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TAPAS MAJUMDAR, *The Measurement of Utility*, St. Martin's Press, Inc., New York, 1958, 149 pages, $3.00

IN THIS brief book the author makes out an interesting, if not always convincing, case for introspective and ordinal rather than behavioristic and cardinal methods in utility theory. The three chapters of Part I are concerned with definitions. The first chapter deals with the meaning and scope of economic welfare. The main point here is to deny that economic welfare can be genuinely separated from general welfare. Chapter II considers the meaning of welfare perception. It is asserted as an axiom that each individual is best able to judge his own welfare. As opponents of this axiom the author mentions the advocates of the kind of welfare state described in Plato's *Republic*. Social intervention is not ruled out, "but to judge the results of any such intervention . . . we resolve to go by the perception of the individual" (p. 18). This rather casual statement of how social control is to be made

to jibe with individual freedom is, in my opinion, all too typical of welfare economists. It is a continual practice in all societies to intervene in individual lives without ever evaluating the intervention in terms of individual perceptions of its merits, and this intervention is so thoroughgoing it is difficult to think seriously of eliminating it.

The aim of Chapter III is to establish a logical distinction between the absolute identifiability and the measurability of welfare. It is argued that cardinal measurement requires absolute identifiability, whereas ordinal measurement requires only relative 'discernibility.' I find the author's line of reasoning wholly unconvincing. At one point (p. 33) it is stated that absolute identifiability means the ability to judge a given welfare situation as good or bad, whereas relative identifiability means the ability to judge it as better or worse than other states. Then (p. 38) it is stated that if a state is quantifiably measurable it is capable of being identified by that absolute measure without reference to other states. But this is as absurd as to argue that we can classify bodies as big or small (corresponding to good or bad) once we know their numerical volumes. The concept of bigness bears no simple relation to numerical volume, nor does the concept of goodness to numerical utility. The real fact is that once a concept is quantified the importance of dichotomous classification with respect to it almost immediately disappears.

The seven chapters of Part II are concerned with the controversy about the measurability of utility. Reasonably objective surveys are given of the major positions. My main criticisms center around the treatment of the 'behaviorist cardinalist,' mainly in Chapter VIII. The author is primarily not prepared to admit the inability of an ordinalist to provide an adequate theory of choice when risk is involved. At points (e.g., p. 135) he seems to want to grant that cardinal measurement of utility may have relevance in controlled games of chance, but it is just in 'uncontrolled' games of chance that risk factors are such a serious matter. Military applications of operations-research techniques provide a wide variety of examples. Even if one can rarely pin down an exact measurement of utility or value in these situations, the very recognition of the inability of ordinal theory to yield a definite choice or decision when there is uncertainty about the true state of nature or an opponent's intentions, has been an important step forward. In this respect it may be noted that the author takes little if any account of the literature of statistical decision theory.

The author's remarks about introspective methods seem more judicious and are more cogently argued. I liked particularly his analysis of the papers of W. E. Armstrong.

It is to be regretted that in following a long tradition in the economic literature on utility the author makes no serious attempt to test his ideas against the large body of experimental literature in psychology on choice behavior.

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