SPEAKING FOR CHILDREN AND FOR THE FUTURE

KENNETH J. ARROW

This essay is not a technical study in economics, though its initial motivation arose from technical issues, and I hope that it will lead back to improved measurements and policies. It is rather an attempt to think through a set of relations of the greatest importance for society in general and of major importance even in narrowly economic issues. I do not consider that I have resolved the issues, but I hope at least that the questions raised will be seen to be socially and morally significant.

The question at stake can be seen in a simple form in the measurement of income inequality. Naively, it might be said that the economy consists of a number of individuals, each of whom has an income, and so the distribution of income is simply defined. But if one looks at distribution statistics, one finds given instead the distribution of *family* incomes. There are a number of questions here, but one certainly is that children have no incomes, and yet entering them at zero incomes would clearly be a very misleading indication of welfare. The consumption and general well-being of a child is determined jointly by the economic capacity of the family and by the sense of responsibility of the family to the child.

The starting point is the normal approach of economics, more specifically of what is called, 'welfare economics'. Although there are many variants within this general framework and there are many critical analyses in specific contexts, the general philosophy may be expressed in relatively brief compass. The society consists of a number of individuals, each of whom has a set of values. The achievement of these values is limited by objective circumstances which, in part at least, govern the society as a whole. The aim is to achieve the individual values as well as possible within the objective constraints; the respect for the dignity and identity of the individual requires taking account of his or her values.

Of course, the kinds of values with which economic analysis works best are those that attach to commodities, that is items which can be transferred among individuals. There is then a natural affiliation with the analysis of markets. It is not required that all valued commodities be marketed or even marketable, but clearly the norm of the market is the background for evaluation.

The question I want to raise is that treating all individuals in the same way, as implied in the usual discussions of welfare economics, overlooks the differences among individuals. There are several dimensions of difference, but the one I want to stress here is that some individuals are not as capable as others of articulating their values or needs. The most obvious case is that of children, limited in reflective and communicative capacities. But there are others. Among them are the future individuals who are linked to us by objective relations, whose potential realization of values we can affect, but who are simply not here to express the values whose realization we can help or hinder.

The implication I will draw is the more explicit recognition of a role of trusteeship or *stewardship*, a social obligation which must be taken account of in the expression of values: stewardship of parents for children and of present generations for future ones.

I organize the discussion into three sections. In Section 1, I review the importance of the representation of individual preferences or values in consequentialist welfare economics. In Sections 2 and 3, I use these arguments to develop the importance of stewardship for protecting the interests of children and of the future of humanity.

1. The Representation of Individual Preferences in Consequentialist Welfare Judgments

I take as a starting point that the aim of social policy is to improve the *well-being* of the *members* of the *society*. Each of the italicized words stands for a problematic concept. To go into all aspects would be beyond my capacity and certainly beyond the limits appropriate to this paper. At a very minimum, then, we must define how wide the society is, who constitute its membership, and how we determine the well-being of members.

I take for granted that the individual members of the society, however, are indeed marked by individuality. Each has individual dignity and at least some degree of autonomy. The well-being of an individual depends, at least in part, on what may be termed, *goods*, that is, objects which can be affected by social or individual actions. These may include the consumption of commodities such as food or clothing, the provision or preservation of environments, both

man-made and natural, the maintenance of public order, the conduct of wars, the provision of medical care and public health, or the development and transmission of knowledge at every level. The irreducible diversity and individuality of human beings can be expressed by saying that the well-being of each depends on social goods in different ways. Let us call this relation between an individual's well-being and goods the individual's *value system*.

The standard assumption in economics is that value systems take the form of utility functions or preference orderings. These impose a considerable degree of consistency on values. For the present purposes, these restrictions are unnecessary.

The general framework of a social decision system (a system for policy determination) has as its elements the value systems of the individual members of the society, the objective circumstances which limit the ranges of goods available (resources, knowledge, institutions), and the actions that individuals and social organizations can take. The concept of a social decision system is very broad. Democratic political systems, dictatorships, theocracies, and the market are all examples of social decision systems; so is the mixture of these concepts which actually prevails.

The point is that to influence the outcome the value systems of all individuals have somehow to be represented. The bias of economic analysis is to assume that the individual represents his or her own values through actions. In the market, these actions may be purchases and sales. In a political system, the actions may be voting and other forms of political activity. The intermediate institutions of civil society represent still other opportunities for actions, including philanthropy, campaigns to influence public opinion and governmental action, volunteer activity for public goods, and non-profit activities. The outcome of all these individual and collective actions is some distribution of the goods in the society, a distribution which in turn determines the achievements of the values of individuals.

I raised three questions and have discussed one of them, the formal role of well-being. Does the society have boundaries and who are the individuals who act in the society and whose values are to be respected? One aspect of this question that I will not discuss today is the relation between the nation and the world. The nation is a major unit for social decision making, as the world is constituted today. One could ask the responsibility of nations to each other. More relevant for my purposes are the roles of those whose action potential is limited, such as children and of those who have no action potential at all, because they are not yet born. I turn to some discussion of these cases.

2. CHILDREN AS A SPECIAL CASE

2.1. Value Representation

At any moment there are individuals who cannot fully represent their value systems through actions, perhaps cannot even fully represent them in thought. The obvious example is that of children, though other forms of incapacity also come to mind. They have not the full intellectual or physical capacity of adults, they have not the other resources, and above all they have not the self-knowledge of their desires and moral capacities which would enable them to represent properly their value systems.

This observation creates a dilemma. Any reasonable system of ethical thought must acknowledge the humanity of children and their right that their values, what is good for them, be considered in determining the distribution of goods. We come to the need that the values of children have to be represented somewhere in the social system. That typically means that they have to be represented by someone. It will be immediately answered in your minds by the statement, 'parents represent children'. In a general way, of course, that is correct, but it raises a host of other issues, only some of which I develop below.

The crucial point is the need for what may be called *stewardship*. The well-being of one individual is represented by one or perhaps several other individuals. The debates on the foundations of ethics have been couched in terms of 'rights' versus 'utilities' or 'consequences', but neither of these fits the role of the steward. It is rather a question of an obligation to discharge.

2.2. Parents as Stewards: Altruism and Conflict

I find it somewhat surprising that religious and moral thought have given relatively little consideration to the right of the child to adequate stewardship. There are many texts on obligations to one's parents, the Fifth Commandment and many others, but none (to my limited knowledge) enjoining obligations to raise children in the children's own interests and with regard to the children's well-beings. One possibility is, of course, very optimistic; it was felt that there was no problem since the concern of parents for their children could be taken for granted.

Clearly, the world is so constructed that this assumption is largely true. At least as far simple nutrition is concerned, parental or at least maternal care is normal among many animals, especially but not only mammals. Human childhood is extraordinarily long by animal standards, and the demands on the parents correspondingly great. Further, as human culture has accumulated over time, the parents have been thrust into the role of participating in the transmission of that culture. This process includes the development of language and the transmission of knowledge, not only of technology but also of acceptable social behavior and the concepts of morality. To be sure, the family is aided (sometimes hindered) by other social institutions. Children form peer groups. Formal institutions, the school and the church or other religious institution, have played increasingly important roles over time. But the parents have typically played a central though not exclusive role in meeting the cultural and moral as well as the physiological needs of the child.

Stewardship is an obligation, and, like any serious obligation, it can be and should be a taxing one. The steward is not the child. There are at least two areas in which conflict can occur: interest and knowledge. The parents have their own interests, their own well-beings to consider. Child labor is an obvious example. There may have been little conflict of interest in a simple world where productive capacity was measured by the operation of the family farm. Putting the child to work at farming adds both to the family income and to the child's knowledge, though overwork may threaten the child's long-term health. But in a world where education is a serious addition to the child's long-term potential both for income and for better understanding of human culture, the conflict can be real. Social policy has already recognized this potential for conflict in the form of compulsory education laws.

I must mention here, without development, that the conflicts between parental and child interests are not only economic. The family, like any social group, has the potential for emotional conflicts, and those between parents can have the most drastic implications for the children. The modern freedom of divorce and of unmarried parentage have increased the scope of expression for parents without necessarily recognizing the implications for the welfare of children. The stewardship obligation is not in fact treated as absolute.

I do not have any simple answers to these difficulties. The need for social regulation is obvious enough and in principle fully recognized. The large changes in behavior with relatively small changes in law show that the processes of moral suasion and attitudes are at least as important as official government policy in determining the conditions under which the stewardship of children is undertaken.

3. THE STEWARDSHIP OF THE FUTURE

Children are one group of individuals for which some kind of stewardship, some kind of representation of values by others, is a necessity. There is another group whose ability to influence the present is even less than that of children: the unborn. Clearly, what we do today can have strong influence on what will happen in the future, perhaps even the very distant future. It will affect those not yet in existence, perhaps many generations hence. By what criteria do we judge the consequences for them? Is there an obligation to weigh future generations at all and, if so, to what extent?

The crucial though obvious point is that the future generations cannot themselves represent their value systems. If they are taken account of at all, it must be because the present generation acts in part at stewards of the future. But it is more complicated than that. The present generation cannot control the future. It can make certain decisions which limit or enhance what the next generation can do, but it does not completely control what that generation can do. It must predict what they will do, and one aspect of that prediction will be the extent to which the next generation is itself going to act as a steward for generations beyond itself. When this analysis is continued, it is clear that the actions of the present generation taken in light of its stewardship depend on the stewardly behavior of all future generations.

Just to focus the mind, let us consider a few of the decisions by which the present influences the future. All have the characteristic that they represent comparing some consumption today with an alternative which yields benefits or the potential for benefits in the future. The most straightforward is ordinary investment; from the social point of view, this would be using resources to accumulate buildings and machinery which yield product in the future instead of using the same resources for the well-being of the currrent generation. The investment might be private or public. Another form of investment is education, the use of resources (skilled teachers who could be doing other things, buildings, and expenses) to transmit knowledge to the young and thereby keep it alive for still further generations. A third is the development of new knowledge through research and development. The knowledge will continue to yield its benefits as long as the human race continues to survive and to transmit it.

We have become aware of still another choice between present and future, the exploitation of natural and environmental resources. Minerals, including fossil fuels, used today can never be used by future human beings. Some industrial emissions into the atmosphere, such as carbon dioxide and methane, remain for long periods of time and, it is generally agreed, lead to an increase in world-wide temperatures. Certain waste products are both very durable and very toxic. The extreme case is that of nuclear waste, whether from power plants or from nuclear arms, with major risks for up to 10,000 years.

I do not propose to go into any of these examples in detail for the purpose of this discussion. The relevant literature in economics, quite unlike that on the role of children, is very large, with regard to both foundations and applications to specific cases. However, consensus has not been attained.

At the foundational level, most economists rely for discussions of responsibility towards the future on the approach of *discounted utilitarian-ism*. There is a general view that the unborn future generations have their claims, which must be respected by the present generation. But it is usually held that the claim of a future individual is not as strong as that of one exist-ing today. When put this way, this assertion makes everyone uncomfortable (e.g., Robert Solow), and it has been rejected by some leading economic thinkers (Frank P. Ramsey, Arthur C. Pigou). To take the example of nuclear power, suppose that we are pretty sure that nuclear waste can never be fully safeguarded, so that some people hundreds or thousands of years from now will die of radiation poisoning as a result of our getting cheaper power. If we discount future well-being at any rate measurably above zero, lives a thousand years hence will have essentially no weight in our decisions.

There is however a contrary argument first enunciated by the Dutch-American economist, Tjalling C. Koopmans. The future is very long in comparison with the present. Hence, if we don't discount, we would justify great deprivations for the present generation for a very small but permanent benefit. Indeed, implicitly, the sacrifices imposed by the Soviet Union on its people during the Thirties and, to a lesser extent, from 1945 to about 1960 were based on some such reasoning. I can remember hearing the first chairman of the Indian Planning Commission giving the same argument very explicitly in the early 1950s as a basis for his recommendations. If one rejects this extreme future-mindedness, then one seems forced to some version of discounting.

A new way of thinking about our responsibilities to the future is the concept of sustainability, given wide diffusion by the Brundtland Commission; each generation should leave the world and its resources with at least the same potential for production as it entered it. The meaning of this condition is certainly far from unambiguous, and its logic muddy, but it does provide a way of giving a meaning to the stewardship requirement on each generation. It may remarked, though, that it leads to acceptable results only because there is an underlying belief in continued technological progress.

4. FINAL REMARKS

Writing this paper has really been for me an exercise in working through some dilemmas in my own thinking about the future. It is disappointingly inconclusive and probably not suited to the more applied and policy-oriented character of this session. But perhaps it may stimulate some reflections on the meaning of intergenerational solidarity. I see the major issues of our time as solidarity with the future, including our living dependents.