, so only differences of levels rather than levels themselves are significant.) Suppose that, were it not for climate change, there would be 10 billion people, and the goodness of everyone's life would be 23.

Suppose that climate change will have two effects. First, it will reduce the goodness of the life of everyone who lives from 23 to 20, either by shortening people's lives or by reducing their quality. This is plainly a bad change.

Suppose, also, that climate change will reduce the size of the population from 10 billion to 8 billion. Since these people would have lived lives at level 23, which is in the range between the worst and the best neutral lives, this change is neutral.

Were it not for climate change, there would have been 10 billion people at 23. Given climate change, there are 8 billion people at 20. To compare the goodness of these distributions, we work out their proto-goodness according to each tightening. It is enough to compare them on the basis of the best and the worst neutral life.

The goodness of the best neutral life is 40 units. On this basis, the proto-goodness of the distribution without climate change is 10 billion times -17 . The proto-goodness of the distribution with climate change is 8 billion times -20 . The latter is greater.

The goodness of the worst neutral life is 10 units. On this basis, the proto-goodness of the distribution without climate change is 10 billion times $+13$. The proto-goodness of the

distribution with climate change is 8 billion times +10 billion. The former is greater.

So different tightenings order the two distributions oppositely. Therefore neither distribution is better than the other according to neutral-range utilitarianism.

But this is plainly the wrong conclusion. The distribution with climate change is worse because it is worse for every person who lives. That is a bad thing. It also has a smaller population, which is supposed to be a neutral thing. A bad thing together with a neutral thing should be a bad thing. But the way the theory works, the supposedly neutral change swallows up the bad change and neutralizes the two changes together.

To create neutral-range utilitarianism out of neutral-life utilitarianism, I had to weaken the notion of neutrality. A consequence is that neutrality acquires the power to swallow up good or bad changes and neutralize them. That is why I call this sort of neutrality ‘greedy’. It is not true to the intuition of neutrality. At first, neutral-range utilitarianism seems a way to accommodate the intuition of neutrality, but in the end it fails to do so. The conclusion in the example that the effect of climate change is not bad is not consistent with the intuition.

In the end, in *Weighing Lives* I found no satisfactory way to fit the intuition of neutrality into an acceptable theory of the value of population. I concluded that this intuition has to be rejected.¹³

6. Utilitarianism with loose betterness among lives.

But now we have a new resource that might be able to revive it. I set out neutral-life and neutral-range utilitarianism under the assumption that betterness among lives is tight. Problems emerged. Could it be that recognizing that betterness among lives is loose – as it undoubtedly is – might give us some relief from these problems? I turn now to this question.

So now, instead of assuming that betterness of lives has a single cardinal measure $g()$, I assume it is represented by a set of measures $g^t()$ indexed by t , where t takes values in some index set T . One life is better than another if it is better according to all these measures. To import this loose ordering into utilitarianism for variable populations, I start from neutral-life utilitarianism with tight betterness among lives, and amend it as little as possible.

I assume there is a neutral life n such that the goodness of populations is represented by the set of proto-goodness measures

$$(4) \quad G^t(l_1, l_2, \dots, l_l) = \sum_i (g^t(l_i) - g^t(n))$$

Each of these describes a tightening of the betterness ordering among distributions.

Tightenings are indexed by t . One distribution is better than another if it is proto-better according to every tightening. We now have a loose betterness ordering for distributions. Although there are many proto-goodness measures of lives, the designated neutral life n is the same for all of them.

One consequence of this theory is that adding the life n to a population leaves the distribution equally as good as it was before. That is to say, the designated neutral life is strongly neutral. This needs to be checked against the definition of equal goodness in section 2. Let the original distribution be (l_1, l_2, \dots, l_l) and the distribution with the neutral life added $(l_1, l_2, \dots, l_l, n)$. For every tightening t , formula (4) shows that $G^t(l_1, l_2, \dots, l_l) = G^t(l_1, l_2, \dots, l_l, n)$. So any distribution that is proto-better or proto-worse than (l_1, l_2, \dots, l_l) according to t is correspondingly proto-better or proto-worse than $(l_1, l_2, \dots, l_l, n)$ according to t , and vice versa. It follows that any distribution that is actually better or worse than (l_1, l_2, \dots, l_l) is correspondingly actually better or worse than $(l_1, l_2, \dots, l_l, n)$, and vice versa. So the definition of equal goodness is satisfied.

Any other life that is equally as good as n is also strongly neutral. Adding a person with a life that is better than n makes a distribution better and adding a life that is worse than n

makes a distribution worse.

In all those respects, this new theory matches neutral-life utilitarianism with tight betterness among lives. I count it as a version of neutral-life utilitarianism because it incorporates a life n that is strongly neutral.

However, it also incorporates lives that are incommensurate with n . They are better than n according to some tightenings t , and worse according to others. Adding one of these lives to a distribution makes the distribution neither better nor worse, nor equally good. These lives are weakly neutral in the sense defined in section 5. Some of them will be better than others. So there is a range of lives – some better than others – that are all weakly neutral. This version of neutral-life utilitarianism therefore imports one feature from neutral-range utilitarianism. It incorporates a sort of neutral range. This is one way in which recognizing the looseness of betterness among lives makes a difference to the axiology of population.

Still, it is an unimportant difference because it goes no way towards solving the problems that motivate neutral-range utilitarianism. Neutral-range utilitarianism is designed to accommodate the intuition of neutrality. But neutral-life utilitarianism with loose betterness among lives does not accommodate this intuition, despite its sort of neutral range.

That is because the betterness ordering of lives, though loose, is locally tight in the way I described in section 2. Take any strongly neutral life – either n or another one. As close as you like to it is a life that is better than it and another life that is worse than it. These two lives are as similar as you like, yet adding one to a distribution makes the distribution better and adding the other makes it worse. This is strongly counter to the intuition of neutrality, which is the intuition that lives are *typically* neutral. It implies that a wide range of lives lies between any life whose addition makes a distribution better and any life whose addition makes it worse.

Nor does neutral-life utilitarianism with loose betterness among lives accommodate the large-scale intuitions: the repugnant conclusion and its mirror image. A distribution containing only a large number of very good lives full of happiness is worse than one that contains only lives that are a little bit better than n , provided there are enough of those lives. Unless n is rather good, this conclusion is repugnant. Also, a distribution containing only a large number of bad lives full of suffering is better than one that contains only lives that are a little bit worse than n , provided there are enough of those lives. Unless n is rather poor, this is counter to intuition. It seems impossible to find a designated neutral life n that does not conflict with one or other of these large-scale intuitions.

It is possible to accommodate all these intuitions by the same means as I employed in section 5. We move beyond neutral-life utilitarianism. Instead of a single designated neutral life, we have many neutral lives n^r , indexed by r . We get this set of proto-goodness measures

$$(5) \quad G^r(l_1, l_2, \dots, l_l) = \sum_i (g^t(l_i) - g^t(n^r))$$

The index t marks different proto-goodness measures for lives, and the index r marks different neutral lives. To ensure there is a suitable range of neutral lives, not all of them will be equally as good as each other or incommensurate with each other. Some will be better than others.

They can only be weakly neutral. There can be no strongly neutral life, because if there were it would conflict with the intuition of neutrality and the other intuitions in the way I just described.

Now we have neutral-range utilitarianism with loose betterness among lives. It accommodates the intuition of neutrality and the large-scale intuitions, just as the same move did in developing neutral-range utilitarianism with tight betterness among lives. However, just as the earlier version of neutral-range utilitarianism did, this version brings with it the

problem of greediness. This problem is not in any way diminished by loosening betterness among lives.

I conclude that recognizing the looseness of betterness among lives makes no significant difference to the utilitarian ethics of population. Neutral-life and neutral-range utilitarianism each have versions with loose betterness. Whether betterness among lives is tight or loose, the same intuitions arise and can be accommodated in the same way in neutral-range utilitarianism. But this theory suffers from the same difficulty of greediness in either version. In writing *Weighing Lives*, I thought it a harmless simplification to assume that betterness among lives is tight. I now feel vindicated.

7. *Getting personal*

That deals with my own concern. Rabinowicz has another. He aims to describe a personal betterness ordering that includes nonexistence, and use it to dispel a particular difficulty that I shall now describe.

Betterness among lives is personal betterness – betterness for those people who live the lives. Lives are ordered by their personal betterness. Rabinowicz assumes that nonexistence has a place in this ordering. That is to say, he assumes that some lives are personally better for a person than not living at all, and some are personally worse. He works out the consequences of this assumption.

He does so initially on the supposition that the personal ordering of lives together with nonexistence is tight. This implies that all lives, if they are not personally equally as good as nonexistence, are personally either better or worse than nonexistence.

To this supposition, let us add the intuition of neutrality. This is the intuition that there is a range of lives – some personally better than others – that are neutral in the weak sense I defined in section 5. That is to say, adding one of these lives to a distribution makes the distribution generally neither better nor worse. Since some of these neutral lives are personally better than others, they cannot all be personally equally as good as nonexistence. Therefore some of them are personally either better or worse than nonexistence. Call these ‘unequal neutral lives’.

Adding a life to a distribution leaves all the existing people with just the same life as they would otherwise have had. So it is personally equally good for all of them. But it gives a life to the person who is added, when otherwise she would not have existed. So adding an unequal neutral life is personally either better or worse for the added person. In sum, adding an unequal neutral life is personally better or worse for one person and personally equally good for everyone else.

This implies that adding an unequal neutral life to a distribution makes the distribution generally either better or worse. That is a consequence of something I have been implicitly taking for granted: that the general goodness of a distribution depends only on the personal goodness of people. This assumption is crystallized in what I call ‘the principle of personal good’, which Rabinowicz supports.¹⁴ One part of it is that, if a change is personally better or worse for one person and personally equally good for everyone else, then it is correspondingly better or worse generally.

I have concluded that adding an unequal neutral life makes a distribution generally better or worse. But the definition of weak neutrality tells us that adding any neutral life makes a distribution generally neither better nor worse. So we have reached a contradiction.

It shows that the following four claims are mutually inconsistent:

The principle of personal good.

Nonexistence has a place in the personal betterness ordering of lives.

The intuition of neutrality.

The personal betterness ordering of lives together with nonexistence is tight. That is the difficulty that concerns Rabinowicz. Rabinowicz likes the first three of these claims, but he argues that the fourth is false. That dispels the difficulty.

Rabinowicz loosens the personal betterness ordering in two ways. Firstly, he loosens the place of nonexistence in it. He stipulates that each neutral life is personally neither better nor worse than nonexistence. Now consider adding a neutral life to a distribution. By the definition of weak neutrality, this makes the distribution generally neither better nor worse. This is now consistent with the principle of personal good. Adding the neutral life is personally equally good for each of the existing people, since it leaves them with the same life as before. By Rabinowicz's stipulation, it is also personally neither better nor worse for the person who lives the added life. It is therefore consistent with the principle of personal good for it to be generally neither better nor worse. The difficulty is overcome.

In effect, Rabinowicz gives nonexistence a loose place in the betterness ordering of lives that coincides with the range of neutral lives. A neutral life is defined as neutral on the basis of general betterness; it is generally neutral. But Rabinowicz makes it also personally neutral in the sense that it is personally neither better nor worse than nonexistence. The neutral range is the range of lives that are both personally and generally neutral.

Rabinowicz secondly also loosens the betterness ordering of lives themselves. I have described this move in section 6. It is not necessary for overcoming the difficulty I described. Loosening the place of nonexistence in the ordering is sufficient for that, whether betterness among lives is tight or loose.

All this passes me by. I do not share Rabinowicz's concern, either with describing a personal betterness ordering that includes nonexistence, or with dispelling the difficulty that arises from doing so. I do not think nonexistence has any place in the personal betterness ordering.

That is because I have a different concept of personal goodness from Rabinowicz's. I take personal goodness to be the good of a person. I take a person's good to be approximately or exactly synonymous with her wellbeing. It is a quantitative concept, and its quantity varies with varying states of affairs. Using functional notation, we may write it as ' $G_s(p)$ ' or ' $G(p, s)$ ', to be read as ' p 's good in s ', where p is a person and s is a state of affairs. I think both Rabinowicz and I accept the lesson of measurement theory, which tells us that quantities of a property are derived from the corresponding comparative relation. The comparative of the property of a person's good can be written $(p, s)B(q, t)$, to be read as ' p would have more good in s than q would have in t ' or as ' p would be better off in s than q would be in t '. This comparative has no meaning unless p would exist in s and q in t .

We often make comparisons where p and q are the same person. Instead of ' $(p, s)B(p, t)$ ', we might use the simplified notation $sB_p t$. This may be read ' p would be better off in s than in t ', or ' s would be better for p than t '. However it is written or read, it has no meaning unless p would exist in both s and t . In this paper I have been concerned with states of affairs that consist in a person's living a particular life, or not living at all. The person would not exist in the latter state of affairs. There is no meaningful comparison to be made between her good were she to live a particular life and her good were she not to live at all.

Rabinowicz outlines his concept of personal goodness in section 1 of 'Getting personal'. He takes goodness to be a property of states of affairs. We can use the notation $G(s)$ for the goodness of a state of affairs s . Measurement theory tells us that quantities of this property are derived from the corresponding comparative relation. This might be written ' sBt ', read as ' s is better than t '. Since we are concerned with personal rather than general betterness, we

need a comparative that is relativized to a person. We might write it $sB_p t$, to be read as ‘ s is better for p than t ’. This comparative $sB_p t$ is a relation that holds between the person and states of affairs. Nothing requires that, if s is better for p than t , the person p exists in either of the states of affairs s and t . Using this concept of personal betterness, it makes sense to say that a particular life is better for a person than not existing. Rabinowicz’s concept of personal goodness, which might be written ‘ $G_p(s)$ ’, is derived from this concept of personal betterness.

Goodness as I understand it is a property that a person possesses in a state of affairs. As Rabinowicz understands it, goodness is a relation a person stands in to a state of affairs. Mine might be called an ‘internal’ concept of goodness, and Rabinowicz’s an ‘external’ one. Rabinowicz is pushed towards an external concept by his fitting-attitude theory of value. He thinks that for something to be good is for it to be fitting to have a particular favourable attitude towards it. The goodness of a life is a matter of an attitude we take towards the life. The life is evaluated from the outside. I take the goodness of a life to be a matter of what it is like to live the life. It is evaluated from the inside.

Which is the best concept to adopt for the sake of population axiology? The betterness ordering of lives need not differ between the concepts. The significant difference is that the internal concept does not include nonexistence within this ordering, whereas the external concept can include it, so that a life can be better or worse than nonexistence. Furthermore, Rabinowicz assumes there actually are lives that are better or worse than nonexistence. The external concept therefore has more content. In principle, this gives it more analytical power.

Indeed, its extra power creates the potential inconsistency in population axiology that I described. This inconsistency cannot arise if we adopt the internal concept of goodness. In any case, Rabinowicz successfully overcomes it by making sure that the neutral range of lives is personally as well as generally neutral.

Apart from creating this potential difficulty, does the power of the external concept give us extra positive leverage on population axiology? It would do so if it allowed us to bring further intuitions to bear on the subject. For example, because the neutral range is personally as well as generally neutral, it might help us identify the neutral range by bringing to bear our intuitions about which lives are personally better than nonexistence and which are personally worse.

But so far as I can tell, our intuitions relevant to the neutral range are directly about the general goodness of populations and not about personal goodness. Most of us think that adding people to the population is ethically neutral in a wide range of cases; this is a thought about general good. As Jan Narveson puts it, ‘We are in favour of making people happy, but neutral about making happy people’.¹⁵ I do not know of a corresponding intuition about personal good. I have mentioned other relevant intuitions – the large-scale intuitions and the intuition about greediness – and these are also matters of general good. I have not seen intuitions about personal goodness applied to population axiology.

In his paper, I do not find Rabinowicz using the external conception of goodness to make a positive contribution in this way. He brings personal betterness into line with population axiology, rather than the other way round. Given that, I think we are better off with the internal conception. We gain nothing from assuming that some lives are better or worse than nonexistence.

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Notes

I am very grateful to Wlodek Rabinowicz for perceptive comments.

1. *Weighing Lives*, p. 82.
2. *Weighing Lives*, p. 22.
3. ‘Getting personal’, section 4.
4. Thanks to Rabinowicz.
5. *Weighing Lives*, p. 95.
6. Starting with von Neumann and Morgenstern, *Theory of Games*.
7. For example, von Neumann and Morgenstern, *Theory of Games*.
8. See my ‘Is incommensurability vagueness?’.
9. Blackorby, Bossert and Donaldson, *Population Issues*.
10. *Weighing Lives*, p. 143 ff.
11. *Reasons and Persons*, p. 388.
12. See Rabinowicz, ‘Getting personal’, section 2.
13. *Weighing Lives*, p. 205.
14. ‘Getting personal’, section 3.
15. ‘Moral problems of population’, p. 73 in the reprinted version.