Book Review
Is an Organization as Decision–making Process Still Worthwhile?

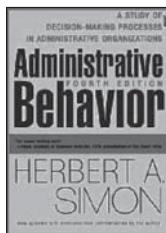## มององค์การเป็นกระบวนการตัดสินใจยังใช้ได้จริงหรือ

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Simon, Herbert A. (1997). Administrative Behavior: A Study of Decision-making Processes in Administrative Organizations, 4th Edition. New York: The Free Press. 368 Pages.

Abstract

This article not only summarizes theoretical concepts but also pinpoints some valuable practices one may learn from the book, Administrative Behavior, 4th Edition. The main lesson drawn from the book is how people in a large organization decide to take actions and to co-operate. Their decisions actually limit rational behavior. Although the author's logical positivism, a methodology for creating a new body of knowledge, has been attacked over the past 60 years since the first edition was published,. Still a number of scholars and practitioner communities worldwide has advocated its principles and remained still accept his far-reaching ideas of the century.

Keywords: Bounded Rationality, Satificing, Logical Positivism, Decision-making Process, Organizational Behavior

บทคัดย่อ

บทความนี้ย่อใจความสำคัญในเชิงทฤษฎีและเสนอคุณค่าในเชิงปฏิบัติที่ผู้อ่านที่สนใจจะเรียนรู้จากหนังสือ Administrative Behavior ฉบับพิมพ์ครั้งที่ 4 บทเรียนหลักก็คือ ผู้บริหารและบุคลากรในองค์การขนาดใหญ่ทั้งในภาครัฐและในภาคเอกชนตัดสินใจที่จะกระทำงานอย่างหนึ่งกันอย่างไร เพื่อให้เกิดการประสานงานที่เหมาะสม การตัดสินใจดังกล่าวนั้นได้สร้างขอบเขตให้กับพฤติกรรมที่พยายามที่จะตั้งอยู่บนพื้นฐานของเหตุผล ถึงแม้ว่ากระบวนการได้มาซึ่งความรู้ใหม่ ที่เรียกว่าปฏิฐานนิยมเชิงตรรกะ ของผู้แต่งมักได้รับการโต้แย้งตลอดระยะเวลากว่า 60 ปีที่ผ่านไป แต่หลังจากศึกษาหนังสือเล่มนี้โดยตลอด เราจะเข้าได้ว่า ทำไมความคิดที่ลึกซึ้งที่ผู้แต่งพรรณนาไว้ในหนังสือเล่มนี้จึงได้รับการยกย่องสนับสนุนและมีการประยุกต์ใช้อย่างกว้างขวางอยู่ถึงในปัจจุบัน โดยเราอาจจะไม่พบทฤษฎีในเรื่องเดียวกันที่จะได้รับการยอมรับเพียงนี้อีกจวบจนสิ้นศตวรรษ

คำสำคัญ: การใช้เหตุผลที่ถูกจำกัด   การเลือกตัดสินใจโดยไม่สามารถใช้เหตุผลเต็มที่
ปฏิฐานนิยมเชิงตรรกะ   กระบวนการตัดสินใจ   พฤติกรรมองค์การ

Introduction

There are several theoretical and practical definitions of an organization. Here is one of the theoretical meanings of organization as elaborated in the book 'Administrative Behavior' by Herbert A. Simon, the Nobel Prize winner in Economics in 1978. To achieve a better understanding of the many types of economic organization and the behavioral patterns of the people who participate in them, the book provides "theories and observations on decision-making in organizations", the perspectives which can be applied "well to the systems and techniques of planning, budgeting and control that are used in business and public administration."[i] The following review will explore all Simon's useful observations and examine the extent of their practical worthiness in today's changing environment of ever more complex organizations.

Section 1: Core concepts

In the latest edition, each chapter includes commentaries by the author which were written to supplement the first edition (1947), originally about 219 pages. These were necessary not only to bring the content up-to-date but also to defend and extend theoretical perspectives offered in the respective chapters in the light of emerging economic, social and technological changes that took place toward the end of the twentieth century. Simon contends in the Introduction to the Fourth Edition (p. x) that "the book, augmented by the commentaries, will continue to help those who would like to understand better and manage more effectively these complex social systems, the organizations in which we do our work."

The unit of analysis of the book is human decision making, mainly at the level of the individual. Simon views an organization as a deci-

sion making process in which top executives impose their values onto their subordinates thereby influencing their decisions and actions accordingly. He argues (p. 11) that "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." But such choice is not necessarily completely desirable to the one making it. Now let us see how his theme of bounded rationality actually evolved and how, later on, it became so influential in economic and administrative sciences.

Rationale: Chapter 1 with its commentary (p. 1-28)

Decision-making and Administrative Organization

The formation of over-all policy is carried on inside the decision-making process. The task of 'deciding' spreads through the entire administrative organization quite as much as does the task of 'doing.' Simon argues forcefully that the actual physical task of carrying out an organization's objectives falls to the operatives-the persons at "the lowest level of the administrative hierarchy. The nonoperatives; however, participate in the accomplishment of the objectives of that organization to the extent that they influence the decisions of the operatives. He intentionally used 'influencing' rather than 'directing' when referring to the exercise of administrative authority, the only one of several ways in which the administrative staff may affect the decisions of the

operative staff. Therefore, as Simon implies, the construction of an **efficient** administrative organization involves more than the mere assignment of functions and allocation of authority. Actually, at any moment there is an extremely large number of alternative (physically) possible actions, any one of which a given individual may undertake. By some **rational** decision-making process these numerous alternatives are narrowed down to the one which is in fact taken.

Further, Simon differentiates value from fact in this decision-making process. "Each decision involves the selection of a goal, and a behavior relating to it; this goal may in turn be mediate to a somewhat more distant goal and so on, until a relatively final aim is reached. Insofar as decisions lead toward the selection of final goals, they will be called 'value judgments'; so far as they involve the implementation of such goals they will be called 'factual judgments.' " In addition, he observes that the objectives can be defined in very ambiguous terms and may be merely intermediate to the attainment of more final aims. Therefore, it is not uncommon that the value and factual elements are not bundled so neatly together. Still, in some other cases, they may be combined in the pursuit of a single objective.

This purposiveness-orientation toward goals or objectives-brings about integration in the patterns of behaviors. Because administration consists in 'getting things done' by groups of people, it would be meaningless without any purpose. To further explain this aspect, Simon elaborates the notion of a hierarchy (vertical

division of labor) of decisions extending downward as to implement and to realize the previously selected goals. Such achievement can only be compromised under the environmental situation limiting possible alternatives and the common denominator sacrificing some impossible objectives. In other words, only relatively weighted objectives can be attainable.

In the commentary on Chapter 1, Simon verifies his theoretical framework discussed earlier in the information age. He defines the term organization here as, 'the pattern of communications and relations among a group of human beings, including the processes for making and implementing decisions.' Moreover, he compares both organization and market as coordinating mechanisms in modern societies. Simon shows his preference for viewing the decision-making process in an organization as a sociological process rather than as a psychological process for its interrelatedness is supported by a rich network of partially formalized but partially informal communications. He urges the reader to distinguish changes in organizational theory from changes in organizations.

Conceptual issues: Chapters 2 and 3 with their commentaries and the Appendix (p. 29-71 and p. 356-360)

Some Problems of Administrative Theory

In Chapter 2, Simon challenges that the principles of administration are just like a pair of proverbs. "For almost every principle one can find an equally plausible and acceptable contradictory principle. Although the two principles of the pair will lead to exactly opposite organizational recommendations, there is nothing in the theory to indicate which is the proper one to apply." He criticizes four common principles-specialization, unity of command, span of control, and organizational design by purpose, process, clientele, place-as that proverbs.

He further contends that efficiency is a prime rational characteristic of 'good' administration which should be constructed and operated to maximize the attainment of certain ends by means of intimidation; however, the term efficiency ought to be considered as a definition rather than a principle. It is a definition of what is meant by 'good' or 'correct' administrative behavior, but it does not describe how goals are to be maximized. He argues that administrative theory must disclose under what conditions the maximization of objectives takes place, hence, which factors will determine with what skills, values, and knowledge the members of the organization shall undertake his work. These are the 'limits' to rationality with which the principles of administration must deal. To Simon, any 'principles of administration' derived from **a priori** reasoning (end-note A) cannot be more than 'proverbs' without objective measurements of results. He is certain that his descriptive and empirical studies can make up for this lack in the literature of administration.

In commentary on Chapter 2, Simon takes the 'proverbs', not as laws (science) but as guidelines for design (engineering), to analyze administrative organization so as to try to verify

the conceptions laid-out in Chapter 1 and the methodology discussed in this chapter. Here he confirms his analytical approach in developing a careful and realistic picture of the decisions that are required for the organization's activities, and of the flow of premises that contribute to these decisions.

Fact and Value in Decision-making

Chapter 3 clarifies the distinction between 'value', in this case, that of ethical considerations, and 'factual' elements, in making any decision in an organization specifically with regards to questions of policy as well as administration. Here he confesses to using **logical positivism** (end-note B) to examine the theory of decision-making processes in administrative organizations, in this case, democratic institutions. He argues that "decisions can always be evaluated in this relative sense-it can be determined whether they are correct, given the objective at which they are aimed-but a change in the objectives implies a change in evaluation." For him, it is clear that "it is not the decision itself which is evaluated, but the purely factual relationship that is asserted between the decision and its aims."

In commentary on Chapter 3, Simon extends the logical distinction to private organizations with the strong inference that the term 'factual premise' does not mean an empirically correct statement but a belief, i.e. an assertion of fact. The assertion may or may not be supported by evidence, and such evidence as exists may be of greater or lesser validity. To him, human decision-making uses beliefs, which may or may not describe how the world really is. Such beliefs, whether true of false, are called 'factual premises.'

What is an Administrative Science?

The distinction made in Chapter 3 between the ethical and the factual helps to explain the nature of administrative science. Simon asserts that there are two kinds of sciences: theoretical and practical. For him, they are different in the ethical realm. Unlike natural sciences, the social sciences involve ethical norms, and therefore lack the objectivity of the natural sciences. Moreover, the social sciences deal with conscious human beings whose behavior is influenced by knowledge, memory and expectation. Consequently, knowledge of human beings themselves forces which mold their behavior may (but need not) be adapted to. The more deliberate the behavior which forms the subject matter of a science, the more important the role played by knowledge and experience. This characteristic of purposive behavior, i.e. its dependence on belief or expectation, has further consequences in societal settings when group behavior is involved. Inherently, it is a fundamental characteristic of social institutions that their stability and even their existence depend on expectations of this sort. Insofar as another person's behavior can be accurately predicted, it forms a portion of the objective environment, identical in its nature with the nonhuman portion of that environment.

Simon agrees with Luther Gulick that prop-

ositions about administrative processes will be scientific as far as truth and falsehood, in the factual sense, can be predicted of them. Conversely, if the truth or falsehood of a proposition concerning administrative processes can be predicted, then that proposition is scientific. *Here, Simon compares analogous forms of administrative science to a sociology of administration for its "theoretical" propositions and "factual" verification and to a practical science of administration for its "behavioral" propositions and "ethical" aspects. [Why is this part of the paragraph in italics?-ed]*

Descriptive theory: Chapters 4 and 5 with their commentaries (p. 72-139)

Rationality in Administrative Behavior

Analysis of decision-making in its objective aspects will refer primarily to the variable consequences of choices. However, this concentration on the rational aspects of human behavior should not be construed as an assertion that human beings are always rational. Since "good" administration is behavior that is realistically adapted to its ends, just as "good" business practice is economic behavior accurately calculated to realize gain, a theory of administrative decisions will of necessity be somewhat preoccupied with the rational aspects of choice.

The objective environment in which choices are made is described as a set of alternative behaviors, each leading to definite anticipated consequences. Knowledge is the means of discovering which of all the possible consequences of a behavior will actually follow it. This implies

that the ultimate aim of knowledge is part of the process of choice. The choice of any particular means and ends does not completely correspond to facts and values respectively. A means-end chain is said to be a series of causally related elements ranging from behaviors to the values consequent on them. Intermediate ends in such a chain serve as value-indices and, by using them, we can evaluate alternatives without a complete exploration of the final ends, or values, inhering in them.

In commentary on Chapter 4, Simon links the notion of conscious human behaviors to that of their limits resulting from human selfishness and struggles for power. In everyday thinking about human behavior, we often treat reason and emotion as polar opposites, the expression of our emotions preventing our behavior from being rational, and our rationality preventing us from expressing our genuine emotions. In examining the function and the role of emotions in behavior, Simon oversimplifies that emotions are associated either directly with external stimuli, or with the particular contents of our memory resulting from past experiences.

The Psychology of Administrative Decisions

Simon next focuses on individual purposive behavior. Considering the simplest movements of infants-taking a step, focusing the eyes on an object-as examples of our purposive nature, he asserts that man's power to observe regularities in nature of a very general sort, and to communicate with others, helps him to shorten materially his learning process. However,

passiveness is not necessarily consciousness which is not always a precondition to docility [The connection of this sentence to the preceding one is unclear and therefore its relevance here is not clear.-ed]. Even behaviors that are extraneous to the focus of attention are capable of purposive adjustment. In the environment surrounding human decision-making, there are many possible stimuli for behavior that could be acted on if they were all simultaneously present to the attention. Rationality demands that a conscious choice be made among competing "goods" instead of leaving the choice to be suddenly altered by attention directing stimuli. In other words, this environment imposes on the individual as "givens" a selection of factors upon which he must base his decisions. However, the stimuli leading to a decision can themselves be controlled so as to serve broader ends, and a sequence of individual decisions can be integrated (socialized) into a well conceived plan (regularization).

In commentary on Chapter 5, Simon reveals his empirical evidence for bounded rationality which he asserts as the central concern of administrative theory. Two crucial alternations are claimed by him in transmuting the economic man of Chapter 4 into the administrator of Chapter 5: first, a "good enough" or satisfactory course of action; second, limiting attention to the complications of the "real world." Further, he tries to rebut the objection on the exclusive role of intuition within the "logical" aspects of the decision-making theory, using the notion that human intuitive skills are highly efficient in handling impersonal works because what managers know they should do, whether by analysis or intuition, is very often different from what they actually do. A choice between undesirable courses of action is not a choice but a dilemma, something to be avoided. In other cases, uncertainty, stress and one's own mistakes can possibly force the postponement of choice and decision making.

Organizational behavior: Chapter 6 with its commentary (p. 140-176)

The Equilibrium of the Organization

The activities of a group of people become organized only to the extent that they permit their decisions and their behavior to be influenced by their participation (an equilibrium system) in the organization. Simon examines equilibrium in business, government, and not-for-profit organizations and contends that those organization decisions cannot be accomplished purely on the basis of considerations of efficiency where the amount of resources and the organizational objectives are outside the control of the administrator.

In commentary on Chapter 6, Simon offers two implications stemming from: first, with regard to organizational decisions, many constraints that define a satisfactory course of action are associated with an organizational role and hence only indirectly with the personal motives of the individual who assumes that role; and second, workers are as satisfied or dissatisfied with their jobs today as they were forty years ago.

Organizational influence processes: Chapters 7, 8, 9, 10 with their commentaries (p. 177-304)

The Role of Authority

In almost all organizations, authority is zoned by subject matter; and the subject-matter allocation will sometimes conflict with the hierarchical allocation. Even if it were desirable, the formal structure could not be specified in such detail as to obviate the need for an informal supplement. On the other hand, the formal structure performs no function unless it actually sets limits to the informal relations that are permitted to develop within it. In any given situation, and within a given system of values, there is only one course of action which an individual can rationally pursue. It is that course of action which, under the given circumstances, maximizes the attainment of value.

In commentary on Chapter 7, there are three issues arising from the critique of a typical hierarchy of authority in socialized enterprises: (1) authority causes alienation; (2) employee participation in decision-making increases satisfaction; and (3) there are power struggles within the functioning of organization. To Simon, these issues are common to organizations in all ages, past, present and future. However, organizations must improve their member's abilities and well-being as long as their systematic stabilities [what is a systematic stability?-ed] can be maintained.

Communication

The personal motives of an organization's members may cause them to divert communication system for their own purposes, and may influence the reception given to those communications that are transmitted. The ability of an individual to influence others by his communications will depend upon his formal and informal position of authority, and upon the intelligibility and persuasiveness of the communication itself. Simon suggests that training be one of the several alternative methods of communication and that this be particularly useful in transmitting job "know-how."

In commentary on Chapter 8, the rapid development of information-processing technology is critically addressed as the enhancement of learning in organizations and organization design. He argues that the corporate and public decision-making processes are becoming significantly more sophisticated and rational than they were in the past. We now possess the analytical tools necessary to understanding the human conditions. Of course, to understand problems is not necessarily to solve them. But it is the essential first step in the process to progress. The new information technology that we are creating enables us to take that step.

The Criterion of Efficiency

Of the factual aspects of decision-making, the administrator must be guided by the criterion of efficiency. This criterion requires that results be maximized with limited resources. On the other hand, criteria for "correctness" have no meaning in relation to the purely valuational elements involved in a decision. Unlike commer-

cial organizations, a democratic state is committed to popular control over these value elements, and the distinction between value and fact is of basic importance in securing a proper relation between policy-making and administration. Simon further asserts that the value of organization along functional lines lies in its facilitation of decisional processes. Functionalization is possible, however, only when the technology permits activities to be segregated along parallel lines.

In commentary on Chapter 9, Simon assesses the difficulties of measuring the efficiency of actions even inside private business firms. He regards efficiency as the ratio of results achieved to resources consumed and considers it as an appropriate and fundamental criterion for all of the decisions that are taken in an organization.

Loyalties and Organizational Identification

Here Simon discusses the individual's subjection to an organizationally determined goals, exercising authority over him, gradually is "internalized" into his own psychology and attitudes. When it is recognized that actual decisions must take place in some such institutional setting, it can be seen that the "correctness" of any particular decision may be judged from its consistency with either socially desirable consequences or an organizationally assigned frame of reference. That is the main reasoning in his agreement with Harold H. Lasswell that a person identifies himself with a group when, in making a decision, he evaluates the alternatives of choice in terms of their consequences for the specified group.

An organizational structure is socially useful to the extent that the pattern of identifications which it creates bring about a correspondence between social value imposed on an individual's motives and organizational value influential to his decisions. Personal loyalty, as such, to organizational values may be equivalently harmful when encountered in the fields of invention and promotion, i.e. to the tastes of the administrator occupying the upper levels of the hierarchy.

In commentary on Chapter 10, Simon refers to cognitive bases to logically prove that decision-makers in an organizational unit can identify strongly with a set of goals and a "world view" that may be quite different from those held by members of other units in the same organization. Moreover, he draws an implication from models of natural selection that take bounded rationality into account. He finds there is strong support for the idea that most people will be strongly motivated by organizational loyalty (rigid organizational identification) which exists side by side with material rewards and the cognitive component motivating employees to work actively toward organizational goals.

Organizational structure: Chapter 11 with its commentary (p. 305-355)

The Anatomy of Organization

Organizational behavior is a complex network of decisional processes, all influencing the behaviors of the operatives-those who do the actual work of the organization. The anatomy of the organization is to be found in the distribution and allocation of decision-making functions. This

deceptive [why is it deceptive? Do you mean 'descriptive'?-ed] framework of analysis of the decision-making process in administrative organizations is offered so that the classical "principles" of administration can be substituted.

In commentary on Chapter 11, Simon reviews the development of organization theory in relation to his own theoretical framework of administrative behavior. He affirms that the new knowledge offered in this book amplifies and continues beyond classical ideas by a logical implication derived from the establishment of Economic Cooperation Administration on April 3, 1948. He verifies once again that the sharing, by both executives and non-managerial employees, of a common conception of an organization's goals is essential to the achievement of effective cooperation in new and growing organizations and should be well conceived and then promulgated until it affects every part of the decision making processes of the organization.

Finally, he draws a critical comparison from his experience in the Graduate School of Industrial Administration in 1949. Simon argues the case that formal training toward scientific knowledge of and, at the same time, toward social system (business profession) is rather impractical. Managing such an organization is not a complete activity. It is a continuing administrative responsibility for the sustained success of the organization.

Section 2: Revitalizing practices

Several administrative theorists refute Simon's methodology and conceptualization,

among them Jay White, Margaret Wheatley, Douglas Kiel, Euel Elliott[ii] and Paul Nieuwenberg. They have challenged Simon on the basis that:

- His application of logical positivism, based on factual premises, ignores other forms of reason which may be utilized for decisions based on value premises. Other forms, White claims, are much broader than Simon's behavioral approach;

- Wider ethical discussions of what "ought" to be done do not fit well into Simon's views of decision making as a process and of cognition in an organization as a group of individuals exchanging information;

- People in an organization will come to a collective sense of purpose or vision through the process of interacting; this is a much more participatory concept than a hierarchical one, as Simon conceives it, however, any boundary inherently ignores the system as a whole; and

- Employees may not be neutral implementers, mere observers influenced by their superiors; nonetheless, they may pick and choose among available factual premises and even apply their own set of value premises in making decisions.

In sum, the challengers regard Simon as representing the old Newtonian science-seeking solutions based on rationality and a largely top-down or mechanistic process. In short, it is too simplified. For them, Simon's logical positivism

is a one-way causal description of organizational behaviors. It is weak in generalizing the variety of emerging events in organizations, and hence its application is restricted.

When the methodology is doubtful, are the findings necessarily invalidated? Let us examine some key aspects of bounded rationality:

First, Simon reveals the complex nature of a large organization and its cognitive and social influences over managers and the managed alike. He "replaces the entrepreneur of the classical school with a number of co-operating decision-makers, whose capacities for rational action are limited by a lack of knowledge of the total consequences of their decisions and by personal and social ties."[iii]

Second, economic end (goal or profit) that is triggered by psychological interactions within the organization justify socially collective means for any decision making. "Since these decision-makers cannot choose a best alternative, as can the classical entrepreneur, they have to be content with a satisfactory alternative. Individual firms, therefore, strive not to maximize profits but to find acceptable solutions to acute problems. This may mean that a number of partly contradictory goals have to be reached at the same time. Each decision-maker in such a situation attempts to find a satisfactory solution to his own set of problems, taking into consideration how the others are solving theirs."[iv]

Finally, we learn that all decisions are not value-free. In other words, for Simon, 'decisions cannot be evaluated by scientific means,' but by an ever-changing relationship between the decision and its ultimate purpose. (p. 57-58) This makes decision-makers in both public and private administrations skeptical about the so-called analytical tools that are adopted prior to making any decision and forces them to realize the (lower assertion) ['lower assertion' has no meaning. What do you mean?-ed] of their habitually determined and socially conditioned judgments into the decision-making process.

Conclusion

Though the purpose of an organization comprised of individuals, is measured in economic terms and the delivery of results is evaluated accordingly, the decisions of the actors are bounded only 'to achieve a satisfaction of their own diverse personal motives.' (p. 15) The implications of this to co-operations across the organizational structure are enormous and must be carefully and thoroughly studied. Simon's theory of bounded rationality affirms that such a view of an organization as a decision-making system is useful and worthwhile for all public and business managers.

End-notes

[A] a priori, according to the *Concise Encyclopedia of Western Philosophy and Philosophers: page 19*, is a Latin phrase meaning "from what comes before", (the *Concise Encyclopedia of Western Philosophy and Philosophers: p. 19)* There are many truths, such as that fire burns or that water will not flow uphill, that we know from experience before we are able to explain why they should be so. Until we discover their causes our knowledge of them must be said to be empirical and not

truly scientific. From this definition, I would say that Simon did not believe in pure analytic/mathematical propositions about principles of administration, especially with regards to human behaviors in an organization. On the contrary, his rationality comes from "causal principles that every event must have a cause and that like causes must have like effects."

[B] Logical positivism. We can see that Simon's approach to accomplish this "work of description" (p. 197) of organizational phenomena (p. 297) comes from the application of general-izations deduced from some objective evalua-tions (p. 48). Further, what he tries to provide us are not universal laws of organization for "how an organization should be constructed and operated (p. 305 and 328).", rather, he warns us, "[this is] a framework for the analysis and description of administrative situations and with a set of factors that must be weighed in arriving at any valid proposal for administrative organiza-tion."

Thisese reveal to us how logical positivism was applied throughout the work so as to arrive at a relatively clear portrait of "the anatomy and physiology of organization" (p. 305). Let us try to understand the typical characteristics of this scientific inquiry. The main features of logical positivism include: a thorough-going empiricism; an equally thorough-going rejection of metaphysics; a restriction of philosophy and a reduction to a common denominator (*Concise Encyclopedia of Western Philosophy and Philosophers*: *p 20)*.

References

[i] Carlson, Sune. Presentation Speech of the Royal Academy of Sciences for Prize in Economic Sciences in Memory of Alfred Nobel 1978. Website: http://nobelprize.org/nobel_prizes/economics/laureates/1978/presentation-speech.html

[ii] Mingus, Matthew S. Bounded Rationality and Organizational Influence: Herbert Simon and the Behavioral Revolutin in Moçöl, Göktug, editor (2007). *Handbook of Decision Making*. Florida, USA: CRC Press, pages 73-75.

[iii] Ibid., Carlson, Sune.

[iv] Ibid., Carlson, Sune.

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