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Title	The Differences between Barnard's and Simon's Concepts of Organization Equilibrium:Simon's Misunderstanding about Barnard's Intention
Author(s)	MANO, Osamu
Citation	ECONOMIC JOURNAL OF HOKKAIDO UNIVERSITY, 23, 13-28
Issue Date	1994
Doc URL	https://hdl.handle.net/2115/30511
Type	departmental bulletin paper
File Information	23_P13-28.pdf



The Differences between Barnard's and Simon's Concepts of Organization Equilibrium

— Simon's Misunderstanding about Barnard's Intention —

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What H. Simon named the Barnard-Simon theory is different from Barnard's intention. This difference comes directly from Simon's misunderstanding of Barnard's concept of the equilibrium of organization economy. In Simon's case, the achievement of organization equilibrium implies only a condition where the sum of the contributions of all participants can guarantee the kinds and quantity of necessary inducements which must be paid. In this case, the functions of the organization — the creation, transformation, and exchange of utilities — are ignored. Barnard attached importance to this organizational function. The root of this difference originated from the difference between their understandings of the non-economic man concept.

1. Introduction

Herbert A. Simon is known as a successor to Chester I. Barnard. In his letter of October 23, 1947 to Andreas G. Papandreou, Barnard recommended him to read Simon's Book entitled, *Administrative Behavior*. Barnard noted that this book developed his concept of organization, as "a system of consciously coöordinated activities or forces of two or more persons." At the same time, Barnard expressed a critical opinion about Simon's views in his conversation with W.B. Wolf.⁽¹⁾

In Japan, there is also a widely held opinion about the differences between Barnard's and Simon's theories, especially regarding authority.⁽²⁾ In this writer's opinion, the most important difference between Barnard's theory and Simon's theory is the concept of organization equilibrium. Though this is a key concept in Barnard's theory, Simon misunderstands it. Simon's misunderstood concept has been accepted by many scholars as the Barnard-Simon theory. We find an example of this misunderstanding in a book by G. Burrell and G. Morgan entitled, *Sociological Paradigms and Organizational Analysis* (1976).⁽³⁾

The purpose of this paper is to clarify the difference between Barnard's and Simon's understanding of the concept of organization equilibrium.

2. Barnard's Organization Equilibrium Theory

According to Barnard, when an individual tries to satisfy his needs or

motives, in many cases he cannot get enough satisfaction due to many types of human limitations. In order to overcome these limitations, especially physiological limitations which are common, the individual develops coöperative systems. This is because coöperative systems can produce more satisfaction than the sum of individual satisfaction.

The structure of this coöperative system is composed of four subsystems: a physical system, a personal system, a social system, and the organization. Among these four, the organization is the nucleus which joins the other three. Therefore, the survival of the cooperative system depends upon the function of the organization. The functions of the organization are the creation, transformation, and exchange of utilities to satisfy the needs of individuals within the coöperative system. Barnard called the participants' satisfied state "the attainment of efficiency." The survival of the coöperative system is thus dependent upon the attainment of efficiency.

From an organizational point of view, the organization is made up of its participants' contributions. Thus the survival of the organization depends upon the continuity of contributions from individuals who make up the whole. The contribution of individuals depends upon inducements given by the organization in return for their contribution, which can satisfy individual motives. In other words, from an individual point of view, when the amount of personal sacrifice given to the organization is smaller than the satisfaction received from inducements given by the organization, the individual continues contributing to the organization.

Barnard called such a satisfied individual "a person who is efficient with regard to personal behavior."⁽⁴⁾ On the other hand, when an individual cannot get satisfaction, he will withhold or withdraw his contributions and will separate from the organization, and the coöperative system will thus be destroyed.

Barnard explains these relationships from a coöperative system's point of view as follows:

"The efficiency of a coöperative system is its capacity to maintain itself by the individual satisfaction it affords. This may be called its capacity of equilibrium, the balancing of burdens by satisfactions which results in continuance."⁽⁵⁾

He thinks that the equilibrium of organization means the capacity to maintain the efficiency of an organization. This capacity is not the same in all situations for obtaining individual efficiency. That is, a situation in which all participants are obtaining net satisfaction and providing their contributions to a coöperative system does not automatically mean efficiency of the coöperative system.

Efficiency of the coöperative system refers to the capacity of continuance of the system. Therefore, the coöperative system requires a balance in the organization economy. Barnard noted that

"The equilibrium of the organization economy requires that it shall command and exchange sufficient of the utilities of various kinds so that it is able in turn to command and exchange the personal services of which it is constituted. It does this by securing through the application of these services the appropriate supplies of utilities which when distributed to the contributors ensure the continuance of appropriate contributions of utilities from them. In as much as each of these contributors requires a surplus in his exchange, that is, a net inducement, the organization can survive only as it secures by exchange, transformation, and creation a surplus of utilities in its own economy. If its operations result in a deficit, it is less and less able to command the organization activities of which it consists. The organization must pay out material utilities and social utilities. It cannot pay out more than it has. To have enough it must secure them either by exchange or by creating them."⁽⁶⁾

That is to say, the organization secures organizational utilities by its functions and changes them into many kinds of inducements or incentives, and sometimes they are used to persuade members to change their desires. These inducements are usually used to persuade members to contribute their talents to various kinds of activities. When the amount of organization utilities secured by organization functions are the same as or more than the amount of organization utilities paid out to the members as incentives or inducements, the organization can survive or grow. This situation must be maintained for the effectiveness of organization. This is what is meant by "equilibrium of organization economy."

The organization can secure a surplus of organization utilities by means of two processes: the exchange or distribution process and the coordination or creative process. Barnard described the distribution process as follows:

"You give, so far as possible what is less valuable to you but more valuable to the receiver; and you receive what is valuable to you and less valuable to the giver."⁽⁷⁾

In other words, the organization gives the contributor what is less valuable to the organization but more valuable to the contributor; and the organization receives from the contributor what is more valuable to the organization and less valuable to the contributor. This exchange process produces only a few surplus

organization utilities.

"No matter what efficiency is obtained in the distributive factor, it at least in most cases probably could not attain an aggregate greater than the aggregate of satisfactions individually obtainable without coöperation. To survive, coöperation must itself create a surplus. The necessity for conservatism in distribution arises from the probability that the surplus from coöperation, small perhaps in most successful organizations, will not be sufficient to permit dissipation by waste, and the organization will be destroyed by the fact. Under most circumstances, therefore, the quality of coördination is the crucial factor in the survivals of organization."⁽⁸⁾

The substantive part of the surplus of organization utilities is produced through the process of coördination. Barnard describes this process as follows:

"The control of distribution may become, and often does, a matter of highly developed technique. Creative efficiency on the other hand, although it may involve the invention of techniques as a result, is essentially non-technical in character. What is required is the sense of things as a whole, the persistent subordination of parts to the total, the discrimination from the broadest standpoint of the strategic factors from among all types of factors — other executive functions, technology, persuasion, incentives, communication, distributive efficiency. Since there can be no common measure for the translation of the physical, biological, economic, social, personal, and spiritual utilities involved, the determination of the strategic factors of creative coöperation is a matter of sense, of feeling of proportions, of the significant relationship of heterogeneous details to a whole."⁽⁹⁾

Therefore, we can only determine the organization success of obtaining equilibrium of organization economy by whether the organization is as a whole growing or shrinking. As a result, a top executive has to know, as soon as possible, the responses of persons internal and external to the organization, in order to correct any wrong decisions. Good communication inside the organization requires always knowing the responses of interest groups. Barnard calls this condition the internal equilibrium of the organization or "a matter of proportions between elements" (communication, willingness to serve, and common purpose).⁽¹⁰⁾ Barnard noted that

"The initial existence of an organization depends upon a combination

of these elements appropriate to the external conditions at the moment. Its survival depends upon the maintenance of an equilibrium of the system. This equilibrium is primary internal, a matter of proportion between the elements, but it is ultimately and basically an equilibrium between the system and the total situation external to it. This external equilibrium has two terms in it; first, the effectiveness of the organization, which comprises the relevance of its purpose to the environmental situation; and second, its efficiency, which comprises the interchange between the organization and individuals."⁽¹¹⁾

3. Simon's Organization Equilibrium Theory

H. Simon writes in his book, *Administrative Behavior* (1945) that the contents of Chapter VI, entitled 'The Equilibrium of the Organization' are "largely a restatement of the ideas of Chester I. Barnard who first provided a systematic framework for discussing the human motivations that are involved in the decision to belong."⁽¹²⁾

Simon's understanding of Barnard's theory was that the organization is a system of human behavior and that it provides an indispensable framework when the individual wants to behave rationally.⁽¹³⁾

Also in Simon's case, an individual participates in organizational activities to achieve his personal goals by receiving inducements from the organization. Therefore, from an individual subjective point of view, only when the inducements given from the organization are larger than the personal sacrifice paid by his participation in the organization, will the individual continue his coöperative actions with the organization. As a result, the organization will continue to survive or grow.

Simon divided members of the organization into three groups based on the perspective of individual and organization goals. He writes as follows;

"Individuals are willing to accept organization membership when their activity in the organization contributes, directly or indirectly, to their own personal goals. The contribution is direct if the goals set for the organization have direct personal value for the individual — church membership is a typical example of this. The contribution is indirect if the organization offers personal rewards — monetary or other — to individual in return for his willingness to contribute his activity to the organization. Employment in a business concern is a typical example of this. Sometimes these personal rewards are directly related to the size and growth of the organization — as in the case of the stockholders of a business; sometimes, not very directly — as in the case of most wage earners. The characteristics

of these three bases for participation are sufficiently distinct to make it worthwhile to consider them separately: personal rewards deriving directly from the accomplishment of the organization objective; personal inducements offered by the organization and closely related to its size and growth; and personal rewards derived from inducements offered by the organization but unrelated to the organization size and growth. Organizations are ordinarily made up of three groups of individuals, in each of which one of these types of motivation prevails; and it is the presence of these three groups that gives administration its specific character.”⁽¹⁴⁾

Customers are a typical example of the first type of motivation — direct interest in organization objectives. Top executives are a typical example of the second type of motivation — direct interest in the growth and size of the organization. Employees, especially wage earners, are an example of the third type of motivation — not related to the size and growth of the organization. Simon continues as follows:

“The members of an organization, then, contribute to the organization in return for inducements that the organization offers them. The contributions of one group are the source of the inducements that the organization offers others. If the sum of the contributions is sufficient, in quantity and kind, to supply the necessary quantity and kinds of inducements, the organization survives and grows; otherwise it shrinks and ultimately disappears unless an equilibrium is reached.”⁽¹⁵⁾

Simon explains that he quotes this idea from Barnard’s book, *The Functions of the Executive*. (pp. 56-59 and Chapters xi and xvi). From the above description, we can understand that in Simon’s case, the achievement of organization equilibrium implies a condition where the sum of the contribution of all participants can guarantee the kinds and quantity of necessary inducements which must be paid. In this case, the functions of the organization — the creation, transformation, and exchange of utilities⁽¹⁶⁾ — are not considered.

Simon explains this as follows:

“No matter what the personal objectives of the control group, their decisions will be heavily influenced by the fact that they can maintain a positive balance of contributions over inducements, or at least an equilibrium between the two.”⁽¹⁷⁾

He also writes that

"In business organization the control groups can ordinarily be expected to be oriented primarily toward profits and conservation. They will attempt to maintain a favorable balance of incoming contribution over outgoing incentives in two ways ; first by modifying the organization objective in response to customer demand ; and second, by employing the resources, monetary contributions, and employees' time and effort in such a manner as to attain a maximum of inducement to employees, and a maximum of attainment of organization objectives with these resources....

One point does require notice, however : the second type of adjustment — that of using the given resources as effectively as possible in light of the organization objective — makes efficiency a basic value criterion of administrative decision in such organizations."⁽¹⁸⁾

The concept of efficiency which Simon uses here is explained as follows :

"The criterion of efficiency demands that, of two alternatives having the same cost, that one be chosen which will lead to the greater attainment of the organization objectives ; and that, of two alternatives leading to the same degree of attainment, that one be chosen which entails the lesser cost."⁽¹⁹⁾

Simon does not mention the process of gaining a surplus of organization utilities by the efficient exchange between organization and participants which Barnard points out.

Simon's opinion is more clearly expressed in his joint work with J. G. March entitled, *Organizations* (1961) which developed Simon's opinion more concretely and increasingly separated from Barnard's opinion. In Chapter 4 'Motivational Constraints : the Decision to Participate,' March and Simon write as follows :

"The decision to participate lies at the core of the theory of what Barnard (1938) and Simon (1947) have called 'organizational equilibrium' : the conditions of survival of an organization."⁽²⁰⁾

March and Simon also state that "the Barnard-Simon theory of organizational equilibrium is essentially a theory of motivation."⁽²¹⁾ They discussed how to measure employee satisfaction, which is produced by a balance between the sacrifice of contribution and the satisfaction of incentives. March and Simon indicate two points : the first where individual employees begin to talk about their dissatisfaction of participation (the zero point of employee satisfaction),

and the second where an employee separates from the organization. They explain indirectly the process of changing utilities of sacrifice and satisfaction and the relationships of elements affecting this processes. The relationships between sacrifice and satisfaction discussed here as the Barnard-Simon theory are a problem of net satisfaction or the utility balance between contributions and incentives valued subjectively by each participant. It is not a problem of balancing produced utilities and outgoing utilities of organization economy.

The problem of decision-making by executives and employees about the creation, transformation, and exchange of utilities in an organization are discussed in other chapters (Chapter 3, Chapter 6, Chapter 7) which are separate from the Barnard-Simon theory. March and Simon separate the intraorganizational decisions from the decision to participate. They assume that intraorganizational decisions are done in order to promote productivity based on dissatisfaction with present production levels. The decision to participate, though, is based on satisfaction regarding incentives. The Barnard-Simon theory discusses the decision to participate.

In Barnard's theory, the equilibrium of organization does not directly imply a state where all participants get satisfaction; that is to say, conditions where all participants are getting more satisfaction than their sacrifices as judged by subjective appraisals. The organization produces a pool of organization utilities by creation, transformation, and exchange of utilities contributed by participants, and the amount of these organization utilities should be greater than the amount of outgoing utilities called incentives which produce satisfaction in the participants. If this situation cannot be attained, the organization must produce more utilities or change the participants' appraisal levels by using incentives in order to obtain a situation of getting greater organization utilities than outgoing incentives. The equilibrium of organization in Barnard's case refers to these processes.

Simon's concept of equilibrium of organization provides no consideration for the processes of creation, transformation, and exchange of organization utilities except for the process of exchange. On the other hand, Barnard suggests that these processes are the most important processes of a coöperative system and therefore, they are a part of the central concept of organization equilibrium. It is Simon's misunderstanding about Barnard's opinion that caused him to name his concept of organization equilibrium the Barnard-Simon theory.

4. An Understanding of Barnard's and Simon's Decision-Making

Simon's misunderstanding of Barnard's concept of organization equilibrium is not based on insufficient reading of Barnard's book, *The Functions of the Executive*. He criticized Barnard's paper entitled, "Mind in Everyday Affairs" in

his book, *Administrative Behavior*.⁽²²⁾ These criticisms concern Barnard's understanding of intuition, which fact implies that there are essential differences between their views with regard to human decision-making. Simon denies the concept of an economic man model, as does Barnard. His view follows :

"The economists attribute to economic man a preposterously omniscient rationality. Economic man has a complete and consistent system of preferences that allows him always to choose among the alternatives open to him: he is always completely aware of what these alternatives are ; there are no limits on the complexity of the computations he can perform in order to determine which alternatives are best ; probability calculations are neither frightening nor mysterious to him. Within the past generation, in its extension to competitive game situations and to decision-making under uncertainty, this body of theory has reached a state of Thomistic refinement having great intellectual and esthetic appeal but little discernible relation to the actual or possible behavior of flesh-and-blood human beings."⁽²³⁾

He thinks that there must be three preconditions for an optimum decision which a rational man in the economic man model makes⁽²⁴⁾. They are summarized as follows :

- 1) The decision-maker always knows the whole set of alternatives from which he will choose his action.
- 2) The decision-maker knows the whole set of consequences that will ensure whether that particular alternative is chosen. This case includes three categories: (a) Certainty: theories that assume the decision-maker has the complete and accurate knowledge of consequences that will follow on each alternative. (b) Risk: theories that assume accurate knowledge of probability distribution on the consequences of each alternative. (c) Uncertainty: theories that assume that the consequences of each alternative belong to some subset of all possible consequences, but the decision-maker cannot assign definite probabilities to the occurrence of particular consequences.
- 3) The decision-maker always knows his "utility function" or his "preference-ordering" that ranks all sets of consequences from the most preferred to the least preferred.

However, the actual decision-making ability of the individual is limited by (a) limits on his ability to perform and (b) limits on his ability to make correct decisions. Simon noted that

"On one side, the individual is limited by these skills, habits, and reflexes which are no longer in the realm of the conscious. His performance, for example, may be limited by his manual dexterity or his reaction time or his strength. His decision-making processes may be limited by the speed of his mental processes, his skill in elementary arithmetic, and so forth....

On the second side, the individual is limited by his values and those conceptions of purpose which influence him in making his decisions. If his loyalty to the organization is high, his decisions may evidence sincere acceptance of the objectives set for the organization; if that loyalty is lacking, personal motives may interfere with his administrative efficiency. If his loyalties are attached to the bureau by which he is employed, he may sometimes make decisions that are inimical to the larger unit of which the bureau is a part."⁽²⁵⁾

"On the third side, the individual is limited by the extent of his knowledge of things relevant to his job. This applies both to the basic knowledge required in decision-making — a bridge designer must know the fundamentals of mechanics — and to the information that is required to make his decisions appropriate to a given situation."⁽²⁶⁾

Therefore, Simon assumes that actual human behavior has the following characteristics: 1) Whereas economic man selects the best alternative from all those available to him, non-economic man looks for a course of action that is satisfactory or good enough and when he finds a satisfactory course of action, he gives up his search. 2) Economic man deals with the "real world" in all its complexity, but non-economic man deals with the "real world" as a drastically simplified model built up with a small number of factors. He believes that most of the facts of the real world have no relation to any particular situation he is facing and that most significant chain of causes and consequences are short and simple. Hence the decision of man is done in a rather simple way.⁽²⁷⁾

Simon postulates that the individual limits of rationality can be changed artificially to some degree. The formal organization (hierarchical organization) has a function which will influence its members and broaden the limitation of rationality in individual members. In other words, the decision of the individual is largely affected by his organizational environment. Management's job therefore, is to design an organizational structure which makes rational decision-making from an organization objective's perspective. In order to provide some decision-making influence to individual members, the organization should do the following :

- "1) The organization divides work among its members. By giving each particular task to accomplish, it directs and limits his attention to that task....
- 2) The organization establishes standard practices. By deciding once and for all (or at least for a period of time) that a particular task shall be done in a particular way, it relieves the individual who actually performs the task of the necessity of determining each time how it shall be done.
- 3) The organization transmits decisions downward (and laterally or even upward) through its ranks by establishing systems of authority and influence. The most familiar form this takes is the hierarchy or the formal authority; but of equal importance are the assignment to particular individuals of the formal function of advising, and the growth in any actual organization of an informal system of influence based partly upon formal status, and partly upon social relationships.
- 4) The organization provides channels of communication running in all directions through which information for decision-making flows....
- 5) The organization trains and indoctrinates its members.... It injects into the very nervous system of the organization members the criteria of decision that the organization wishes to employ. The organization member acquires knowledge, skill, and identification or loyalties that enable him to make decisions, by himself, as the organization would like him to decide."⁽²⁸⁾

As a result, the organization gives each member stable expectations about the behavior of other members under specific conditions. Also, the organization gives each member the intermediate objectives which stimulate his action to contribute to a common purpose. Thus, organization members can, always, make their decisions correctly. As is well known, Simon noted that,

"The behavior patterns which we can call organization are fundamental, then, to the achievement of human rationality in any broad sense. The rational individual is, and must be, an organized and institutionalized individual."⁽²⁹⁾

Simon calls such a person in an organization "administrative man," and his theory of business administration is constructed upon this human model. He suggests that administrative man regards value or ethical propositions in the decision process as given from others and deals exclusively with the factual propositions of a decision.

Unlike factual propositions, the accuracy of value propositions cannot be proven by experience or fact. That is to say, factual propositions may use logical positivism as a starting point. Therefore, Simon thinks that an organization

can make correct human decisions by exercising influence upon factual elements. He suggests that, in public administration, decisions which include value elements are made by a legislative body, but in private management such decisions are made by the board of directors or the stockholders. Administrative man deals with following these decision processes, and the criteria which he uses in these processes is cost concept as mentioned above.

On the other hand, Barnard's concept of decision-making in an organization always includes an opportunistic aspect and an ideal or moral aspect. An organization cannot carry out any action except under prevailing conditions and with means then available. Therefore, under current opportunistic situations, decision-makers analyse the circumstances and purpose, and then find a way to control changeable strategic factors. At this time, decision-makers always take into consideration past experiences, history, and knowledge about related elements, and then anticipate future results to which they select a way of controlling strategic factors or redefining purpose. The selection of anticipated future results may be done not only by considering cost accounting as Simon says, but also by considering non-accountable elements (for instance, desirable physical conditions, associational attractiveness, etc.); and by process of ideal or moral considerations. Decision-makers cannot make their selection of the opportunistic elements without considering also the moral aspects. According to Barnard, when an individual participates in an organization, he may be faced with conflicts of moral code — with which he may have no such experience unless he participates in an organization.⁽³⁰⁾ He points out that there are seven moral codes in an organization: personal responsibility, personnel loyalties, corporate responsibility, organizational loyalties, economic responsibility, technical and technological responsibility, and legal responsibility. When individuals choose definite objectives or concrete means, they ought to resolve conflicts among those codes. In a hierarchical organization (a scalar organization), upper executives should resolve conflicts of moral codes. He indicates three types of solutions to these conflicts:

“The first may be called the judicial method. This essentially is the process of narrowing and delimiting of the areas of responsibilities, thus restricting the incidence of conflict.

The second method of resolving conflict is that of reconciliation, the process of demonstrating that apparent or alleged conflicts of responsibility are pseudo-conflicts based on false assumption or ignorance of the facts. This is a process continually in use in organizations: it is frequently expressed as ‘changing the point of view’. It also frequently involves redefinition of jurisdictions.

The third method of resolving conflicts of responsibilities may be called that of the invention of concrete solutions. Thus, where a proposal which seems desirable from one standpoint appears to involve consequences that are seriously deleterious in some respects, the solution may be to discover or construct another proposal which will effectively accomplish the ends initially desired without involving the deleterious effects to be avoided."⁽³¹⁾

Among these three types of resolution, the most important type for top executives is the second. To find another point of view, top executives should have long-term purpose, high ideals, and foresight. Their ability to use this type of resolution depends upon their own sense of morality. Barnard notes, "organizations endure,... in proportion to the breadth of morality by which they are governed."⁽³²⁾

Moreover, Barnard includes in his concept of knowledge behavioral knowledge which is nonverbal. People acquire it through habitual experience. This practical knowledge, which is often called intuitive knowledge, is indispensable in real life situations.

The decision process in Barnard's case is an integration process of ideal or moral aspects and opportunistic aspects, and also includes intuition which is often used in situations lacking the necessary data for logical reasoning. Therefore, Barnard points out that decisions in an organization involve not only the field of science but also the field of art.

We can understand the difference between Barnard's concept of decisions in an organization and Simon's, from the above statement. Barnard's concept includes all aspects of an executive's decision-making processes in an organization.

It includes subjective and objective decision processes and also decisions involving value judgements. On the other hand, Simon's concept limits its research to the field treatable by logical positivism. Therefore, the concepts of creative efficiency, organization economy, and the moral sector of decision to which Barnard attached importance are excluded. Given these differences, Simon is not his correct successor. Barnard often noted that the whole is different from the sum of its constituents. For instance, he notes that

"The group is a unit with which the individual has interactions, also called social, in that the unit is something more or different from the mere sum of the interactions between the individuals composing it."⁽³³⁾

5. Conclusion

Simon's concept of organization equilibrium in his *Administrative Behavior* (1945) and the concept of the Barnard-Simon Theory in *Organizations* (1961) written by March and Simon are both based on Simon's misunderstanding of Barnard's intention.

Simon and his followers ignored the concepts on which Barnard places emphasis. For instance, organization economy, the creative economy of the whole, and the moral sector in decision-making, etc.

These differences between Barnard and Simon were created by the different subjects of interest and methodology. They do not harm Simon's brilliant contribution to the development of modern organization theories, however. But from Barnard's point of view, it is very regrettable, since Simon, if he had followed Barnard's intention correctly, could have further developed his own organization theories.

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Notes

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7. *ibid.*, p. 254.
8. *ibid.*, p. 256.
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21. *ibid.*, p. 84.
22. H. A. Simon. (1976). *Administrative Behavior*. Note 10, p. 51, Note 15, p. 190.
23. *ibid.*, "Introduction to the Third Edition." pp. xxvi-xxvii.
24. March and Simon. (1958). *Organizations*. p. 137.
25. March-Simon deal with these problems as motivational constraints in their book, *Organiza-*

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26. H. A. Simon. (1976). *Administrative Behavior*. p. 40.
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