Scientific Inquiry and Group Theories in Political Science

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논문요약

본 논문의 목적은 첫째, 과학적인 정치학 연구는 어떤 단계들을 거쳐 이루어지는지에 대해 살펴보고. 둘째. 이러한 과학적인 정치학 연구의 한 예인 그룹이론들 (group theories)에 대해 분석하고 있다. 논문의 전반부에 서는 정치학의 과학적 연구를 위해 필요한 개념, 리서치 디자인, 가설 설 정 등에 대해 살펴보고 정치학 연구의 과학화가 갖는 한계점에 대해서도 분석하고 있다. 논문의 후반부에서는 그룹접근법들인 역할이론, 그룹이론, 갈등해소이론, 공공선택이론, 합리적 선택 이론 등에 대해 분석하고 있다. 결론에서는 정치학 연구의 과학화가 갖는 한계점에도 불구하고 과학적 탐 구가 정치현상을 분석하는데 도움을 주고 있기 때문에 학자들이 연구의 주제. 성향 등에 따라 전통적인 방법과 과학적인 방법을 혼용해서 쓰는 것 이 필요하다는 점을 강조하고 있다. 또한 정치학의 과학화의 한 예인 그룹 이론이 정치현상을 분석하는데 미친 긍정적인 영향과 그 한계에 대해서도 분석하고 있다.

주제어 : 과학적 정치학 연구, 개념, 리서치디자인, 가설, 역할이론, 합 리적 선택이론, 공공정책이론

I. Introduction

The purposes of this paper are twofold: First, to discuss ways and limits of studying politics scientifically; second, to examine group theories including bureaucratic politics and rational choice approach. To answer the first question, I discuss the philosophy of science, methods and research design of scientific research. The second part of this paper then examine one of scientific approach, group theories (approaches). Examining this will show strength and limits of studying politics scientifically.

II. Scientific Inquiry of Politics and its Limits

Can politics be studied scientifically? What gives political scientists to justify themselves in pursuing scientific research? Science is an objective and systematic way of looking at phenomena that allows for the creation of reliable knowledge. It is also based on systematic method of analysis of phenomena, which permits the accumulation of knowledge.

Scientific knowledge differs from knowledge derived from myth, causal observation, intuition, belief, or common sense. Scientific knowledge is empirical and subject to empirical verification, non-normative, transmissible, explanatory, and provisional. With the ends, the scientific approach has had a profound effect on the discipline of political science past several decades.

The study of politics follows the basic principles of scientific method. Scientific study of politics begins with the formation of concepts, then the formation of generalizations, and construction of theories, and finally the use of theories to explain and predict political phenomena.

Concepts are the building blocks of political science and every other

discipline. Concepts are abstract symbols that represent something or a quality about something. It uses languages to covert information into images. They need to be clear, precise, and agreed upon. It is the concept that serves as science's empirical bases. A science will never progress if it does not move beyond the concept formation stages.

The strength of discipline depend on the adequacy of its concepts to facilitating meaningful communication. Unfortunately, political concepts are often subjective in their use. Systemic approaches to social science concept formulation typically focus on matter of connotation and denotation. There are multiple connotations in which those using the concept weight the various connotations differently (Satori 1984). To surmount this conceptual contest, we need to operationalize these concepts. Operationalization is viewed as one basic method for introducing concepts to a scientific language. It links their concept to observational properties.

Another way of introducing concepts into a scientific language is through their placement in theories. Theoretical concept is defined within a theory. Hence, its meaning depends upon the other concepts in the theory and their relationship (Issac 1984, 82).

Concepts function to identify the political phenomena. It also have several descriptive qualities. Each concept has own function and usefulness. In order to be a sound concept, it must have empirical import as well as systematic import. We can relate a concept to other concepts to formulate generalization (Issac 1984, 89-94).

A scientific generalization expresses a relationship between concepts. It is important because it gives us a more sophisticated and wide-ranging description of political phenomena. Also, it follows from the nature of scientific explanation and prediction. Every sound explanation and prediction contains generalizations, so without it there are no predictions and explanations (Issac 1984, 103-104).

Concepts are linked through presumptions and assumptions which can be hypothetical, factual, and theoretical. For instance, hypotheses are the generalization that have been formulated but not tested and those that were tested and either confirmed or rejected. Making hypotheses require variables. Variables are a characteristic or a property of something. Independent variables are the cause and dependent variable are the results of phenomena.

A hypothesis must be clear, controllable, specific, researchable, and positive. A null hypothesis states that there is no relationship between variables. If this is proven, then the possibility of a relationship is ruled out. A spurious relationship is where variables other than the ones observed cause the results. Non-spurious is the opposite. Once the hypothesis has been formulated, scientists need to decide which of many testing method is most appropriate.

The study of scientific inquiry involves a study of epistemology, methodology, and methods. Epistemology is the study of the origins and development of knowledge. Methodology is the study of the description and analysis of methods. It examines how research is done. Method involves a general way of conducting inquiry with rules of evidence, inference, hypothesis formation and other parts of scientific inquiry.

Research methods include experimental, and quasi-experimental, and non-experimental. Quasi experimental method is trying to settle some kinds of control over uncontrolled situations while experimental methods is controlled for its research conducting.

Most scientists use the narrow definition and define the experiment in terms of three basic requirement: 1) the ability to manipulate the factor (independent and dependent variable); 2) the ability to control, to hold constant other factors that might have some impact on the dependent variable; 3) the ability to measure the impact of the independent variable on the dependent variable (Issac 1984, 121).

Numerals are used as labels to sort things such as social security number. Numbers are numerals with quantitative meanings. Measurement is the assigning of numerals and numbers according to rules. Its purpose is providing a precise, logical, systemic analysis. The system of measurement must be similar in structure. Levels of measurement is varies from the least precise to the most precise.

Among the activities that are essential to the development of a scientific discipline are model building and the theory construction. Both models and theories combine concepts and generalizations in various ways. However, models are used mainly to discover political facts, theories to explain them.

Theory is set of interrelated, warranted statements about a phenomenon. A good theory is internally consistent, has predictive properties, has explanatory capacities. A sound theories are the basis for reliable knowledge of politics. Theories help us to explain the predict political phenomena, and ultimately enables us to make practical decisions (Issac 1984, 165).

Theory has several functions: it explains facts and occurrence, and more importantly, it explain empirical generalizations. Scientists use theories to organize, systematize, and coordinate existing knowledge in a field. It also suggest potential knowledge by generating hypotheses. That is, in addition to its explanatory and organizational functions, theory has an heuristic one to suggest and to generate hypotheses (Issac 1984, 169).

Research performs two foundations in the process of theory building. Firstly, it provides knowledge about the political phenomena in which we are interested. Secondly, after statement about the patterning of political events have been formulated, political scientists need to know if those statements are accurate.

Conducting research is a multistage process. The first step is the task of selecting a problem of investigation. When one choose topic of a research, the topic should be interesting and also it has some significance in theoretical term. To achieve the academic goal of research, the topic should be chosen based on existing knowledge.

After deciding a general area of inquiry, the next step would be reviewing the literature. One needs to find out what else has been written on the topic. Once we decided what problem we will focus on in research, it is necessary to plan our research. This is called, research design.

Many factors affect the choice of a research design. One is the purpose of the investigation. Whether the research is intended to be explanatory or descriptive will most likely to influence the choice of a research design. Several problems arise in this process; there are practical limitations on how researchers test their hypotheses. Some research design may be unethical, others impossible to implement for lack of data or sufficient time or money.

In sum, research design include the following steps: Statement of general problem → Review literature → Formulation of hypothesis → Defining concepts in hypothesis - Make concepts operational -Designing data sampling and collecting → Collect data → Analyze data → Interpret data → Generalization → Apply finding.

Designs for hypothesis testing is either experimental or ex post facto. Experimental designs permit us to manipulate independent variables. With ex post facto designs we are not able to administer treatment to the subject. Instead, we can take as independent

variables events that have already occurred. A quasi-experimental research design utilize experimental methods under the condition of full experimental control is not possible (Plano 1982).

As political science becomes more concerned about scientific methodology, the importance of a good research design is increased. It is true that still historical and case studies are common, but increasing attention has been given to the research design for hypotheses testing. Formulating hypotheses before analysis of data, and testing alternative hypotheses, can increase our confidence that the relationships found through ex post facto research are genuine and not spurious. These controls are important because experimental designs are not possible to the study of political science.

Three categories of objection to the scientific study of politics was raised; It cannot be studied scientifically. If the purpose is to find absolute, universal laws, then it probably is impossible. If it is to find generalizations which can be flexible, it may be possible. This argument essentially attacks quantitative analysis-counting. Sampling must be done because the larger phenomenon is too costly to study. Some of the problems are over-inferring from data, overpromising.

A second objection for the scientific study is labeled as undesirable. It is said that 1) our egos offer resistance to being studied, 2) scientific study violates human uniqueness, 3) all humans are unique because they are not bound by their environment. Science looks at uniformity, causation, patterns, which goes somewhat against the free will of individuals. The response to this argument is that science observes behavior, it does not mandate kinds of behavior. To a certain extent all knowledges are ideological and therefore not objective. The argument rebutting this is that science is a system of checks against intrusion of values into the study of subject. Total objectivity is not

probable, but normal objectivity should be the norm.

A third objection for the conduct of science of politics is blamed as inadequate. But we need to retrospect what is the relationship between what political science has promised and how it actually performed? Clearly, as argued by scientists of politics, the informations from scientific inquiry has made it possible to grasp better understanding of human behavior and this is functioning as tools to predict and explain the phenomena of out-there-world.

Political scientists do not have the authority to tell others what action to take, but likewise, authorities cannot tell others how to study politics. Bias, within the study of politics may hinder the progress of knowledge. A bias is an unfair manner of influence used on another including lying, distortion, and editorialization. It is produced by 1) personal ideology or interpret, 2) partisan political ideology or interest, 3) professional ideology or interest, 4) organizational ideology or interest

III. Group Theories: An Example of Scientific Inquiry

The importance of group approach in political science has been recognized for centuries. The group approaches examine the importance of role that people hold in the political system as well as the relationship between the action of collective group and its impact on the political behavior. Overall, the group approaches tend to deal with individuals in specific societal contexts and with varying distributions of power between the actors.

This group approaches are premised on the belief that political activity involves more than just one individual, political activity occurs instead through individual actors in particular settings. The

next examine the group approaches including the importance of Role, Group, Conflict resolution, and rational choice.

1. Role Approach

Role is defined as the behavior expected of a person by society in a particular position or status. The role approach posit that political behavior is largely the result of the demands and expectations of the role that a political actor happens to filling.

For example, attitudes and personalities of president influence his decision, but the decisions may be affected primarily by his role as president. The individual behaves with some references and deference to the expectations of others, and the occupant of the role is interdependent on others.

There are three types of expectations involved in role theory which influence the actor. The external expectations are referred to as the 'nations of society' about how the actor should behave. The 'insider' expectations are those expectations of actors closely related to the actor filling a particular role. Finally, the actor himself has expectations of what the role is and how he should act (Issac 254). In role theory, these expectations can be a dynamic factor, as the various expectations may change.

There may be a number of expectations about how someone in a particular position is supposed to behave (e.g. a man as a father, teacher, husband). To the extent that he is a aware of his role as a father, teacher, husband, therefore, his behavior is likely meet he expectation of fulfilling whatever role he has. Another example of the use of role theory is in explaining judical behavior. Role expectation is the criteria that judges feel is proper for making their decision.

Put more specifically, behaviors that appear to be irrational in terms of goal maximizations assumptions may in fact be explicable by role conflict or contradictory role expectation. Several types of role conflicts can happen: 1) intra role conflict happens when the expectations or demands from the occupant of the role are mutually contradictory; 2) inter role conflict occurs when the occupant holds two or more roles, and the demands or expectations of another role; 3) personal role conflict arises when expectations to fulfill a role conflict with moral beliefs of the occupant.

These kinds of role conflicts appear when there is role overloaded or role ambiguity. The role overload occurs when demands of the role not necessarily contradictory, but are so extensive and time consuming what the expectations are to fulfill the role.

Role theory's methods and techniques are concerned with the following points: 1) positions must be viewed and studied in an relational context; 2) the position studies is called a focal positions that position related to it called the counter position; 3) positions must be studied in the context specific situation. Expectations of behavior from a particular role allows for empirical testing. How an actor responds to situations and pressured of a role can be studied by observation. Several works done using the role theory in order to explain judical behavior.

Role theory provides a framework for analyzing institutions in behavioral terms. According to role theory, institution are neither groups of individual nor structures, but systems of international roles. This gives the role theorists the ability to treat institutions as a dynamic process that has some continuity.

Given the complexity of most role networks, the questions must asked; can the roles is a particular situation be reduced to

a manageable number that still describes with some accuracy the behavior involved? It is useful in comparative analysis and social change for its strong descriptive applicability.

Another benefit of role theory is that it places the role occupant into a social context by allowing the role occupant to react to society. In this way it 'bridges the gap' between institutional and group theory. The role theory however, lacks predictive capacity, and does not given consideration to the idea that role orientations of role types in the study of politics. Furthermore, it ignore the possibility of non-role variables that may influence decisions.

2. Group Approach

The group approach was developed mainly by Arthur Bentley (1908) who emphasized importance of groups and an empirical method. As with the role approach, the group approach emphasizes the importance of social context in explaining individual motivations.

David Truman (1981) took up Bentley's empirical approach to study the activities of groups. To many group theorists, the basic concern was economic. This manifests itself through group activities, which create the issue agendas for political conflict and deliberation and then affect the authoritative allocation of values that follows (Polsby & Greenstein 1975, 245).

Bentley says that "each groups's members were united by their shared preferences on specific policies, and the preferences were revealed by the members' activity or behavior." (Polsby & Greenstein 246). To where Bentley repeatedly stressed the decisive importance of the procedural flow of activity, Truman explicitly considered those stable social and economic groups which do not necessarily have

continuing policy goals but can suddenly intervene in politics. Government as an aggregations of groups which have interest and interactions with each other and outside groups. Group theorists assumed that humans have tendency to organize because unaffiliated individual lacks means of access.

The underlying assumption of group approach is that one cannot understand political behavior in the small group simply by knowing the characteristics of those who make up the group; the group setting is crucial factor. This is a move away from strict micro-individualism toward a middle-level approach (Issac 1984, 259). Each group has character of its own, not reducible to its individual members. This is analogous to the holistic notion of national character.

In the group approach, so-called groupthink may be involved. Indications of the existence of groupthink include societal pressure to enforce conformity, limiting discussion to only a few alternatives, failing to reexamine intial decisions, and making little attempt to seek information from outside experts who may challenge a preferred policy.

Irving Janis (1982) argued that in a cohesive decision making group, that is, one made of people with common interests, there is always the danger that the decision makers will fall into the trap of unconsciously making proposals that they think will please their colleagues. The group begins to value an atmosphere of agreement more than rational decision resulting from a full, open, and critical discussions of the issues (Issac 1984, 261).

Criticisms of the group approach are: 1) it ignores individual, so it cannot account for individual by group membership; 2) its exclusiveness to U.S. system limits generalizability. Other critics have included that the concept of group loses its sensible meaning if defined broadly enough to include all political activity, and does not adequately deal with the psychological bases of individual political or account for the impact of government institutions upon individual and group behavior (Plano 1982, 60-62).

3. Bureaucratic Politics

Snyder (1954) is among the earlier advocates of bureaucratic politics model in analyzing American foreign policy. Huntington (1961) also acknowledged long ago that policy is not the result of deductions from a clear statement of national objectives, rather it is a product of competition among individuals and groups. Graham Allison's study of the Cuban missile crisis is case in point. Allison's discussion of the Cuban Missile Crisis (1969) has given a useful and influential explication of alternative decision units involved in foreign policy.

Many case studies are available on this subject matter. A study of Gelb and Betts (1979) well illustrate that US decision making process on Vietnam can be explained through the bureaucratic politics model. By focusing on the internal political process, they were aware of the conflict within government. It is widely shared beliefs among many analysts of this model that rather than conceptualize policy only as rational action, it is incumbent to know how the decision making machines work, their repertoires, the institutional rules of the game, and how the black box score is kept.

It is not surprising to find the results of research focusing on small groups and the bureaucratic politics model favored the presidential dominance in American foreign policy decision making. Due to its' necessity of speed, complexity and potential cataclysmic impact of events, all of which enhance the normal position of the president in

foreign policy decision making (George 1980). After all, we have seen that most all presidents since World War II have attempted to create their own doctrine in foreign policy. This doctrines articulated by Roosevelt and Truman and they became a basic model of American foreign policy during the Cold War era.

We can assess that the small group and bureaucratic politics approach does have a strength and descriptive richness derived from adopting as analytical categories the terms in which the political game is played. By looking at the policy process from within the bureaucratic web, this model considers the complexities and multiplicities of the pressures at work in the foreign policy decision making. Another contribution of this approach is that it is useful to understand the slippage between executive decisions and foreign policy actions that might arise during policy implementation process.

The critics, however, identified several shortcomings. First, most participants in foreign policy decision making indeed tend to interpret the actions of others to make them more consistent with held images. beliefs, rather than re-examining basic views. Since many decision-making situations involve hierarchical distributions of authority, the process by which decisions are made should not normally be expected to result of a choice unintended by any player in particular (Art 1973). It is problematic to agreed on the Bureaucratic Politics model that the office, not its occupant, determines how players behave. More often than not we saw that decision makers often do not stand where they sit, sometimes they are sitting nowhere.

A second limitation is that it describes decision making only as it occurs in the executive branch. For example, Allison and Halperin are not concerned with decisions involving the legislative branch or other external institutions. For example, the small group and bureaucratic politic model was representative of the decision making structure and process during the Johnson administration, however, during the Nixon's dealing with SALT, the bureaucratic politics model lost its applicability.

Third, this approach seems to underestimates the influence of the chief executive in foreign policy, since it treated the president as one of several bureaucratic players. The emphasis on bureaucratic bargaining failed to differentiate between the positions of participants in decision making. For instance, even during the Cuban Missile Crisis, the president is all but unfettered in his ability to make decisions and to shape the foreign policy decision making process.

It seems that there was no evidence of bureaucratic politics at work in his study of the 1976 crisis in the Korean demilitarized zone. Politics does not always take the form of bargaining and competition, rather it can be drawn from log-rolling as well as domination, repression, or even manipulation.

Janis concludes the maximization of values can be undermined by "the pervasive presence of politics in the form of interpersonal conflicts between decision makers, the political ambitions of decision makers, parochial interests groups, bureaucratic politics and/or the influence of other states, by groupthink (1983, 9).

Bureaucratic politics, may involve distortions of the alternatives proposed for a foreign policy problem if one bureaucratic unit can seeks to discredit rival bureaucracies and hence overstates the benefits of its proposal while exaggerating the costs of those alternative proposed by its rivals. Groupthink might entail the decision makers considering only those options that are likely to yield consensus without the optimal alternative existing among the set of those that group considers; and then the group may not necessarily choose the best alternative among these, but the one that is the least objectionable and yields consensus.

During the Cuban Missile Crisis, what this small group and the bureaucratic political approach argue was that organizational repertoires and hierarchies are so rigid and complex that the president cannot micro-manage all that happens. Allison correctly notes that the state's national interests is not a given, rather bureaucrats bargain to define the national interests. In a same vein, analysts of bureaucratic politics school maintain that although the president is powerful, it is not omnipotent, instead he is one chief among many. Thus, the output of foreign policy came out of the pulling and hauling, competition, and bargaining among policy makers and different governmental agencies.

4. Conflict Resolution

The origins of conflict resolution approach were influenced by other disciplines. Many other related disciplines explore the nature of human aggressiveness. From biology, Konrad Lorenz saw conflict as necessary for a species survival, and to achieve geographical distribution among animals, including humans.

Psychological theory of Sigmund Frued focused on the irrationality of men, attributing destructive behavior to a "death instinct". Erich Fromm found technological society to be the root of aggression, as it caused people to feel alienated. sociological theory found conflict to be inherent in social life, with conflict breaking out over distribution of scare resources.

Philosophical theory of Locke and Hobbes also found conflict to be a part of human nature, although Hobbes found men to be

destructive if left in the state of nature, and Locke found them to be corrupted by the necessary existence of the state.

The essence of the conflict approach is that conflict is a natural part of society, and the function of government is the control of conflict. Conflict can be defined as a pattern of interaction which occurs when there are disagreements concerning the allocation of scarce resources.

How do conflicts arise? It arises when people become aware of their differing interests concerning the allocation of scarce resources. contemporary social life is full of potential conflict at both the individual level and at national levels

In international relations, conflict arises because of integration and competition. A degree of integration is necessary, as conflict required contact between actors. Competition is the striving for scarce resources according to the rules governing the tactics to be used by competitors. Conflicts occurs when competitors disregard the rules.

In domestic level too, political competition and conflict in society arise over position or resource scarcity. Conflict is always concerned with the distribution of power. The goal of any party in conflict is the achievement of victory. When conflict occurs, the parties may have several resolutions: avoidance, on party withdraws its claims, mutual agreement, and fight war.

Another important question about conflict concerns its resolution. There are in effect three ways to resolve conflict: consensus, compromise, or coercion. Nations of societies' principle tasks involve the management and, if possible, peaceful resolution of conflict on whatever level it exists.

If all parties agree on a particular issue, the resolution of conflict is clear. If all parties do not agree, but are willing to cooperate in accommodating each other's interests, then there is at least the potential for compromise. If all parties do not agree, and prefer to complete using the resources available to them rather than find a compromise, then the resolution of conflict will often result from one side's coercion of others. In practice, societies engage in a mix of these alternatives in managing both domestic and international conflicts.

Several criticisms exist of this approach. It is argued that efforts at studying conflict resolution will erode the forces of common sense. experience, and history that argue for a strong defense as a deterrent to war. Wars break out because of the fundamental intractability of power, territory, national pride, and sovereignty. Although no paradigm has emerged yet, study has already begun on the nature, elements, and the future of the resolution process, and on the role of third parties in the areas of negotiation and mediation.

5. Policy Studies

Policy studies is an approach that attempts to discover "policy-relevant information" and make it applicable to solving problems in the public sector and government operations. While the approach was founded by Max Weber and Karl Mannheim, policy analysis was first widely used in the 1960's. Political scientists in the most-behavioral era became more concerned with issues that were relevant to everyday existence. The "outputs" of the political system were the policies that governed every life.

Policy studies, the main field, have two subdivisions. Policy-making looks at the content and implementation of policy. Policy analysis looks at the impact and evaluation of policy. Policy making can be

shorted into a number of typologies. The functional area method categorizes policies by the subject area of the policy.

Political policy has five different stages. The first stage is issue formation where some actor recognizes a problem. The second stages is policy demands where people demand action or nonaction on an issue. The third stage is agenda formation. These first three stages from the pre-policy part of the process.

The fourth stage, or deliberation and policy analysis, involves the selection of a goal and a commitment to that goal by some policy-making body. The last stage is policy implementation. The policy-making body established concrete steps what will help fulfill the goal they have set. Researchers can look at a policy question from three approaches.

The study of policy has had some success. Scholars have found that policies often have effects what were unintended by policy makers and that different types of policy making effects in different types of policy areas. A dilemma exists though between specificity and generalization.

Since most policy-making requires an in-depth knowledge about a certain issue, detailed cases studies are used instead of quantitative studies. But, these case studies yield narrow theories that are difficult to apply outside of a limited area. In so far as most policy is not value natural, some critics charge that participation in policy formation causes political scientists to lose the objectivity that all social scientists need to maintain.

The policy approach also has other limits. Problems exist in measuring costs and benefits. Policy often impacts other people than those it was targeted to affect. Experiments are difficult to conduct because researchers are often unable to set up a control group for ethical or other reasons. Political scientists can not set up an experiment with two identical neighborhoods and withdraw police protection from one in order to see the effects of a city's police force on crime.

6. Rational Choice

The rational choice approach has developed out of economic analysis in the late 1950's and early 1960's. Like many theories originating in economics, the rational choice approach assumes rational actors, perfect information, and ideal circumstances.

The definition of the rational choice approach is that a rational choice explanation of human must satisfy three requirements: the section chosen is the best way for the agent to satisfy his desire, given his belief; the belief is the best he could form, given the evidence; the amount of evidence collected is itself optimal, given his desire. The rational choice approach is used in studying political science with assumption that politics involves the act of making choices, theorists of rational choice explain political phenomena based on the behavior of actors, as they seek heir goals based on their preferences.

It is argued by theorists of rational choice that an action is rational to the extent that it is correctly designed to maximize goal achievement, given the goal in question and the world as is exists. To act rationally requires a rank ordering of preferred goals, considerations of all feasible alternatives to attain those goals in the light of existing capabilities, and consideration of the costs and benefits associated with using particular methods to attain particular goals.

The assumption is often made in international relation research that actors do often act rationally. It is difficult to define rationally and distinguish a rationality of ends from a rationality of means, the

rationality of means is easy to specify; a means is rational if it pursues a given objective effectively (Susser 1992, 300).

This approach assumes that all political actors, or a particular class of them, are rational, in an economic sense, a politician is rational if, given a particular objective a of a situation, a course of action that is most likely to achieve the objective is chosen" (Issac 1984, 233). A more realist notion of rational is that the typical rational decision makers do not chosen among grand, comprehensive alternatives but instead make a series of small, piecemeal adjustments to existing policies.

Rational choice is a deductive strategy that proceeds from assumptions that all social phenomena are derivable from or can be factored into the properties and behaviors of individuals. Players will behave rationally. Players have defined goals, rules, and equal information

Also political actors are material interest maximizers, seeking benefits in the form of votes, offices, power, and so on, at the least cost. Rational choice research is not done on particular set of institutions or on a specifically defined set of political problems. instead analyzes the discipline throughout a wide range of contexts. Some examples of the uses of rational choice approach are game theory and voting behavior.

In evaluating the usefulness of rational choice theory, one must note that much of political behavior is not rational. Thus, rational theories are limited in their scope. This means that "it is incumbent upon the political scientist who contemplates employing a rational theory to substantiate the claim that a political actors is rational" (Issac 1984, 235-236). A concept of rationality at least served as a focal point or standard against which behavior can be measured.

The rational approach has a certain appeal that many other

models lack: 1) it is easy to use a simple rational model; 2) it yields the comforting thought that the decision makers who hold our lives in their hand are truly rational.

However, there are several limitations of the rational approach to the study of political science. While this approach assumes rationality. much political behavior not rational. Thus, rational choices are limited in their scope. Rational choice theory lack empirical support-primarily normative, and indeterminate.

Almond points out that rational choice analysis may lead to empirical and normative distortions, unless it is used in combination with the historical, sociological, anthropological, and psychological sciences, which deal with the values and utilities of people, cross-culturally, cross-nationally, across the social strata, and over time (Almond 1990, 121, 134).

7. Public Choice

Public choice is founded on theories of collective action and public goods, and incorporates elements of political science, of public administration, and of microeconomics. Public choice theory assumes that people will pursue their self interests. Consequently, they are not likely to pursue collective interests. Therefore, the main problem in decision making from the public choice perspective concerns how to aggregate individual preferences into a collective choice that is not rational.

Collective action, in terms of minimal objectives such as law, order and defense, helps an individual to minimize costs and minimize benefits. It is therefore in the interests of rational, self interested individuals to create a state to achieve these ends.

Public choice theory defines the core problem of policy making to be

the provision of public goods and services but rejects the notion that a unified governing unit, organizations, bureaucracy are responsible for all public policy making in an given area. Public choice theorists argue that only through the proper design institutional agreements can effective, efficient and responsive public policy making occur.

As opposed to game theorists, who generally focus individual actors (or groups acting as units) and the strategies best suited to maximize their interests against those of rival actors, public choice analysis is interested in how public choices can accommodate individual preferences (Susser 1992, 309).

Public choice aims at understanding the considerations that go into public decisions seeking to maximize the individuals. However, this approach cannot allow too active and interventionary a state, since it would confer more costs than benefits on individuals. It needs, therefore constitutional restraints premised on individual choice.

8. Game Theory

Game theory is an application of mathematical reasoning to problems of conflict and collaboration between radical self-interested actors. It has been used most in the field of international relations. Game theory can best be described as the formal study of the rational, consistent expectations that participants can have about each other's choices (Susser 1992, 302).

The game theory approach is a decision making approach based on the assumption of actor rationality in an situation of competition. Each actor tries to maximize gains or minimize losses under conditions of uncertainty and incomplete information, which requires

each actor to rank order preferences, estimate probabilities, and try to discern what the actor is going to do.

In the game approach, several different scenarios are used, based on the number of players and whether or not the games are zero-sum. The first type, and the most simple, is the zero-sum game, an "all or nothing" payoff game consisting of two players.

More complex, as well as more realistic, are non-zero games with more than two players, and mixed games, both of which allow different levels of payoffs according to the decision of th actor in comparison to the decisions of other. By examining the likely choice of strategies of independent players it is often possible to show not only what the outcome will likely be, but where apparently rational interest-maximizing choice will produce a sub-optimal pay off for both.

Game theory has contributed to the development of models of deterrence and arms race. The central problem is that rational decision for an individual actor, such as a state, may be to defect and go it alone as opposed collaboration with another state actor, to taking a chance on.

Game theorists do not forecast what will happen. Game theory serves more as a heuristic than an actual predictive theory. Game theorists are concerned with identifying the rational course of action given certain objectives, constraints, and contingencies (Susser 1992, 302-303). To prevent the worst possible scenarios, game theorists target the formation of political coalitions.

Game theory is one branch of a whole development of public choice theories that are said to shed increasing light on social interactions. However, the great promise that appeared twenty years ago has not been realized, largely because of the difficulty of building sufficiently accurate empirical assumption into the models.

W. Conclusion

Despite advances of scientific method in studying politics, it has not been applied as widely in political science as in the natural science. Partly because political science emerged from historical. legalistic tradition of conducting research, or maybe because the scientific study of political science is simply impossible.

Obviously, political variables present difficult problems of operationalization and quantification. Nevertheless, scientific method is and should be essential part to building valid empirical generalizations about political phenomena. Comparison, counting, and sampling are parts of our everyday life.

As a subject matter itself, political science involves the study of human beings and the discovery of explanations for the political behavior that they exhibit. This discovery of regularities of behavior in politics inevitably requires that human beings act consistently or in a discoverable manner. The best way of studying politics as much as possible is to combine traditional and scientific approaches depending upon issues, topics, and personal interests.

As discussed in the third part of the paper, the group approaches tend to deal with individuals in specific societal contexts and with varying distributions of power between the actors. This group approaches are premised on the belief that political activity involves more than just one individual, political activity occurs instead through individual actors in particular settings. In conclusion, group theories have contributed to the scientific study of politics with its explanatory power and descriptive richness. Yet, as other theories in politics, it has limits and flaws too.

⟨References⟩

- Almond, Gabriel A. 1990. A Discipline Divided: Schools and Sects in Political Science, Sage Publications.
- Art, R. J. 1973. "Bureaucratic Politics and American Foreign Policy: A Critique," Policy Sciences, 4, pp. 467-490.
- Bentley, Arthur F. 1908. The Process of Government: A Study of Social Pressures. Chicago: University of Chicago Press.
- Crotty, William. ed. 1990. The Theory and Practice of Political Science, Sage Publications.
- Dahl, Robert A. 1991. Modern Political Analysis, 5th ed. Prentice Hall.
- Gelb, Leslie H. & Richard K. Betts, 1979. The Irony of Vietnam: The System Worked, Washington: Brookings Institution.
- George, Alexander. L. 1980. Presidential Decisionmaking in Foreign Policy: The Effective Use of Information and Advice, Boulder, CO: Westview Press.
- Issac, Alan C. 1984. Scope and Method of Political Science, 4th ed. Dorsey Press.
- Janis, Irving L. 1982. Groupthink: Pychological Studies of Policy Decisions and Fiascoes. 2nd ed. Boston: Houghton Mifflin.
- Merritt, Richard L & Pyskzka Gloria J. 1969. The Student Political Scientist's Handbook, Schenkman Publishing Co.
- Plano, Jack C. et al. 1982. The Dictionary of Political Analysis, 2nd ed. ABC-CLIO, LLC.
- Polsby, Nelson W. & Greenstein Fred I. et al. 1975. Handbook of Political Science, vol. 1, Addison-Wesley Publishing Co.
- Ricci David M. 1984. The Tragedy of Political Science: Politic, Scholarship, and Democracy, Yale University Press.
- Snyder, Richard C, H. W. Bruck and Burton Sapin, 1954. Decision-Making as an Approach to the Study of International

- Politics, Princeton: Princeton University Press.
- Snyder. Richard C. H. W. Bruck and Burton Sapin, eds. 1962. Foreign Policy Decision-Making. Glencoe: The Free Press.
- Satori, Giovanni. ed. 1984. Social Science Concepts: A Systematic Analysis, Sage.
- Susser, Bernard, 1992, Approaches to the Study of Politics. Macmillan Publishing Co.
- Truman. David. 1981. The Governmental Process: Political Interests and Public Opinion, Praeger.

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⟨Abstract⟩

Scientific Inquiry and Group Theories in Political Science

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The purposes of this paper are twofold: First, to discuss ways and limits of studying politics scientifically; second, to examine group theories to the study of political science. To answer the first question, I examine philosophy of science, methods of scientific research, and limits of scientific study of politics. As a subject matter itself, political science involves the study of human beings and the discovery of explanations for the political behavior that they exhibit. This discovery of regularities of behavior in politics inevitably requires that human beings act consistently or discoverable manner. I argue that the best way of studying politics as much as possible is to combine traditional and scientific approaches depending upon issues, The second section of this paper will examine one of important middle-range theory of politics; group theories (approaches). Examining this will show strength and limits of studying politics scientifically. The group approaches examine the importance of role that people hold in the political system as well as the relationship between the action of collective group and its impact on the political behavior. Overall, the group approaches tend to deal with individuals in specific societal contexts and with varying distributions of power between the actors. This group approaches are premised on the belief that political activity involves more than just one individual, political activity occurs instead through individual actors in particular settings. I argued that group theories have some explanatory power and descriptive richness, though it has limitations.

Key words: Scientific Inquiry of Politics, Group Approaches, Role theory, Conflict Resolution, Bureaucratic Politics, Public Choice, Rational Choice