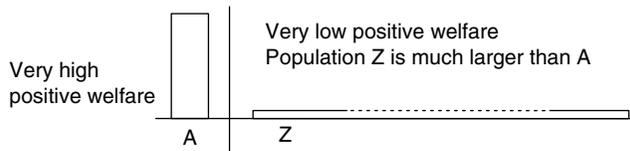


# Repugnant Conclusion

Gustaf Arrhenius

Derek Parfit originally formulated the Repugnant Conclusion as follows: “For any possible population of at least ten billion people, all with a very high quality of life, there must be some much larger imaginable population whose existence, if other things are equal, would be better even though its members have lives that are barely worth living” (1984: 388).



**Figure 1**

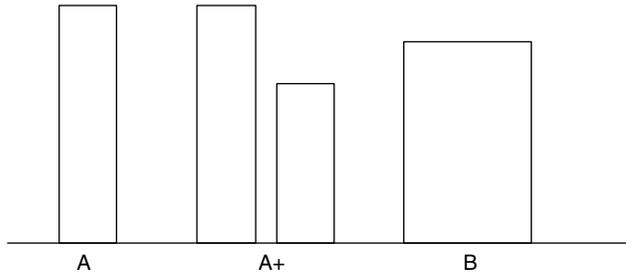
The blocks in Figure 1 represent two populations, A and Z. The width of each block shows the number of people in the corresponding population, the height shows their lifetime quality of life. All the people in Figure 1 enjoy positive welfare or, as we also could put it, have lives worth living (*see* WELL-BEING). People’s welfare is much lower in Z than in A, but since there are many more people in Z, there is a greater quantity of welfare in Z as compared to A. Consequently, although the people in A lead very good lives and the people in Z have lives only barely worth living, Z is nevertheless better than A according to, for example, classical Utilitarianism (*see* UTILITARIANISM).

The Repugnant Conclusion highlights a problem in an area of ethics which has become known as *population ethics*. The last decades have witnessed an increasing philosophical interest in questions such as “Is it possible to make the world a better place by creating more people?” and “Is there a moral obligation to have children?” The main problem is to find an adequate theory about the moral value of states of affairs where the number of people, their welfare, and their identities may vary. Since, arguably, any reasonable moral theory has to take such aspects of possible states of affairs into account when determining the normative status of actions, the study of population ethics is of general import for moral theory (*see also* INTERGENERATIONAL ETHICS; POPULATION; POTENTIAL PERSONS).

As the name indicates, Parfit finds the Repugnant Conclusion unacceptable, and most philosophers seem to agree. It has been surprisingly difficult, however, to find a theory that avoids it without implying other counterintuitive conclusions. Thus,

how to deal with the conclusion and what it shows about the nature of ethics have turned it into one of the cardinal challenges of modern ethics.

The Repugnant Conclusion can be derived from seemingly reasonable principles. Consider the following populations (see Parfit 1984: 419):



**Figure 2**

Population A consists of people with very high welfare. A+ consists of all the A people and an extra group of people with a bit lower welfare. In Parfit's terminology, A+ is generated from A by "mere addition." Comparing A and A+, it is reasonable to hold that A+ is better than A or, at least, not worse. The idea is that an addition of extra worthwhile lives cannot make an outcome worse. Consider the next scenario B with the same number of people as A+, all leading lives well worth living and at an average welfare level slightly above the average in A+, but lower than the average in A. It is hard to deny that B is better than A+ since it is better in regards to average, total, and equality of welfare. However, if A+ is at least not worse than A, and if B is better than A+, then B is also better than A, given transitivity and full comparability among populations (see INCOMMENSURABILITY [AND INCOMPARABILITY]). By parity of reasoning (scenario B+ and C, C+ etc.), we end up with a scenario Z in Figure 1, a population with very low positive welfare. Thus, the final conclusion is that Z is better than A and, by apparently sound steps of reasoning, we have arrived at the Repugnant Conclusion. This is the infamous "Mere Addition Paradox."

It might be tempting to think that the problems raised by the Repugnant Conclusion are only problems for utilitarians. However, most people tend to believe that we have *some* obligation to make the world a better place, at least if we can do so without violating any deontological constraints and at a not-too-high cost to ourselves. All who think along these lines, even without being utilitarians, are faced with the conclusion and the paradox since one can assume that other values and considerations are not decisive in the choice among the populations in Figures 1 and 2 (e.g., promises, rights).

The main challenge in Parfit (1984: Part 4) is to develop a theory of beneficence – theory X – which solves the nonidentity problem (see NONIDENTITY PROBLEM), avoids the Repugnant Conclusion, and thus the Mere Addition Paradox, without implying other unacceptable conclusions. Parfit did not succeed in

developing such a theory. Several philosophers have taken up the challenge, and the suggestions regarding how to deal with the Repugnant Conclusion are very diverse: introducing new ways of aggregating welfare into a measure of value (e.g., assigning decreasing marginal value to more people with positive welfare); questioning the way we can compare and measure welfare (e.g., some high-quality lives might have higher welfare than the combined welfare of any number of lives with very low positive welfare); counting welfare differently depending on temporal or modal features (e.g., discounting the value of future people's welfare); revising the notion of a life worth living (e.g., rejecting the assumption that there are lives with positive welfare); giving up transitivity of "better than"; and appealing to other values such as, for example, equality and desert (see Ryberg and Tännsjö 2004; Broome 2004; Blackorby et al. 2005; Arrhenius 2012). Although these theories often succeed in avoiding the Repugnant Conclusion, they have other counterintuitive conclusions. For example, Average Utilitarianism, which ranks populations according to the average welfare per life in the population, clearly avoids the conclusion and blocks the Mere Addition Paradox at its first step. However, it also implies that, for a population consisting of just one person with very negative welfare (e.g., a life of constant torture), there is another population which is better even though it contains millions of lives at just a slightly less negative welfare (Parfit 1984: 422).

Even though Parfit did not succeed in finding theory X, he kept his hope that such a theory could be found (1984: 451). Other theorists consider the prospects gloomier. In fact, it has been proven that there is no population ethics that satisfies a set of apparently very plausible and weak adequacy conditions for such a theory (Arrhenius 2012; *see* ARROW'S THEOREM). Such a theorem seems to leave us with only three options: (1) to bite the bullet and abandon one of the conditions on which the theorem is based; (2) to become moral skeptics at least in this area of ethics; or (3) to try to explain away the significance of the impossibility theorems – alternatives which do not invite an easy choice.

**See also:** ARROW'S THEOREM; INCOMMENSURABILITY (AND INCOMPARABILITY); INTERGENERATIONAL ETHICS; NONIDENTITY PROBLEM; POPULATION; POTENTIAL PERSONS; UTILITARIANISM; WELL-BEING

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