



“Summary of article by John Broome: Coherence Against the Pareto Principle and Equality” in Frontier Issues in Economic Thought, Volume 3: Human Well-Being and Economic Goals. Island Press: Washington DC, 1997. pp. 266-269

Social Science Library: Frontier Thinking in Sustainable Development and Human Well-being

“Summary of article by John Broome: Coherence Against the Pareto Principle and Equality”

The economics profession initially relied on an early version of utilitarianism as the basis for theories of choice and welfare. As problems emerged with the resulting philosophical and behavioral assumptions, neoclassical economics attempted to retreat to a positivist formalism, supposedly grounding its theories on nothing more than stylized observation of individual choices. Yet, as many critics have observed, the economists' retreat into positivism did not entirely succeed in eliminating controversial and contradictory traces of the earlier philosophical perspective.

This selection is part of a rigorous reconstruction of a modern form of utilitarianism, and examination of its implications for such economic questions as equity, distribution, and social choice. In earlier chapters the author identifies utilitarianism as a leading example of the broader category of teleological, or consequentialist, ethical theories. Teleological theories are those in which the goodness of an act and its consequences determine what should be done (i.e., other ethical principles such as rights, fairness, and obligation can be subsumed into the notion of goodness). Utilitarianism assumes that the goodness of an act depends solely on the total good it provides to people, independent of distribution.

In any teleological ethical system there is an ordering of alternatives, consisting of statements like "A is as good as or better than B"; this ordering can be said to define the "structure of good." If the ethical system is consistent, then the ordering satisfies the assumptions of expected utility theory [see the Harsanyi article summarized in Section 3], and it is possible to define a cardinal (quantitative) mathematical representation of the degree of goodness; the author refers to such a representation as a "utility function." Note that this definition of utility involves individual or collective good, not preferences; the distinction is a crucial one. If people were perfectly rational, well-informed, and self-interested, then their preferences would coincide with what is good for them; the fact that these assumptions are not satisfied, however, affects both preferences and concepts of the good.

The chapters summarized here explain how these ideas lead to a critique of the principle of Pareto optimality, and to a utilitarian basis for egalitarianism.

A PROBLEM WITH PARETO'S PRINCIPLE

The Pareto principle is familiar to students of economics everywhere: Two alternatives are equally good if everyone is indifferent between them; if someone prefers the first of two choices, and no one prefers the second, then the first is better than the second. It has been pointed out that if individuals disagree about the probability of events, and each person has coherent (logically consistent) preferences, then it is easy to construct examples in which the general "betterness" relationship cannot both be coherent and conform to the Pareto principle. This is a serious contradiction, since both the Pareto principle and logical coherence are widely accepted as desirable features of social choice.

The contradiction arises from the sloppy formulation of the Pareto principle, which mixes statements about preferences and about good. It is easily confused with two related but less problematical principles, one dealing with good and the other with preferences. The principle of personal good states that two alternatives are equally good if they are equally good for everyone, and that if one alternative is at least as good as another for everyone and better for someone, then it is better. The democratic principle states that if no one prefers the second of two choices and someone prefers the first, then the first should come about.

There is no contradiction in maintaining both of these principles while recognizing their possibly divergent outcomes, since people do not always prefer what is best for themselves, and democracy involves doing what people want, not what is good for them. The structure of general, or societal, goodness is coherent, but as Arrow demonstrated, the choices made by a democratic social system need not be.

WELFARE ECONOMICS

The Pareto principle is untrue when expressed, as above, as a statement about the general good. It is more often stated as a condition on social preferences -- if someone prefers the first alternative, and no one prefers the second, then the first is socially preferred. John Harsanyi, for example, argues that if individual preferences are coherent, and social preferences are coherent and Paretian, then social preferences can be represented by a utility function that is the sum of individual utility functions. But the concept of social preference used by Harsanyi and others is an ambiguous one: either it means betterness (in which case it suffers from the problems suggested earlier), or it is a statement about what should come about. The latter interpretation reduces it to the "democratic principle."

Attempts to base welfare economics on social preferences require abandonment of either coherence of social choice or the Pareto property; both alternatives have been tried, but neither is entirely satisfactory. The problems can be avoided by reformulating welfare economics on the basis of good rather than preferences. The analogue of Harsanyi's theorem, expressed in terms of goodness -- assuming coherence and the principle of personal good, the general good can be represented as the sum of individual goods -- is more defensible than his original form.

A UTILITARIAN CASE FOR EQUALITY

The principle of personal good, a Pareto-like principle expressed entirely in terms of individual and general goodness, appears to say nothing about distribution. Utilitarianism in general seems

concerned with the total amount of good, not with the equity of its distribution. How, then, does a utilitarian ethical theory argue for equality?

A traditional answer rests on additional assumptions about the structure of the good. Assume that each person has the same individual benefit function, in which her individual good is an increasing but strictly concave function of her own income. That is, the additional benefit of an increase in income is always positive, but diminishes as income rises. Then, as utilitarian economists such as Alfred Marshall and Arthur Pigou pointed out, redistribution from rich to poor would increase the total amount of good. However, this is true only if each person has the same benefit function. If benefit functions differ, the total good might be maximized by a very unequal distribution of income which equalized the marginal utility of income for all. Francis Edgeworth, an early neoclassical economist, made crudely aristocratic and sexist assumptions about differences in benefit functions, so that his argument for equalization of marginal benefits implied preservation of historic inequalities.

Two more sophisticated utilitarian arguments for equality have been offered. One approach, communal egalitarianism, suggests that equality is a communal good: at any fixed level of total individual good, the more equally it is distributed, the greater the general good. This can be true even if the general good depends solely on individual goods. For instance, if the general good is a sum of increasing, concave functions of the individual goods, then more equality in the distribution of good means more general good.

A second approach, individualistic egalitarianism, challenges the assumption that a person's good depends on her own income alone. In this view, inequality itself is bad for those at the bottom, if no one else, independent of the absolute level of income. Since income inequality is bad for those below the average, an increase in equality increases the general good. The same arguments apply, with only a little more complexity, to inequality of individual good rather than of income. Most generally, "a person's good consists partly in how fairly she is treated; unfairness is bad for a person, whatever she may feel about it." (182) Individualistic egalitarianism avoids certain problems involving the treatment of risk and uncertainty that arise under some versions of communal egalitarianism; thus the individualistic theory appears to be the stronger of the two.

EQUALITY AND FAIRNESS

Why is equality good in the first place? Utilitarianism seems to imply that any scarce commodity should be allocated in a manner that maximizes the resulting benefits; but this alone would overlook the question of fairness. The reasons why a person would benefit from obtaining the commodity can be divided into claims, or duties owed to the individual herself, and all other reasons. There is ample room for debate about the nature and extent of claims: do they arise solely from historical agreements and contracts, from an analysis of basic needs or prevailing standards of living, from capabilities, as discussed by Amartya Sen, or from other considerations? It seems unlikely that all sources of individual good are equally worthy claims on society.

The definition of claims answers the question, "Equality of what?" Whatever answer is chosen, fairness requires that claims be satisfied in proportion to their strength. When resources are

scarce and many people have vital claims (e.g. there is usually a scarcity of replacement organs for sick people who need transplants), a lottery among all qualified applicants may be the fairest means of distribution.

If people have equal claims to the satisfaction of needs, then unfairness is plainly an individual harm, corresponding to the discussion of inequality in the individualistic egalitarian theory above. While fairness affects an individual's good, it cannot be determined by examining the individual's own resources alone. Consequently, theories that base utility solely on an individual's own resources or consumption, as is common in economics, cannot incorporate the notion of fairness, which is one crucial aspect of egalitarianism.