DEFINING POLITICAL SCIENCE: SOME BASIC REFLECTIONS

Jan-Magnus Jansson University of Helsinki

In spite of the fact that the literature in political science - according to the figures given by the International Bibliography of the Social Sciences - grows with a speed of about 4,000 items each year, it cannot be claimed that there exists anything approaching a consensus among political scientists as to the goals and methods of their science. A glance at some volumes which have been published in the last decades in an attempt to map out the field of political science show a bewildering variety of opinions on this subject (e.g., Contemporary Political Science, 1950; Waldo, 1956; Politische Forschung, 1960; Barents, 1961). The distance between the different approaches is sometimes great enough to give rise to doubts as to whether political science represents a coherent field of investigation at all. In recent years, however, encouraging signs have appeared. Yesterday's usually rather fruitless speculations about the scope and methods of political science have given way to a more constructive state of mind. David Easton's works on the methodological problems of political science (1953, 1965), Morton Kaplan's highly stimulating framework for the study of international politics (1957), and Gabriel Almond's introductory chapter in the pioneering volume on the developing countries, which was edited by him in co-operation with James Coleman (1960), may be mentioned here, not because their approaches would be immune to criticism but because they represent a striving for increased stringency and homogeneity in dealing with the fundamental problems of political research.

The aim of this paper is to make a tentative contribution to the mental efforts too free our science from the inner contradictions and uncertainties it has suffered too long. Its content has been strictly confined to a few problems of a general nature that are, in a way, common to all social sciences though they have been regarded here from the specific point of view of the political scientist. In this context, the sphere of 'politics' has not yet been explicitly delimited from that of other social phenomena. An exact definition of the 'political' would of course be necessary for a closer scrutiny of the relations of political science to such fields as economics and the different branches of sociology. This would,

DEFINING POLITICAL SCIENCE: SOME BASIC REFLECTIONS

Jan-Magnus Jansson University of Helsinki

In spite of the fact that the literature in political science - according to the figures given by the International Bibliography of the Social Sciences - grows with a speed of about 4,000 items each year, it cannot be claimed that there exists anything approaching a consensus among political scientists as to the goals and methods of their science. A glance at some volumes which have been published in the last decades in an attempt to map out the field of political science show a bewildering variety of opinions on this subject (e.g., Contemporary Political Science, 1950; Waldo, 1956; Politische Forschung, 1960; Barents, 1961). The distance between the different approaches is sometimes great enough to give rise to doubts as to whether political science represents a coherent field of investigation at all. In recent years, however, encouraging signs have appeared. Yesterday's usually rather fruitless speculations about the scope and methods of political science have given way to a more constructive state of mind. David Easton's works on the methodological problems of political science (1953, 1965), Morton Kaplan's highly stimulating framework for the study of international politics (1957), and Gabriel Almond's introductory chapter in the pioneering volume on the developing countries, which was edited by him in co-operation with James Coleman (1960), may be mentioned here, not because their approaches would be immune to criticism but because they represent a striving for increased stringency and homogeneity in dealing with the fundamental problems of political research.

The aim of this paper is to make a tentative contribution to the mental efforts too free our science from the inner contradictions and uncertainties it has suffered too long. Its content has been strictly confined to a few problems of a general nature that are, in a way, common to all social sciences though they have been regarded here from the specific point of view of the political scientist. In this context, the sphere of 'politics' has not yet been explicitly delimited from that of other social phenomena. An exact definition of the 'political' would of course be necessary for a closer scrutiny of the relations of political science to such fields as economics and the different branches of sociology. This would,

however, demand a much more detailed inquiry than the present one. For this study, a common-sense understanding of what is meant by 'politics' will be sufficient.¹

Relationship of Political Science to Law and History

Political science is here defined as the realistic and systematic study of politics. In this definition, the words 'realistic' and 'systematic' serve to determine the position of political science among the different branches of science that are interested in the study of political phenomena, much as longitude and latitude serve to determine the position of a locality on the surface of the earth. It is therefore worth while to devote some attention to them.

The epithet 'realistic' delimits the sphere of political science from that of jurisprudence, in particular from the study of public law. Jurisprudence is usually regarded as a normative science. This does not mean that it creates new norms; in principle, its task is merely to clarify the content of existing legal norms and to ascertain their implicit consequences. But the *content of juristic statements* has a normative character: they tell us that something is prescribed, allowed, or prohibited by law. Of course, the law as such is not unconnected with social facts. It is made by men and applied by men in actual social situations. The fact that it is backed by the force of an established government normally guarantees a high degree of compliance with its provisions. But a prescription, however effective, is one thing; what men actually do is another. While jurisprudence is concerned with *prescribed* behavior, political science deals with *actual* behavior.

The practical importance of this distinction is obvious under conditions where actual behavior for some reasons considerably diverges from the provisions of the legal order. This is the case where an outmoded constitutional text has been replaced by a different political practice; where a 'sham constitution' has been deliberately set aside by the rulers; or where revolutionary conditions prevail. Of course, even in countries where the gap between constitutional text and political practice is less wide frequent deviations from the letter of the constitution will occur; besides, there are many aspects of politics that are not covered by law at all. Furthermore, in political matters the law generally specifies only the way in which decisions shall be made, but leaves a broad discretion as to the content of the decisions. Thus, the electoral law regulates the suffrage and the manner of counting the votes; but, at least in competitive party systems, it does not interfere with the choice of the voter. In the same way, parliamentary procedure only specifies the 'how', not the 'what' of legislative decisions. This means that even where the law is faithfully applied, the juristic description gives only a fraction of the political reality; to give the entire picture is the task of political science.

But it would be a mistake to assume that political science deals exclusively, or even chiefly, with such aspects of behavior that are not determined by legal provisions. Of course, political science cannot neglect the existence of the law. Human behavior is to a great extent modified by legal institutions, and conse-

quently the influence of law has to be accounted for as one factor that determines political action. To leave out the influence of institutions would be to repeat a mistake which has at times distorted the results of economic research.

One final distinction between legal and political research ought to be mentioned. Jurisprudence analyzes the *meaning* of legal words and sentences to find out the correct interpretation of the law. Its method does not allow a treatment of *causal* relations between social phenomena. In so far as lawyers are interested in causality — for instance, in the effects of legal enactments on human behavior — they have to fall back on the methods and results of the social sciences. This also holds true of the relations between jurisprudence and political science. The effects of any legal arrangements in the political field — say, the influence of compulsory voting on electoral participation or the importance of international jurisdiction for the behavior of sovereign states — naturally fall within the subject matter of political research.

The empirical, realistic sciences dealing with the behavior of man in society can roughly be divided into two main groups: the systematic and the historical sciences. Political science, along with economics and sociology, belongs to the former group. Its counterpart in the camp of the historical sciences is political history, to which it stands in a relation analogous to that between economics and economic history.

There are, to be sure, wide differences of opinion among historians as to the goals and methods of their science. In spite of this, it can be safely maintained that the average historical study is characterized by two principal traits. First, the chronological manner of presentation dominates historical writing. Events are connected by a temporal nexus; the goal of the historian is to show in what manner an earlier event (or state of things) influences a later event (or state of things). Second, the historian describes particular facts in the specific historical context without striving to reach conclusions of a general scope. This, of course, is to some extent a moot point among historians themselves. Most of them, however, seem to agree with Ernest Nagel:

A theoretical science like physics seeks to establish both general and singular statements, and in the process of doing so physicists will employ previously established statements of both types. Historians, on the other hand, aim to assert warranted statements about the occurrence and the interrelations of specific actions; and though this task can be achieved only by assuming and using general laws, historians do not regard it as a part of their task to establish such laws / italics added /.

(Nagel, 1959, p. 375)

In both these respects, political science clearly differs from history. Political scientists do not connect facts according to their chronological occurrence, but with regard to their similarity and dissimilarity. The political scientist isolates the particular facts from their specific historical context, brings them under certain general conceptual categories and relates them to general laws of political behavior. To use an expression of V.O. Key, "the political scientist

seeks uniformities of action to be able to describe political phenomena in general terms." (Key, 1958, p. 281) In fact, the ambitions of political scientists often transcend the level of mere "description in general terms"; the ultimate goal of political science research is the construction of a comprehensive theory of politics. On the other hand, it is obvious that the bulk of this research is dedicated, not to generalization, but to the investigation of specific cases. The difference between history and political science, then, is that while the former regards the study of the specific as an end in itself, the latter sees it just as a 'case', intended to prove or to disprove a proposition of a general nature.

Generalizations and Typological Schemes

As a generalizing science, political science summarizes its observations in statements about the conditions under which certain political phenomena tend to occur. As was clearly stated by Ostrogorski in his classic book on political parties, this amounts to an application in the social field of methods that are familiar to the study of natural phenomena.

"Comment acquérir cette connaissance des forces politiques? De la même manière dont on connaît les forces de la nature; les unes aussi bien que les autres ne se perçoivent que dans le mouvement, qu'il faut observer... Ces observations auront d'autant plus de valeur qu'elles porteront sur des actes qui se produisent sous des aspects plus ou moins réguliers, d'une façon plus ou moins méthodique... Il est bien entendu que cette étude ne pourrait se borner à l'analyse purement formelle des procédés politiques... Pour comprendre réellement le caractère de l'action sociale, il faut en étudier les modes dans leur rapport avec le caractère de ceux qui les mettent en oeuvre, et les conditions sociales et politiques où leurs volontés se forment et se manifestent."

(Ostrogorski, 1902, p.x.)

A common mistake, however, is to compare the methods of the social sciences with those of physics, the prototype of generalizing and systematic science. A much less far-fetched analogy exists between the social and the biological sciences which both, by the way, can be brought under the common category of 'behavioral sciences'. Even within the limits of this more modest comparison it is, however, evident that generalization in the social field meets with difficulties which are, if not wholly absent, at least much less acute in biology. The reasons for this are complex and need not be exposed in any detail here. No doubt, one reason is that civilization - which fundamentally signifies an attempt to free man from his narrow subservience to 'nature' - tends to increase the scope for variety in human behavior compared with that of animals; another reason is that individual variations in human behavior are deemed to be scientifically more important than those of animal behavior. Anyhow, the effects of the varying cultural patterns always have to be taken into account by political scientists. There is no aprioristic certainty that concepts and hypotheses that reflect the political experience of Western Europe or North America will also prove to be useful in studying Communist countries, Afro-Asian societies, or tribal, feudal, and despotic political systems. The importance of this fact has long been only incompletely grasped because empirical research has been mainly confined to Western societies. In the last few years, however, the growing literature on the developing countries has made it almost a commonplace that our present conceptual apparatus is not well adapted for the needs of cross-cultural political studies (Almond-Coleman, 1960, pp. 3-4).

The cultural dissimilarities and their effects on political life put a particularly heavy responsibility on comparative political research. 'Comparative politics' has sometimes been classified as a separate branch of political science. In fact, it is not a branch with a relatively autonomous subject matter - like international politics - but rather a stage in the process of research which leads from the establishment of singular facts to broad generalizations. This stage, to be sure, exists in all empirical sciences; inductive generalization, of course, is always built on the comparison of a number of separate observations. But it is obvious that the task of comparison is wider in political science than, for instance, in biology. A biologist who is interested in the life of the termites does not need to study every termite hill to be reasonably sure of the validity of his generalizations; the political scientist can seldom reach even that degree of certainty. Of course, this puts no insurmountable obstacle in the way of generalization about politics. A generalization does not need to be universally valid to be useful; it still serves a purpose if it explains political phenomena at least within one group of culturally related countries. Furthermore, the importance of the continuous readjustment of science itself to new situations should not be underrated. While comparative research is proceeding it amends its own generalizations and creates new concepts that, in turn, open the path for new comparisons.

It should also be pointed out that the discovery of dissimilarities in political behavior is often at least as useful as the discovery of invariant behavior patterns. Such discoveries may stimulate the search for more comprehensive generalizations that will explain why behavior differs from what we have expected. To take a well-known example, American electoral research has found that, as a rule, "lower-status people participate less than upper-status people" (Lane, 1959, pp. 220-234). On the other hand, European political scientists, at least from the time of the publication of Tingsten's Political Behavior, have pointed to the fact that political participation is unusually high in many working-class milieus (Tingsten, 1937). Without trying to offer any definite explanation of this difference one can establish with certainty that status as such is no universal key to differences in participation, but that some more general ground of explanation has to be found. Thus, in political science as in every other science, the observation that does not fit into a preconceived scheme is an incentive for new efforts: it steers science from the 'apparent' to the 'hidden' causes, from superficial observations to essential insights.

In this context, a brief remark concerning the importance of *typology* may be justified. It is a well-known fact that from the very beginnings of political thought political scientists have been fond of constructing typological schemes; at times,

this task has almost assumed the character of an end in itself. Also in modern political science, ambitious attemps to create an exhaustive classification of political phenomena have been made (in particular, Lasswell — Kaplan, 1952). It is, however, well to remember what is the proper role of typology. It does not increase our empirical knowledge of the world: it simply means that a common label is put on things that are similar in some respect. In spite of this limitation, the interest of political scientists in classification is justified within reasonable limits. If a number of separate units, A₁, A₂, A₃, etc., are alike with regard to some property a, a comparative study interested in the occurrence of a does not need to investigate every unit of this type. Instead, it picks out A₂ and assumes that the observations made of this unit will hold true of the other units too. Typology, thus, is essentially a work-saving tool of science.

The immense difficulty with any typology is, of course, the necessity to decide what properties are relevant to a certain scientific purpose, and, consequently, ought to be used as a basis for the classification. This problem is well known from the history of biology. In political science, it assumes still greater proportions: first, because the number of variables is so great and, second, because their respective weights change in the course of history. Thus, it was commonly assumed at the end of the last century that the difference between a monarchy and a republic was an essential one. To-day, it is obvious that this distinction has lost most of its former importance. Instead, Western political science has tended to concentrate on the question of how many parties are allowed to exist - legally and in fact - and to compete on equal terms for the support of the voters; the decisive dicotomy, then, would be that between monopolistic one-party systems and competitive two- or multiparty systems. But with the growth of a number of one-party systems in the new states, the difference between these systems and those known from the recent history of Europe becomes obvious. Consequently, new criteria of classification may be needed. The classical doctrine of the Communist countries, on the other hand, tends to stress the distribution of economic power as the decisive criterion for a classification of political systems. "The type to which the state belongs depends on which class it serves, that is to say, it depends in the final analysis on the economic basis of a given society. The type of state therefore corresponds to a socioeconomic formation". (Fundamentals ..., 1964, p. 157) All this points to the fact that the co-existence of many typologies is not just an index of the backwardness of political science research but rather a natural consequence of the varying perspectives and research problems. Though an exaggerated use of ad hoc classifications should be avoided, we should not expect that the typology of political science could ever be strait-jacketed. This will simply be prohibited by the complex nature of the subject matter of this branch of science.

Description, Explanation, and Theory

The process of generalization in political science ranges from very crude observations of recurrent phenomena in political life to theories of a rather

complex structure. On the lowest level of abstraction, we encounter what might be called descriptive generalizations. One example of such generalizations is the common observation that women tend to vote less, and in general to participate less in politics, than men. If we, for the sake of simplicity, suppose that the statement is valid in this crude form, it is obvious that it increases our empirical knowledge of politics and that it also will render some elementary predictions about the political behavior of both sexes possible. In itself, however, this statement remains isolated, without any meaningful connection to our knowledge about other political phenomena. We feel that it 'explains' nothing at all; because our need for explanation, of social as well as of natural phenomena, is satisfied only to the extent that the several detached observations are linked to a logically coherent body of theory. The situation will be different if the relative passivity of women is interpreted in the light of the role that the prevailing culture assigns to women and the picture it presents of the 'normal' relation of women to political affairs (cf. Lane, 1959, pp. 215-216). This might be called an explanatory generalization. It correlates the passivity of women with a phenomenon that varies from one cultural environment to another (and which, in principle, can also be varied in experimental situations). It also helps us to explain possible deviations from the general rule of female political passivity in milieus where cultural conditions differ from the average. It finally gives rise to expectations that a change of cultural norms will influence the political behavior of women.

Recently there has been much discussion about the role of theory in political science (in particular, Easton, 1953, 1965). A theory may be defined as a set of explanatory generalizations on a comparatively high level of abstraction. It is difficult to see why there would be anything peculiar with regard to the place of theory in political science. Theory is always the result of past empirical investigation - or at least of hypothetical generalizations made on a more or less conjectural basis - and it will be continually retested in the course of future empirical investigation. In the course of this process, the theory will be corroborated, refuted, or revised. Attempts to bring in questions concerning the ethical evaluation of political activity or political institutions (Easton's 'value theory', 1953, passim) into this context can only result in sheer confusion. A common feature of theories in political science - which is, however, by no means confined to this branch of research - is that generalizations about political phenomena express vague tendencies rather than exact mathematical relations between the variables concerned. This means that such theories cannot be refuted by means of one single negative instance. But it does not signify that they cannot be submitted to empirical testing; as a rule, statistical evidence can be advanced for or against some theoretical generalization, or, if this is not possible, at least the classical tool of historical case studies can be used to illustrate its application. It is also probable that we will be increasingly able to express regularities in political life as mathematical functions; this, however, means that the portrait thus given of political life will necessarily be a simplified and schematized picture which does not pretend to explain every detail of historical reality.2

It is true, however, that theoretical formulas of a very wide scope in political science will be difficult to submit to any definite empirical tests. This, again, is nothing absolutely unique: in many sciences, not the least in biology, there are some basic controversies that are doomed to remain open at least for a long time. It is therefore quite conceivable that several theoretical conceptions can coexist over long periods, each of them professed by serious scientists and backed by massive statistical and historical evidence. The struggle for and against a 'materialistic' conception of history may illustrate the point. In such cases, one theory may be preferable to another in view of its greater ability to explain facts without being in any definite sense a 'proved' theory. What in any case should be scrupulously avoided is the idea that theories of wide application in political science are somehow a matter of 'creed'; it is one thing to state that there are problems that at present cannot be definitely solved, it is another to introduce an absolutely alien element into scientific reasoning.

Generalizations belong to different levels not only with regard to their internal structure, but also to the breadth of the sector of human knowledge they intend to cover. David Easton discriminates between 'narrow-gauge' or synthetic and 'broad-gauge' or systematic theory. While the former kind of theory consists of "a set of interrelated propositions that are designed to synthesize the data concerned in an unorganized body of singular generalizations", the latter kind of theory is described as "the conceptual framework within which a whole discipline is cast" (Easton, 1953, pp. 56–57).

Narrow-gauge theories are thus confined to some determined area of political life. Such areas are, for instance, the functioning of parties and other political groups, political participation and passivity, political recruitment and leadership, the influence of classes and other non-political groups on political structures and processes, the background of political attitudes and ideologies, the mechanism of decision-making, and the determinants of political change. Empirical political scientists are hardly to blame if they have shown a marked preference for such more restricted types of theory. The reason for this lies in the above-mentioned difficulties in testing broad-gauge theories. To most political scientists excessive system-building appears as a senseless waste of time.

This does not mean that the idea of a more comprehensive framework into which the several narrow-gauge theories will fit ought at length be abandoned. It is probable that it is here that the study of classical political thought has most to offer — both in a positive and a negative sense. Two main types of empirically oriented broad-gauge theories emerge from that study. One is represented by the theorists that start from an assumption about 'human nature in politics'. The famous disquisition 'Of Man' that forms the basis of Hobbes' Leviathan is one of the purest examples of this psychologically oriented, essentially static kind of theory. Another type is constituted by theories that are essentially dynamic, dealing with the causes of political change and development. The foremost instance, of course, is the historical materialism of Marx as exposed in the preface to Zur Kritik der politischen Ökonomie. To be sure, the history of political thought offers us the choice between still other types of broad-gauge theories:

geographical, biological (racist), and elite theories. All these theories illustrate what was already said about the properties of broad-gauge theories. They are useful to the extent that they are able to give a meaningful interpretation to a wide range of phenomena; but it does not seem possible to 'prove' their truth in the sense that all empirical observations would fit into the scheme they offer us.

This relative fallacy of broad-gauge theories has probably contributed to the birth of a new phenomenon that plays a growing part in political science: the frame of reference. A frame of reference can be described as a kind of incomplete theory. While the complete theory expresses itself in statements about the conditions under which a certain political phenomenon will occur — "under conditions A, the phenomenon B will tend to appear" — the task of a frame of reference is a more modest one. It stresses the conceptual rather than the substantial point of view. It indicates the fundamental concepts that seem to be useful for a particular science; it shows the most important problems that research ought to tackle and the ways that should be used for that purpose. Richard C. Snyder and his associates' book on Foreign Policy Decision-Making (Snyder et al., 1962), which nominally concentrates only on foreign policy but in fact offers ideas for the study of any kind of decisions in an organization, may be taken as a random example of this type of studies.³

Applied Political Science

We have so far dealt with pure or theoretical political science; some final words on applied political science are justified. By common consent, the only task of pure or theoretical science is the study of facts and relations between facts. Among those facts, of course, are also the opinions human beings entertain about 'good' and 'bad' in politics. It needs hardly to be stressed that these opinions belong to the foremost objects of those branches of political science that deal with political attitudes and ideologies.

Applied science differs from its theoretical counterpart only in respect to the manner in which it selects its object, but not in its methods once the object is chosen. The difference is indeed so slight that the intense discussions that have at times emerged on this point seem futile; it is almost only a difference of wording. A typical starting-point for a research project in applied political science would be: "How can the peaceful solution of international conflicts be promoted?" or "Which measures are appropriate to strengthen our national security?". (In practice, of course, both subjects would probably have to be more exactly circumscribed.) Now, before the researcher accepts any of these tasks, he has to make a kind of moral decision. He must take a stand on the question, whether the goals that his work is assumed to serve are such that he wants to promote them; if he accepts the research task without accepting its purpose, his behavior is plainly immoral. The difference between a moral decision of this kind and the mere 'disinterested' study of facts is aptly stressed by Karl Popper:

"The decision, for instance, to oppose slavery, does not depend upon the fact that all men are born free and equal, and that no man is born in chains. For even if all were born free, some men might perhaps try to put others in chains; and they may even believe that they ought to put them in chains. And conversely, even if men were born in chains, many of us might demand the removal of these chains. Or to put this matter more precisely, if we consider a fact as alterable — such as the fact that many people are suffering from diseases — then we can always adopt a number of different attitudes towards this fact; more especially, we can decide to make an attempt to alter it; or we can decide to resist any such attempt; or we can decide not to take action at all."

(Popper, 1962, p. 62)

The decision that the scientist has to make in this respect ought not to be confused with the more trivial decision that any scientist must make before he begins to treat a theoretical subject. In the last-mentioned case, he asks himself whether the subject is 'interesting' enough to be studied; in the former, whether the goal served by his research is morally right. It is quite clear that the two situations are fundamentally different.

The necessity to scrutinize the goals of applied science from a moral point of view are not, however, peculiar to political science or even to the social sciences in general. They appear in any field of applied research. This fact is often concealed behind the general consensus that exists in society about the usefulness of such applied branches as medicine and engineering. But problems such as the acceptance or rejection of mercy killing and the choice between peaceful and military uses of atomic energy clearly show that, at a certain point, the ethical presumptions of applied natural science can also be questioned.

In social research, to be sure, consensus about accepted and rejected goals is much less widespread. However, the ethical differences that exist in this respect should not be overrated. In a stable democracy, it is as easy to find goals for applied political science that would be readily accepted both by learned institutions, research-promoting foundations, and individual scientists as to find other goals that would no doubt be proscribed. Measures to increase the participation of the public in political life or to strengthen administrative efficiency belong to the former category; the invention of more effective methods to murder leading politicians or to increase the bribing of public officials certainly fall under the latter category in spite of the fact that some political classics have recommended them. The consensus which exists about the fundamental values in stable democracies is sometimes so great that more non-conformist projects for applied research probably would be frowned at.

But of course, there are also fields where different values confront each other in stern conflict and where the problem of 'accepted' goals must be decided by each individual. The difference between pacifistic and national security values can, under some conditions, belong to this type of unsolvable moral conflicts. There are also less fundamental value conflicts that can appear in the daily practice of almost any project in applied political science. Thus, the government's interest in furthering administrative efficiency and the citizen's interest in having maximal legal guarantees are not always easy to bring under a common roof.

Once the decision to accept a certain practical goal has been made, there is no essential difference between the procedures of applied and theoretical political science. Herbert A. Simon has made a very instructive comment on this point:

"Sciences may be of two kinds: theoretical and practical. Thus, scientific propositions may be considered practical if they are stated in some such form as: 'In order to produce such and such state of affairs, such and such must be done.' But for any such sentence, an exactly equivalent theoretical proposition with the same conditions of verification can be stated in a purely descriptive form: 'Such and such a state of affairs is invariably accompanied by such and such conditions.' Since the two propositions have the same factual meaning, their difference must lie in the ethical realm. More precisely, the difference lies in the fact that the first sentence possesses an imperative quality which the second lacks".

(Simon, 1958, p. 248).

Suppose that a series of electoral surveys have made it clear that television performances affect voting preference much more than the reading of newspaper advertisements. Suppose further that these surveys have not been made out of a pure theoretical interest in voting research, but are sponsored by a party whose policies the researchers have accepted. Then, the same observation can be given the imperative form: "Concentrate on TV performances and give less money for advertisements in the papers". Obviously, the difference is rather one of style and of logical framework than of actual content. An observation, made according to the methods of theoretical research, is given the logical form of a recommendation.

These reflections have not touched upon the actual possibility of using the results of political science for practical purposes. In this context, we have to make a careful distinction between the mere 'practical usefulness' of a finding and the application of science in a proper sense. Political research distributes a flow of information about politics, and it goes without saying that part of this information may be very useful for the practicians — politicians and administrators alike — without having ever been intended for any practical purpose. A distinct thing is applied science in a proper sense, the conscious attempt to find solutions for practical problems by applying the results of empirical research. The success of this kind of scientific work is highly dependent on the capability of political scientists to make dependable predictions about the effects of a given measure. Since this predictive capability is still low in most fields of political research, the usefulness of applied political science is at present a limited one.

References

Only works explicitly referred to in the text are mentioned.

Almond, Gabriel A. – Coleman, James S., *The Politics of the Developing Areas*. Princeton: Princeton University Press, 1960.

Barents, Jan, Political Science in Western Europe. A Trend Report. London: Stevens & Sons, 1961.

Contemporary Political Science. A Survey of Methods, Research, and Teaching. Paris: Unesco, 1950.

Easton, David, The Political System. New York: Alfred A. Knopf, 1953.

Easton, David, A Framework for Political Analysis. Englewood Cliffs, N. J.: Prentice-Hall, 1965.

Fundamentals of Marxism-Leninism. Second Revised Ed. Moscow: Progress Publisher, 1964.

Kaplan, Morton A., System and Process in International Politics. New York: Wiley, 1957.

Lane, Robert E., Political Life. Glencoe, III.: The Free Press, 1959.

Lasswell, Harold D. - Kaplan, Abraham, Power and Society. A Framework for Political Inquiry. London: Routledge & Kegan Paul, 1952.

Nagel, Ernest, "Some Issues in the Logic of Historical Analysis" in Gardiner, Patrick: *Theories of History*. Glencoe, III.. The Free Press, 1959.

Ostrogorski, M., La démocratie et l'organisation des partis politiques. Paris: Calman-Lévy, 1903.

Politische Forschung. Schriften des Instituts für Politische Wissenschaft, Herausgeg. v. Prof. Dr. Otto Stammer, Band 17. Köln: Westdeutscher Verlag, 1960.

Popper, Karl, The Open Society and Its Enemies. Vol. I. The Spell of Plato. London: Routledge & Kegan Paul, 1962.

Simon, Herbert A., Administrative Behavior. 2nd ed. New York: Macmillan, 1957.

Snyder, Richard, et al., Foreign Policy Decision-Making. Glencoe, III.: The Free Press, 1962.

Tingsten, Herbert, Political Behavior. Stockholm/London: P. S. King & Son, 1937.

Waldo, Dwight, Political Science in the United States of America. A Trend Report. Paris: Unesco, 1956.

NOTES

¹ The present paper is intended as an introduction to a larger work on the goals and methods of political science. The incomplete character of some of the definitions given below must be understood against this background.

² In view of the increased use of mathematical models in political science the definition of that science as 'realistic' might be questioned. Because the object of models is to facilitate the understanding of reality I would, however, prefer to extend the content of the word 'realistic' to cover more than the mere 'photographic' description of things. What should at all events be pointed out is that models may have an ambiguous tinge of normativity as well: thus, the applications of game theory tell us how we *ought to* behave rationally if certain conditions are present. This normativity, to be sure, has no ethical or legal content whatsoever: it is purely technical and linked to the relationship between ends and means.

³ Some recent works have preferred to combine the construction of a frame of reference for political research with the introduction of a large number of hypotheses on actual behavior (e.g., Lasswell — Kaplan, 1952; Kaplan, 1957).

Once the decision to accept a certain practical goal has been made, there is no essential difference between the procedures of applied and theoretical political science. Herbert A. Simon has made a very instructive comment on this point:

"Sciences may be of two kinds: theoretical and practical. Thus, scientific propositions may be considered practical if they are stated in some such form as: 'In order to produce such and such state of affairs, such and such must be done.' But for any such sentence, an exactly equivalent theoretical proposition with the same conditions of verification can be stated in a purely descriptive form: 'Such and such a state of affairs is invariably accompanied by such and such conditions.' Since the two propositions have the same factual meaning, their difference must lie in the ethical realm. More precisely, the difference lies in the fact that the first sentence possesses an imperative quality which the second lacks".

(Simon, 1958, p. 248).

Suppose that a series of electoral surveys have made it clear that television performances affect voting preference much more than the reading of newspaper advertisements. Suppose further that these surveys have not been made out of a pure theoretical interest in voting research, but are sponsored by a party whose policies the researchers have accepted. Then, the same observation can be given the imperative form: "Concentrate on TV performances and give less money for advertisements in the papers". Obviously, the difference is rather one of style and of logical framework than of actual content. An observation, made according to the methods of theoretical research, is given the logical form of a recommendation.

These reflections have not touched upon the actual possibility of using the results of political science for practical purposes. In this context, we have to make a careful distinction between the mere 'practical usefulness' of a finding and the application of science in a proper sense. Political research distributes a flow of information about politics, and it goes without saying that part of this information may be very useful for the practicians — politicians and administrators alike — without having ever been intended for any practical purpose. A distinct thing is applied science in a proper sense, the conscious attempt to find solutions for practical problems by applying the results of empirical research. The success of this kind of scientific work is highly dependent on the capability of political scientists to make dependable predictions about the effects of a given measure. Since this predictive capability is still low in most fields of political research, the usefulness of applied political science is at present a limited one.

References

Only works explicitly referred to in the text are mentioned.

Almond, Gabriel A. – Coleman, James S., *The Politics of the Developing Areas*. Princeton: Princeton University Press, 1960.

Barents, Jan, Political Science in Western Europe. A Trend Report. London: Stevens & Sons, 1961.

Contemporary Political Science. A Survey of Methods, Research, and Teaching. Paris: Unesco, 1950.

Easton, David, The Political System. New York: Alfred A. Knopf, 1953.

Easton, David, A Framework for Political Analysis. Englewood Cliffs, N. J.: Prentice-Hall, 1965.

Fundamentals of Marxism-Leninism. Second Revised Ed. Moscow: Progress Publisher, 1964.

Kaplan, Morton A., System and Process in International Politics. New York: Wiley, 1957.

Lane, Robert E., Political Life. Glencoe, III.: The Free Press, 1959.

Lasswell, Harold D. - Kaplan, Abraham, Power and Society. A Framework for Political Inquiry. London: Routledge & Kegan Paul, 1952.

Nagel, Ernest, "Some Issues in the Logic of Historical Analysis" in Gardiner, Patrick: *Theories of History*. Glencoe, III.. The Free Press, 1959.

Ostrogorski, M., La démocratie et l'organisation des partis politiques. Paris: Calman-Lévy, 1903.

Politische Forschung. Schriften des Instituts für Politische Wissenschaft, Herausgeg. v. Prof. Dr. Otto Stammer, Band 17. Köln: Westdeutscher Verlag, 1960.

Popper, Karl, The Open Society and Its Enemies. Vol. I. The Spell of Plato. London: Routledge & Kegan Paul, 1962.

Simon, Herbert A., Administrative Behavior. 2nd ed. New York: Macmillan, 1957.

Snyder, Richard, et al., Foreign Policy Decision-Making. Glencoe, III.: The Free Press, 1962.

Tingsten, Herbert, Political Behavior. Stockholm/London: P. S. King & Son, 1937.

Waldo, Dwight, Political Science in the United States of America. A Trend Report. Paris: Unesco, 1956.

NOTES

¹ The present paper is intended as an introduction to a larger work on the goals and methods of political science. The incomplete character of some of the definitions given below must be understood against this background.

² In view of the increased use of mathematical models in political science the definition of that science as 'realistic' might be questioned. Because the object of models is to facilitate the understanding of reality I would, however, prefer to extend the content of the word 'realistic' to cover more than the mere 'photographic' description of things. What should at all events be pointed out is that models may have an ambiguous tinge of normativity as well: thus, the applications of game theory tell us how we *ought to* behave rationally if certain conditions are present. This normativity, to be sure, has no ethical or legal content whatsoever: it is purely technical and linked to the relationship between ends and means.

³ Some recent works have preferred to combine the construction of a frame of reference for political research with the introduction of a large number of hypotheses on actual behavior (e.g., Lasswell — Kaplan, 1952; Kaplan, 1957).