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On the Significance of Lateral Organization in C. I. Barnard's Theory

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According to C. I. Barnard, there are two kinds of formal organizations; lateral organization and scalar (or hierarchical) organization. The purpose of this paper is to clarify the significance of lateral organization in Barnard's organization theory. These two kinds of formal organizations are also compared. It was found that from Barnard's point of view scalar organizations cannot exist without lateral organizations, and essentially their survival depends on the practical use of lateral organizations.

1. Introduction

C. I. Barnard wrote in his preface to the Japanese Edition of *The Functions of the Executive* (1956) as follows:

“Based on my experience since 1938 (when I published this book), I think it is not necessary to change the main contents of the book. I think, however, I should clarify the concept of status system in formal organizations and the concept of lateral organization. I partially introduced these concepts in my book entitled 'Organization and Management.' ”⁽¹⁾

We find references to these concepts in Chapter VI, “On Planning for World Government” and in Chapter IX, “Functions and Pathology of Status System in Formal Organizations” in his book, *Organization and Management*. (1947) In Chapter VI, Barnard explains the concept of lateral organization. In his main work, *The Functions of the Executive*, the term, lateral organization is only used once. In a note on page 110, in which Barnard wrote as follows:

“A group of two or more unit organizations may coöperate as a whole without a formal superior organization or leader. Under many conditions this is observed, especially where two small organizations(or a large and a small) work together under contract for specified purposes. The method of communication is primarily that of conference. Because of our habit of considering an organization as a group of persons rather than as systems of coöperative services of persons, the usually temporary combinations that are made as a result of contracts or agreements are not recognized as

organizations, since they have no name or common officials. Most large building operations are so organized, however ; and it will be readily seen that a very large part of the organized activities of today are carried on by temporary limited combinations under contracts without a general coördinating authority. The state, through the law of contracts and the provisions of courts, is a general formal executive in these cases in limited degree ; but the real general executive is custom , etc." (1938, p. 110)

There is no general coördinating authority, that is to say, no executives or managers in a lateral organization. As the main focus of *The Functions of the Executive* was to examine the functions of the executive, as the title says, we can barely find this concept of lateral organization in this work.

When we choose, however, the organization structure as a subject of organization behavior or organization planning, we should deal with lateral organization. Under some conditions, we should consciously use the characteristics of lateral organization in order to attain a certain purpose. I think this is the main reason why Barnard deals with lateral organization in his paper entitled "On Planning for World Government." (1956)

The concept of lateral organization has yet to be given attention even by scholars who study Barnard's theory. This inattention has produced many misunderstandings. A famous example of a misunderstanding was in an article entitled, "Comments on the Job of the Executive" (*Harvard Business Review*, Winter 1940) by Professor M. A. Copeland. He did not understand the characteristics of lateral organization. The purpose of this paper is to clarify the significance of lateral organization in Barnard's organization theory.

2. The Definitions of Lateral Organization and Scalar Organization

C. I. Barnard defined the coöperative system as "a complex of physical, biological, personal, and social components which are in a specific systematic relationship by reason of the coöperation of two or more persons for at least one definite end." (1938, p. 65) Then he defined formal organization as "a system of consciously coördinated activities or forces of two or more persons." (1938, p. 81) He pointed out that (1) willingness to serve, and (2) common purpose, and (3) communication are the elements of the formal organization. He defined the willingness to serve as follows ;

"The willingness to serve (or coöperate) is the expression of the net satisfactions or dissatisfactions experienced or anticipated by each individual in comparison with those experienced or anticipated through alternative opportunities. These alternative opportunities may be either personal and

individualistic or those afforded by other organizations. That is, willingness to coöperate is the net effect, first, of the inducements to do so in conjunction with the sacrifices involved, and then in comparison with the practically available net satisfactions afforded by alternatives." (1938, p. 85)

If an individual thinks he will be unable to get net satisfactions compared with his sacrifice through his coöperative behavior, he will lose his willingness to serve. On the other hand, the greater the net satisfaction, the stronger his willingness to serve will be. We can see this relationship between net satisfaction and willingness to serve in all formal organizations.

The conditions of the other elements, common purpose and communication, are different in every organization. Barnard focused his attention on typical types of conditions and arranged these many types of conditions into two organization forms: the lateral organization and the scalar organization. Barnard adapted the term, scalar organization from the book, *Onward Industry* written by James P. Mooney and Alan C. Reiley. (1931, p.150) This concept is, however, more often referred to by the terms, hierarchical organization, pyramid type organization, or vertical organization. In this paper, the term, scalar organization as interpreted by C. I. Barnard will be used.

(1) The Lateral Organization

Barnard defined the lateral organization as an organization of free agreement -by mutual understanding, by contract, or by treaty. He described such organizations as follows:

"A system of coöperative efforts established and maintained by written or oral contract or by treaty is an organization in which the duty of command and the desires to obey are essentially absent. It is nonauthoritarian organization. The primary integration of such an organization is horizontal or lateral. The emphasis is upon the coming into coöperation of individuals or bodies who are 'side by side.' The customary legal phraseology 'bilateral,' 'multilateral,' etc., reflects this conceptions. Perhaps the simplest case of lateral organization is that of barter exchange, a short-lived organization. Lateral organizations are usually established for short periods and limited to specific purposes. These purposes are personal to parties to the agreement and are not inherent in the organization created by agreement. The agreement does not become an end in itself. It does not maintain itself but is maintained by the parties to it severally." (1948, pp. 150-151)

The following points are specific features of the lateral organization.

- 1) The communication in a lateral organization is essentially nonauthoritarian which does not contain duty or obedience by order or direction. This organization is regulated by public opinion, customs, social institutions, the moral community, and the judicial influencing power to the organization.
- 2) The common purpose is ordinarily a simple and concrete objective and has individualistic characteristics of the participants. Therefore, there are few major differences between participants' and lateral organizations' objectives. Such as in the barter exchange case mentioned above.
- 3) Though there are exceptions where these organizations have long lives such as a free agreement of market prices and the regulation of supply and demand for wheat, the lateral organization which has none of its own intentions and regulations is a short-lived organization in many cases. Therefore we sometimes disregard or ignore such organizations. As examples of lateral organization, Barnard used political and economic organization in the world between 1905 and 1914, a single concern with several factories(plants) associated by free contract between several concerns, a barter exchange, the wheat market, supply of material and parts by free agreement. I can add to these examples a free cartel without its own authority. If a perfect free and equal relationship is guaranteed, we can say that the relationships between stockholders, creditors, customers, suppliers, governments, labor unions, and business enterprise are also lateral organizations. But as we can see in many cases, some original(independent) power or authority occurred in these relationships, thus these relationships are not yet pure lateral organizations, since they include the characteristics of scalar organizations.

When we think about organizations, we should pay special attention to the following point made by Barnard :

“It is notable that when we are thinking about organization, we are apt unconsciously to overlook the general organization secured by the aggregate of lateral organizations and to think only of scalar organizations.” (1948, p. 151)

(2) The Scalar Organization

Barnard described the characteristics of scalar organizations as follows ;

“They are fundamentally authoritarian. In most of them (except

states) individuals, it is true, come into them by agreement, but the relationship between subordinate parts and between individuals when operating in them are controlled not by 'considerations' fixed as in contracts but by prescriptions to be changed as circumstances may require 'for the good of the organization.' The primary integration of scalar organization is vertical. Every part except the highest is definitely dependent upon a 'highest' part; and every part except the lowest rests upon a foundation of lower parts. Formal relations between parts on the same level, i. e., lateral coordination, are in principle determined by command or instruction, not by agreement. All persons participating are bound together in the accomplishment of common purposes or aims of the organization which are not personal. An injury to one part is regarded as an injury to the whole. A fundamental assumption usually implicit in scalar organizations is their indefinite continuance, even though in fact their mortality is high." (1948, pp. 151-152)

We can see typical examples of scalar organization in the bureaucratic organization in public administration and the management organization in business enterprise. Main members who comprise these organizations are usually called executives and general employees. These members participate in a coöperative system by free agreement. The communication among them, however, contains authoritarian characteristics such as command, instruction or order. This is a special feature of these members as compared with members who constitute only lateral organizations such as customers, suppliers, creditors, trade unions, etc. The reason why the scalar organization contains such characteristics is that the common purpose of the scalar organization is usually different from personal objectives and the function of the executives and employees are to attain this common purpose. This common purpose contains two types of action. One type is that which is intended to facilitate coöperation itself. The second type is that which is intended to maintain the coöperative system. The concrete aims under this common purpose are always changeable in accordance with changing environmental requirements.

One reason why people think that lateral organizations are short-lived is that they do not provide any kind of authoritarian power to their internal participants (that is, to executives and employees). Lateral organizations are essentially policed by external powers such as public opinion, community morals, custom, habit and social institutions. They are also policed by statutes, courts and police authority. On the other hand, scalar organizations are policed by internal powers such as internal discipline, or internal policing. For instance, scalar organization can force violaters to quit, or can manipulate wage rate and status

for executives and general employees. All employees and executives have to consciously accept the common purpose of scalar organizations and have to contribute their coöperative actions as assigned to them to attain concrete ends. The essential function of the executive is to have all participants maintain the common belief that the common purpose must be attained in the future.

(3) A Comparison between Lateral Organization and Scalar Organization

Barnard compared these two kinds of formal organizations and wrote as follows ;

“Lateral organization appears to be generally cheaper in terms of human resources, talents, and leadership abilities, and therefore in terms of overhead costs, than scalar organization, provided that freedom and the temporary nature of the specific agreements under the conditions do not lead to an excessive degree of competitiveness and combativeness. The reason for this is that specific decisions are more restricted in scope and relate more to concrete behavior and less to abstract propositions than is the case in scalar organization. ... It is noticeable that as scalar organizations become of large size they rapidly outstrip the capacities of all but a very few men to make the major decisions single-handed. Decisions are then in fact largely made by executive organizations, elaborate staff departments and through a long period of time ; i. e., decisions are to a great extent made by reference to an established body of rules and precedents and patterns of action.” (1948, pp. 154-155)

This suggests that lateral organizations are more flexible and adaptable than scalar organization. Scalar organizations require much conscious decision-making to maintain its adaptability to environmental situations. Thus it can be said that scalar organizations are more conservative and less progressive than lateral organizations. In scalar organizations, when leaders make their decisions, they must simultaneously consider the effect of every decision upon the immediate objective and also its reaction to the organization itself. In the case of scalar organizations, its existence depends upon the accomplishment of its common purpose and upon the satisfaction of personal motives of the participants. This implies that many conflicts of opinion or interests among its participants must be consciously settled through the formal administrative processes and the judicial processes in the scalar organization. On the other hand, in lateral organizations, most of these problems are naturally settled through all participants' ability to decide freely whether participate or not in the lateral organization.

The essential authority and discipline in scalar organizations depend upon

the participants' loyalties. The securing and maintenance of these loyalties is a major task of its executives. There are two ways to accomplish this task. One way is by progressively increasing the satisfaction of self-interest. This tends to exhaust the resources of an organization and thus to destroy it. Another way is to develop other kinds of loyalty which override ordinary self-interest even to the point of extinguishing it at times of crisis. The executive must develop this kind of loyalty.

In the case of lateral organizations, the need for loyalty is greatly reduced and the type of loyalty required is different from scalar organizations. The loyalty required is to self-interest within a moral code rather than to a specific formal organization. The conflict between the required loyalty and self-interest thus does not arise as often. Even if it arises, it is personal or local, and thus the whole system is not as greatly affected by this conflict or the departure of participants.

As to what kind of conditions are appropriate for these two kinds of formal organizations, Barnard explained as follows ;

“Activities of great complexity seem susceptible to large-size scalar organization only if these activities are capable of being segregated into relatively simple groups in space or in time and if the relation between the segregations is relatively simple, even though the interdependence between them is complete. Whether or not scalar organization can be used will depend to some extent upon the intellectual and technical capacities of leaders or managers to contrive the segregations and workable combinations of them.

On the other hand, when there are innumerable interactions not isolatable into small groups having simple interrelation, but on the contrary having a large number of simultaneous interdependencies, scalar organization may be impossible, whereas organization by free agreement has been certainly successful on a wide scale.” (1948, p. 157)

3. The Two Kinds of Formal Organizations and the Survival of an Organization

Barnard wrote with regard to the survival of an organization as follows ;

“ 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 primarily internal, a matter of proportions 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. Thus the elements stated will each vary with external factors, and they are at the same time interdependent." (1938, pp. 82-83)

In other words, an organization comes into being when the elements (willingness to serve, common purpose and communication) combine appropriate to the external conditions, and the survival of the organization depends upon the equilibrium of the system, especially upon the internal equilibrium which refers to the appropriate combination of these three elements.

This condition means that since the elements of organization are very closely interdependent, the understanding of the organization is more dependent on the ability of perceiving the whole than the ability of reasoning by the causal relations.⁽²⁾

For decision-making in an organization it is necessary to use functional planning or evolutionary planning with many trial and error processes (1948, pp. 169-171), therefore, the effects or reactions of the organization behavior which are results of decision-making must be communicated to the decision-makers as soon as possible and must be used to select the next coördinated activities.

The first precondition of repeated or successive decisions is to maintain a balance between two elements (i.e., willingness to serve and common purpose) and then the communication function which is indispensable combines these two elements. For instance, as a concrete goal which was introduced from the common purpose will affect members' power of willingness to serve. The change of this power will also affect the concrete conditions of attainment of the goal, thus the communication function which coördinates this relation must be correct and speedy.

From an internal equilibrium perspective, we should always try to compare the characteristics of lateral and scalar organizations. In lateral organizations, all participants can easily know the results of their decisions by the reaction of other participants or partners. For instance, in the case of market exchange, if the offered price is not appropriate to the situation, only a few people will accept that price. The person who offered that price can easily know the error of his decision. On the other hand, in scalar organizations, the decision is divided up and allocated among many specialized individuals and the behaviors are carried out by the organization as a whole. Therefore, top executives who are the final

decision-makers need to use complex communication processes to understand the results of their decision.

Barnard emphasized in his report entitled, "The Entrepreneur and Formal Organization" (1949) that organizations must produce new combinations appropriate to the environmental situation to continue to secure sufficient incentives which are used to induce necessary contributions from participants. He calls this a new combination of elements, in particular the new combination of specialized elements is referred to as an innovation. He thought that innovation is an important function of a formal organization. In a business organization, a person who invents, discovers or promotes innovations is an entrepreneur. In other words, when a formal organization plans new goals or objectives, it must always endeavor to invent, discover, and promote innovations.

In this paper, Barnard pointed out that innovation is not done by only top executives, but rather is done by an organization as a whole, and that lower managers and general employees should also engage in the processes of innovation.

Barnard attached greater importance to social innovations and deals with them in relation to the specialization of actions, saying, "the effectiveness of coöperative systems depends almost entirely upon the invention or adoption of innovations of specialization" (1938, p. 132). This is the problem of combination of specialization in the process of breaking down final goals or objectives into intermediate objectives.

Barnard classified the basis of specialization of organization into five groups: (1) the place where work is done (geographical specialization) (2) the time at which work is done (time specialization) (3) the persons with whom work is done (associational specialization) (4) the things for which work is done (specialization for objectives of effort or purpose of work) (5) the method or process by which work is done (specialization of process). (1938, pp. 128-131)

Barnard continued his explanation on the innovation of specialization as follows;

"On a primary level, then, specialization depends upon the variation in persons, upon the conditions of coöperation (chiefly physical environment), and upon the invention and innovation of the art of organization. Beyond the primary level, however, though these factors do not completely disappear as independent factors, there is progressive reaction of organization upon objectives, persons, and physical environment, all of which are altered as means of elaborating specializations of organization. It is these elaborated specializations of organization which more and more transcend

the biological limitations of individuals." (1938, pp. 135-136)

The specialization for effectiveness of coöperation, on a primary level, largely depends upon the introduction and growth of persons who can operate new social techniques or have a new vision, or new knowledge of the organization structure or new market. But in the future, the efficiency of coöperation will progress largely, because the continuation of action (which is a kind of time specialization) will produce many kinds of skills, accumulate know-how, eliminate waste, routinize behavior and gather information in order to make decision-making more accurate and speedy. Then these things will produce new social conditions, and new rules for the creation and the division of organization utilities. This is the reason why formal organizations must include the functions of the entrepreneur. In this description, Barnard not only points out the importance of process innovation and product innovation, but also includes a more important factor.

From Barnard's point of view, the most important condition for the survival of an organization is to attain efficiency of coöperation; that is to say, "the maintenance of equilibrium of organization activities through the satisfaction of the motives of individuals sufficient to induce these activities." (1938, p. 240) This condition of obtaining efficiency of coöperation includes eventually the attainment of effectiveness of coöperation in it.⁽³⁾ In other words, an increase in effectiveness of coöperation by the introductions of new products, new materials, new production methods, new technology, new transportation, an innovation of relationships with other coöperation systems, etc. must lead to an increase in satisfaction of all participants in the coöperation.

The invention or adaptation of innovations of specialization should not only increase the effectiveness of attainment of objectives but also continue the effort to increase the satisfactions of all participants through the method of trial and error.

In this process of trial and error, chief executives need to know quickly the responses to their decisions. At this time, when this response happens through complex innumerable simultaneous interactions, it is difficult for top executives to get responses (or reactions) to their decisions quickly within scalar organizations, thus they must use a form of lateral organization.

Therefore, in real formal organizations, we can find many kinds of intermediate or mixed formal organizations in between the extreme form of lateral organization and the extreme form of scalar organization. For instance, a divisionalized organization is a representative example of intermediate or mixed formal organizations. We can also find the same kind of organizations in business groups such as cartels, trusts, and conglomerates. These business groups

display characteristics of both lateral organizations and scalar organizations.

It is a usual phenomenon to have a scalar organization operating with many lateral organizations as a part of the formal organization. For instance, in business enterprises, executives and general employees organize a scalar organization, but the basic relationships with other members such as consumers, stockholders, creditors, suppliers of material, and trade unions, are nonauthoritative and horizontal agreements, and thus these relationships are essentially lateral organizations.

4. Conclusion

From Banard's point of view, the essential reason why people coöperate is that coöperation can produce more utilities than the arithmetical total sum of individual participant's activities. The surplus of utilities is mainly produced by the creative coördinative activities based on specialized functions of the scalar organization. On the other hand, the surplus of utilities which is produced by the process of exchange activities of the lateral organization is very small compared with the surplus produced by the scalar organization. One reason why many lateral organizations have short lives is due to this fact. Therefore if possible, people try to use scalar organizations in order to produce a larger surplus of utilities. It is thus a natural result that the main focus of research on organizations in the study of business administration is scalar organizations. The complexity of communication, however, limits the function of decision-making in a scalar organization, under complicated circumstances which require a trial and error approach. Thus the attempt to use the characteristics of a lateral organization which is a rather simple structure and communicates quickly the responses of other participants⁽⁴⁾ to the decision-makers, are frequently introduced into the scalar organization.

In other words, we always try to produce the largest surplus of organization utilities by using scalar organizations but when we can not use completely the functions of scalar organizations due to the complexity of communication, we partially introduce lateral organizations into the scalar organization or partially introduce scalar organizations into a lateral organization (for instance, a cartel), and we always try to increase the surplus of organization utilities as much as possible. After all attempts are made, we may finally use a fully lateral organization in the area where we cannot use any kinds of scalar organizations.

The external equilibrium which, in Barnard's case, ultimately decides the possibility of an survival of an organization is essentially maintained through the evolutionary planning process in lateral organizations. In other words, the possibilities for survival of an organization by each approach are tested by the coördinative activities through the negotiations among the participants of the

coöperative system and executives of the organization try maintain the equilibrium of organization economy through this process using a method of trial and error. For instance, as there may be many objectives or goals based upon the levels of internal equilibrium, at first, an organization maintains an external equilibrium with an objective which was introduced from an internal equilibrium through functionalized organization and participating leadership. However, at another time, the organization may find from some experiences a better external equilibrium with other new objective which is introduced from another internal equilibrium through matrix organization and delegating leadership. The organization will try to maintain this new external equilibrium with the new objective.

Ultimately, from Barnard's point of view, the survival of the scalar organization depends upon its relationship with lateral organizations.

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Notes

1. BARNARD, C. I. *Keieisha no Yakuwari* (The Functions of the Executive) translated by Y. Yamamoto and others into Japanese. Tokyo, 1969, pp. 35–36.
2. BARNARD, C. I. "Mind in Everyday Affairs," C. I. BARNARD, *The Functions of the Executive*, 1938, Appendix.
3. MANO, Osamu "On the Concepts of Efficiency and Effectiveness of Barnard's Theory," *Keizaigaku Kenkyu* (Hokkaido Univ.) Hokkaido, Vol. 35, No. 4, 1986.
4. In the case of business enterprise, the representative responses are the movement of market process, the volume of bargaining, the reactions of buyers, or the response of subordinates or other departments.

References

1. BARNARD, Chester I. (1938). *The Functions of the Executive*. Mass. Harvard Univ. Press.
2. BARNARD, C. I. (1948). *Organization and Management*. Mass. Harvard Univ. Press.
3. BARNARD, C. I. (1949). "The Entrepreneur and Formal Organization." in *Change and the Entrepreneur*. Mass. Harvard Univ. Press.
4. BARNARD, C. I. (1958). "Elementary Conditions of Business Morale." *California Management Review*. Vol. 1, No. 1, Fall.
5. COPELAND, Morris A. (1940). "Comments on the Job of the Executive." *Harvard Business Review*. Vol. 18, No. 2, Winter.
6. MANO, O. (1969). "On the Science of Business Administration in Japan." *Hokudai Economic Papers*. Vol. 1, 1968-69. Hokkaido Univ.
7. MANO, O. (1971). "The Development of the Science of Business Administration in Japan since 1955." *Hokudai Economic Papers*. Vol. 2, 1970-71. Hokkaido Univ.
8. MANO, O. (1973). "An Approach to the Organization Economy—The Development of Barnard's Theory." *Hokudai Economic Papers*. Vol. 3, 1972-73. Hokkaido Univ.
9. MANO, O. (1976). "Social Responsibility of the Firm—One Development of Barnard's Theory." *Hokudai Economic Papers*. Vol. 5, 1975-76. Hokkaido Univ.
10. MANO, O. (1978). *Soshiki Keizai no Kaimei* (Organization Economy—A Study of the

Management Theory of C. I. Barnard). Bunshindo. Tokyo.

11. MANO, O. (1981). "Barnard's Theory of Education for Executives." *Hokudai Economic Papers*. Vol.10.1980-81. Hokkaido Univ.
12. MANO, O. (1987). *Barnard no Keiei Riron* (Management Theory of C. I. Barnard). Bunshindo. Tokyo.
13. MANO, O. (1994). "The Differences between Barnard's and Simon's Concept of Organization Equilibrium-Simon's Misunderstanding about Barnard's Intention." *Economic Journal of Hokkaido University*. Vol. 23. 1994. Hokkaido Univ.
14. MOONEY, James P. and Alan C. REILY.(1931). *Onward Industry*. Harper & Brothers, N. Y.