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Source: *Journal of Political Economy*, Vol. 62, No. 2 (Apr., 1954), pp. 114-123
Published by: The University of Chicago Press
Stable URL: http://www.jstor.org/stable/1825570
Accessed: 18-07-2015 09:36 UTC

SOCIAL CHOICE, DEMOCRACY, AND FREE MARKETS[1]

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PROFESSOR Kenneth Arrow's provocative essay, *Social Choice and Individual Values*,[2] has stimulated a great deal of comment and discussion during the two years since its publication. Reviewers and discussants have been primarily concerned with those formal aspects of Arrow's analysis which relate to modern welfare economics. This concentration, which is explained by both the stated purpose of the work and the tools with which it is developed, has resulted in the neglect of the broader philosophical implications of the essay.[3] In this paper I propose to examine the arguments of Arrow and his critics within a more inclusive frame of reference. This approach reveals a weakness in the formal analysis itself and demonstrates that some of the more significant implications drawn from the analysis are inappropriate.

I shall first review briefly Arrow's argument, in order to isolate the source of much of the confusion which has been generated by it. Following this, I shall raise some questions concerning the philosophical basis of the concept of social rationality. In the next section I shall attempt to show that the negative results of Arrow's analysis as applied to voting represent established and desirable features of the decision-making process embodied in constitutional democracy. From this it follows that if the conditions required by Arrow were satisfied, certain modifications in the underlying institutional structure would become imperative. Finally, I shall develop the argument that the voting process is fundamentally different from the market when the two are considered as decision-making processes rather than as bases for deriving social welfare functions. Here it will be demonstrated that the market does produce consistent choices and that the market does not belong in the category of collective choice at all.

I. ARROW'S CONDITIONS FOR THE SOCIAL WELFARE FUNCTION

Arrow first defines his problem as that of constructing an ordering relation for society as a whole which will also reflect rational choice-making. This construction requires the establishment of a weak ordering relation among alternative social states. He then defines the social welfare function as a "*process* or rule which, for each set of individual orderings . . . *states* a corresponding social ordering" (italics mine).[4] The language is extremely important here, and the use of the word "process" seems singularly unfortunate. This usage has apparently been the source of the confusion, which is present in both the original essay and most of the criticism, between the defini-

[1] I am indebted to Marshall Colberg and Jerome Milliman, of Florida State University, and to Proctor Thomson, of the University of Chicago, for helpful comments and suggestions.

[2] New York: John Wiley & Sons, 1951.

[3] Little's stimulating review article and, to a somewhat lesser extent, Rothenberg's subsequent critique provide partial exceptions to this general statement (see I. M. D. Little, "Social Choice and Individual Values," *Journal of Political Economy*, LX [1952], 422–32; and Jerome Rothenberg, "Conditions for a Social Welfare Function," *Journal of Political Economy*, LXI [1953], 389–405).

[4] Arrow, *op. cit.*, p. 23.

tion of the social welfare function and the actual *processes* of choice: voting and the market. As will be shown in this paper, the decision-making *process* may produce consistent choice, even though the *rule* which *states* the social ordering from the individual values may not exist.

Having defined the social welfare function, Arrow proceeds to set up the conditions which are necessary to insure that it will be based on individual values. These conditions have received the bulk of attention in the discussion of Arrow's work and are so generally familiar that they may be merely listed here. They include the requirements that (1) the function shall not be imposed; (2) it shall not be dictated by any one individual; (3) if one individual prefers one social alternative to another and everyone else is indifferent between the two, the preferred alternative shall not stand lower in the social ordering; and (4) irrelevant social alternatives shall not affect the ranking of relevant alternatives.[5]

Having set up these necessary conditions, Arrow develops his General Possibility Theorem (p. 59) which states that, if there are at least three alternatives, every social welfare function satisfying the rationality conditions along with requirements 3 and 4 above must violate the condition either of nonimposition or of nondictatorship. The theorem is proved to be applicable to the method of majority decision *as a welfare function* and to the market *as a welfare function*. It is inapplicable only when there exists unanimous agreement among all individuals concerning alternative social states, when the required majority of individuals possess identical orderings of social alternatives, or when individual orderings are characterized as "single-peaked." Since each of these possibilities appears somewhat remote, the weight of Arrow's argument is to the effect that the individual values which are implicit in the normal decision-making mechanisms of society do not provide methods of deriving social welfare functions that are neither imposed nor dictatorial. So far, so good. But Arrow extends the argument to say that these ordinary decision-making mechanisms do not allow rational social choice.[6] Now this is a horse of quite a different color, with which the Arrow argument should not legitimately concern itself at all. Arrow is not at all clear as to which of these two animals he is chasing. The title of his essay implies that he is concerned with decision-making processes, and he begins his work by reference to the democratic means of decision-making—voting and the market. He states his General Possibility Theorem in terms of "moving from individual tastes to social *preferences*" (italics mine).[7] Yet he slips almost imperceptibly into the terminology of social-ordering relations or social welfare functions when he sets up his required conditions. He fails to see that his *conditions, properly interpreted, apply only to the derivation of the function and do not apply directly to the choice processes*.[8] As will be shown in Section III, this distinction is not im-

[5] For the most concise listing of these conditions see William Baumol's review in *Econometrica*, XX (1952), 110.

[6] *Op. cit.*, p. 59.

[7] *Ibid.*

[8] Little objects to Arrow's failure to draw a distinction between the social welfare function and the decision-making process on quite different grounds from those advanced here. His objections are primarily centered on Arrow's labeling the ordering as a "social welfare function" rather than merely as the resultant of the decision-making process (Little, *op. cit.*, pp. 427–30). He thus fails, along with Arrow, to make the necessary distinction between an ordering of social states possessing certain properties and a decision-making process which is consistent, that is, rational.

Rothenberg, on the other hand, explicitly defines the results of the choice process as the social portant in application to voting, and this appears to be the root of some of the difficulty. As will be shown in Section IV, when the market is considered, this distinction is fundamental. It will be proved that the existence of an Arrow social welfare function is not a necessary condition for consistent decision-making.

Unfortunately, but understandably, the Arrow argument has been widely interpreted in the erroneous sense of proving that the decision-making processes are irrational or inconsistent.[9] To the critics and reviewers of his analysis, almost without exception, Arrow appears to have subjected voting and the market to the test for rationality and to have found both these processes wanting.

II. THE CONCEPT OF SOCIAL RATIONALITY

It is difficult to know exactly what is meant by "rational social choice" in the Arrow analysis. Social rationality appears to imply that the choice-making processes produce results which are indicated to be "rational" by the ordering relation, that is, the social welfare function. But why should this sort of social rationality be expected? Certainly not because it is required for the derivation of the function in the first place. The mere introduction of the idea of social rationality suggests the fundamental philosophical issues involved. Rationality or irrationality as an attribute of the social group implies the imputation to that group of an organic existence apart from that of its individual components. If the social group is so considered, questions may be raised relative to the wisdom or unwisdom of this organic being. But does not the very attempt to examine such rationality in terms of individual values introduce logical inconsistency at the outset? Can the rationality of the social organism be evaluated in accordance with any value ordering other than its own?

The whole problem seems best considered as one of the "either-or" variety. We may adopt the philosophical bases of individualism in which the individual is the only entity possessing ends or values. In this case no question of social or collective rationality may be raised. A social value scale as such simply does not exist. Alternatively, we may adopt some variant of the organic philosophical assumptions in which the collectivity is an independent entity possessing its own value ordering. It is legitimate to test the rationality or irrationality of this entity only against this value ordering.[10]

The usefulness of either of these opposing philosophical foundations may depend upon the type of problems to be faced.[11] But the two should always be sharply distinguished, and it should be made clear that any social value scale

welfare function (*op. cit.*, p. 400). He fails, however, to trace through the effects of this definition on the Arrow analysis.

[9] See, e.g., J. C. Weldon, "On the Problem of Social Welfare Functions," *Canadian Journal of Economics and Political Science*, XVIII (1952), 452–64.

[10] By his statement that "every value judgment must be someone's judgment of values" (*op. cit.*, p. 427), Little appears fully to accept what I have called the "individualistic assumptions" and, in doing so, to deny the possible existence of an organic social unit. In his critique Rothenberg seems to adhere to the organic conception, when he states that "social valuation as opposed to solely individual valuation is an existential reality" (*op. cit.*, p. 397).

[11] The point involved here is closely related to a central problem in the pure theory of government finance. The whole body of doctrine in this field has suffered from the failure of theorists to separate the two approaches (see my "The Pure Theory of Government Finance: A Suggested Approach," *Journal of Political Economy*, LVII [1949], 496–505).

may be discussed only within an organic framework. Once this approach is taken, the question as to whether or not the social value scale may be based on individual values may properly be raised,[12] and the individual orderings of all possible social states may be the appropriate starting point in the construction of a social ordering that is to be based on individual values. But the appropriateness of such individual orderings for this purpose does not depend on the fact that these are sufficient to allow the ordinary decision-making processes to function.

Voting and the market, as decision-making mechanisms, have evolved from, and are based upon an acceptance of, the philosophy of individualism which presumes no social entity. These processes are related only indirectly to the individual values entering into any welfare function. This was true even in the pre-Robbins state of welfare economics. The measurability and comparability of utility did provide a means by which individual psychological attributes could be amalgamated into a conceptual social magnitude. The social welfare function of the utilitarians was based, in this way, on components imputable to individuals. But the welfare edifice so constructed was not necessarily coincident with that resulting from the ordinary choice-making processes. It was made to appear so because the utilitarians were also individualists[13] and, in one sense, philosophically inconsistent.

Arrow's work, correctly interpreted, consists in rigorously proving that the individual orderings of alternatives which are sufficient to allow the decision-making processes to function produce no such measuring stick as was provided by the measurability of utility. The overthrow of such measurability destroyed the conceptual social welfare function; there are no longer any units of account.[14] Arrow's analysis appears to consist, however, in proving that the decision-making processes themselves define no social welfare function, that is, do not produce rational social choice. And here the implication is strong that this is true only when an ordinal concept of utility is substituted for a cardinal concept. Actually, the decision-making processes do not produce rational social choice, even in the utilitarian framework, until and unless certain restrictive assumptions are made.

If social rationality is defined as producing results indicated as rational by the welfare function, that is, maximizing total utility in the utilitarian framework, a market decision is socially rational only if individuals are rational and individual utilities are independent. A voting decision is socially rational only if individual voting power is somehow made proportional to individual utility. Cardinal utility allowed the economist to construct a social welfare function from the individual utilities; it did nothing to insure that market or voting choices were socially

[12] Whether or not the degree of dependence on individual values is or is not a good criterion of appropriateness for a social ordering depends, in turn, on one's own value scale. We may or may not agree with Rothenberg when he says that consensus is required for a good social welfare function (*op. cit.*, p. 398).

[13] Cf. Lionel Robbins, *The Theory of Economic Policy in English Classical Political Economy* (London: Macmillan & Co., Ltd., 1952), p. 182.

[14] Several of the attempts to modify Arrow's conditions in such a way as to define an acceptable social welfare function involve, in one form or another, a revival of the interpersonal comparability of utility (see Murray Kemp and A. Asimakopulos, "A Note on Social Welfare Functions and Cardinal Utility," *Canadian Journal of Economics and Political Science*, XVIII [1952], 195–200; Leo Goodman and Harry Markowitz, "Social Welfare Functions Based on Individual Rankings," *American Journal of Sociology*, LVIII [1952], 257–62; Clifford Hildreth, "Alternative Conditions for Social Orderings," *Econometrica*, XXI [1953], 81–95).

rational. Here the distinction between a rational choice process and an acceptable social welfare function becomes evident.

The proper approach to social welfare functions appears to begin with the frank admission that such functions are social, not individual, and therefore are of a fundamentally different philosophical dimension from individual values or from individualistically oriented decision-making processes. It seems meaningless to attempt to test such choice processes for social rationality. But if the idea of acceptable social welfare functions and of social or collective rationality is completely divorced from the decision-making processes of the group, what is there left of the Arrow analysis? It is still possible to test these processes for consistency;[15] but consistency or rationality in this sense must not be defined in terms of results obtainable from a social ordering. Consistency must be defined in terms of satisfying "the condition of rationality, as we ordinarily understand it."[16] This implies only that choices can be made (are connected) and that the choices are transitive. The implications of the Arrow argument appear to be that such consistency of choice, could it be achieved, would be a highly desirable feature of decision-making. I shall attempt in the following section to show that possible inconsistency of collective choice as applied to voting is a necessary and highly useful characteristic of political democracy.

III. MAJORITY DECISION AND COLLECTIVE CHOICE

The reaching of decisions by majority vote provides the simplest example of voting. In the historical and philosophical context, majority decision evolved as a means through which a social group makes collective choices among alternatives when consensus among the individuals comprising the group cannot be attained. Correctly speaking, majority decision must be viewed primarily as a device for breaking a stalemate and for allowing some collective action to be taken. A decision reached through the approval of a majority with minority dissent has never been, and should never be, correctly interpreted as anything other than a provisional or experimental choice of the whole social group. As a tentative choice, the majority-determined policy is held to be preferred to inaction,[17] but it is not to be considered as irrevocable. The fact that such decisions may be formally inconsistent provides one of the most important safeguards against abuse through this form of the voting process.[18] If consistency were a required property of decision, majority rule would not prove acceptable, even as a means of reaching provisional choices at the margins of the social decision surface.

One of the most important limitations placed upon the exercise of majority rule

[15] Cf. Little, *op. cit.*, p. 432.

[16] Arrow, *op. cit.*, p. 3.

[17] For a discussion of the basis for majority decision see Robert A. Dahl and Charles E. Lindblom, *Politics, Economics, and Welfare* (New York: Harper & Bros., 1953), pp. 43 f.

[18] Throughout this section the term "inconsistency" will be used in the formal sense without specific reference to the question of time dimension. This is admissible if it is assumed that all individuals have sufficient knowledge of alternatives to enable each to rank all alternatives and if it is assumed further that neither these individual orderings nor the available alternatives change over time. These assumptions, which are central to the Arrow analysis, allow the time dimension of the voting paradox to be neglected. When knowledge of alternatives is not perfect, however, and when the individual orderings do change over time (cf. below) or the alternatives presented vary, the concept of inconsistency itself becomes extremely vague. The argument of this section is applicable, however, whether or not the conditions required for the formal analysis are satisfied.

lies in the temporary or accidental nature of the majorities. One social alternative may be chosen during a legislative session, but a new and temporary majority may reverse the decision during the same or the next session. A majority may reject C in favor of B, and then select A over B, but still select C over A when put to yet another test. The obvious result of this so-called "paradox" of voting is that the social group cannot make a firm and definite choice among the alternatives offered.[19] Thus the voting process does not necessarily produce consistency of choice, and, within the Arrow framework, the individual rankings required for voting cannot be translated by the economist into a satisfactory social welfare function. The implication is that both these results are undesirable; the transitivity property is not present.

But, certainly, majority rule is acceptable in a free society precisely because it allows a sort of jockeying back and forth among alternatives, upon none of which relative unanimity can be obtained. Majority rule encourages such shifting, and it provides the opportunity for any social decision to be altered or reversed at any time by a new and temporary majority grouping. In this way, majority decision-making itself becomes a means through which the whole group ultimately attains consensus, that is, makes a genuine social choice. It serves to insure that competing alternatives may be experimentally and provisionally adopted, tested, and replaced by new compromise alternatives approved by a majority group of ever changing composition. This is democratic choice process, whatever may be the consequences for welfare economics and social welfare functions.

The paradox is removed, and majority rule produces consistent choices, in the formal sense, if the individual components of a majority possess identical orderings of all social alternatives. If, for example, Joe and Jack both prefer A to B to C, and Tom prefers C to B to A, Joe and Jack can always outvote Tom and adopt A. The selection of A would represent definite and irreversible choice as long as the individual orderings remain unchanged. This is one of the situations in which Arrow's General Possibility Theorem would not hold; a social welfare function may be derived, and the implication appears to be that such a situation would prove a more desirable one than that in which inconsistency is present. In one of the most revealing statements in his essay Arrow says: "Suppose it is assumed in advance that a majority of individuals will have the same ordering of social alternatives. . . . Then the method of majority decision will pick out the agreed-on ordering and make it the social ordering. Again all the . . . conditions will be satisfied. These results reinforce the suggestion . . . that like attitudes toward social alternatives are needed for the formation of social judgments."[20] The above statement also shows that Arrow is primarily interested in individual values as the units of account to be used in deriving social welfare functions. It is the collective rationality with which he is concerned; his approach includes no consideration of individual values as ends as well as means.

If one examines the choices made in

[19] Dahl and Lindblom accept fully this interpretation of the paradox when discussing it in specific reference to Arrow's work. They also dismiss the logical difficulty involved in the paradox as "minor" and "not an empirical observation of a common difficulty." In this latter respect, they apparently fail to see that the potential intransitivity property of ordinary majority voting provides a means of removing one of the greatest of all difficulties in the structure of majority rule (*op. cit.*, pp. 422 f.).

[20] *Op. cit.*, p. 74.

this case of identical majority orderings, it becomes evident that collective rationality or consistency is secured here only at a cost of imposing a literal "tyranny of the majority." Minorities under such conditions could no longer accept majority decisions without revolt. If there should exist policy areas in which specific majority groupings possess identical orderings of social alternatives, it would become necessary to impose additional restraints upon the exercise of majority decision. This was one of the considerations which led Wicksell to advocate the adoption of the principle of unanimity in the approval of tax bills. He reasoned that in the imposition of taxes the given majority in power would tend to be too cohesive and would, therefore, be able permanently to impose its will on the minority.[21]

The form in which Arrow states his condition of nondictatorship is closely related to the point discussed above. This condition, as applied to group decision, states that no one individual must dictate the choice without regard to the values of other individuals.[22] From the individual minority member's point of view, however, the acceptance of irrevocable majority decision is not different from the acceptance of irrevocable authoritarian decision. In either case the choice is dictated to the individual in question, since his values are overruled in the decision-making. If one thinks in terms of individual values as ends, "dictated to" seems a more meaningful concept than "dictated by."

The reason that majority rule proves tolerably acceptable and individual authoritarian dictatorship does not lies not in the many versus the one. It is because ordinary majority decision is subject to reversal and change, while individual decision cannot readily be made so. With identical majority orderings, the majority would, of course, always choose the same leaders, and this advantage of majority rule would be lost. It is not evident that we should summarily reject the rule of one individual if we could be assured that every so often a new dictator would be chosen by lot and that everyone's name would be in the lottery.

The attempt to examine the consistency of majority voting requires the assumption that individual values do not themselves change during the decision-making process. The vulnerability of this assumption in the general case has been shown by Schoeffler.[23] Individual values are, of course, constantly changing; so a postdecision ordering may be different from a predecision ordering. The assumption of constancy may, however, be useful in certain instances. For example, the assumption of given tastes in the decision-making represented by the market is essential for the development of a body of economic theory. But the extension of this assumption to apply to individual values in the voting process disregards one of the most important functions of voting itself.[24] The definition of democracy as "government by discussion" implies that individual values can and do change in the process of decision-making. Men must be free to choose, and they must maintain an open mind if the democratic mechanism is to work at all. If in-

[21] Knut Wicksell, *Finanztheoretische Untersuchungen* (Jena: Gustav Fischer, 1896), p. 122.

[22] Arrow, *op. cit.*, p. 30.

[23] Sidney Schoeffler, "Note on Modern Welfare Economics," *American Economic Review*, XLII (1952), 880–87.

[24] The difference in the validity of the constancy assumption in these two situations is stressed by L. J. Richenburg in his review of Duncan Black and R. A. Nevins, *Committee Decisions with Complementary Valuation*, in *Economic Journal*, LXIII (1952), 131.

dividual values in the Arrow sense of orderings of all social alternatives are unchanging, discussion becomes meaningless. And the discussion must be considered as encompassing more than the activity prior to the initial vote. The whole period of activity during which temporary majority decisions are reached and reversed, new compromises appear and are approved or overthrown, must be considered as one of genuine discussion.

In a very real sense collective choice cannot be considered as being reached by voting until relatively unanimous agreement is achieved. In so far as the attainment of such consensus is impossible, it is preferable that the actual choice processes display possible inconsistency to guaranteed consistency. The molding and solidifying of individual values into fixed ordering relations sufficient to make ordinary majority voting fit the Arrow conditions for consistency would mean the replacement of accepted democratic process by something clearly less desirable. The danger that such solidification will take place becomes more imminent as functional economic groups, subjecting members to considerable internal discipline, seek to institutionalize individual values.

The unanimity requirement need not imply that consistent choice can never be reached by voting. Relatively complete consensus is present in the social group on many major issues, and the securing of such consensus need not involve the concept of a Rousseau-like general will. As Arrow points out,[25] the unanimity required may be reached at several levels. There may exist relatively general support of the framework within which change shall be allowed to take place, that is, the constitution. This in itself insures that a genuine attempt will be made to attain consensus on controversial issues and, more importantly, to insure that the changes which are made are introduced in an orderly and nonrevolutionary manner. This relative consensus on procedure, however, will exist only so long as majorities on particular issues do not solidify; in other words, as long as ordinary decision-making may be formally inconsistent.

IV. COLLECTIVE CHOICE AND FREE MARKETS

In his discussion Arrow fails to make any distinction between voting and the market mechanism as decision-making processes, and he specifically defines both as "special cases of the more general category of collective social choice."[26] He is led to this conclusion because he is unable to define a satisfactory social welfare function from the individual orderings required for either process. In the consideration of voting, it is a relatively simple step to discard the social rationality or social welfare function implications and to utilize the Arrow conditions in testing the consistency of the choice process. When this is done, it is found that ordinary majority rule does not necessarily produce consistent choices. Thus the voting process serves neither as a basis for deriving a social welfare function in the Arrow sense nor as a means of producing consistent choices if tested by the Arrow conditions. When the market is considered, however, a different result arises when the process is tested for consistency of choice from that which is forthcoming when one seeks to derive a social welfare function. A necessary condition for deriving a social welfare function is that all possible social states be ordered *outside* or *ex-*

[25] *Op. cit.*, pp. 90 f.

[26] *Op. cit.*, p. 5.

ternal to the decision-making process itself. What is necessary, in effect, is that the one erecting such a function be able to translate the individual values (which are presumably revealed to him) into social building blocks. If these values consist only of individual orderings of social states (which is all that is required for either political voting or market choice), this step cannot be taken. This step in the construction of a social welfare function is the focal point in the Arrow analysis. This is clearly revealed in the statement: "The relation of known preference or indifference is clearly transitive, but it is not connected since, for example, *it does not tell us* how the individual compares two social alternatives, one of which yields him more of one commodity than the second, while the second yields him more of a second commodity than the first" (italics mine).[27]

By the very nature of free markets, however, the only entity required to compare two social alternatives when a choice is actually made is the individual. And, since individual orderings are assumed to be connected and transitive,[28] the market mechanism does provide a means of *making consistent choices* as long as individual values remain unchanged. If, given this constancy in individual tastes (values), the economic environment is allowed to change, consistency requires only that the same social state result always from similar environmental changes. Of course, there is no way of telling what a market-determined result will be (even if we know the individual orderings) except to wait and see what the market produces. The market exists as a means by which the social group is able to move from one social state to another as a result of a change in environment without the necessity of making a collective choice. The consistency of the market arises from what Professor Polanyi has called the system of "spontaneous order" embodied in the free enterprise economy. The order "originates in the independent actions of individuals."[29] And, since the order or consistency does originate in the choice process itself, it is meaningless to attempt to construct the ordering. We should not expect to be told in advance what the market will choose. It will choose what it will choose.

The market does not establish the optimum social state in the sense that individuals, if called upon to vote politically (act collectively) for or against the market-determined state in opposition to a series of alternatives, would consistently choose it. This may or may not be an important conclusion, depending on the value-judgment made concerning the appropriateness of majority approval as the criterion of optimum collective choice. But the essential point here is that the market does not call upon individuals to make a decision collectively at all. This being the case, market choice is just as consistent as, and no more consistent than, the individual choice of which it is composed.

V. SUMMARY

It is necessary to distinguish between the problem of deriving a social welfare function from the individual orderings required for the operation of the decision-making processes of our society and the problem of testing these processes themselves for consistency. I have shown that the failure to make this distinction clear is the source of much of the confusion surrounding the Arrow analysis. A second distinction must be made be-

[27] Arrow, *op. cit.*, p. 61.

[28] *Ibid.*, p. 34.

[29] Michael Polanyi, *The Logic of Liberty* (Chicago: University of Chicago Press, 1951), p. 160.

tween social or collective rationality in terms of producing results indicated by a social ordering and the consistency of choice produced by the mechanisms of decision-making. If rationality is taken to mean only that the choice-making is consistent, the Arrow analysis shows that voting may be inconsistent. But I have argued that possible inconsistency is a necessary characteristic of orderly majority rule. The market, on the other hand, has been shown to produce consistent choice, in spite of the fact that a "satisfactory social welfare function" cannot be derived from the individual rankings implicit in the market mechanism.

The consistency of market choice is achieved without the overruling of minority values, as would be the case if ordinary political voting were made consistent. Therefore, in a very real sense, market decisions are comparable to political decisions only when unanimity is present. The question as to what extent this lends support to the utilization of the market as the decision-making process when it is a genuine alternative to voting opens up still broader areas of inquiry which cannot be developed here.[30]

[30] So far as I know, the differences between the market and political voting as choice processes have never been clearly and precisely analyzed. I hope to explore some of these differences in a forthcoming paper.