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## THE CALCULUS OF CONSENT

Logical Foundations of Constitutional Democracy

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## PART I THE CONCEPTUAL FRAMEWORK

## CHAPTER 1 INTRODUCTION

Political theory has concerned itself with the question: What is the State? Political philosophy has extended this to: What ought the State to be? Political "science" has asked: How is the State organized?

None of these questions will be answered here. We are not directly interested in what *the* State or *a* State actually is, but propose to define quite specifically, yet quite briefly, what *we think* a State ought to be. We shall not pause to argue our case with those who might disagree, nor shall we examine in detail either the existing or some ideal organization of governmental activity.

Given an explicitly stated postulate about the objectives of collective action, we shall construct, in an admittedly preliminary and perhaps naive fashion, a theory of collective choice. This construction will require several steps. Collective action must be, under our postulate, composed of individual actions. The first step in our construction is, therefore, some assumption about individual motivation and individual behavior in social as contrasted with private or individualized activity. Our theory thus begins with the acting or decision-making individual as he participates in the processes through which group choices are organized. Since our model incorporates individual behavior as its central feature, our "theory" can perhaps best be classified as being *methodologically* individualistic.

We shall state here what it will be necessary to reiterate: The analysis does not depend for its elementary logical validity upon any narrowly hedonistic or self-interest motivation of individuals in their

behavior in social-choice processes. The representative individual in our models may be egoist or altruist or any combination thereof. Our theory is "economic" only in that it assumes that separate individuals are separate individuals and, as such, are likely to have different aims and purposes for the results of collective action. In other terms, we assume that men's interests will differ for reasons other than those of ignorance. As we shall demonstrate, more restrictive assumptions are required only when the basic theory is to be employed in developing specific operational hypotheses about the results of collective choice.

Any theory of collective choice must attempt to explain or to describe the means through which conflicting interests are reconciled. In a genuine sense, economic theory is also a theory of collective choice, and, as such, provides us with an explanation of how separate individual interests are reconciled through the mechanism of trade or exchange. Indeed, when individual interests are assumed to be identical, the main body of economic theory vanishes. If all men were equal in interest and in endowment, natural or artificial, there would be no organized economic activity to explain. Each man would be a Crusoe. Economic theory thus explains why men co-operate through trade: they do so because they are different.

Political theorists, by contrast, do not seem to have considered fully the implications of individual differences for a theory of political decisions. Normally, the choice-making process has been conceived of as the means of arriving at some version of "truth," some rationalist absolute which remains to be discovered through reason or revelation, and which, once discovered, will attract all men to its support. The conceptions of rationalist democracy have been based on the assumption that individual conflicts of interest will, and should, vanish once the electorate becomes fully informed. We do not deny the occasional validity of this conception, in which rules of political choice-making provide means of arriving at certain "truth judgments." However, we do question the universal, or even the typical, validity of this view of political process. Our approach to the collective decisionmaking processes is similar to that expounded by T. D. Weldon under the term "individualist democracy." Our assumptions are substantially equivalent to his,1 but Weldon has emphasized the theoretical indeterminacy which such assumptions introduce. Our

task, in one sense, is to provide the theoretical determinacy to the "area of human life over which a democratic government . . . can exercise control," even on the purely individualistic postulate, a determinacy that Weldon specifically states to be missing.2

What do we mean by theoretical determinacy here? Economic theory does not explain the organization of private choices sufficiently to enable the professional economist to predict the precise composition of the national product, the exchange ratio between any two goods or services, or the price of any one good in terms of money. Such predictions would require omniscience, not science, because we must deal with individuals as actors, not as atoms. The sciences of human choice must be modest in their aims. At best, they can provide the skilled practitioner with some ability to predict the structural characteristics of organized human activity, along with some directional effects of changes in specifically defined variables. Economic theory can help us to predict that markets will be cleared, that uniform units of product will command uniform prices in open markets, that demand will increase as price is reduced-always, of course, with the necessary ceteris paribus proviso attached.

The theory of political choice that we hope to construct can do even less than this. Such a theory is inherently more difficult at the outset because of the fundamental interdependence of individual actions in social choice, an interdependence which is largely absent, at least for the first level of analysis, in the market organization of economic activity. The theory of collective choice can, at best, allow us to make some very rudimentary predictions concerning the structural characteristics of group decisions.

The important choice that the group must make, willy-nilly, is: How shall the dividing line between collective action and private action be drawn? What is the realm for social and for private or individual choice? It is not the function of a theory to draw a precise line; theory assumes meaning only in terms of an analytical model which describes or explains the processes through which individuals of the group can make this all-important decision. Moreover, in deriving this model we shall be able to describe, in general terms, some of the characteristic features of a "solution."

The selection of a decision-making rule is itself a group choice, and it is not possible to discuss positively the basic choice-making of

a social group except under carefully specified assumptions about rules. We confront a problem of infinite regression here. Individuals cannot competently choose between collective and private action in a particular area until the results of alternative choices are analyzed. Private action, at its simplest, presents little difficulty; the ultimate decision-maker is assumed to be the acting individual. However, collective action is wholly different. Before it can be properly assessed as an alternative to private choice, the ultimate decision-making authority must be specified. Is a simple majority to be controlling? Or must collective decisions be made only upon the attainment of full consensus? Or is there a single-minded ruling class or group? The individual's evaluation of collective choice will be influenced drastically by the decision rule that he assumes to prevail. Even when this difficulty is surmounted at the primary level, however, it allows us to analyze only the choice of the single individual in his own "constitutional" decision. When we recognize that "constitutional" decisions themselves, which are necessarily collective, may also be reached under any of several decision-making rules, the same issue is confronted all over again. Moreover, in postulating a decisionmaking rule for constitutional choices, we face the same problem when we ask: How is the rule itself chosen? 3

One means of escape from what appears to be a hopeless methodological dilemma is that of introducing some rule for unanimity or full consensus at the ultimate constitutional level of decision-making. Quite apart from the relevance of this rule as an explanation of political reality, it does provide us with a criterion against which the individual person's decisions on constitutional issues may be analyzed. In examining the choice calculus of the single individual, as this calculus is constrained by the knowledge that all other individuals in the group must agree before ultimate action can be taken, we are able to discuss meaningfully "improvements" in the rules for choicemaking. When will it prove desirable to shift one or more sectors of human activity from the realm of private to that of social choice, or vice versa? Implicit in our discussion is the assumption that the criteria for answering such questions as this can only be found in the conceptual unanimity among all parties in the political group. Agree-I ment among all individuals in the group upon the change becomes

the only real measure of "improvement" that may be accomplished through change.4

The attainment of consent is a costly process, however, and a recognition of this simple fact points directly toward an "economic" theory of constitutions. The individual will find it advantageous to agree in advance to certain rules (which he knows may work occasionally to his own disadvantage) when the benefits are expected to exceed the costs. The "economic" theory that may be constructed out of an analysis of individual choice provides an explanation for the emergence of a political constitution from the discussion process conducted by free individuals attempting to formulate generally acceptable rules in their own long-term interest. It is to be emphasized that, in this constitutional discussion, the prospective utility of the individual participant must be more broadly conceived than in the collective-choice process that takes place within defined rules.<sup>5</sup> Our theory of constitutional choice has normative implications only insofar as the underlying basis of individual consent is accepted.

If such a theory of the constitution is to move beyond the symbolic, some analysis of the separate decision-making rules must be attempted. The costs and the benefits from collective action, as these confront the choosing individual, can be assessed only on the basis of some analysis of the various choice processes. The central part of this book is an analysis of one of the most important rules for collective choice—that of simple majority voting. The areas of human activity that the reasonably intelligent individual will choose to place in the realm of collective choice will depend to a large extent on how he expects the choice processes to operate. Moreover, since majority rule assumes such a dominant position in modern democratic theory and practice, any theory of the constitution would be but a hollow shell without a rather careful analysis of majority rule.

Any theorizing, be it about private or collective decision-making, must initially be based on simple models which define clearly the constraints within which the individual actor operates. In a preliminary analysis, simplification and abstraction are required. The institutional constraints on human action must be stripped of all but their essentials. As noted, the central part of this book analyzes the action of individuals as they participate in group decision-making under the single constraint of simple majority rule. Existing political institutions rarely, if ever, are so simple. However, progress is made by building from the ground up, and we do not propose to present a fully developed theoretical structure. Our approach, which starts with the participation of individuals in simple voting situations, should be complementary to that which begins with existing institutional structures, such as political parties, representative assemblies, executive leadership, and other characteristics of the modern polity.

It is not surprising that a significant part of the work most closely related to this book has been done by political economists. Knut Wicksell, in his original and highly provocative work on the organization of the fiscal system, must be given much credit for inspiring many of the ideas that we develop here.6 His work preceded by several decades the final construction of the Paretian "new" welfare economics, which is closely related although independently developed. The merit of Wicksell is that he states directly the implications of his analysis for the institutions of collective choice, a subject upon which the modern welfare economists have been rather strangely silent. Only within the last decade have serious attempts been made to analyze collective-choice processes from what may be called an "economic" approach. Recent works by Kenneth Arrow,7 Duncan Black,8 James M. Buchanan,9 Robert A. Dahl and Charles E. Lindblom,10 Bruno Leoni,11 and Henry Oliver 12 are of direct relevance to both the methodology and the subject matter under consideration in this book. The works most closely related to this book are, however, those of Anthony Downs 13 and Gordon Tullock. 14 This book differs from the work of Downs in its basic approach to the political process. Downs tries to construct a theory of government analogous to the theory of markets by concentrating his attention on the behavior of political parties. The attempt of parties to maximize voter support replaces the attempt of individuals to maximize utilities in the market process. By comparison, in this book we do not consider problems of representation (i.e., problems concerned with the selection of leaders, party organization, etc.) except at a second stage of analysis. We construct a model of collective choice-making that is more closely analogous to the theory of private choice embodied in the theory of markets than is that which Downs has produced. Tullock, on the other hand, in his preliminary version

of a projected general work, concentrates his attention on the behavior of the individual in a bureaucratic hierarchy and upon the choices that such an individual faces. Our approach parallels this in its concentration upon, and its assumptions about, individual motivation, but we are interested here primarily in the behavior of the individual as he participates in a voting process and upon the results of various voting or decision-making rules.

Although developed independently, our conception of democratic process has much in common with that accepted by the school of political science which follows Arthur Bentley in trying to explain collective decision-making in terms of the interplay of group interests. 15 Throughout our analysis the word "group" could be substituted for the word "individual" without significantly affecting the results. In this way a group calculus may be developed. We have preferred, however, to retain the individualist approach. At best, the analysis of group interests leaves us one stage removed from the ultimate choice-making process which can only take place in individual minds.

The essential difference between our "economic" approach to political choice and that approach represented by the Bentley school lies in our attempt to examine the results of political activity in terms of simplified analytical models and, in this way, to suggest some of the implications of the theory that might be subjected to empirical testing.

In terms of method, our models are related to those that have been utilized in the development of the emerging "theory of teams," 16 although, again, this development is wholly independent of our own. This theory of teams, however, has been primarily concerned with the choice of intraorganizational decision rules when the goals of an organization may be rather carefully specified. To our knowledge the theory has not been extended to apply to political decision rules.