Rational Approach in Administrative Organization:
Focused Study on Herbert A. Simon

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Herbert A. Simon은 행정학에 과학적이고 논리적인 방법론의 개념과 합리적인 개념을 현실에 적절하게 접목하여 행정학이론을 실증적인 측면에서 접근을 시도하였다. 본 논문에서는 행정조직의 문제해결을 위해 행정조직을 구성하는 개인들의 합리적인 의사결정과 조직의 효율적인 운영을 위한 이론적인 접근으로서 행정학과 합리성에 관해 살펴보고, 조직에서의 미시적인 측면과 거시적인 측면에서의 의사결정에 관해 논하고, Simon이 추구한 조직행태론에서의 합리적인 모델을 제시하는 것으로 구성되어 있다. 이런 이론들을 토대로 행정학과 관련된 융용분야를 발전시킨 Herbert A. Simon의 학문세계를 통해 행정학의 발전방향을 제시하고자 한다.

RATIONALITY IN ADMINISTRATIVE BEHAVIOR

Herbert simon is concerned largely with what goes on "inside" administrative
organizations using words in social science – "behavior," "decision-making," "rationality," and "organization."

In a broad sense, rationality denotes a style of behavior that is appropriate to the achievement of given goals, within the limits imposed by given conditions and constraints. Theories of rational behavior may be normative or descriptive that is, they may prescribe how people or organizations should behave in order to achieve certain goals under certain conditions, or they may purport to describe how people or organizations do, in fact, behave. This concept will be concerned with the structure of theories of rational behavior, whether they are intended prescriptive or descriptively.

**Philosophy of Science**

In Administrative behavior, Simon advocated the development of a science of administration based squarely on the canons of logical positivism. In other early writings, Simon appeared not merely as an apostle (Simon, 1947, 1952) – taking "a very austere view as to what may be counted as scientific knowledge" and elevating this knowledge "to a highly privileged status excluding almost all other sources" (Ziman, 1984: 189).

Moreover, Simon always has formally taken a very restrictions stance with respect to the influence of science on values (Graham, 1981). This early identification with logical positivism has led to no end of problems in the evaluation by others of Simon's conceptions of rationality.

Then, too, Simon has never been able to live up to the demanding distinctions he has offered, say, between applied and pure sciences of administration (Simon, 1947: 302):

We find a second group of rebels, a group of which I count myself a member, who wish to create a pure science of human behavior in organizations ...... This group does not, or should not, have any illusion that it is prescribing for public policy. In my analysis is correct, there does not appear to be any reason why these two developments in the field of public administration should not go on side by side, for they in no way conflict or
contradict. But the workers in this field must keep clearly in mind in which area, at any given time, they propose to work.

Simon now declines the label of “revolutionary” and presumably “rebel” as well (Simon, 1985a). Much of his work always has been intermittently pure and applied as he defines the terms – and which, with respect to Administrative behavior, he explicitly acknowledges (Simon, 1957).

This has encouraged three unfortunately common reactions to Simon’s work: (1) to reject it as fatally flawed because it is erected on a philosophically suspect foundation (Ladd, 1970); (2) to dismiss it as shallow and thus of little significance (Storing, 1962); or (3) to misinterpret the whole, as well as numerous specific passages, as being exclusively or primarily normative in character (Denhardt, 1981). Although understandable, none of these reactions are fully justified.

Because a strict restrictions approach to the relationship between science and values is not tenable for social science generally does not imply that Simon is necessarily an uncritical expansionist (Graham, 1981). Indeed, in an effort to adhere to his restrictionist inclination, Simon has been repeatedly skeptical and critical of expansionist claims in practice. He had not abandoned the point – first presented forcefully in Administrative Behavior – that logic does not permit an “ought” conclusion to be derived formally without the introduction of an ‘ought’ premise somewhere along the way.

Because orthodox logical positivism has been discredited as a model of how “real” science operates, or should operate, does not mean that good science cannot be done by someone who believes strongly in positivism or empiricism, nor does it mean that positivist tenets have no practical value in guiding research and criticism. The philosophical decline of logical positivism does Simon’s argument little good, to be sure, but Simon’s science is not all that vulnerable, being erected on a foundation consisting of more than the conclusions of logical positivism.

Moreover, that a commitment to doing positivist science must entail a commitment to more than narrow positivism is usually not considered.
Simon’s work is important and influential not because of his ostensibly positivist epistemology, but because of his commitment to various norms of science which we have come to understand through the sociology of knowledge. For Simon, concepts are to be revised, refined, and built upon; conclusions are to be accepted only tentatively; and whole realms of interest may be ignored by individual researchers who are merely part of a larger, social, complementary, and cumulative enterprise (Simon, 1985b):

Science, viewed as competition among theories, has an unmatched advantage over any other form of intellectual competition I know. In the long run, the winner is selected, not by its superior rhetoric, not by its ability to persuade or dazzle laymen, not by political influence, but by its agreement with data, with facts, as they are gradually and cumulatively revealed.

If the power of science to reducing the ambiguity of evidence (Boulding, 1981) derives as much as anything from the collective output of a peculiar community striving toward consensus (Ziman, 1984: 189), then individual researchers or even inconsistent over time (Storing, 1962). These criticisms, all of which have been directed at Simon’s treatment of rationality beginning with Administrative Behavior, can be seen as virtues as well as faults.

Rationality and Public Administration

It is barely adequate to say that Simon’s work on rationality has had a tremendous influence on teaching and research in public administration, and on practice as well. To some extent, this influence was greater because of two general trends in political science and public administration that Simon’s work reflected: an emphasis on empirical research and a willingness to adapt and extend economic approaches to modeling political and organizational processes. Simon’s work, beginning with Administrative Behavior and extending at least through the early 1960s, was all the more influential because of his roots in political science and his continuing close intellectual association with public administration and political science. His co-authored textbook Public Administration (Simon, Smithburg, and Thompson, 1950), while never enjoying
widespread classroom adoption, was cited often by scholars, particularly with respect to its extension, refinement, and application of the approach to administrative rationality presented in Administrative Behavior. Such terms as "bounded rationality" and later "satisficing" became part of the vocabulary of anyone pretending to study public administration and a focus on the decision process in the tradition of Simon characterized a great deal of research.

Less influential for public administration, however, has been Simon’s work on rationality deriving from (or, more accurately, motivating) his researches in information systems and cognitive psychology. Simon has been sounding for more research on a particular kind of rationality in organizations, what he labels "procedural rationality."

**Substantive and Procedural Rationality**

Simon begins with a definition of rationality as an attribute or standard of behavior, a usage drawn from classical economics. His focus is on the limited usefulness of this standard of global rationality when applied to administrative situations. Simon offers the specification of more realistic norms of rationality. By modifying standards of rationality to take account of limitations upon rationality in actual behavior, he established "bounded rationality" as a useful concept for explaining and evaluating behavior in organizations. Much of Simon’s work through the 1950s represents his creative gripping with this modified economic theory of rationality. He is interested in specifying various assumptions about goals and conditions to make the concept of rationality less ambiguous and more useful. He finds psychology helpful in specifying realistic goals and conditions for subjective or bounded rationality. He implies that there is basically one conception of rationality of which several variation are possible. Bounded rationality is thus a more accurate and useful description of an applied generic rationality of means and ends (alternatives and consequences).

Moreover, the objections that have been raised to the means–end schema
are (a) that it obscures the comparative element in decision-making, (b) that it does not achieve a successful separation of the factual elements in decision from the value elements, and (c) that it gives insufficient recognition to the time variable in purposive behavior (Simon, 1957: 66). Then a decision may be called "objectively" rational if in fact it is the correct behavior for maximizing given values in a given situation. It is "subjectively" rational if it maximizes attainment relative to the actual knowledge of the subject. It is "consciously" rational to the degree that the adjustment of means to ends is a conscious process. It is "deliberately" rational to the degree that the adjustment of means to ends has been deliberately brought about (by the individual or by the organization). A decision is "organizationally" rational if it is oriented to the organization's goals; it is "personally" rational if it is oriented to the individual's goals (p. 77).

Not until the mid-1960s does he explicitly in writing that two fundamentally different definitions were being used. In A Dictionary of the Social Sciences, Simon explicitly contrasts these two usages but goes no further than to say that "rationality, in reference to the process of choice, appears to be disappearing from social science literature" (Simon, 1964). But disappear it has not. While perhaps still preferring such terminology as "cognitive processes" or "intellectual processes," modern cognitive psychology no longer eschews the term rationality. As a now widely accepted and recognized field of research psychology, cognitive psychology has made tremendous strides since the 1950s in explaining and modeling human reasoning. Many of these advances were made or inspired by Herbert Simon. Indeed, Simon's research agenda for at least the last two decades has been dominated by his work in artificial intelligence and information processing psychology.

In several different lectures and papers since 1976, Simon reanalyzes these two concepts of rationality, one with origins in economics, the other from psychology (Simon, 1957, 1985a).

The conflict between situational determinism and economic behavioralism
has been most often discussed from the vantage point of the discipline of economics, and as though the discrepant views of rationality associated with the two programs were both indigenous to economics. In point of fact, situational determinism is indigenous to economics, but economic behavioralism is largely an import from psychology, brought into economics to handle certain problems that appeared not to be treated satisfactorily by the situational approach. Thus, the concept of rationality employed in the program of economic behavioralism is not merely an adaptation of the concept previously used by economists following the program of situational determinism. It is a distinct concept that has its own independent origins within psychology (Simon, 1982). According to these concepts, he will use the phrase "substantive rationality" to refer to the concept of rationality that grew up within economics, and "procedural rationality" to refer to the concept that developed within psychology. Also, he labels the two notions "substantive rationality" and "procedural rationality" (Simon, 1982: 402).

I asked myself how economics and psychology, but deeply concerned with human rational behavior, could go their separate ways with almost no concern for each other or mutual communication. In particular, when asked to provide a definition of "rationality" for the Dictionary of the Social Sciences, I had to supply two distinct definition, one to fit the usage in economics, the other to fit the usage in psychology. Out of this discovery came the distinction between the "substantive rationality" assumed in classical economic theory and the "procedural rationality" studies by psychologists.

Substantive rationality refers to behavior "appropriate to the achievement of given goals within the limits imposed by given conditions and constraints ... The rationality of behavior depends upon the actor in only a single respect - his goals. Given these goals, the rationality of behavior is determined entirely by the characteristics of the environment in which it takes place" (Simon, 1957). Choice, however, "is not determined unequivly by the objective characteristics of the problem situation, but depends also on the particular heuristic process that is used to reach the decision" (Simon, 1979).
Procedural rationality, on the other hand, describes an intelligent system's ability to discover appropriate adaptive behavior. "Behavior is procedurally rational when it is the outcome of appropriate deliberation. Its procedural rationality depends on the process that generated it" (Simon, 1976). Thus research on decision-making must "given an account not only of substantive rationality - the extent to which appropriate courses of action are chosen - but also procedural rationality - the effectiveness, in light of human cognitive powers and limitations, of the procedures used to choose actions" (Simon, 1978).

**Implications for Public Administration**

Simon's terms "substantive rationality" and "procedural rationality" have, potential, considerable significance for public administration.

Most importantly, the distinction is a distinction theories and of possible research programs. Although Simon has not addressed this message directly to public administration scholars, he would be unlike to argue that it any less relevant. If Simon's analysis is accepted, it points to the limited further progress that is likely to be made by a mere extension and application of a neoclassical economics approach in explaining administrative phenomena in public organizations.

In Simon's view, however, public administration and political science are less guilty than economics of "worshipping at the altar of rational choice theory" (Simon, 1985a: 300). Assumptions about rationality are used, but tentatively, sensitively, and with concern for empirical validity. I think that Simon would prefer the more emphasis be placed on exploration of mechanisms, drawing upon the psychological literature. Public administration has been much more receptive to psychological ideas and approaches than has economics: for many, the theories, the training, and the tools are already available for the investigation of applied procedural rationality in public administration as a research design and policy design.
DECISION PREMISE IN ORGANIZATION

Decision making constituted the core of administration. Indeed, decision making was essentially the same as management itself.

In the past, under the influence of the politics-administration dichotomy, interest in decision making had been concentrated at the highest organizational levels, where broad politics are made. Simon argued, however, that decisions at this level simply lead to decisions at other levels, all the way down through the administrative system. From the decision of the chief executive to undertake a new program to the decision of the operative employee to carry out a given order, the same basic process of decision making occurs.

Simon saw that the decision-making process, at whatever level, consists of three parts: intelligence, design and choice (Simon, 1967). By intelligence, Simon referred to those activities by which one scans the environment and arrives at occasions to make a decision; by design, the referred to finding or developing alternative courses of action; and, by choice, he referred to the selection of the alternative with the best chance of success. They seem to constitute the basic elements of decision making.

In Administrative Behavior, Simon sees human choice as a process of drawing conclusions from decision premises: “It is ... the premise (and a large number of these are combined in every decision) rather than the whole decision that serves as the smallest unit of analysis” (Simon, 1976). Simon’s description of human choice stems from Chester Banard’s classic analysis of organizational authority. Barnard saw authority exercised when a person allowed his or her decisions to be guided by decision premises provided by another person. In a work organization, an employee accepts authority by permitting his or her behavior to be guided by the decision of the superior without an independent examination of that decision(p.11). The “zone of acceptance” defines the boundaries of accepted authority. Barnard had earlier referred to a similar phenomenon as the “zone of indifference” (Barnard, 1938). And yet, as Simon explains, any particular decision is the product of
streams of decision premises that converge to influence the action decision-
making of organization members that create the occasion for exercise of
authority (Simon, 1976: 110-151). So that, ultimately, the subordinate, by
accepting the decision, is implicitly accepting both the stream of decision
premises and the form in which they converge in a particular situation.

The ethical content of organizational behavior refers to the broad notions
of right and wrong reflected in macro-level organizational choices and in
micro-level individual judgments. Since the positivist approach taken in
Administrative behavior assumes a fact-value dichotomy that sees value-laden
statements as non-cognitive and not susceptible to empirical or rational
resting (Simon, 1976: 46), using Simon’s concept for rational analysis of the
ethical dimension of decision-making required some explanation. Ethical judgment
has typically been viewed by positivists as a problematic subject for rational
scientific inquiry. This clear separation of empirical "facts" and normative
"values‘ often is associated with a theory of ethics which sees moral
judgments as essentially emotional responds to life conditions (Fisher, 1980)
that are ultimately beyond the reach of rational or empirical methods. In
Simon’s view, scientific reasoning and investigations relate only to "fact," ...
"the decision making process must start with some ethical premise that is
taken as given" (Simon, 1976: 50).

Decision premises, their rank ordering, and their combination can be
systematically examined as reasons that result in a decision. Viewed from
this perspective, the decision premise is just the conceptual tool a good
reasons ethicist utilize in attempting to analyze the ethical dimension of
management decision-making. This can apply at the macro-level, it is the
tool for understanding the exercise of moral choice for individuals in
organizations. In each case, decision premise serves as a conceptual tool to
help sort the streams of premises flowing into a final judgment. It does not
sanction certain ends a priori but, rather, it clarifies the reasoning behind
each stream of decision premises so that the reasoning itself can be
assessed.
Macro-level Decision-making

At the macro-level, the decision premise describes the reasons organization give for action of the corporate body.

The first frame of reference from which premises may be drawn is labeled collective negotiations (Stewart, 1984). Factual premises contained within this frame of reference assert that the growth in the size of organizations, increased bureaucratization, deterioration of material and social standing, and changing economic and social conditions have intensified employee incentives to band together in association to improve their lot in work organizations (Levy, 1977). The central value premises inherent in the collective negotiations frame of reference assert that imbalance to power between employer and employees is bad: that the ability to share in decision-making that affects one’s livelihood is a basic human right; and that this process value should be deferred to, independent of substantive goals, in any human resource decision-making (Stewart, 1984).

The second frame of reference from which decision premises might be drawn is labeled merit (Stewart, 1984). Also, the value premises inherent in the merit frame of reference is a basic Aristotelian notion of procedural justice that calls for treating all equally and unequals unequally. The good is achieved by the institutionalization of standards that measure individuals relative to capacity to perform a certain kind of work and that sort out on that basis. According to this principle, employees would be dismissed based on their performance ratings, with the least competent leaving first irrespective of seniority (p.16).

Conducting an ethical analysis of the ultimate policy decision that an agency articulates first requires that we understand the actual decision premises that stand behind a decision and second that we assess these resources as good enough in terms of possible competing premises. Good enough is not to be judged by some empirical/scientific standard that would render a true or false judgment. In other words, understanding the goodness
or badness of human resource decision-making in a particular organizational
decision can be achieved by exploring the content of these decision frames of
reference and engaging in practical deliberation about the normative
conclusions to be deduced from the factual evidence.

The characteristics of most human resource decisions in organizations are:
(1) they reflect premises drawn from one or more frames of reference; (2) in
a particular decision, the value premises emanating from one frame of
reference are weighted more heavily; and (3) the choice is based in part on
how compelling the factual premises are in a particular case. Administrative
Behavior broke new ground in formulating a strategy for assessing the
validity of the factual premises.

**Micro-level Decision-making**

At the micro-level, Simon’s notion of decision premise is a basic tool for
understanding the individual’s relationship to the organization. The characteristic
of the subordinate role in an organization is that “... it establishes an arena
of acceptance in behavior within which the subordinate is willing to accept
the decisions made for him by his superior. His choice is then determined,
always within the zone of acceptance, by his superiors, and the relations of
superior–subordinate holds only within that area” (Simon, 1957). The content
of that area is defined by the decision premises contained within. Individuals
accept certain sets of decision premises when they join the organization –
this constitutes their personal “zone of acceptance.” Ethical quandaries arise
for individuals when the rank ordering and weighting of values of an
individual differ from that of his/her superior or when the conditions create
new issues that alter previously-held rank ordering or weights.

The use of Simon’s concept of “decision premise” clarifies the reasoning
behind the stream of premises that feed macro-level organizational judgments.
It also offers a framework for describing a moral basis for individual actions.
The decision premises are the reasons that support decisions and therefore
actions. Rational evaluation of moral positions of individuals or organizations depends on our ability to articulate and assess those reasons. Whether reasons are "good enough" will be answered only by drawing on other criteria for judgment: utilitarian, consequentialist or perhaps a pluralistic combination and by crafting a convincing argument. But in the thorny ethical process of drawing lines, the final judgment can only be reached with the decision premise firmly in hand. In that sense, Simon's concept of decision premise can become a fundamental tool for ethical analysis of organizational actions. It facilitates the first step in analyzing the ethical content of organizational behavior.

**ORGANIZATIONAL BEHAVIOR**

Herbert Simon's image of "administrative man" has penetrated deeply into on organizational behavior in public organizations (Harmon, 1986). Vital to the formulation of "administrative man" is the concept of decision premise. Decision premise stands as a central segment in a line of reasoning that explains why people accept authority in work organizations. As such, it is the key to understanding the ethical dimension of organizational and individual choice.

**Rational Model**

The rational model of administration was given its earliest and most forceful presentation in the literature on public organization in Simon's Administrative Behavior. Beginning in the early 1950s, Simon's work turned increasingly toward the social psychology of decision making, then to information technology and the processes of cognitive development. Consequently, although Simon's own efforts in the field of public administration have been somewhat limited in more recent times, the influence of his work remains quite substantial, and his occasional efforts in
public administration today still have considered influence.

In *Administrative Behavior*, Simon undertakes the task of laying out a comprehensive theory of administrative organization based on a positivist view of knowledge acquisition and an instrumental interpretation of organizational life. Fully embracing the positivist perspective, Simon argues that the role of the scientist is the examination of "factual" propositions, those based on the observation of manifest behavior or those logically inferred from such observators. Also, he argues that facts and values can be logically separated. Then, factual propositions are statements about the observable world and the way in which it operates (Simon, 1957). Statement of value, on the other, speak to the issue of how things should be: they express preferences for desired events. In contrast to the rather elusive nature of values, factual statements are precise. Propositions of fact, according to Simon, may be tested to determine whether they are true or false – whether what they say about the would actually occurs or whether it does not (pp. 45-46).

In terms of organization, good things are those that enhance the organization's capacity to attain its goals; bad things are those that do not. Whatever increases efficiency is good; whatever does not is bad. And, of course, says Simon, this stance is only what one would expect of a theory of administration, which sees efficiency as its primary aim.

Moreover, organizations are created in order to enhance human rationality and to structure human behavior so that it may approximate abstract rationality. Simon begins by arguing that individual human beings are limited in their capacity to respond to the complex problems we face. The capacity of the human mind for formulating and solving complex problems is very small in comparison with the size of the problems whose solution is required for objectively rational behavior in the real world – or even for a reasonable approximation to such objective rationality (p. 198).

In organizations, we find a way of molding human behavior to rational patterns of obtaining our objectives. Thus, the rational individual is, and
must be, an organized and institutionalized individual (p. 102).

**CONCLUSION**

Simon’s original intention was to apply scientific method to the problem of government. He was emphatically not interested in merely “theoretical concepts devised by academicians,” but in “practical tools by means of which practical legislators and administrators can meet the practical need of choosing between alternative courses of action.” In this respect he was in perfect harmony with his predecessors in the study of administration.

If the method provided by science did not fit the problems thrown up by administration, as often happened in the most interesting and important cases, the pre–Simonians were likely to resort frankly to common sense qualifications and adjustments. While their science, thus qualified, was neither pure nor sometimes even especially useful, it was usually directed at significant administrative problems. Simon, on the other hand, committed himself, perhaps as strongly as a man can who actually wishes to engage in social studies, to the pursuit of science.

Whenever Simon’s science is probed, it is found to depend upon some pre-scientific divination of the nature of man and the world. Simon does in practice assume that there are real problems which would exist even if they were not regarded as problems, and therefore important decisions and unimportant decisions. Also, he believes that men ought to act rationality and that their preference should at least have that degree of consistency and stability necessary to the exercise of rationality. He believes that the pursuit of common goals is a higher endeavor than the pursuit of merely individual satisfaction and that, in either case, it is better done efficiently than inefficiently.

Especially, the central concerns of administrative theory by Simon is with the boundary between the rational and non-rational aspects of human social behavior. Administrative theory is peculiarly the theory of intended and bounded
rationality - of the behavior of human beings who satisfies because they have not the wits to maximize. The need for an administrative theory resides in the fact that there are practical limits to human rationality, and that these limits are not static, but depend upon the organizational environment in which the individual’s decision takes place. The task of administration is so to design this environment that the individual will approach as close as practicable to rationality.

Moreover, the central theme of Administrative Behavior - the boundness of the rationality of administrative action - must be evaluated in light of what intended to be and in light of what has been written and investigated in the forty years since its publication by many scholars including Simon himself. Administrative Behavior offers a still fertile research program for public administration and the related social sciences. The same too can be said for Simon’s recent work on rationality which has been neglected by public administration, for reasons begin and otherwise, to its own misfortune.

I think that Simon gives us an important contribution to the social science of formal organization and administration. Also, he construct a set of tools - a set of concepts and a vocabulary - suitable for describing an organization and the way an administrative organization works. If any "theory" is involved, it is that decision-making is the heart of administration, and that the vocabulary of administrative theory must be derived from the logic and psychology of human choice.

Conclusively, the theory of administration is concerned with how an organization should be constructed and operated in order to accomplish its work efficiently. Consequently, although Simon’s own efforts in the field of public administration have been somewhat limited in more recent times, the influence of his work remains quite substantial, and his occasional efforts in public administration today still have considerable influence.
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