

Reexamining the Organization Theory: the Validity of the Bureaucratic and the Human Relations Models

KWON, GI-HEON

*Prof. Dept. of Public Administration,
Kyung Hee University*

I. Introduction

Various organizational theories are based on divergent assumptions about human nature. Based on certain assumptions, the theorists justified administrative behavior in formal organizations. At one extreme the Bureaucratic theorists assert that their theory, based on the assumption that man is inherently selfish by nature, has validity and universality in an ideal sense. According to Weber, for example:

Experience tends universally to show that the purely bureaucratic type administrative organization ... is from the purely technical point of view, of attaining the highest degree of efficiency and is in this sense formally the most rational known means of carrying out imperative control over human beings. It is superior to any other form in precision, in stability, in the stringency of its discipline, and in its reliability (Weber, 1947, p. 337)¹⁾

Some other theorists argue, on the contrary, that the machine theory should be discarded away as its assumptions were proven wrong. The Human Relations theorists, for example, conclude:

... the amount of work carried out by an individual is determined not by his physical capability but his social capacity; non-economic rewards are most important in motivation and satisfaction of individuals ... the effective supervisor is "employee-centered" and not

"job-centered," that is, he regards his job as dealing with human beings rather than with the work, communications and participation in decision making are some of the most significant rewards which can be offered to obtain the commitment of the individual.²⁾

Should we only accept the Human Relations theory and throw away the Machine theory? Or, to put it another way, is the Machine theory valid? How do the theories differ? These are the main questions to be addressed in this paper.

Because we are mainly concerned with the logical validity of the Machine model, the essential issues are: 1) *Essential Set of Premises*: What are the core assumptions (or dimensions) of the model? 2) *Falsification*: Can we falsify them in a strict sense? If can't, what is the evidence supporting the validity of the model? 3) *Replication*: Is the thesis of the Machine model replicable? To answer these questions, we will take the following steps.

First, to identify some essential dimensions of the organizational models, we will employ the concept of the stable-dynamic open system. It will be illustrated that all the existing three models possess the same essential dimensions—namely administrative behavior, task, and subordinate motivation.

Secondly, having identified some essential dimensions, we will examine the logical validity of the Machine model. We will consider the issues of "falsifiability," and "replicability." To do that, we will focus on examining the assumption about human motivation. Specifically, we will survey some theories in the fields of behavioral science that constitute "self-interest," or "aggressiveness" as a biosocial nature.

Finally, we will consider another kind of evidence—correlational field studies in organizations.

II. The Essential Dimensions of the Organizational Models

The stable-dynamic open system framework helps us identify the essential dimensions of the existing organizational models—administrative behavior, task technology, and subordinate motivation. A brief introduction of the framework can be useful in helping us understand how the existing organizational models on the administrative behavior are interconnected

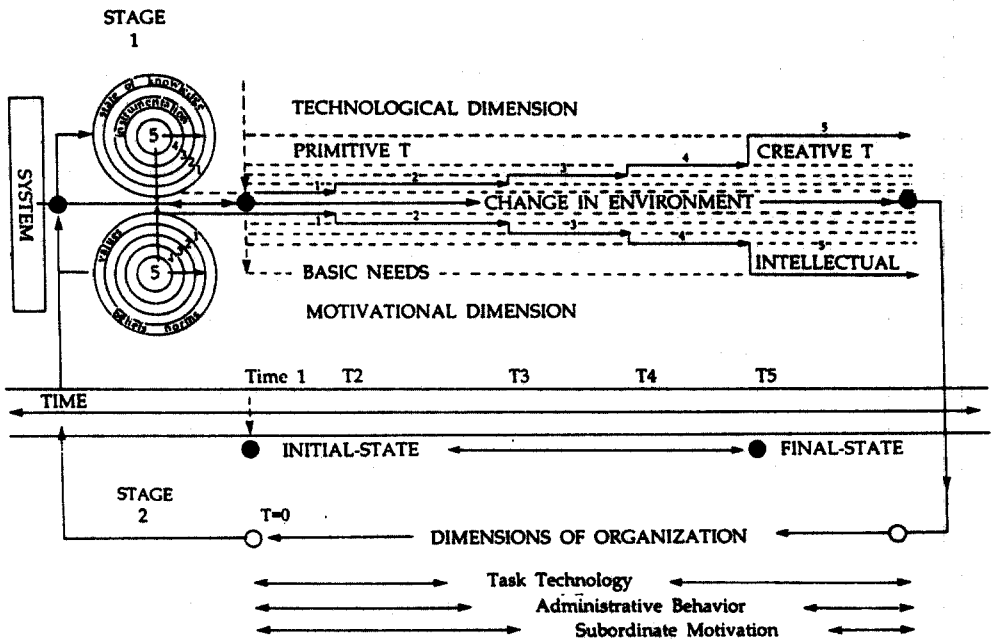
1. The System Stage

The key element in the framework of the theory shown in figure 1 (next page) is the environment; it is the starting point. The environment, which by its very nature is constantly changing from simple to complex in the time/space continuum, is defined

by two essential dimensions—technology and motivation. It is a two-dimensional, "state-determined, dynamic system." The stability of the system is determined by a tendency toward fitness between the two dimensions of the system. This is what Dewey and Bentley(1948) have called "transactions" or processes between the parts that constitute the system. They have suggested that in the nature of any society there is a tendency toward fitness between the essential dimensions of the social system. That is to say that human societies, like living beings, are self-regulating; they adapt themselves to change over time.

The two dimensions are defined as follows: First, the motivational dimension is, at the individual level, defined as the *need-tendency of "man"* for the valued object. This runs from the basic needs to intellectualization, and linked, at the system level, to the values, beliefs, norms, and attitudes of the social system-society and culture. It can be seen that the above definition encompasses the motivational dimensions of all the existing theories.

<Fig. 1> Conceptual Framework of the Theory



Revised from Abraham H. Maslow, *Motivation and Personality* (New York : Harper-Row, 1987).

Second, the technological dimension is defined as the knowledge about technical processes existing outside the organization, and as the tendency to understand the nature of the object. The object may be animate-human or other, inanimate, running from simple to complex in the time/space continuum

2. The Sub-System Stage

The organization, in constant response to the needs of its environment, is defined as a "miniature of society." Any statement about the environment is a statement about the organization, which requires a tendency toward fitness between the environment and the organization.

The organization, because of the fitness tendency with the relevant environment, must fit with its internal structure in order to respond at an optimum level to the desired needs of the environment-organizational objective. The internal structure as the interconnection between the essential dimensions is characterized here by tasks-units in the stable state at a given time.

To maintain the internal structure or interconnection of the system at the optimum level, the required control (administrative behavior) must exist. Administrative behavior-control as "a task relationship between a superior and subordinate is determined in terms of the relevant parameters (technological and motivational dimensions)."

Using the concepts provided, we can analyze and compare the three organizational models--the Machine model, the Human Relations model, and the Human Resources model. Tables 1 and 2 provide a summary(see tables 1 & 2). The following is a brief description of these models.

First, the Machine model assumes that man is selfish and aggressive in his original nature. In this model, effectiveness of administrative behavior is considered as an interconnection between the rigid-structured task, impersonal administrative behavior and external motivation (reward system). Secondly, the Human Relations School, with its emphasis on People's social needs, advocates a supportive form of administrative behavior. An administrator is not a bureaucrat dealing with rules but is a person who attempts to understand the needs and feelings of subordinates and shows consideration and sympathy for their needs and feelings.

Finally, the human Resources School, the second version of the neoclassical approach, derive their theoretical justification explicitly from the assumption that all men are interested in self-actualizing or realizing their full potential. It advocates a participative form of administrative behavior as universally most effective for all organizations.

<Table 1> Theoretical Distinctions between the Bureaucratic and the Human Relations Models

Models	The Bureaucratic Model	The Human Relations Model	
Dimensions:			
The structure of organization	Mechanistic	Organic	
Form of administrative behavior	Bureaucratic	Supportive	
Form of task structure	Structured or rigid	Flexible	
Form of subordinate motivation	External: Money	External: Social and Money	
Assumptions about Human Nature:	Economic man Selfish, Aggressive	Social man Instinct of Sociability	
Time :	1900	1930	1960
Theorists :	Weber Fayol Urwick Taylor and others...	Mayo Roethlisberger Dickson Early Likert and others...	

All the existing theories base their theoretical foundation on the essential dimensions of "organization"--namely administrative behavior, task and subordinate motivation. Therefore, with regard to the essential dimensions, the Bureaucratic model possesses each one of the essential dimensions of the Human Relations and the Human Resources models.

Now, having identified the essential dimensions of the organizational models, let's turn to our main issue: the logical and empirical validity of the Machine model. We will mainly focus on one of the core assumptions of the model--i.e., the assumptions about human nature. Concerning the logical validity of the model, we are interested in two tests: *falsifiability and replicability*.

Specifically, we will attempt to discover answers to the following questions: 1) Are there any theories in the fields of behavioral science that constitute "selfishness," or "aggressiveness" as a biosocial characteristic of human nature? 2) What empirical evidence, if any, justifies the validity of such theories of human nature?

〈Table 2〉 Theoretical Distinctions between the Human Relations and the Human Resources Models

Models	The Human Relations Model	The Human Resources Model
Dimensions:		
The structure of organization	Organic	Organic
Form of administrative behavior	Supportive	Participative
Form of task	Flexible	Unstructured, complex structure
Form of subordinate motivation	External: Money, Social	External and internal
Assumptions about Human Nature:	Social man (Instinct of Sociability)	Self-actualizing man (Self-realization)
Time :	1930	1930
Theorists :	Mayo Roethlisberger and Dickson Early Likert and others	Likert McGregor Argyris and others

III. On The Assumptions about the Human Nature

The view of man in the design of organizations as a "means" has been proposed in the writings of authors in the political sciences (Machiavelli (1515), Hobbes (1651)), in economics (Adam Smith (1723)), in biology (Darwin (1859)), in the social sciences (Spencer (1862)), in psychoanalytic psychology (Freud (1929)), in sociology (Weber (1904)), in management theory (Taylor (1911), Urwick (1937)) and others³⁾,

1. Selfishness

Machiavelli, as an early political scientist in Western thought, provides an appropriate beginning. In "The Prince"(1515), he presents the first view of the nature of man, His main proposition, tracing back to "hedonism" (pain-pleasure theory) concerned what he observed in the government of Florence in the fifteenth and early

sixteenth centuries--that there is "impulsive selfishness," inherent in man. He writes:

It is much safer to be feared than loved... For it may be said of man in general that they are ungrateful, valuable, dissemblers, anxious to avoid dangers, and covetous of gain (Machiavelli, 1946, p, 61). ⁴⁾

Because of his nature, he said man's rebellious and uncooperative behavior must be, in an organization (or political system) ruthlessly and strictly controlled by administrators (or princes) who aspire to achieve the goals of their organizations.

2. Power

The following century, Thomas Hobbes in "The Leviathan"(1651), developed a theory of social organizations which identified him as a direct intellectual offspring of Machiavelli. His major proposition, evidenced during the years of the economic-political turbulence of seventeenth century England, asserts that there are two impulsive forces, "fear of death" and "desire for power," that dominate human behavior. Fear in man is the source of his passionate dedication to the preservation of his own life according to Hobbes. The second force, related to man's fear of death, is man's instinctive desire for power to protect himself from the attack of another. This basic element in man's nature urges him to search for "power after power," all for his own security. It is further explained as follows:

... so that in the first place, I put for a general inclination of all mankind, a perpetual and restless desire of power after power, that ceaseth only in Death. And in the cause of this, is not always that a man hopes for a more intensive delight, that he has already attained to; or that he cannot be content with a moderate power; but because he cannot assure the power and means to live well which he hath present, without the acquisition of more.(Hobbes, 1951, p. 63)

Hence, in this insatiable desire of his natural state for power, man becomes subject to an unending war of all against all. Given this situation the rational solution, according to Hobbes, is that it is absolutely necessary to control people. The suggestion in this concept, like Taylor's or Machiavelli's, is simply to treat "man" in the design of an organization as a means.

3. Self-interest

The beginning of the Industrial Revolution in the mid-eighteenth century based its

theoretical background on Smith's equilibrium theory of the "invisible hand" His view received acceptance at that time in light of the evidence of economic behavior in Western Europe and America

Under Smith's economic theory of the "invisible hand," there is a simple allocation of a nation's scarce resources through the price mechanism which reflects the supply and demand conditions of the market. By maximizing his own self-interest each individual benefits not only from his own wealth, but also from that of society as a whole. This idea of *self-interest* is the criterion which has led many theorists to think that Smith defines "man" in terms of a selfish, rather than a virtuous nature.

The economic theory of "laissez-faire," originated by Smith, gives "permission to do or make what you choose." This implies no interference with personal indulgence. But laissez-faire, when linked with self-interest motives, may seem to support the idea that man is in his nature self-indulgent, predatory, and interested only in his own good.

It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard of their own interest. We address ourselves not to their humanity, but to their self-love, and never talk to them of our own necessities, but of their advantage. (Smith, 1937, p. 14)

4. Competition

In the mid-nineteenth century, Darwin Published "Origin of Species"(1859), in which he set forth the biological theory of "survival of the fittest." The theory clearly asserted that survival is the primary force in the behavior of animal and man. Darwin hypothesized that survival was guaranteed only to those who were the best representatives of the species and best adapted to the conditions of their environment. The survivors were those who, through physical power and mental quickness, were able to win *the competition* for food, to mate and acquire the other necessities of survival. The suggestion is clearly that nature is a never-ending struggle, a form of competition, a permanent state of war that exists among and between all species and their natural environment.

The concept of "survival of the fittest" was extended from biological organisms to the broader explanation of man's nature and the social settings(organizations) by Herbert Spencer in the last part of the nineteenth century. Spencer, in his proposition, argued that among men, the fittest survive; indeed they are the only ones enabled to survive. In this, the process of natural selection in man's social world accepts the behavior of the aggressive competitive and strength. Man, in Spencer's model, is a predatory creature. His interpretation of Darwinian theory underlies many of the

educational, industrial designs of organizations in nineteenth century America.

5. Sex and Aggression

Freud, who was born three years before the publication of Darwin's *Origin of Species*, grew up in the nineteenth century in the spirit of the Darwinian age. In his earlier books, Freud described the inevitable conflict between sexual and ego instincts as operating under two different principles—the *pleasure* principle and the *reality* principle. Although the description of these two sets of instincts and their relation to these "principles" changed with his later observations, the concept of unconscious conflict between two inner forces remained as a foundation of the later formulation of his *instincts* theory.

According to the fully developed theory of psychoanalysis, there are two basic instincts, a *life instinct* or *Eros* and a *death instinct* or *Thanatos*. The life instinct and death instinct constitutes the biological basis of self-interest, egotism, competition and dominance. To gain some insight into these operations of two sets of instincts in the mental life of man, the structural postulates that Freud presented in his *The Ego and the Id*(1923), *New Introductory Lectures on Psycho-Analysis*(1926), and *An Outline of Psychoanalysis*(1940), should be examined.

Supporting evidence for the validation of the unconscious sexual(life) and aggressive (death) instincts identifies two sources of data in the literature of psychoanalytic theory:

- One source, which derives from the work of Freud, is the body of clinical observations and case studies upon which Freud rested the structure of psychoanalytic theory.

- The second source, which derives from investigations after Freud, is the clinical and naturalistic observation of infants and children which were surveyed by Hilgard(1952)⁵, Fisher and Greenberg(1977)⁶, and others. After surveying the investigations and examining the data on infants and children, Fisher and Greenberg published *The Scientific Credibility of Freud's Theory and Therapy* in 1977. Here the investigators believe that the evidence, generally speaking, favors Freud's position.

From the systematic observational and experimental evidence presented in the above discussion, we accept Freud's view that two irrational and unconscious dialectic forces, sex and aggressiveness, constitute the biological basis of rationality and egoism. With this position, we will notice that we cannot falsify some core set of assumptions upon which the Machine theory is based. Unless we can falsify the core assumption, we cannot say that the thesis of the model, established based on the assumption, is invalid.

We notice that there is an equally overwhelming body of evidence that man is also biologically driven to seek social identity. It has been proposed in philosophy (Locke (1689)), Rousseau (1762)), in the social sciences (Mayo (1933)), in neo-Freudian psychology (Adler (1917), Fromm (1941, 1955)), in humanistic psychology (Maslow (1954)), and in organizational psychology (McGregor (1960)), Liker (1961), Argyris (1962)). In the current history of research on human motivation there is evidence to support both concepts of man. The work of Freud and his successors clearly supported the view of man as evil. The view--man as good--was supported through research evidence by Fromm, Maslow, and many others. This perhaps suggests that the nature and motivation of man is on a continuum, from evil to good, competitive to cooperative, and from basic need to self-actualization.

Now the question might arise as: "Does this fact disprove our claim?" The answer would be no. That will not change our argument. The fact that the motivation of man is on a continuum *cannot* falsify the assumption that man is inherently selfish in his nature, because the "selfish" aspects of the human motivation is also on the continuum. In other words, the other half of the "social" human behavior *cannot* dispute the existence of the first half of the "self-interested" human behavior.

IV. On the Replication of the Machine Model

Does the thesis of the Machine model also pass the "replication" test? In other words, are the core dimensions of the model replicable? We will answer this question through examining the following two observations provided by the stable-dynamic, open system framework.

1. *Observation I : The essential dimensions of the organizational models are the same in some basic ways*

This means that the essential dimensions--namely administrative behavior, task and subordinate motivation, together in their interconnections, constitute the formal identity of the model of social systems. The existing three models, even though they were developed and asserted in different time/space, have common essential dimensions.

An example helps to illustrate the point: for a moment suppose that a scientist who, after much investigation into all kinds of apples, comes to the conclusion that *all the apples in the world are always the same*.

From what the scientist has said, it appears that he recognizes some fundamental properties which, in their interconnection, constitute the formal identity of apple(s) and differentiates the apple(s) from everything else in the world. Further, the fundamental elements, which in their interconnection, identify the apple(s) as constant, unchanging,

and *state-determined* in their origin, do so only if the apple(s), at different points in time and space are always the same *in some basic way*

Similarly, when it is stated that *all the models of social systems—organizations are always the same in the organic world*, these essential dimensions are always constant, unchanging, and *state-determined* in their nature.

2. Observation II : The development of a model is not linear but circular

The Fig. 2 helps to illustrate this argument. The figure shows the evolution of organizational models. With two hypothetical models having been added--i.e., the Autocratic and Autonomous models, it provides a complete state of the world in the time/space continuum. The human motivational dimension changes from basic needs to self-actualization and administrative behavior changes dependently from Autocratic to Autonomous model.

If the development of a model is *linear*, meaning it will not return to the original state, a newly developed model would supersede the previous version. This would not be the case if it is true that the nature of human motivation is on a continuum which is quite conceivable. For example, the Human relation model, developed on the assumption of "social" human nature which is one point on a continuum, cannot supersede the Machine model based on the assumption of "selfish" human nature

<Fig. 2> Evolution of the Organizational Models in a Stable-Dynamic Open System Framework

Simplicity 1	2	3	4	Complexity 5
Autocracy				
Technological Dimension of Change	Bureaucracy Scientific mgmt Administrative mgmt	Human relations		Human resources
Motivational Dimension of Change	Economic -man	Social -man	Autonomy	
1 Basic needs	2 Security	3 Social	4 Ego	5 Self- actualization
1700	1890	1930	1960	1990

which is at some other, at least equivalent, point on a continuum. Following this logic, we can infer that in our system(organization or society), its components(motivation and technology)from one level to the next might change (e.g., "economic needs" to "social needs", simple technology to complex technology), but *remain* in the system(not *evaporating*). It suggests that the administrative behavior of the Machine model (e.g., impersonal and bureaucratic behavior)can be regarded as *an absolute and core form of organization* in the time/space continuum, thus replicable.

In a similar fashion, we can extend our logic to the other remaining essential dimensions like task technology. The task technology of the Machine model would not disappear but remain in the system. It implies that the task technology of the Machine model (e.g., rigid and mechanistic task structure)can also be regarded as an absolute and essential form of organizations in the time/space continuum.

V. On the Empirical Validity of the Machine Model

The effectiveness of impersonal administrative behavior has been investigated by several researchers. Litwak⁷⁾, for example, reports that "Weber's model is most efficient when the organization deals primarily with uniform events and occupations stressing traditional areas of knowledge"(p. 177). Robbitt, Breinhold, Doktor, and McNaul(1974)⁸⁾, in their book *Organizational Behavior* note that

"The impersonal bureaucratic model tends to be most effective and efficient in organizations concerned primarily with routine... and representative tasks in a fairly stable environment"(pp. 48, 50). The studies by Lawrence and Lorsch(1967), Leavitt(1962), and Whyte(1969) support these findings⁹⁾. They have suggested that if the environment is simple, with a slow rate of change, effective administrative behavior is highly bureaucratic.

The evidence from these studies indicated that: *If tasks are highly structured or routinized, and individuals with low skill have strong needs for security and stability, the impersonal or bureaucratic administrative behavior developed in the three models—bureaucratic, administrative management, and scientific management—is effective* (March Simon, 1958, Ch. 2; Bennis, 1969).

VI. Summary and Conclusion

The big question raised in this paper was: "Is the thesis of the Machine model valid?" To address this question, we have taken the following three steps: 1) *identifying some core dimensions of the model*; 2) *examining the logical validity of the model*; and 3) *considering empirical evidence of the model*.

Utilizing the stable-dynamic opensystem concept, we identified some essential

dimensions of the organizational models—namely, administrative behavior, task, subordinate motivation. The three existing theories derived their theoretical foundation from the same essential dimensions, thus they have common core dimensions. They have arrived at a single form of administrative behavior based on one or more of these dimensions which they believed was universally most effective.

After identifying the essential dimensions, we have examined the logical validity of the Machine model. We argued that the thesis of the Machine model is logically valid because the core assumption of the model is not falsifiable. Furthermore, it is replicable.

Finally, we considered another kind of evidence, empirical evidence. Evidence from correlational field studies indicates that the Bureaucratic model is effective if the environment is simple, tasks are routine and subordinates are security oriented. Therefore, it would be misleading to assert that the task technologies of the Machine model are ineffective.

Because we mainly focused on analyzing the assumption about human motivation, one of the most important issue in the organizational studies, we did not fully deal with the other essential dimensions on a one-by-one basis. Lacking space, that is beyond the scope of this paper. Subsequent research on those issues would be useful both in an academic and practical sense.

Notes

- 1) M. Weber, *The Theory of Social and Economic Organization*, (trans. by A.M. Henderson and T. Parsons). (New York: Oxford, 1947 [2d. ed., Free Press, 1964]).
- 2) D.S. Pugh, *Modern Organization Theory*.
- 3) Machiavelli(1515), *The Prince* (Transl. New York: Hendrich House, 1946); Thomas Hobbes (1951), *Leviathan* (Reprint of 1st ed. Cambridge, England: Cambridge Univ. Press, 1904); Adam Smith(1723), *The Wealth of Nations* (London: Oxford University Press, 1937); Charles Darwin (1859), *Origin of Species* (New York: Modern Library, 1936 Edition); Sigmund Freud(1920), *Beyond the Pleasure Principle* (New York: International Psychoanalytical Press, 1922); Max Weber, *The Protestant Ethic and the Spirit of Capitalism* (New York : Person, Trans. 1930); Frederic W. Taylor, *The Principle of Scientific Management* (New York : Harper & Row, 1911); L. Urwick, *The Element of Administration* (New York : 1935).
- 4) Machiavelli, *The Prince* (Transl, New York: Hendrich House, 1946).
- 5) E. R. Hilgard, "Experimental Approaches to Psychoanalysis." In E. Pumpian Mindlin(ed.) *Psychoanalysis as a Science*. (California: Stanford University Press, 1952).
- 6) S. Fisher and R. P. Greenberg, *The Scientific Credibility of Freud's Theories and Therapy*(New York: Basic Books).
- 7) E. Liwark, "Model of Bureaucracy which Permit Conflict." *American Journal of Sociology*, Vol. 67, pp. 177-184 (1961).
- 8) H. R. Robbitt, R. H. Breinhold, R. H. Doktor, and J. P. McNaull, *Organizational Behavior*:

Understanding and Prediction (Englewood Cliffs, N. J.: Prentice-Hall, 1974).

- 9) P. R. Lawrence, and J. L. Lorsch, *Organization and Environment* (Boston: Harvard Business School, Division of Research, 1967); J. J. Morse and J. W. Lorsch, "Beyond Theory Y," *Harvard Business Review*, Vol. 48, pp. 61-68; (1970), H. J. Leavitt, "Management According to Task: Organizational Differentiation." *Management International*, Vol. 1, pp. 13-22; (1962), W. F. Whyte, *Organizational Behavior* (Homewood, Ill: Irwin and Dorsey, 1969); Strauss, G. *Some Notes on Power-Equalization*. In H. J. Leavitt (Ed.) *The Social Science of Organization* (Englewood Cliffs, N. J.: Prentice-Hall, 1963).
- 10) In the distinction tentatively made and discussed earlier, Statement I concerns the essential dimensions--Administrative behavior, task and subordinate motivation--Whereas Statement II considers the theses for all the existing ideal models--the Bureaucratic, the Human Relations, and the Human Resources models--within the essential dimensions, as shown in Table 1 and 2.

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