Chapter - 3

The Theory of Social Choice
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3.1 Introduction

In this chapter Sen’s major work on the theory of social choice, from his “Collective Choice and Social Welfare” (CCSW) (1970), to the 1982 volume, “Choice, Welfare and Measurement” (CWM), is examined. Sen in the main addresses the questions raised by Arrow in his formulation of the theory of collective choice and welfare. I.M.D. Little had published “A Critique of Welfare Economics” in 1950, and in the same year Kenneth J. Arrow published the famous article, “A Difficulty in the Concept of Social Welfare”, followed by the book, “Social Choice and Individual Values” in 1951. These two important books started off the debate on what came to be known as the ‘new’ welfare economics in the 1950’s, which continued into the 1960’s, at which point Sen, together with Dobb, entered the debate.

Little’s approach was to take Bergson’s social welfare function and the Pareto criterion as his starting points, and to “develop a set of sufficient conditions for an increase in welfare which take into account ethical views on income distribution. … These conditions are related to the well-known compensation principle.” Dobb, for his part, concentrates on criticising Little’s approach. In a 1963 article in which he reviews the contradictions in various versions of the compensation principle, he concludes: “We seem to be faced with just another aspect of the same problem of separating a definition of real income as a total from its distribution; only now this reappears as the problem of defining (in terms relevant to welfare judgments) distribution of real income independently of the composition of the real income to be distributed.” As we have seen in the previous chapter, Dobb pursues these arguments in his 1969 book.

Sen, on the other hand, takes Arrow as his point of reference in most of his writing of this period, and particularly in CCSW. Later on he broadens his canvas: he tries to critique neo-classical concepts of rationality, and clarify the distinctions between welfare criteria and methods of reaching collective decisions on matters of social welfare. Sen’s writings in CCSW have an important pedagogic value, because his grasp of logic
and his clarity of exposition help both to understand the conceptual premises of neoclassical social choice theory and to underline some of its inconsistencies. His formulations and some of his new propositions became an integral part of the debate on social choice theory, the literature on which proliferated during the decade following the publication of CCSW. Some of Sen’s later articles on social choice theory and welfare economics are put together in *Choice, Welfare and Measurement*, published as a collection in 1982. But although in these writings Sen often raises questions of ethics in opposition to some of the mainstream positions, his alternative philosophical approach is not worked out at this stage. This task is taken up in the small volume, “On Economic Inequality”, published in 1973.

This leads to one of Sen’s most important works in the context of his theoretical evolution, viz. the 1984 Tanner Lectures on “The Standard of Living”, published together with critical comments of some respondents in 1985. Here Sen takes issue with the utilitarian framework informing the work of Pigou and Pareto and puts forward the notion of ‘capability’ as an alternative to ‘utility’ in the evaluation of ‘the standard of living’. In the second part of the volume *Resources, Values and Development* (RVD), published in 1984, the perspective of welfare economics is used in analysing a number of different issues, including poverty, famines and real income comparisons. There is also an interesting article in this volume, with the lengthy title “Approaches to the Choice of Discount Rates for Social Cost Benefit Analysis”. There is an attempt in this article to relate Sen’s work on development policy and the choice of discount rate (including the isolation paradox and the ‘assurance problem discussed in Chapter II) with his work on the theory of social choice. As it is, Sen admits in the introduction that he agrees with Robert Dorfmann’s comment that this paper is ‘really two papers concealed as one’. The attempt to connect his earlier concerns with his later ones does not quite work. The attempt to bring a utilitarian logic and Rawls’ ‘difference principle’ to bear on the problem of choice of discount rate remains a bit artificial. RVD also contains two articles: “Ethical Issues in Income Distribution” (originally published in 1978) and “Rights and Capabilities” (1982) which present an early exposition of the concept of capabilities.
In this chapter we will look at some of Sen’s writing on social choice theory, and try to trace how Sen gradually moves from a framework defined by Arrow’s formulation to an exploration of the ideas that most concern him in his subsequent work.

3.2: The Theory of Collective Choice

To sum up Arrow’s approach in a rather oversimplified nutshell, bringing issues of income distribution into welfare economics involves interpersonal comparisons. Now, by the 1950’s theoretical economists had moved from a cardinal to an ordinal concept of utility. Arrow says, “the only preference information that could be transmitted across individuals was an ordering. Social welfare could only be an aggregate of orderings.” Having thus accepted the “ordinalist viewpoint”, as he puts it, he then goes on to prove that “If we exclude the possibility of interpersonal comparisons of utility, then the only methods of passing from individual tastes to social preferences which will be satisfactory and which will be defined for a wide range of sets of individual orderings are either imposed or dictatorial.” This is Arrow’s famous Impossibility Theorem.

We will discuss later, in the context of Sen’s critique, what Arrow means by “satisfactory methods” (Briefly, they should satisfy something he calls ‘idependence of irrelevant alternatives, the Parto criterion in some form, and generate social preference orderings that satisfy the usual rationality conditions). Here we are considered with Arrow’s approach in a broader sense. Later in the same article he interprets his findings thus: “The failure of purely individualistic assumptions to lead to a well-defined social welfare function means, in effect, that there must be a divergence between social and private benefits if we are to be able to discuss a social optimum. Part of each individual’s value system must be a scheme of socio-ethical norms, the realization of which cannot, by their nature, be achieved through atomistic market behaviour. These norms, further, must be sufficiently similar among the members of the society to avoid the difficulties outlined above.”

24
It is clear that Arrow is here making a sophisticated statement of faith in capitalist liberalism. The inadmissibility of interpersonal comparisons of welfare means that we are left with the Pareto criterion, according to which one social state (A) is to be preferred to another (B) only if nobody is worse off in A as compared to B, and at least one person is better off in A than in B. Thus states in which nobody can be made better off without making someone worse off are called Pareto-optimal states. Now, of course it is well-known that there can be numerous Pareto-optimal states of social welfare with very different distributions of income and wealth. Any redistribution will make some persons worse off even if it improves the situation of others. Little’s “new welfare economics” discusses ways of going beyond the Pareto criterion without admitting interpersonal comparisons of welfare. Little’s is an effort to accommodate left-wing criticisms of neoclassical welfare theory to some extent. He admits the importance of distributional considerations, and that the Pareto criterion cannot deal with them, and also that the competitive market mechanism will not always lead to even the most efficient outcome, leave alone considerations of equity. (In Dobb’s opinion, as we have seen above, the attempt to separate efficiency from equity considerations is itself somewhat misguided.)

Arrow’s approach is fundamentally different. He is no doubt criticising, on the one hand, Bergson’s social welfare function (SWF), which gives cardinal values to different social states based on individual utilities or individual preference orderings. But the framework he sets up is richly coloured with the values of capitalist liberal democracy, even as it is expressed in a mathematical form. Firstly, Arrow’s social welfare function is based on individual preferences about social states, while Bergson’s is based on utilities; thus, as Arrow says, it is based on values rather than tastes. Thus besides individual tastes for consumption goods and leisure, it can take account of values such as a preference for equity, for example. Secondly, as Sen points out (CCSW, p.35-36), the Arrow SWF is a procedure for obtaining a social ordering of social states. “Any ordering for the society (More accurately, its real-valued representation) is a Bergson-Samuelson social welfare function (henceforth, swf). An Arrow SWF determines a Bergson swf (or the ordering R underlying it) on the basis of individual orderings.” Sen in CCSW concerns himself mainly with the Arrovian framework.
I would say that the difference between the two is not, as Sen suggests (CCSW, p.36) merely semantic. In the first case above, Arrow avoids the restrictive Bergsonian view of welfare as based only on utility derived from consumption of commodities. This makes his impossibility result more broadly applicable than to purely utility-based conceptions of welfare; however, he claims that his impossibility results hold good even if the individual preferences orderings involve utilities based on consumption of commodities only. The second distinction is that Arrow is not merely concerned with the comparison of social states, but with procedures for reaching an ordering of social states which can apply to a wide range of sets of individual orderings. He refers to majority voting and voting based on ranking of preferences, both of which are methods used to reach collective decisions in practice. Sen refers to these as examples of collective choice rules, a term which he defines slightly differently from Arrow’s SWF, as we shall see. Arrow presents his conditions on the SWF as conditions which would be considered “reasonable” by a person living in a modern (western) capitalist democracy. He is saying, therefore, that no ordering of social states is possible if interpersonal comparisons are ruled out: not if one moves from cardinal to ordinal utility, not if one includes preferences about values as well as tastes in the individual preference orderings. There is no satisfactory, well-defined method for getting a collective ordering of social states that will take individual orderings into account and satisfy a small number of ‘reasonable’ conditions, unless one put restrictions on those individual orderings. This renders the search for a social welfare function in Bergson’s sense, or a consistent compensation principle, redundant. Let us turn to those conditions now, so that we can better understand the implications of Arrow’s theorem, looking also at Sen’s exposition and critique of the theorem, first of all in CCSW.

3.3: Arrow’s Impossibility Theorem

Mathematically, an ordering of elements of a set must satisfy certain minimum conditions, such as reflexivity, transitivity and completeness. In a preference ordering, the basic relation is xRy, or x is at least as good as y (in the preference of the individual, or the collectivity, as the case may be.) Then xRy and yRx implies that there is
indifference between x and y(x\leq y), while xRy and \neg yRx implies that x is (strictly) preferred to y (x\succ y). Reflexivity means that xRx, transitivity that if xRy and yRz, then xRz; and completeness implies that for all pairs of alternatives x, y in the preference set, either xRy or yRx ("or" to be understood to include "and"). An ordering then is a preference relation that is reflexive, transitive and complete; these are sometimes referred to as the "rationality conditions" on preference relations. This meaning of "ordering" is common to both Sen and Arrow, although on p.9 of CCSW Sen gives a table showing how the terms "ordering", "quasi-ordering" and "pre-ordering" etc. are used by Sen and other authors. A relation that is reflexive and transitive but not complete is called a quasi-ordering by Sen. For example, the Pareto rule can give rise to quasi-ordering among social states. This is because in situations where movement from one state to another involves making some people worse off while others are made better off, the Pareto rule cannot choose between the two.

Now, in the community there is a number of individuals having sets of preference relations R_i. So, xR_i y means that for the ith individual, x is at least as good as y. The relation xR_y is then understood as x being at least as good as y in a social ordering. In his original exposition in the 1950 article, "A Difficulty in Social Welfare", Arrow gives the following definition: "By a 'social welfare function' will be meant a process or rule which, for each set of individual orderings R_1, \ldots, R_u for alternative social states (one ordering for each individual), states a corresponding social ordering of alternative social states, R.".

Arrow then states his 'reasonable' conditions on the SWF, which we will state in the form stated in the said article. For simplicity it is assumed that the number of individuals is two. If the impossibility result is proved for two individuals, it will hold a fortiori for a larger community, with more possibilities of conflict.
CONDITION 1. The social welfare function is defined for every admissible pair of individual orderings, $R_1, R_2$.

CONDITION 2. If an alternative social state $x$ rises or does not fall in the ordering of each individual without any other change in those orderings and if $x$ was preferred to another alternative $y$ before the change in individual orderings, then $x$ is still preferred to $y$.

CONDITION 3. (Independence of irrelevant alternatives) Let $R_1, R_2,$ and $R'_1, R'_2$ be two sets of individual orderings. If, for both individuals $i$ and for all $x$ and $y$ in a given (sub)set of alternatives $S$, $xR_y$ if and only if $xR'_y$, then the social choice made from $S$ is the same whether the individual orderings are $R_1, R_2$ or $R'_1, R'_2$.

Sen refers to the first condition as the condition of “unrestricted domain”. However, Arrow makes it clear that it need not hold for all possible sets of individual orderings, but only for all admissible orderings: “On a priori grounds we may suppose it known that preferences for alternative social states are formed only in a limited set of ways, and the social welfare function need only be defined for individual orderings formed in those ways.” As an example he cites the Bergsonian social welfare function, in which the individual orderings are based only on personal consumption of commodities. So, it appears that Sen’s naming of this condition is different from Arrow’s. We will come back to this point later.

The second condition is interpreted by Sen as follows (CCSW, p.37): “the SWF must satisfy the Pareto principle in the weak form, i.e., if everyone prefers $x$ to $y$, then society must also prefer $x$ to $y.” However, later on in CCSW, he refers to Arrow’s condition 2 above as a condition of “positive association,” and says that it is a weaker condition than the weak Pareto principle.

The third condition is justified succinctly by Arrow in a later article (published in French in 1952, and translated into English for inclusion in the 1984 Collected Papers
of Kenneth J. Arrow) thus (p.51): “the social choice among a set of candidates should depend on the individual preferences for those candidates and those candidates only.... If (this condition) is abandoned, a choice among a given set of preferences can be made only if each individual possesses a list of preferences containing more candidates than those which are really available. ....There is no natural limit (to this list) except a vague universe containing all logically possible candidates.”

Arrow shows that two commonly used methods of reaching collective decisions in the presence of differing individual preferences do not satisfy the above definition and conditions on the SWF. The method of majority voting, that is xRy if and only if, for a majority of the n individuals, xRy, can, in certain instances, even when individual preference orderings are transitive, give rise to a non-transitive collective choice. This means, as Sen points out, that the method of majority decision violates the condition of unrestricted domain. It has be shown (by Nanson, some time before Arrow) that with a community of three individuals, a simple set of preference orderings can be devised (one which is certainly not so unusual as to be “inadmissible” for Arrow’s condition) which results in the method of majority decision giving rise to intransitive social preference. On the other hand, another commonly used procedure, the method of ranking a finite list candidates and giving specified weights to each rank, will violate the third condition in case one of the candidates is deleted from the list. There are two trivial “methods of aggregation” which satisfy the three conditions. “The first is the establishment of a collective ranking independent of any individual preference.” Arrow refers to this as the Platonic method, where individual preferences are simply not taken into account. Sen describes this case as “somewhat odd”, and suggests it may arise when social preference (is) determined by “an entirely specified traditional code”. The other trivial example cited by Arrow “consists in distinguishing one individual in the society and requiring that the society prefer one possibility to another whenever that individual does so; in short, a dictatorship.” To preclude these two trivial solutions, Arrow adds two more conditions to his list:

29
CONDITION 4. (non-dictatorship). *It is impossible that the preferences of society be always in agreement with those of a single individual.*

CONDITION 5. (non-imposition) *For every pair of possibilities x and y, there exists at least one system of individual preference orderings which causes x to be preferred to y.*

Arrow then proves that there is no social welfare function conforming to his definition and satisfying the five conditions. As we have mentioned above, this amounts to be saying that there is no way of devising a method of collective choice that “overcomes” the problem of interpersonal comparisons of welfare.

In later expositions, starting from the book, *Social Choice and Individual Values*, Arrow reduces the number of conditions to four, and modifies condition 2 to what Sen terms the weak Pareto principle: “If an alternative x is preferred to alternative y be every single individual according to his ordering, then the social ordering also ranks x above y.” This is because if the “Platonic method”, or a traditional code, says that x is chosen over y; then if there is a set of individual orderings in which yP₁x for all I, this SWF fails to pass the weak Pareto rule. Thus condition 5 becomes redundant. Sen follows this later exposition of Arrow, though the original version does have a significance as a broad statement of liberal values about the process of making social choices, explicitly ruling out any procedure that takes no account of individual values.

### 3.4: Collective Choice Rules and the Pareto Principle

Sen says (CCSW, p.22-23) : “We shall call methods of going from individual orderings to social preference “collective choice rules” (CCR). Thus he defines collective choice in a broader way than Arrow’s SWF. He then shows that Arrow’s impossibility result does not hold for all CCR’s. In particular, if we allow the social preference to have the property of acyclicity, which is weaker than transitivity, we get a class of CCR’s which Sen calls “social decision functions”, and this ensures that, to quote Arrow, “from any environment, there will be a chosen alternative.” The Impossibility
Theorem does not hold for social decision functions, not even if Arrow’s condition 2 is strengthened to the strong Pareto principle: x is socially preferred to y if at least one individual prefers x to y and everyone else regards x to be at least as good as y.

Sen is doing two things primarily in CCSW. In making slight modifications in some of the assumptions and conditions in these discussions of the theory of social choice, he tries to show that such slight modifications can significantly change the results. Secondly, he uses the framework set up by Arrow, again with carefully thought-out modifications, to explore other problems of collective choice. The contention he makes (discussed in the previous paragraph) that the Impossibility Theorem does not apply to what he calls social decision functions, is an example of the former. He admits that Arrow’s Impossibility Theorem is “economical”, in the sense that if any of the conditions is dropped, there is no impossibility. Yet, as we have seen, he has reduced the number of conditions from four to five by making a slight change in Arrow’s second condition. We will discuss the significance of Sen’s contention later on in this section.

The other type of exercise carried out by Sen in CCSW is to explore other contradictions and paradoxes. We will not go into all of these; we will look at Sen’s propositions in the article “The Impossibility of a Paretian Liberal”, which certainly has some importance in Sen’s own assessment of his work of this period, and also at his discussion of Rawls’ principles of justice, which has a bearing on the later development of Sen’s thinking.

“The Impossibility of a Paretian Liberal” was published as an article in the Economic Journal in 1970, and this case is discussed in Chapter 6 and 6* of CCSW. The article provoked a large number of reactions, some critical, some accepting and trying to extend Sen’s results. Sen replies to some of these responses in a 1976 paper which is included in the collection Choice, Welfare and Measurement (CWM) published in 1982: “Liberty, Unanimity and Rights”, and returns to the question in a 1978 paper also included in this volume. Since we are mainly concerned here with the evolution of Sen’s
thought, we have not considered the large volume of literature generated by this paradox, but will look mainly at Sen’s earlier and later presentations of it.

We are in the world of the social democratic function (SDF) defined above. Sen shows that if, together with the condition of unrestricted domain (as in Sen’s version of Arrow’s condition 1) and the weak Pareto principle, an additional condition is imposed, namely what he calls the condition of minimum liberalism, an impossibility result ensues. This condition replaces and is stronger than Arrow’s Condition 4 (non-dictatorship), but is weaker than the following: (CCSW, p.87):

“Condition L (liberalism) : For each person I there is at least one pair of distinct alternatives \((x,y)\) such that he is decisive in the social choice between them in either order, i.e., \(xPy \sqsubseteq xPy\), and \(yPx \sqsubseteq yPx\). The justification for this I condition is that “Liberal values seem to require that there are choices that are personal and the relevant person should be free to do what he wants. It would be socially better in these cases, to permit him to do what he wants, everything else remaining the same.”

Sen proves his impossibility result using a weaker version of this condition, which he calls minimal liberalism, i.e. that such limited decisiveness is required for at least two persons in the society.

Condition \(L^*\) (minimal liberalism): There are at least two persons \(k\) and \(j\) and two pairs of distinct alternatives \((x,y)\) and \((z,w)\) such that \(k\) and \(j\) are decisive over \((x,y)\) and \((z,w)\), respectively, each pair taken in either order. Condition \(L\) implies \(L^*\). He then generates a particular type of preference ordering for two individuals which leads to a contradiction: when the Pareto condition and \(L^*\) are imposed, a cyclicity of social preference results, and there is no social decision function that can satisfy both the said conditions, given the condition of unrestricted domain, which requires that any SDF must produce acyclic social preference even in the case of the example he cites. The example is as follows (CWM, p.293):
"There is a book, (e.g. Lady Chatterley's Lover) which may be read by Mr A ('the prude') or Mr B ('the lascivious') or by neither. Given other things, these three alternatives define three social states \( a, b \) and \( o \). respectively. The prude A most prefers \( o \) (no one reading it), then \( a \) (I'll take the hurt on myself), and lastly \( b \)." Person B's ordering is, in descending order, \( a, b \) and lastly \( o \). "On grounds of individual freedom, since B wants to read the book rather than no-one reading it, \( b \) is socially better than \( o \); note that in either case A does not read the book here. Similarly, since A does not want to read it, \( o \) is socially better than \( a \). But \( a \) is Pareto superior to \( b \), yielding a preference cycle."

In the later articles, Sen changes the term "liberal" to "libertarian", admitting that liberalism has a broader and more complex meaning than what is illustrated by his example. What in fact does his example signify, and what is the nature of the paradox he presents? Now, the whole business of moving from individual social orderings to collective choice runs into contradictions because people's preferences are not identical, or consistent with each other. Yet social choice is to reflect individual preference in ways which appear reasonable. This is what Arrow's Impossibility Theorem is about. Sen, although he makes some changes as we have noted, is using Arrow's framework in discussing this paradox. Arrow's Condition 1, which Sen refers to as the condition of unrestricted domain, implies that if even one "admissible" individual ordering is found in respect of which all the conditions cannot be fulfilled simultaneously, there is a contradiction. In the case of majority voting giving rise to intransitivity of social preference, the individual orderings taken in the illustrative example are quite simple: with three individuals and three alternatives, the individuals' rankings are as follows:

"Individual 1 prefers A to B and B to C (and therefore A to C), Individual 2 prefers B to C and C to A (and therefore B to A), Individual 3 prefers C to A and A to B (and therefore C to B). Then a majority prefers A to B, and a majority prefers B to C. We may therefore say that the community prefers A to B and B to C. If the community is to be regarded as behaving rationally, we are forced to say that A is preferred to C. But, in fact, a majority prefers C to A."
Now, in Sen's example, the two individuals' rankings are: for the 'prude'(A), \( o, a, b \), and for the 'lascivious'(B), \( a, b, o \). The paradox arises because Individual A's choice of \( o \) over \( a \) is considered socially decisive on grounds of personal freedom, and similarly B's choice of \( b \) over \( o \) is considered socially decisive. A combination of the two, with the principle of acyclicity, results in \( b \) being chosen collectively over \( a \). But in fact \( a \) is Pareto-superior to \( b \). The actual rankings arise because both A's and B's preferences involve 'social states' which actually belong to the area of personal freedom of the other. Thus, while the rule introduced (Sen's condition of liberalism or libertarianism) involves respecting personal freedom, the example involves individual preference orderings which don't in fact respect the personal freedom of the other. It is not surprising that this leads to a contradiction. Is it, on the other hand, justified to argue, as Sen does (CCSW, p.83, and elsewhere), that it is the Pareto principle that should be jettisoned?

One way out would be to say that this kind of preference be excluded from the domain of the SDF, that it is not "admissible" because it clashes with the principle of personal freedom. Sen considers this possibility at the end of chapter 6 of CCSW, but is somewhat derisive about it: "A condition may be fine for a CCR with a certain restricted domain and another may be alright for a CCR with a different restricted domain, and given a possible conflict between the two, we might choose with an eye to the likely sets of individual preferences. This prospect may not make the air electric with expectations, but it is formally a possible way out of the disturbing dilemma." In CWM, however, Sen quotes a passage in which Robert Nozick considers a similar solution to the dilemma:

"The trouble stems from treating an individual's right to choose among alternatives as the right to determine the relative ordering of these alternatives within a social ordering.... A more appropriate view of individual rights is as follows. Individual rights are co-possible; each person may exercise his rights as he chooses. The exercise of these rights fixes some features of the world. Within the constraints of these fixed
features, a choice can be made by a social choice mechanism based upon a social ordering, if there are any choices left to make! Rights do not determine a social ordering but instead set the constraints within which a social choice is to be made, by excluding certain alternatives, fixing others, and so on. If entitlements to holdings are rights to dispose of them, then social choice must take place within the constraints of how people choose to exercise these rights. If any patterned is legitimate, it falls within the domain of social choice, and hence is constrained by people's rights. *How else can one cope with Sen's result?*

Sen is much more positive about Nozick's solution here (CWM, p.306), though he has rejected a similar solution as trivial in CCSW. "This neat solution of the problem is indeed attractive, since the conflict between the Pareto rule and the liberal principle is resolved by giving them two quite different roles; viz., the former determines a strict partial ordering with which the social ordering has to be consistent, and the latter restricts the choice situations over which the social ordering is to be applied." Nozick's framework does indeed give importance to individual's right of privacy over certain decisions; hence the question Sen raises is taken seriously by him. However, Nozick is not overly concerned with the Pareto principle; he is in fact advocating a minimal state, which does not interfere with individuals' rights; and in fact he does not agree with the usual arguments in welfare economics with doing so; he advocates (p.ix): "a minimal state, limited to the narrow functions of protection against force, theft, fraud, enforcement of contracts, and so on, is justified; that any more extensive state will violate persons' rights not to be forced to do certain things, and is unjustified; and that the minimal state is inspiring as well as right." Nozick is, in fact, an advocate of an extreme form of laissez-faire; this is not the direction in which Sen wants to go.

Sen holds that the right to some sphere of private decisions be granted to the individual, but that in that case the Pareto principle must be restricted in scope, in other words, that individuals agree that their private decisions need not be 'counted' in determining social choice. This is the resolution that Sen advocates in his 1976 summary of the debate, which is reproduced as paper 14 in CWM. He says: "this notion of
counting suggests a conditional version of the Pareto principle. If everyone in a community prefers \( x \) to \( y \) and wants that preference to count, then \( x \) must be socially preferred to \( y \). A person can be described as respecting the rights of others if and only if he wants only a part of his total preference to count such that it can be combined with everyone's preferences over their respective 'protected spheres'.” I am not sure that this resolution actually restricts the Pareto principle as opposed to the claim of privacy; in fact to see this as an either-or choice means to go by the mathematical expression of the paradox alone.

Sen’s concern was to demonstrate that the Pareto principle, which for many welfare economists defined the limits for propositions about social welfare, as long as interpersonal comparisons of utility are not allowed, is by no means uncontroversial even in its own self-limited sphere. Sen points out at the very beginning of CCSW that the sphere of the Pareto principle is extremely limited. It applies only to those cases when the preference orderings of the different individuals coincide, or overlap, over a certain number of alternatives. When the preferences of two individuals are opposed, no comparison of social states can be made using the Pareto principle. Sen says: “In the difficult field of welfare economics even small mercies count, so that there is much to commend in the Pareto criterion, in spite of its incompleteness. But there is a danger in being exclusively concerned with Pareto-optimality. An economy can be optimal in this sense even when some people are rolling in luxury and others are near starvation as long as the starvers cannot be made better off without cutting into the pleasures of the rich. In short, a society or an economy can be Pareto-optimal and still be perfectly disgusting.” What Sen has demonstrated with the liberalism paradox is that with a plausible form of preference relation (illustrated by his prude-and-lewd example), combining the Pareto principle with decisiveness for just two individuals over one pair of alternatives each (Sen’s minimal liberalism) leads to acyclicity of social preference, which violates rationality. So the Pareto principle, which appears uncontroversial because it deals with cases of unanimity among individuals only, conflicts with another principle which also appears to fit in with the values of a liberal society.
Arrow (*Social Choice and Justice*, p.170) looks at the dilemma in more practically economic terms. A person’s privacy claims can be dealt with, if the good of society is at stake. “Thus, an individual with special talents may choose not to exercise them without special reward; if we do not wish to leave the choice to his private decision, we may have to pay him more than what would otherwise be a just reward.” He also makes a new proposition linking privacy claims to the difference between private and public *information* (p.184): “This is to regard claims to privacy not as primary value judgments but derived from the inability of others to know everything relevant about an individual.”…. “One can then deliberately factor the decision space into social and private decisions so as to optimise a criterion of justice, where it is assumed that the private decisions are functions of information private to the individual, whereas the social decisions are functions only of public information.” He admits here (p.183) that “Sen’s paradox shows that we have to sacrifice the universal applicability of the Pareto principle, but perhaps we can still retain it for the non-private parts of the decision.”

On the other hand, Sen’s resolution of the libertarian paradox can perhaps be put in broad terms as follows: if individual preferences are to be taken into account in arriving at collective choice, and if there are certain areas of individual preference (the private sphere) in which certain individuals’ preference is to be deemed decisive for social choice, then, if one is to avoid contradictory cycles of social preference, individuals must also have “respect” for the preferences of others, i.e. they must agree to limit the social decisiveness of their preference where it runs into conflict with that of others. This is also a non-trivial solution with a certain relevance for political decision-making in the contemporary world. We will pursue this aspect in a later chapter.

As we have seen in the discussion of the Liberalism Paradox, Sen’s formulations undergo considerable modification and refinement in the course of the debate. One might also say that the “Paretian Liberal” paradox discussed above is suggested by Arrow’s discussion in the following passage from a 1952 paper included in the collection *Social Choice and Justice*: “The only rational defense of what may be termed a liberal position, or perhaps more precisely a principle of limited social preference, is that it is itself a
value judgment. In other words, an individual may have as part of his value structure precisely that he does not think it proper to influence consequences outside a limited realm. This is a perfectly coherent position, but I find it difficult to insist that this judgment is of such overriding importance that it outweighs all other considerations. Personally, my values are such that I am willing to go very far indeed in the direction of respect for the means by which others choose to derive their satisfactions.” In other words, Arrow’s liberal framework for social choice is such that it allows for individual preferences to be illiberal, in the sense illustrated by Sen’s “prude and lewd” example. The terminology used by Sen in proving his paradoxical result, that of an individual being decisive over a pair of alternatives, is also originally used by Arrow in a paper dating to 1967. Sen’s contribution is to explore the logical implications of this, resulting in the rich debate very schematically outlined above.

The same may be said about his discussion of Arrow’s Impossibility Theorem. In earlier parts of this chapter we have focused on Sen’s discussion of this theorem in CCSW. In later papers Sen does not so much emphasise his suggestions (see above) for escaping the impossibility, which are based on replacing the requirement of transitivity of social choice by a weaker condition of acyclicity —— a rather technical modification. In the important 1977 paper, included under the title “Social Choice theory: A Re-examination”, in CWM, Sen admits that “the advantage that is gained in moving away from welfare relations to choice functions has been overestimated.” In later papers, Sen focuses more on the informational aspects of various approaches to the problem of social choice.

3.5: Interpersonal Comparisons and Non-utility Information

Sen thus admits in several places that the framework of the Arrow impossibility theorem is robust and economical: (e.g. CWM, p.337; reproduction of an article first published in 1979) “Recent works in weakening the conditions of social transitivity, binariness of social choice, independence conditions and unrestricted domain, have
revealed how easy it is to get trapped in an Arrow-like impossibility result as one escapes the exact impossibility pinpointed in Arrow’s theorem.” However, he adds: (p. 338) “On the other hand, genuine escape routes emerge with real possibility results once the informational constraints are lifted or weakened.”

In Arrow’s framework, it is Condition 3 above, that is, the Independence of Irrelevant Alternatives, that most directly imposes informational constraints. Arrow in fact admits this, in the 1967 paper included as Chapter 4 in the collection Social Choice and Justice. (p. 76) “I now feel, however, that the austerity imposed by this condition is stricter than desirable. ….The potential usefulness of irrelevant alternatives is that they may permit empirically meaningful interpersonal comparisons. The information which might enable us to assert that one individual prefers alternative x to alternative to alternative more strongly than a second individual prefers y to x must be based on comparisons by the two individuals of the two alternatives, not only with respect to each other but also to other alternatives.” Sen, in discussing the “Libertarian Paradox” mentions the possibility of including considerations of intensities of preference as one way out of the contradiction he presents, but then finds that this too runs into difficulties. The point I am making here is that Arrow himself, some time before the publication of CCSW, had suggested that Condition 3 imposed informational constraints.

Arrow also suggests, in the same article, that the use of “irrelevant alternatives” might enable a form of interpersonal comparisons to be made, through what he calls “extended sympathy.” He says: “We do seem prepared to make comparisons of the form Action x is better (or worse) for me than action y is for you. This is probably in fact the standard way in which people make judgments about appropriate income distributions…” We will return to this when we come to Sen’s treatment of Rawls’ principles of justice. Arrow concludes (p. 77): “The principle of extended sympathy seems basic to many of the welfare judgments made in ordinary practice. It remains to be seen whether an adequate theory of social choice can be derived from this and other acceptable principles.”
The modern theory of economic welfare, notably the "new welfare economics", however, adheres to the view that utilities are not comparable between persons. Also, the approach developed by Bergson and Samuelson finds that basing social choice on an ordinal view of utility is superior to one based on cardinal utility. Following Leontief, Sen sums up the properties of welfare economics on which there seems to be a general consensus (CWM, p.328):

"Welfarism. Social welfare is a function of personal utility levels, so that any two social states must be ranked entirely on the basis of personal utilities in the respective states (irrespective of the non-utility features of the states).

Ordinalism. Only the ordinal properties of the individual utility functions are to be used in social welfare judgments.

Non-comparable utilities. The social welfare ranking must be independent of the way the utilities of different individuals compare with each other.

To these three is added what Sen terms the strong Pareto condition, a stronger condition than what we have seen in the earlier and later versions of the Arrow framework above.

Pareto Preference Rule. If everyone has at least as much utility in x as in y, and if someone has more utility in x than in y, then x is socially better than y."

As we have seen above (in section 3.2), the Arrow framework differs from the Bergson-Samuelson framework in establishing procedures for going from individual orderings of social states to social orderings, or social choice, whereas the Bergson-Samuelson swf derives a social ordering from a single set of individual preferences, or a single profile. Also, Bergson-Samuelson use utility information only in deriving judgments about social welfare. What Sen argues is that this explicit limitation of the informational basis of welfare judgments extends implicitly to the Arrow framework also. Of course, there is a difference in the way the term "utilities" is used by Arrow: "It is assumed that each individual has some measure of the satisfaction he draws from each social state and that the social ordering is determined by the specification of these utilities for all possible social states"--- and the way it is used in the Bergson-Samuelson framework, where utilities are derived essentially from the consumption of commodities.
Arrow’s framework is generally much more inclusive, and in his writings we often find explicit references to the liberal philosophical approach that he espouses. It has been said that Arrow’s main results in social choice theory are less to do with economics than with procedures for political decision-making.

Specifically, among the non-utility information that, according to Sen, is excluded from the Arrow framework is information about how much different individuals actually have. This is illustrated in his 1977 paper, Social Choice Theory: A Re-examination”, in the cake-division problem (CWM, p.183). “Consider the two following exercises of interest aggregation (my italics) involving dividing a cake(100 units) among three identical people….

Exercise 1. Choose between \( x_1 = (98, 1, 1) \) and \( x_2 = (96, 2, 2) \).

Exercise 2. Choose between \( y_1 = (4, 48, 48) \) and \( y_2 = (2, 49, 49) \).

The two problems are not similar since Person 1 is very well off with both alternatives in Exercise 1, whereas he is very poorly off in general in Exercise 2… In fact, armed with only individual rankings, it is not very easy to discriminate between the choice over \( x_1 \) and \( x_2 \) and that over \( y_1 \) and \( y_2 \) (in both cases Person 1 prefers the former alternative to the latter and the other two do the opposite).

Sen concludes, after going into some detail as to how interpersonal comparisons can be brought into the picture, that, on the whole, the Arrow framework is not suitable for what he calls interest aggregation, but only for aggregation of welfare judgments. Arrow, however, disagrees (Social Choice and Justice. p.149): “Sen (1977) has argued that my suggested conditions on social choice are more appropriate to the interpretation of choice among principles of justice than to the determination of a just allocation of satisfactions. I remain unconvinced that the same issues do not arise under both interpretations.”

Sen’s main contention is that Arrow’s framework also leads to a form of welfarism (in the sense defined above) even though this is not explicitly stated in Arrow’s conditions. He concludes (CWM, p. 346-347): “Arrow’s impossibility theorem can be
seen as resulting largely from combining ‘welfarism’ (ruling out the use of non-utility information) with remarkably poor utility information (especially because of the avoidance of interpersonal comparisons). ....the power of these combined informational exclusions can be illustrated by noting that in the exercise of aggregating the conflicting interests of the poor vis à vis the rich, the exclusions make it, in effect, impossible to give priority to the interest of the poor. The poor cannot be distinguished for this purpose from the rich --- neither in terms of utility, nor in terms of income or other non-utility information. There are many different ways of avoiding this impasse: dropping welfarism is one, using richer utility information is another.”

3.6: Interpersonal Comparisons and Rawls’ Principle of Maximin

In his earlier article (“Social Choice Theory: a Re-examination) Sen elaborates on how two commonly discussed rules for social choice, namely utilitarianism and Rawls’ principle of justice, solve the problem by allowing certain types of interpersonal comparisons. (CWM, p.184) : “Once interpersonal comparisons are brought in, various possibilities of social aggregation open up which cannot be translated into ‘collective choice rules’ of the type of Arrow’s social welfare functions defined as they are on the space of n-tuples of orderings. The two rules that have been most discussed are the utilitarian rule \( W=\max_i W_i \) and the Rawlsian maximin rule \( W=\min_i W_i \), usually in its lexicographic version. The two use rather different types of welfare information, with utilitarianism being concerned only with interpersonal comparisons of welfare gains and losses (the level comparisons do not matter) and the Rawlsian rules being concerned with interpersonal comparisons of levels only (the gain-loss comparisons do not matter).”

We will turn to Sen’s treatment of the utilitarian alternative in a later section. We now turn to his discussion of Rawls’ principle of justice, which he first takes up in CCSW. At the time of writing CCSW, Rawls had presented his ideas in a number of papers, but his major work, A Theory of Justice (1971) had not yet been published. Sen’s discussion in Chapter 9 of CCSW is thus based on Rawls’ earlier presentation. Rawls establishes a criterion for “fairness” in deciding on the institutions in society. He
proposes an “original position”, “where individuals choose ‘principles’ in a state of
primordial equality without knowing their own placing in social states resulting from it,
being ignorant even of their personal features in addition to social positions. In such a
situation the principles that would be generally accepted would satisfy the criterion of
‘fairness’, being the result of a fair agreement with no vested interests. (CCSW, p.135.)

Sen’s summary continues (CCSW, p.136): “Having thus established a framework for
fairness, Rawls argues that the two following principles of justice would have been
chosen in the ‘original position’: (a) ‘each person participating in a practice, or affected
by it, has an equal right to the most extensive liberty compatible with a like liberty for
all’; and (b) ‘inequalities are arbitrary unless it is reasonable to expect that they will work
out to everyone’s advantage, and provided that the positions and offices to which they
attach, or from which they may be gained, are open to all’.” From these propositions
Rawls concludes that the principle of justice will imply that “social inequalities be
arranged to make the worst-off best-off.” This conclusion is, as Sen says, “a well-
defined criterion” and Sen then proceeds to examine it with reference to the Arrovian
framework of social choice.

This criterion, which may be termed a “maximin” criterion, does involve
interpersonal comparisons of utility, but, unlike utilitarianism, which requires summation
of individual welfares and therefore a cardinal measure of utility, Rawls’ criterion can be
applied using only a ranking of different persons’ levels of welfare. Now the Rawls
principle cannot be termed an Arrovian SWF, as it does not lead to an ordering of social
states; indeed, this is not Rawls’ purpose. However, Sen describes a procedure that can
bring about such an ordering based on the Rawls criterion. (CCSW, p.138n.) “...for a
community of n individuals:

(1) Maximise the welfare of the worst-off individual

(2) For equal welfare of the worst-off individuals, maximise the welfare of
the second worst-off individual.
(n) For equal welfare of the worst-off individuals, the second worst-off individuals, ..., The (n-1)th worst-off individuals, maximise the welfare of the best-off individual."

This procedure will result in an ordering that will satisfy even the strong version of the Pareto rule. Sen calls this procedure "leximin", as it applies the maximin principle in a lexicographical procedure, proceeding to the second worst-off person after the interests of the worst-off have been taken care of, and so on.

Although this is an ingenious device, it really achieves nothing more than to fit Rawls’ principle into the framework of Arrovian social choice. As we mentioned above, it is not Rawls’ purpose to provide an ordering of social states, but to indicate a “fair” basis for constructing a set of liberal democratic institutions. It is because individuals in the “original position” do not know where they will be placed that they choose to maximise the welfare level of the worst-off, following an essentially pessimistic principle of “maximin”. Sen’s device of repeatedly applying the “worst-off” criterion to establish an ordering no longer carries the same compelling moral force. Rawls in his 1971 *A Theory of Justice* (p.83) takes note of Sen’s device, but chooses not to use it. Sen, however, in later articles, uses the “leximin” construct as an alternative rule for social choice and explores its properties; this discussion really has not much to do with Rawls. In his “Annexe” to *On Economic Equality* (1996) (p.196), Sen says that Rawls(1971) accepted his lexicographic version of the “maximin” rule, but this is not in fact the case. Rawls says, on the other hand, that a lexicographic rule may be applied to the “primary goods” to which individuals have equal rights (see below).

Sen in CCSW evidently finds Rawls’ criterion somewhat appealing on ethical grounds. The Rawls criterion follows a deontological approach, as opposed to utilitarianism, which is “consequentialist” in the sense that it is only the consequences of choices that matter. Sen says (CCSW, p.139): “If people choose a system while totally ignorant of their personal attributes, it certainly does satisfy an important value of our moral system.” However, Sen (in CCSW) points out certain defects of the Rawls criterion. One, it does not reflect wider concerns about inequality, focussing as it does on
the worst-off individual or group of individuals. However, Sen admits: (ibid.): “However, it is likely that the difficulty will be more serious in the choice between social states in general, which is our problem (my italics), than in the choice between certain institutions, which is Rawls’ focus of attention.”

In CCSW and later, Sen points out an important distinction between utilitarianism and the Rawls criterion. This is that whereas utilitarianism advocates maximising the sum of individual welfares, and thus requires one to compare differences in welfare among different persons, the maximin criterion compares levels of welfare, a consideration that is neglected in utilitarianism (and other forms of what Sen calls welfarism), but takes no account of the magnitudes of gains and losses to different persons involved in moving from one social state to another. In a later article (CWM, p.361) he adds: “Aside from its indifference to ‘how much’ questions, leximin also has little interest in ‘how many’ questions --- paying no attention to the number of people whose interests are overridden in the pursuit of the interests of the worst-off.” These are examples of how different ways of taking interpersonal comparisons into account are distinguished by their informational bases. In CCSW, he presents this as a defect of the Rawls criterion; however, elsewhere he has shown how the utilitarian approach can in principle result in the condoning of practices like torture, if the welfare gain to the torturer outweighs the welfare loss to the tortured. The Rawls principle of justice, focusing on the welfare of the worst-off, avoids such positions.

However, Sen here raises a question about why the “original “position” must lead to the pessimistic option of maximising the welfare of the one who has the least., i.e. maximin. If one allows cardinal utilities, perhaps, the utilitarian solution of maximising the sum of individual welfares might well be chosen, and there are many other alternatives. Arrow, in a review of Rawls’ 1971 book, refers to Vickrey and Harsanyi’s suggestion that “in the original position each individual may with equal probability be any member of society.” Here it is assumed that utilities are cardinally measurable and choice under conditions of risk is described as the maximisation of expected utility. This would in fact lead to the maximisation of the sum of utilities of different persons. Rawls
has, in fact, replied to this suggestion in *A Theory of Social Justice*; he argues that if there is a high risk aversion, the original position under the same assumptions will lead to a choice of the maximin criterion as the principle of justice. Arrow agrees with this in essence, and devises an elegant mathematical construct to show that, if the degree of risk aversion is in fact built into the individuals' utility functions, then the maximin principle can be seen as an extremal case of utilitarianism when the degree of risk aversion is greatest. However, Rawls in principle rejects both cardinal utility and the notion that the ethical basis of social institutions should be dependent on a factor like individuals' degree of risk aversion. Rather, the possibility from the point of view of the "original position" of any individual being the worst-off one, is what leads to justice as fairness.

Sen has another interesting comment to make in CCSW on how the Rawls difference principle, as compared to Arrovian social choice, takes interpersonal comparisons into account. "For the Rawls type of comparison, what is needed is not an ordering merely of social states viewed from one's own position, but a ranking of social states with interpersonal permutations. The statement that individual *i* has a higher welfare in state *x* than individual *j* has in state *y* can be translated as: it is better to be person *i* in state *x* than to be person *j* in state *y*. Arrow says something similar in his 1967 article (*Social Choice and Justice*, p.76-77): "Interpersonal comparisons of the extended sympathy type can be put in operational form. The judgment takes the form *it is better (in my judgment) to be myself under action x than to be you under action y*. Arrow has indicated earlier in that article, quoted above, that the principle of extended sympathy may provide a way to relax the condition of independence of irrelevant alternatives, and to bring in information that makes some form of interpersonal comparison possible. Yet this is done keeping the basic framework, of going from *individual* preferences to social decisions, intact. Sen then, as is his wont, puts it in a mathematical form (CCSW, p.137): "A collective choice rule is thus based on *n* orderings of *m* elements, whereas a Rawlsian maximin choice mechanism is based on one ordering of mn elements." There is one ordering because the "original position" removes interpersonal differences in *judgments*, which are presumably based on a person's personal attributes and social position, all of which are hidden under Rawls' "veil of
ignorance". Sen, however, is in later articles more interested in exploring mathematically the properties of the leximin procedure and the ordering of \textit{mn} elements, than in exploring the epistemological question implied here, though he does make some reference to them, following Arrow, who raises that question in the review article quoted above (pp.103,106). "What knowledge is available in the original position?... Individuals are supposed to know the laws of the physical and the social worlds, but not to know who they are or will be. But empirical knowledge is after all uncertain, and even in the original position individuals may disagree about the facts and laws of the universe." We will return to these questions in the next chapter.

Rawls in \textit{A Theory of Justice} elaborates on his first principle of justice (a) (quoted above in its earlier form) as follows (p.303): "all social primary goods – liberty and opportunity, income and wealth, and the bases of self-respect – are to be distributed equally unless an unequal distribution of any or all of these goods is to the advantage of the least favoured." Arrow offers the following cautionary comment: "so long as there is more than one primary good, there is an index-number problem in commensurating the different goods, which is in principle as difficult as the problem of interpersonal comparison with which we started." Again, this is a relevant problem only if, like Arrow, we are aiming for an ordering of different social states, which is not in fact Rawls' objective. In Rawls' view, the rights of an individual to "primary goods", is absolute; they represent, as Arrow comments, "the ability to determine life plans, rather than specific goods or the levels of satisfaction achieved from them." In fact, Rawls suggests (\textit{A Theory of Justice}, p.42-43) that a lexicographical order may be applied to these primary goods (He prefers the term "lexical"). He explains: "This is an order which requires us to satisfy the first principle in the ordering before we can move on to the second, the second before we consider the third, and so on..... A serial ordering avoids, then, having to balance principles at all; those earlier in the ordering have an absolute weight, so to speak, with respect to later ones, and hold without exception....As an important special case I shall, in fact, propose an ordering of this kind by ranking the principle of equal liberty prior to the principle regulating economic and social inequalities." The approach of Rawls is quite unambiguously stated here, and it seems Arrow's reservations do not
apply. However, a similar objection may be raised in regard to Sen’s concept of
capabilities, which, as we will see, is heavily influenced by Rawls’ concept of primary
goods. Sen has admitted that some kind of indexing of capabilities may be necessary.

We have discussed the Rawlsian principles of justice in great detail here because
it is evident that Rawls’ concerns are somewhat similar to Sen’s. As the political
philosopher Chantal Mouffe says, “(Rawls) was trying to find a solution to the disputed
question of how basic social institutions should be arranged in order to embody the
principles of equality and liberty and how those two ideals should be understood and
balanced.”( p.43) Sen in the works we have been discussing here accepts the Arrow
framework of social choice, but is not happy with its refusal to admit interpersonal
comparisons. This is why he expresses dissatisfaction with the tendency of welfare
economists to put a central emphasis on the Pareto principle. Rawls goes even further: he
refuses to use the term “Pareto optimality”, but refers to the principle of “efficiency”, as
he wants to remind us that this principle has nothing to do with equity concerns. On the
other hand, Sen is also concerned with protecting the individual’s right to liberty. In
CCSW, perhaps, his concern is more to point out that the liberal framework proposed by
Arrow can contradict itself; that the contradiction does not arise only in reconciling social
decisions with individual preferences in the absence of interpersonal comparisons, but
that, even with the exclusion of interpersonal comparisons, the right to liberty in some
sense can lead to results which are “irrational”, in some sense. When he commends
Arrow’s Impossibility Theorem, it is mainly for its mathematical elegance and
“economy” of assumptions; he does not make it clear exactly where he stands. The
influence of Dobb is still there in the background; so in effect, he is saying, “your liberal
values, your refusal to make interpersonal comparisons, your concept of rationality, can
be shown to be inconsistent with each other.” Whereas his concern for equality is
repeatedly made explicit, there is no such clarity regarding what value liberty has in his
configuration of social values.

It is interesting at this point to take a look at the references to Sen in Rawls’ *A
Theory of Justice*. A large number of references make use of Sen’s definitions and
explanations of certain concepts of welfare economics; as we have said, CCSW was written as part of a series of pedagogical texts on mathematical economics. In his review of Rawls’ book, Arrow says (Social Choice and Justice, p. 96): “As an economist accustomed to much elementary misunderstanding of the nature of an economy on the part of philosophers and social scientists, I must express my gratitude for the sophistication and knowledge which Rawls displays here.” Since Rawls has so frequently used Sen’s expositions in CCSW, a part of that gratitude may well be due to Sen. Another set of references, interestingly, is to Sen’s writings on the rate of saving, which we have discussed in Chapter II. Rawls uses some of Sen’s ideas, notably the isolation paradox and the assurance case, to deal with the question of justice between different generations. Sen’s liberalism paradox is referred to only in passing.

We now turn to Sen’s discussion of utilitarianism, which is the other important attempt to incorporate interpersonal comparisons in collective choice. We have of course already referred to some of Sen’s views on this subject in our discussion of Rawls.

3.7 : Utilitarianism

The Encyclopedia Britannica has this to say on the subject of utilitarianism:

“In normative ethics, a tradition stemming from the late 18th- and 19th-century English philosophers and economists Jeremy Bentham and John Stuart Mill that an action is right if it tends to promote happiness and wrong if it tends to produce the reverse of happiness—not just the happiness of the performer of the action but also that of everyone affected by it. Such a theory is in opposition to egoism, the view that a person should pursue his own self-interest, even at the expense of others, and to any ethical theory that regards some acts or types of acts as right or wrong independently of their consequences. Utilitarianism also differs from ethical theories that make the rightness or wrongness of an act dependent upon the motive of the agent; for, according to the Utilitarian, it is possible for the right thing to be done from a bad motive.”

49
“The simplest form of consequentialism is classical Utilitarianism, which holds that every action is to be judged good or bad according to whether its consequences do more than any alternative action to increase—or, if that is impossible, to limit any unavoidable decrease in—the net balance of pleasure over pain in the universe. This is often called hedonistic Utilitarianism.”

Amartya Sen’s neat factorisation of utilitarianism into three components is first explicitly made in the 1982 book he edited jointly with Bernard Williams, *Utilitarianism and Beyond*. These components are: “(1) ‘consequentialism’ (judging the rightness of all choice variables, such as actions or rules or institutions, only by the goodness of the consequent states of affairs), (2) ‘welfarism’ (judging the goodness of states of affairs only by utility information), and (3) ‘sum ranking’ (judging utility information, for a given population, simply by summing utilities).” In several of the papers in CWM, he discusses the second and third components in some detail.

In his important 1977 paper, “On Weights and Measures: Informational Constraints in Social Welfare Analysis”, Sen says (CWM, p.248): “The general approach of making no use of any information about the social states other than that of personal welfares generated by them may be called ‘welfarism’. I would like to argue that (i) welfarism as an approach to social decisions is very restrictive, and (ii) when the information on personal welfare is itself limited, it can be positively obnoxious.” He argues in the following section that welfarism cannot accommodate certain social principles or values that are “widely acclaimed.” Liberty is one of them; it involves (ibid.): “the acknowledgment of a special relation between a person and certain choices that are thought to be, in some ways, in his ‘personal’ domain.” This involves, in Sen’s view, a kind of non-utility information about certain alternatives, and it violates the principle of ‘neutrality’: that there is no “built-in bias towards any alternative”, and that making a permutation of alternatives will not change social choice. Thus utilitarianism also clashes with the principle of liberty in his sense.
Another important consideration that is ruled out by welfarism is any historically based conception of rights. This means Marx of course, and also Nozick, at the other end of the political spectrum. Nozick’s “entitlements” theory of justice is opposed to what he calls “current-time-slice” or “end-result” theories of social justice (in which utilitarianism would be included), which “hold that the justice of a distribution is determined by how things are distributed (who has what) as judged by some structural principles of just distribution.” Nozick says (p.155) that “historical principles of justice hold that past circumstances or actions of people can create differential entitlements of differential deserts to things.” Nozick’s theory of justice respects entitlements, which come from private property, inheritance, voluntary exchange and transfers. Sen is merely giving us a categorisation of the properties of welfarism here; he does not say whether he favours historical principles of justice. Marx’s theory is historical, according to Sen, because it takes account of historical information like “dated labour.”

Sen also launches another direct attack on Arrow here, saying that although Arrow himself declares that for him, “the principle of neutrality is not intuitively basic,” a slight strengthening of his conditions leads us “very close to a strongly neutral framework,” and thus close to welfarism. “The problem with Arrow is that he rules out both cardinal utilities and interpersonal comparisons. This leads to what he calls an informational famine, which is the real basis of Arrow’s impossibility result.” I will not go into arguments about the tenability of Sen’s assertions here; they have been discussed in earlier sections. However, Sen is evidently paving the way here for a more “informationally rich” basis for his alternative theory of collective choice.

Finally, utilitarianism is discussed in an essay, “Equality of What?”, first presented by Amartya Sen as The Tanner Lecture on Human Values in 1979. Two types of “welfarist equality” are compared. In utilitarianism, since the sum of utilities of all persons is to be maximised, marginal utilities are equalised among individuals. As we have seen, in this exercise the levels of utility or welfare of different persons is not compared at all. Hence, if a person who enjoys luxury gets more marginal utility out of an increment in income as compared to a cripple who is less well off, and also less able to
get more utility out of a unit of income, then the additional unit of income would go to the former. By contrast, equality of total welfare involves comparing the utility levels of different persons. However, this approach would have to be combined with a procedure such as “leximin” if an ordering is to be achieved. Utilitarianism and “leximin” both have their disadvantages (discussed in the earlier section), and a combination of the two still suffers from the limitations of “welfarism”, that is of refusing to take non-utility information into account.

Utilitarianism is next compared to Rawlsian equality. In this essay, Sen does not so much emphasise the implications of the “maximin” principle or “difference principle” of Rawls, as his first condition that primary goods are to be equally distributed and that the individuals’ rights to these goods take priority over comparisons of utility or welfare. He quotes Rawls as underlining how utilitarianism asks(s) no questions about the source or quality of satisfactions in aiming for their greatest sum. “In justice as fairness, on the other hand, persons accept in advance a principle of equal liberty and they do this without a knowledge of their more particular ends.” Sen concludes that utility information is inadequate for moral judgments of states of affairs; in this he goes with Rawls. Thus in the works we have discussed here, Sen has focused on two of the components of the utilitarian approach: welfarism and sum ranking. He does, as we have seen, note even in CCSW that Rawls' principles of justice are, as opposed to utilitarianism, not exclusively concerned with the consequences of actions, but considers some principles to be intrinsically good in moral terms. This is the consequentialist aspect of utilitarianism.

Sen has more to say on the first two aspects of utilitarianism in his work on inequality; we turn to this in Chapter 4.

3.8: Capabilities

The article we have been discussing concludes by introducing the concept of capabilities as an alternative basis for equality among individuals. Marginal utility and total equality have been rejected because they are welfarist; the Rawlsian approach, on
the other hand, is inadequate because “the primary goods approach seems to take little note of the diversity of human beings.” (CWM, p.366). He says there is a kind of fetishism involved here: “Rawls takes primary goods as the embodiment of advantage, rather than taking advantages to be a relationship between persons and goods.”

The concept of “basic capability equality” is then tentatively suggested as an alternative that avoids the reliance on utilities --- which are essentially persons’ “mental reactions” to goods --- and Rawls’ focus on the goods themselves. He claims that this is following an approach similar to Rawls, but which takes account of the diversity among persons, since “there is evidence that the conversion of goods to capabilities varies from person to person substantially and the equality of the former may still be very far from the equality of the latter.” There will be an a problem, Sen admits, of indexing of different capabilities, “a problem comparable with the indexing of primary good bundles in the context of Rawlsian equality.” The solution of this problem will be “rather culture-dependent.” This is Sen’s earliest presentation of the concept of capabilities.

Our concern in this chapter has been to examine how Amartya Sen’s work on the theory of social choice eventually leads him to the formulation of his own approach. His presentation of the libertarian paradox is intended to suggest that the Pareto efficiency principle is not just limited in its refusal to take account of interpersonal comparisons, but comes into contradiction with a respect for individuals’ right to some areas of private choice. The adoption of the overall framework of Arrow’s impossibility theorem leads him to the conclusion that Arrow’s impossibility result pivots on his refusal to take into account firstly interpersonal comparisons, and secondly non-utility information. The concern with interpersonal comparisons then takes him to the critique of utilitarianism which we have examined in the previous section. This lays the foundation for the introduction of the concept of capabilities which is taken up in greater detail in the fifth chapter of this dissertation. These are some of the major issues raised in Sen’s early work on the theory of social choice, which, as we have mentioned was specially cited when awarding him the Nobel prize.
References