

MODERN STRUCTURAL ORGANIZATION THEORY: FROM MECHANISTIC VS. ORGANIC SYSTEMS OF BURNS & STALKER TO TECHNOLOGY OF BURTON & OBEL

Özgür Önday

Ph.D Student, Yeditepe University Department of Business Administration.

ABSTRACT: Organization is a relatively young science in comparison with the other scientific disciplines. (Ivanko, 2013) Accounts of the growth of organizational theory usually start with Taylor and Weber, but, as Scott (1987) mentions, organizations were present in the old civilizations which goes back to Sumerians (5000, BC) and which experiences its maturation phase with Taylor, Fayol and Weber, continuing to come up to present with modern management methods and principles. The modern organization may be the most crucial innovation of the past 100 years and it is a theory which will never complete its evolution as the human being continues to exist. Understanding how organizations work has been the focus of scientists and scholars until the early part of the 20th century. Just as organizations have evolved, so to have the theories explaining them. These theories can be divided into 9 different “schools” of thought (Shafritz, Ott, Jang, 2005): Classical Organization Theory, Neoclassical Organization Theory, Human Resource Theory, or the Organizational Behavior Perspective, Modern Structural Organization Theory, Organizational Economics Theory, Power and Politics Organization Theory, Organizational Culture Theory, Reform Though Changes in Organizational Culture and Theories of Organizations and Environments. This introductory paper will concentrate on the modern structural organization theory and is divided as follows: The introduction talks about the developments of the organization and organization theory from its early stages with detailed definitions. In section 2, theoretical roots in other words literature review on the subject will be presented. At further section, by looking at the perspectives of the 9 pioneering people (Burns & Stalker, Blau & Scott, Walker & Lorsch, Mintzberg and Burton & Obel) main principles of the classical organization theory are presented one by one. Section 4 mentions strengths and weaknesses of the classical organizational theory and section 5 discusses and concludes the paper.

KEYWORDS: Modern, Structural, Organization, Organization Theory.

INTRODUCTION

Organization theory is not an easy concept. Unless you are naturally interested to the abstract, you probably expect this subject to be dry, unconnected to practical matters and perhaps a little boring. Even if you are interested about abstractions, it can be boring to confront as many of them at one time as organization theory asks you to do. So why would anyone sign up to study this complex and difficult subject matter?

There are many answers to this question. For some, studying organization theory is motivated by curiosity. They want to know what it would be like to think like an organization, to get inside organizing processes far enough to reveal the intricate organizational patterns that make organizations understandable. Others are motivated by the attraction of stretching their minds in new ways. For example, organization theory relies on the sciences, the humanities and the

arts, and so presents the intellectual challenge of thinking in interdisciplinary ways. Some turn to organization theory in the hope that it will get better their chances of becoming successful executives in business, government or non-profit organizations. Table lists some of their specific reasons.

Strategy/Finance	Those who want to improve the value of a company need to know how to organize to achieve organizational goals; those who want to monitor and control performance will need to understand how to achieve results by structuring activities and designing organizational processes.
Marketing	Marketers know that to create a successful corporate brand they need to get the organization behind the delivery of its promise; a thorough understanding of what an organization is and how it operates will make their endeavors to align the organization and its brand strategy more feasible and productive.
Information technology	The way information flows through the organization affects work processes and outcomes, so knowing organization theory can help IT specialists identify, understand and serve the organization's informational needs as they design and promote the use of their information systems.
Operations	Value chain management has created a need for operations managers to interconnect their organizing processes with those of suppliers, distributors and customers; organization theory not only supports the technical aspects of operations and systems integration, but explains their socio-cultural aspects as well.
Human resources	Nearly everything HR specialists do from recruiting to compensation has organizational ramifications and hence benefits from knowledge provided by organization theory; organizational development and change are particularly important elements of HR that demand deep knowledge of organizations and organizing, and organization theory can provide content for executive training programs.
Communication	Corporate communication specialists must understand the interpretive processes of organizational stakeholders and need to address the many ways in which different parts of the organization interact with each other and the environment, in order to design communication systems that are effective or to diagnose ways existing systems are misaligned with the organization's needs.

Man is intent on describing himself into a web of collectivized patterns. ``Modern man has learned to accommodate himself to a world increasingly organized. The trend toward ever more explicit and consciously drawn relationships is profound and sweeping; it is marked by depth no less than by extension.`` This comment by Seidenberg summarizes the influence of organization in many shapes of human activity.

Some of the reasons for hectic organizational activity are found in the main transitions which revolutionized our society, shifting it from a rural culture, to a culture based on technology, industry, and the city. From these shifts, a way of life occurred and characterized by the proximity and dependency of people on each other. Proximity and dependency, as conditions of social life, harbor the threats of human conflict, capricious antisocial behavior, instability of human relationships, and uncertainty about the nature of the social structure with its concomitant roles.

Of course, these threats to social integrity are still exist to some degree in all societies, ranging from the primitive to the modern. But, these threats become serious when the harmonious functioning of a society acts upon the maintenance of a highly intricate, delicately balanced shape of human collaboration. The civilization we have generated depends on the preservation of a precarious balance. Hence, disrupting forces impinging on this shaky form of collaboration must be prohibited or minimized.

Traditionally organization is seen as a intermediary for accomplishing goals and objectives. While this approach is nifty, it tends to obscure the inner workings and internal aims of organization itself. Another fruitful way of behaving organization is as a mechanism having the ultimate aim of offsetting those forces which undermine human collaboration. In this approach, organization sloping towards to minimize conflict, and to lessen the meaning of individual behavior which deviates from values that the organization has established as worthwhile. Further, organization increases stability in human relationships by decreasing uncertainty regarding the nature of the system's structure and the human roles which are inherent to it. Parallel to this point, organization enhances the predictability of human action, because it limits the number of behavioral alternatives available to an individual. (Scott, 1961)

Furthermore, organization has built-in safeguards. Besides prescribing acceptable shapes of behavior for those who elect to submit to it, organization is also capable to counterbalance the effects of human action which transcends its established ways. Few segments of society have engaged in organizing more strongly than business. The reason is clear. Business depends on what organization offers. Business requires a system of relationships among functions' it requires stability, continuity, and predictability in its internal activities and external contacts. Business also appears to need harmonious relationships between the people and processes which creates it. In other words, a business organization has to be free, relatively, from destructive tendencies which may be caused by divergent interests. (Scott, 1961)

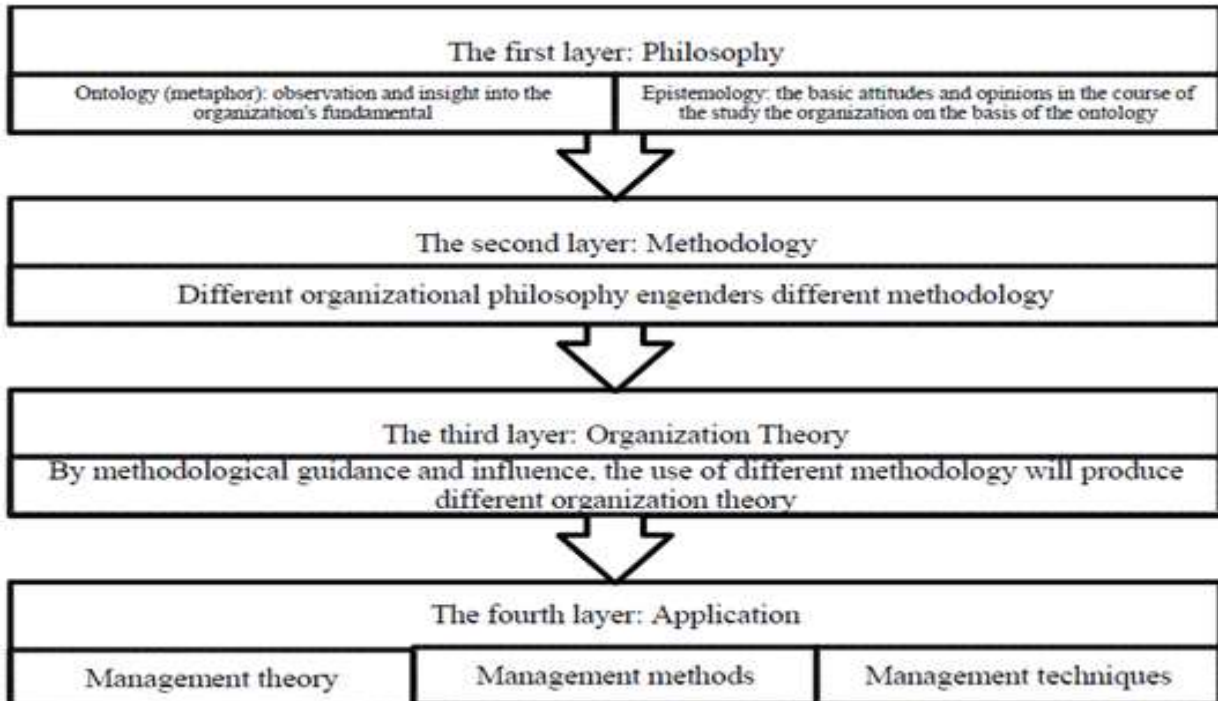
As a main principle for meeting these needs build upon administrative science. A major element of this science is organization theory, which gathers the grounds for management activities in a various number of crucial areas of business endeavor. Organization theory, however, is not a homogeneous science based on generally accepted principles. Different theories of organization have been, are being evolved and continued to be evolving. (Ibid.)

If it is needed to give detailed definition of organization and organization theory; there are various definitions. To start with organizations, organizations are universal phenomena in human social and were explained by March and Simon (1958) as a systems of coordinated action among individuals who differ in the dimensions of interests, preferences and knowledge. Who holding the same philosophy included Arrow (1974), Mintzberg (1979), et cetera. Organizations exist when people interact with one another to implement essential (Daft, 2007), they are social units of people with recognizable boundary to reach certain goals (Robbins, 1990). Organizations are the unities composed of mental activities of member with same goals and technologies and operate in the clear relationship mode (Liu,2007). On rational, natural, and open system perspectives, there are various emphasis in the definitions of organizations. The rational perspective sees an organization with tool which is designed to meet the pre-defined goals; the natural perspective underlines that an organization is a group; and the open system perspective concentrates on that an organization as a self-regulation system and an open system, exchanging with its external environment.

Organization theories comes from organization practices and in turn serve practices. Nicholson explains them as ``a series of academic viewpoints which attempt to explain the multiplicities of organizational structure and operating process (Nicholson, 1995).`` In other words, organization theories are knowledge systems which study and explain organizational structure, function and operation and organizational group behavior and individual behavior (Zhu, 1999).

Complete organization science should include 4 layers: philosophy, methodology, theory and application, and organization theory takes place on the third layer, under the direction of

methodology, it builds various management theories, management methods and management techniques by management practices. The relationship of them shows as the following figure:



Furthermore, science of management is a process arise of which goes back to Sumerians (5000, BC) and which experiences its maturation phase with Taylor, Fayol and Weber, going to exist up to present with modern management methods and principles such as, Total Quality Management, Process Management and it is a theory that will never complete its development. On the contrary, to developments and changes in world economy and industry during years before First World War, especially fast economic growth breaking out in the USA, production techniques used being far away from science interested some scientists. With Industry Revolution happening at the end of 18th c., human abilities, skills and energy were replaced with machines, small scaled employers who couldn't adapt to these changes began to work as workers in enterprising implementing change; and production moved from small locations to big locations (factories). Thus came out with problems regarding management and organization structure (Celik and Dogan, 2011).

Organization is a relatively young science in comparison with the other scientific disciplines. An organization is a system of two or more persons, engaged in cooperative action, trying to reach some purpose. Organizations are bounded systems of structured social interaction featuring authority relations, communication systems, and the use of incentives. Example of organizations includes businesses, hospitals, colleges, retail stores et cetera. (Ivanko, 2013) Accounts of the growth of organizational theory usually start with Taylor and Weber, but, as Scott (1987) mentions, organizations were present in the old civilizations which goes back to Sumerians (5000, BC).

Complex forms of organization were necessitated and did change as families grew into tribes and tribes evolved into nations. The earliest written record, the clay tablets of the Sumerians, recorded division of labor and supervision practices. In Sumerian society, as in various others since then, the wisest and best leaders were thought to be the priests and other religious leaders.

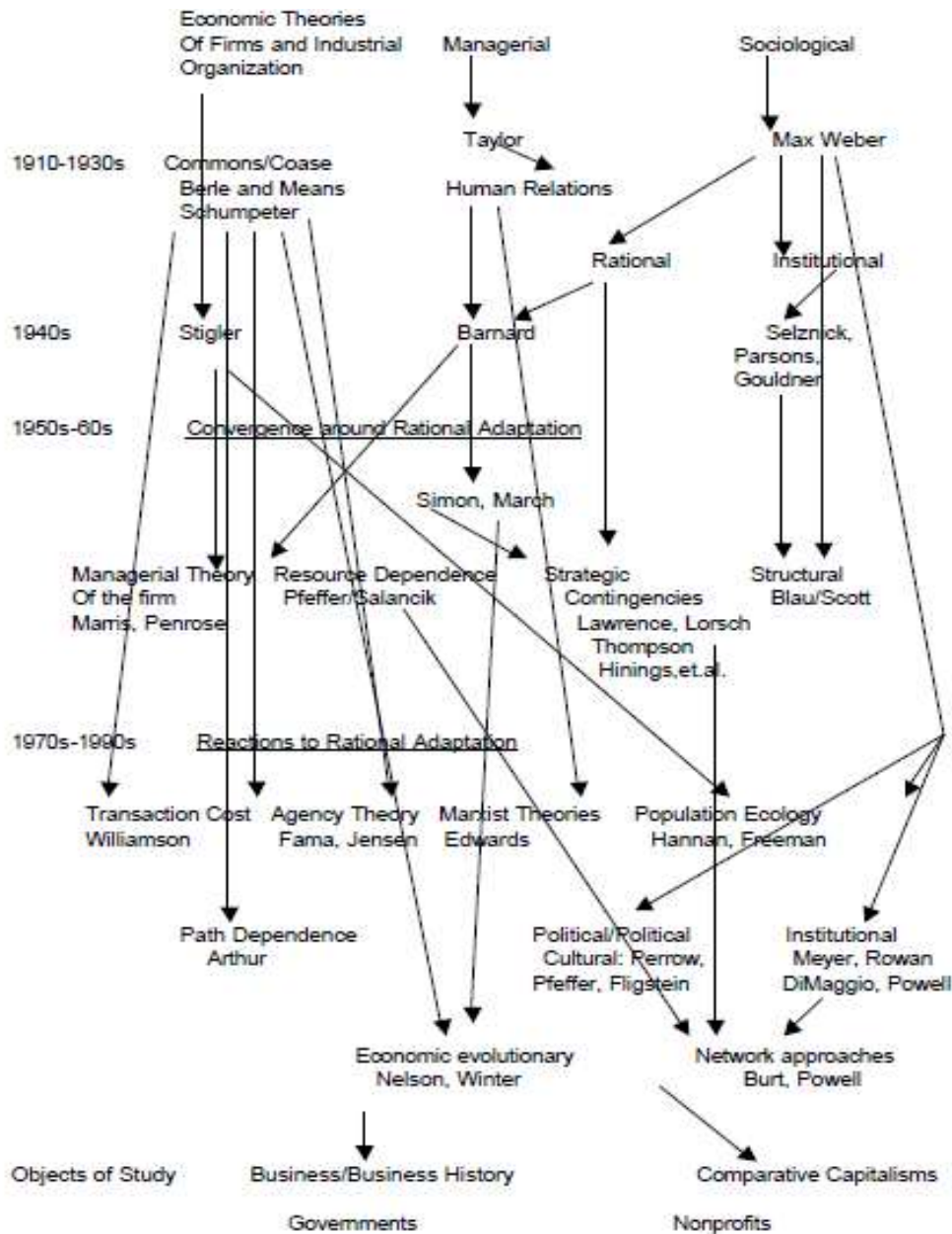
Likewise, the ancient Babylonian cities developed very strict codes, such as the code of Hammurabi. King Nebuchadnezzar used color codes to control production of the hanging gardens and there were weekly and annual reports, norms for productivity, and rewards for piecework. The Egyptians organized their human and their slaves to build cities and pyramids. Construction of one pyramid, around 5000 B.C., required the labor of 100,000 people working for approximately 20 years. Planning, organizing, and controlling were required elements.

China was perfected military organization based on line-and-staff principles and utilized these same principles in the early Chinese dynasties. Confucius wrote parables that offered practical suggestions for public administration. The city-states of ancient Greece were commonwealths, with councils, courts, administrative officials, and boards of generals. Socrates talked about management as a skill different from technical knowledge and experience. Plato wrote about specialization and suggested notions of a healthy republic. Many think the Roman Empire did well also because of the Romans' great ability to organize the military and conquer new lands. Similarly, those sent to govern the far-flung parts of the empire were successful administrators and were able to maintain relationships with the other provinces and the empire as a whole. There are various other ancient examples of organization development, such as Hannibal leading a massive army across the Alps, Alexander the Great building a vast inter-connected empire, and the first emperor of China building the Great Wall. Many of the practices employed today in leading, managing, and administering modern organizations have their origins in antiquity.

The Industrial Revolution caused occurrence a need for new thinking and the refinement of old thinking. However, modern management theory, as discussed in this paper and applied specifically to organizations, is primarily a phenomenon of the 20th century with new theoretical constructs and practices emerging now in the early 21st century. Taylor, Fayol and Weber, continuing to come up to present with modern management methods and principles. The modern organization may be the most crucial innovation of the past 100 years and it is a theory which will never complete its evolution as the human being continues to exist. Organization theory comes from practice and the evolution of it depends on the evolution of organization practice. The development of productivity causes the development of organization theory. As environments have become more complex, organizations going to be flat-structure, class stratified, network relationship, flexible and fuzzy boundary. The paradigm of organization theory has developed to the complexity one as seen below (Chunxia et. al, 2013).

	1900		1911	Taylor - Scientific Management
Weber - Bureaucracy Model	1922		1925	Fayol - Administrative Theory
Mayo - Hawthorne Studies	1933		1954	Maslow - Hierarchy of Needs
McGregor - Theory X-Theory Y	1957		1957	Tannenbaum-Schmidt - Continuum of Leader Behavior
Simon & March - Organizations	1958		1961	Burns & Stalker - Management of Innovation
Blake-Mouton - Managerial Grid	1964		1965	Woodward - Industrial organisation
McClelland - Achievement Theory	1965		1966	Herzberg - Motivation-Hygiene
Likert - Systems 1-4	1967		1967	Fiedler - Contingency Model
Olsson - Management By Objectives	1968		1969	Hersey-Blanchard - Situational Leadership
Alderfer - Existence, Relationship and Growth	1972		1974	House-Mitchell - Path-Goal
Vroom - Expectancy Theory	1976		1980	Hackman & Oldham - Jodesign
Mintzberg - Organizational Design	1981		1985	Schein - Organizational Culture
Senge - The Learning Organization	1990		1991	Toyota - Lean
Martin - Culture in Organizations	1992		1995	Weick - Sensemaking in Organizations
Whetter-Cameron - Empowerment	1995		1997	Kotter - Leading Change
Fairholm - Values-Based Leadership	1998		1998	Scott - Rational, Natural and Open Systems
Knowledge Society - Kolind	2001			

Understanding how organizations work has been the focus of scientists and scholars until the early part of the 20th century. Just as organizations have evolved, so to have the theories explaining them. These theories can be divided into 9 different “schools” of thought (Shafritz, Ott, Jang, 2005): Classical Organization Theory, Neoclassical Organization Theory, Human Resource Theory, or the Organizational Behavior Perspective, Modern Structural Organization Theory, Organizational Economics Theory, Power and Politics Organization Theory, Organizational Culture Theory, Reform Though Changes in Organizational Culture and Theories of Organizations and Environments. This paper will concentrate on modern structural organization theory.



LITERATURE REVIEW

The distinctive specialities of modern organization theory are its conceptual-analytical base, its reliance on empirical research data and, above all, its integrating nature. These qualities are framed in a philosophy which accepts the premise that the only meaningful way to study organization is to study it as a system. As Henderson put it, the study of a system must base on a method of analysis, ". . . involving the simultaneous variations of mutually dependent variables." Human systems, of course, include a huge number of dependent variables which defy the most complex simultaneous equations to solve. Nevertheless, system analysis has its own peculiar point of view that aims to study organization in the way Henderson suggests. It treats organization as a system of mutually dependent variables. As a result, modern organization theory, which accepts system analysis, changes the conceptual level of

organization study above the classical and neoclassical theories. Modern organization theory asks a spectrum of interrelated questions which are not seriously considered by the two other theories.

Key among these questions are:

- (1) What are the strategic parts of the system?
- (2) What is the nature of their mutual dependency?
- (3) What are the fundamental processes in the system which link the parts together, and facilitate their adjustment to each other?
- (4) What are the goals sought by systems?

Modern organization theory is in no way a unified body of thought. Each writer and researcher has his special emphasis when he considers the system. Perhaps the most evident unifying thread in the study of systems is the effort to search at the organization for its totality. Representative books in this field are March and Simon, *Organizations*, and Haire's anthology, *Modern Organization Theory*." Instead of attempting a review of different writers' contributions to modern organization theory, it will be more useful to discuss the different ingredients involved in system analysis. They are the parts, the interactions, the processes, and the goals of systems (Scott, 1961).

The Parts of the System and Their Interdependency

The first basic part of the system is the individual, and the personality structure he brings to the organization. Elementary to an individual's personality are motives and attitudes which condition the range of expectancies he hopes to satisfy by participating in the system.

The second part of the system is the formal arrangement of functions, generally called the formal organization. The formal organization is the interrelated pattern of jobs which make up the structure of a system. Certain writers, like Argyris, see a fundamental conflict resulting from the demands made by the system, and the structure of the mature, normal personality. In any event, the individual has expectancies regarding the job he is to perform; and, conversely, the job makes demands on, or has expectancies relating to, the performance of the individual. Considerable attention has been given by writers in modern organization theory to incongruencies caused from the interaction of organizational and individual demands.

The third part in the organization system is the informal organization. Enough has been said already about the nature of this organization. But it must be added that an interactional pattern occurs between the individual and the informal group. This interactional arrangement can be conveniently discussed as the mutual modification of expectancies. The informal organization has demands which it makes on members in terms of anticipated forms of behavior, and the individual has expectancies of satisfaction he desires to gather from association with people on the job. Both these sets of expectancies interact, resulting in the individual modifying his behavior to accord with the demands of the group, and the group, perhaps, modifying what it expects from an individual because of the impact of his personality on group norms.

Much of what has been said about the many other expectancy systems in an organization can also be treated utilizing status and role concepts. Part of modern organization theory bases on research findings in social-psychology relative to reciprocal patterns of behavior stemming

from role demands generated by both the formal and informal organizations, and role perceptions peculiar to the individual. Bakke's fusion process is largely concerned with the modification of role expectancies. The fusion process is a force, according to Bakke, which acts to weld divergent elements together for the preservation of organizational integrity.

The fifth part of system analysis is the physical setting in which the job is accomplished. Although this element of the system may be implicit in what has been said already about the formal organization and its functions, it is well to separate it. In the physical surroundings of work, interactions are present in complex man machine systems. The human "engineer" cannot approach the problems posed by such interrelationships in a purely technical, engineering fashion. As Haire says, these problems lie in the domain of the social theorist." Attention should be concentrated on responses demanded from a logically ordered production function, often with the view of minimizing the error in the system. From this standpoint, work cannot be effectively organized unless the psychological, social, and physiological characteristics of people participating in the work environment are taken into account. Machines and processes should be designed to fit certain generally observed psychological and physiological properties of men, rather than hiring men to fit machines.

In summary, the parts of the system which appear to be of strategic significance are the individual, the formal structure, the informal organization, status and role patterns, and the physical environment of work. Again, these parts are woven into a configuration called the organizational system. The processes which link the parts are taken up next. (Scott, 1961)

The Linking Processes

One can say, with a good deal of glibness, that all the parts mentioned above are interrelated. Although this observation may be correct, it does not mean too much in terms of system theory unless some attempt is made to analyze the processes by which the interaction is achieved. Role theory is devoted to certain types of interactional processes. Besides, modern organization theorists point to three other linking activities which appear to be universal to human systems of organized behavior. These processes are communication, balance, and decision making.

- (1) Communication is mentioned often in neoclassical theory, but the emphasis is on description of forms of communication activity, i.e., formal-informal, vertical-horizontal, line-staff. Communication, as a mechanism that links the parts of the system together, is overlooked by way of much considered analysis. One aspect of modern organization theory is study of the communication network in the system. Communication is seen as the method by which action is evoked from the parts of the system. Communication acts not only as stimuli resulting in action, but also as a control and coordination mechanism linking the decision centers in the system into a synchronized pattern. Deutsch points out that organizations are composed of parts which communicate with each other, receive messages from the outside world, and store information. Taken together, these communication functions of the parts comprise a configuration representing the total system.
- (2) The concept of balance as a linking process deals with a series of some rather complex ideas. Balance refers to an equilibrating mechanism whereby the various parts of the system are continued in a harmoniously structured relationship to each other. The necessity for the balance concept logically flows from the nature of systems themselves. It is impossible to conceive of an ordered relationship among the parts of a system without

also introducing the idea of a stabilizing or an adapting mechanism. Balance occurs in two varieties—quasi-automatic and innovative. Both forms of balance work to insure system integrity in face of changing conditions, either internal or external to the system. The first form of balance, quasi-automatic, means to what some think are "homeostatic" properties of systems. That is, systems seem to exhibit built-in propensities to let continue steady states. If human organizations are open, self-maintaining systems, then control and regulatory processes are required. The issue hinges on the degree to which stabilizing processes in systems, when adapting to change, are automatic. March and Simon have an interesting answer to this problem, which in part is relied on the type of shift and the adjustment required to adapt to the change. System' have programs of action which are put into effect when a change is perceived. If the change is relatively minor, and if the change comes within the purview of established programs of action, then it might be fairly confidently predicted that the adaptation done by the system will be quasi-automatic. The role of innovative, creative balancing efforts now requires to be examined. The requirement for innovation comes for real when adaptation to a change is outside the scope of existing programs designed for the purpose of keeping the system in balance.

New programs have to be occurred in order for the system to continue internal harmony. New programs are created by trial and error search for feasible action alternatives to cope with a given change. But innovation is subject to the limitations and possibilities inherent in the quantity and variety of information present in a system at a particular time. New combinations of alternatives for innovative purposes base on:

- (a) the possible range of output of the system, or the capacity of the system to supply information.
- (b) the range of available information in the memory of the system.
- (c) the operating rules (program) governing the analysis and flow of information along the system.
- (d) the ability of the system to "forget" previously learned solutions to shift problems." A system with too good a memory can narrow its behavioral choices to such an extent as to stifle innovation. In simpler language, old learned programs might be utilized to adapt to change, when newly innovated programs are necessary."

Much of what has been said about communication and balance brings to mind a cybernetic model in which both these processes have vital roles. Cybernetics has to do with feedback and control in all kinds of systems. Its aim is to continue system stability in the face of change. Cybernetics cannot be studied without considering communication networks, information flow, and some kind of balancing process aimed at securing the integrity of the system. Cybernetics directs attention to key questions regarding the system. These questions are: How are communication centers connected, and how are they maintained? Corollary to this question: what is the structure of the feedback system? Next, what information is stored in the organization, and at what points? And as a corollary: how accessible is this information to decision-making centers? Third, how conscious is the organization of the operation of its own parts? That is, to what extent do the policy centers receive control information with sufficient frequency and relevancy to create a real awareness of the operation of the segments of the system? Finally, what are the learning (innovating) capabilities of the system?

Answers to the questions given by cybernetics are significant to understanding both the balancing and communication processes in systems. Although cybernetics has been implemented largely to technical-engineering problems of automation, the model of feedback, control, and regulation in all systems has a good deal of generality. Cybernetics is a fruitful area which can be utilized to synthesize the processes of communication and balance.

- (3) A wide spectrum of topics dealing with types of decisions in human systems causes to occur core of analysis of another important process in organizations. Decision analysis is one of the major contributions of March and Simon in their book *Organizations*. The two major classes of decisions they discuss are decisions to produce and decisions to participate in the system. Decisions to create and produce are largely a result of an interaction between individual attitudes and the demands of organization. Motivation analysis becomes main theme to studying the nature and results of the interaction. Individual decisions to participate in the organization reflect on such issues as the relationship between organizational rewards versus the demands made by the organization. Participation decisions also bring attention on the reasons why individuals remain in or leave organizations. March and Simon treat decisions as internal variables in an organization which rely on jobs, individual expectations and motivations, and organizational structure. Marschak looks on the decision process as an independent variable upon which the survival of the organization is based. In this case, the organization is seen as having, inherent to its structure, the ability to maximize survival requisites via its established decision processes. (Scott, 1961)

The Goals of Organization

Organization has three goals which may be either intermeshed or independent ends in themselves. They are growth, stability, and interaction. The last goal means to organizations that occur mainly to supply a medium for association of its members with others. Interestingly enough these goals seem to apply to different forms of organization at varying levels of complexity, ranging from simple clockwork mechanisms to social systems. These similarities in organizational purposes have been investigated by many of people, and a field of thought and research called general system theory has come into light, dedicated to the task of discovering organizationed universals. The dream of general system theory is to create a science of organizational universals, or if you will, a universal science using common organizational elements found in all systems as a starting point.

Modern organization theory is on the periphery of general system theory. Both general system theory and modern organization theory studies:

- (1) the parts (individuals) in aggregates, and the movement of individuals into and out of the system.
- (2) the interaction of individuals with the environment found in the system.
- (3) the interactions among individuals in the system.
- (4) general growth and stability problems of systems. (Scott, 1961)

Modern organization theory and general system theory are similar in that they look at organization as an integrated complete. They differ, however, in terms of their generality. General system theory is deals with every level of system, whereas modern organizational theory focuses primarily on human organization. The question might be asked, what can the science of administration gain by the study of system levels other than human? Before

attempting an answer, note should be made of what these other levels are. Boulding presents a convenient method of classification:

- (1) The static structure—a level of framework, the anatomy of a system; for example, the structure of the universe.
- (2) The simple dynamic system—the level of clockworks, predetermined necessary motions.
- (3) The cybernetic system—the level of the thermostat, the system moves to maintain a given equilibrium through a process of self-regulation.
- (4) The open system—level of self-maintaining systems, moves toward and includes living organisms.
- (5) The genetic-societal system—level of cell society, characterized by a division of labor among cells.
- (6) Animal systems—level of mobility, evidence of goal-directed behavior.
- (7) Human systems—level of symbol interpretation and idea communication.
- (8) Social system—level of human organization.
- (9) Transcendental systems—level of ultimates and absolutes which exhibit systematic structure but are unknowable in essence.

This approach to the study of systems by finding universals common at all levels of organization offers intriguing possibilities for administrative organization theory. A good deal of light could be thrown on social systems if structurally analogous elements could be found in the simpler types of systems. For example, cybernetic systems have characteristics which seem to be similar to feedback, regulation, and control phenomena in human organizations. Thus, known facets of cybernetic models could be generalized to human organization. Considerable danger, however, lies in poorly founded analogies. Superficial similarities between simpler system forms and social systems are seen everywhere. Instinctually based ant societies, for example, do not yield particularly instructive lessons for understanding rationally conceived human organizations. Thus, care should be taken that analogies utilized to bridge system levels are not mere devices for literary enrichment. For analogies to have usefulness and validity, they must exhibit inherent structural similarities or implicitly identical operational principles.

Modern organization theory leads, as it has been shown, almost inevitably into a discussion of general system theory. A science of organization universals has some strong advocates, particularly among biologists. Organization theorists in administrative science cannot afford to overlook the contributions of general system theory. Indeed, modern organization concepts could offer a great deal to those working with general system theory. But the ideas interested with in the general theory are exceedingly elusive. Speaking of the concept of equilibrium as a unifying element in all systems, Easton says, "It (equilibrium) leaves the impression that we have a useful general theory when in fact, lacking measurability, it is a mere pretence for knowledge." The inability to quantify and measure universal organization elements undermines the success of pragmatic tests to which general system theory might be put.`` (Scott, 1961)

Below represent the fundamental assumptions and tenets of the modern structural organizational theory: (Shafritz, Ott, Jang, 2005).

Fundamental assumptions:

1. "Organizations are rational institutions whose primary aim is to implemt established objectives; rational organizational behavior is achieved best via systems of defined rules

and formal authority. Organizational control and coordination are key for maintaining organizational rationality”.

2. “There is a ‘best’ structure for any organization, or at least a most appropriate structure in light of its given objectives, the environmental conditions surrounding, the nature of its products and/or services, and the technology of the production process”.
3. “Specialization and the division of labor increase the quality and quantity of production, particularly in highly skilled operations and professions”.
4. “Most problems in an organization result from structural flaws and can be solved by changing the structure”.

Tenets are similar:

- Organizational efficiency
- Organizational rationality
- Increase the production of wealth in terms of real goods and services.

MAJOR THEORISTS AND CONTRIBUTIONS

Tom Burns & G. M. Stalker - Mechanistic and Organic Systems

Burns and Stalker set out to discover whether differences in the technological and market environments affect the structure and management processes in firms. They observed 20 manufacturing firms in depth, and classified environments into ‘stable and predictable’ and ‘unstable and unpredictable’. They found that firms could be classified into one of the two main types, mechanistic and organic forms, with management practices and structures that Burns and Stalker considered to be logical responses to environmental conditions.

The Mechanistic Organization has a more rigid structure and is typically found where the environment is stable and predictable. Its characteristics are:

- a. tasks necessitated by the organization are broken down into specialized, functionally differentiated duties and individual tasks are pursued in an abstract way, that is more or less distinct from the organization as a whole;
- b. the strong and certain definition of rights, obligations and technical methods is belonged to roles, and these are translated into the responsibilities of a functional position; moreover a hierarchical structure of control, authority and communication;
- c. knowledge of the whole organization is located exclusively at the top of the hierarchy, with better significance and prestige being belonged to internal and local knowledge, experience and skill rather than that which is general to the whole organization;
- d. there is a look for interactions between members of the organization to be vertical, i.e. between superior and subordinate.

The Organic Organization has a much more fluid set of arrangements and is an appropriate form for changing environmental conditions which necessitate emergent and innovative responses. Its characteristics are:

- a. individuals contribute to the common task of the organization and there is continual adjustment and re-definition of individual tasks through interaction with others;

- b. there is spread of commitment to the organization beyond any technical definition, a network structure of control authority and communication, and the direction of communication is lateral rather than vertical;
- c. knowledge may be located anywhere in the network, with this ad hoc location getting the centre of authority and communication;
- d. importance and prestige attach to affiliations and expertise valid in industrial, technical and commercial milieus external to the firm.

Mechanistic and organic forms are polar types at the opposite ends of a continuum and, in some organizations, a mixture of both types can be observed (Lam, 2011).

Peter M. Blau & W. Richard Scott - The Concept of Formal Organization

- “Assert that all organizations include both a formal and informal element. The informal organization by its nature is rooted in the formal structure and supports its formal organization by establishing norms for the operation of the organization that cannot always be spelled out by rules and policies”.
- “It is impossible to know and understand the true structure of a formal organization without a similar understanding of its parallel informal organization”.
- “Social organization refers to the ways in which human conduct becomes socially organized, that is, to the observed regularities in the behavior of people that are due to the social conditions in which they find themselves rather than to their physiological or psychological characteristics as individuals”.
- “Since the distinctive characteristics of these organizations is that they have been formally established for the explicit purpose of achieving certain goals, the term ‘formal organization’ is used to designate them” (Shafritz, Ott, Jang, 2005).

Arthur H. Walker and Jay W. Lorsch - Organizational Choice: Product vs. Function

- “Should an organization be structured according to product or function?”.
- “Should all specialists in a given function be grouped under a common boss, regardless of differences in products they are involved in, or should the various functional specialists working on a single product be grouped together under the same superior?”.
- “They concluded that either structural arrangement can be appropriate, depending upon the organization’s environment and the nature of the organization itself”.
- Very detailed piece outlining when (a) organization based on product line or (b) based on function, should be used (Shafritz, Ott, Jang, 2005).

Henry Mintzberg - The Five Basic Parts of the Organization

- “Synthesized many schools of organizational management theory”.
- “Created “a model of organizations with five interdependent parts: the strategic apex, the middle line, the operating core, the techno structure, and the support staff”.
- Operating Core – “the operators carry out the basic work of the organization”.
- Strategic Apex – “Those at the very top of the hierarchy, together with their own staff”.
- Middle Line – Managers that join the apex to the core.
- Techno structure – “the analysts carry out their work of standardizing the work of others, in addition to applying their analytical techniques to help the organization adapt to its environment”.

- Support Staff – “supports the functioning of the operating core indirectly, that is, outside the basic flow of operating work.”
- Pooled coupling – “where members share common resources but are otherwise independent”.
- Sequential coupling – “members work in series as in a relay race”.
- Reciprocal coupling – “the members feed their work back and forth among themselves’ in effect each receives inputs from and provides outputs to the others” (Shafritz, Ott, Jang, 2005).

Richard M. Burton and Borge Obel - Technology as a Contingency Factor

- Covers “technology’s effect on formalization, centralization, complexity, configuration, coordination and control, and incentives”.
- Studied “the effects that many dimensions of technology have on organizational design”.
- The effects of technology “assessed on six dimensions of organization: formalizations, centralizations, complexity, configuration, coordination and control, and incentives”.
- Also, interdependency between organizational structure and information technology, organizations as information processing entities, the effects of media richness on design, and design criteria for fitting information technology to decentralized organizations (Shafritz, Ott, Jang, 2005).

STRENGTHS AND WEAKNESSES OF THE MODERN ORGANIZATIONAL THEORY

Strengths:

- Still very concentrated (in comparison to classical theory) on goals and achievement.
- Expanded the perspective of bureaucracy (mechanistic vs. organic).
- Accepts the existence of both formal and informal elements.
- Still a very rational model, but not as closed of a system as classical.
- Deals with formal authority and responsibility.
- Expanded the understanding of specialization and the division of labor.
- More flexible than classical theory (such as organizational structure options: product vs. function).
- Synthesized much of the various schools of thought.
- Acknowledged, to some extent, the existence of external environments, especially technology (Shafritz, Ott, Jang, 2005).

Weaknesses:

- Still a very rational theory.
- Does not wholly address the potential of external influences.
- Bases on control rather than empowerment.
- Still takes into account the structure as the main tool for making improvements (Shafritz, Ott, Jang, 2005).

DISCUSSION AND CONCLUSION

In the organizational science the paradigm is developing that will bridge the macro-micro gap both in theory and in empirical research. There are positive shifts occurring in organizational research where a huge concentration is put on organizations as systems, while the systems theory of organizations and multilevel approach to organizations are more frequently used. A multi-level understanding of organizational reality will cause preconditions for further improvement of organizational theory and practice by encouraging integration of the field. Starting from strongly decomposing the system on different sub-elements, but at the same time accepting its context, it offers potentially useful cognitions of interconnectivity and cause-and-effect relationships between various aspects.

In order to design organizations that will be able to confront successfully with upcoming competition and increasing changes in consumer expectations, it is required to look for systemic and cause-and-effect relationships between emerging practice at many levels of analysis – industry, organization, and work. Namely, job is not being done in vacuum but in organizations that make a part of a market or of a global economy in complete. The most successful organizations today are the ones capable of aligning flexible organizational solution with flexible forms of work design (Gyan-Baggour, 1999). Therefore, organization design does not only form, but also simultaneously limits possible choice, i.e. shapes of work design. In order to identify basic links and guidelines, in the paper current trends in doing business are presented, jointly with consequential tendencies at the organizational and work level. Furthermore, it is possible to propose that certain contextual factors can have a direct and stronger, and others indirect and weaker, impact on work design. Equally, certain trends in work design can be more limited by broader organizational context, while others can be under their minimal impact. Very significant issue is a problem of alignment. Although the problem comes out from their various dynamics and change tendencies, organization design and work design should be and need to be analyzed as naturally complementary concepts. Moreover, inability to precisely determine cause-and-effect relationships between various variables should be also underlined as a research shortcoming. Although systems perspective conceptually strive for presenting realistic picture of the world with all the required interdependencies, thorough insights about the nature of particular relationships is almost impossible without *ceteris paribus* assumption.

Furthermore, cross-level and multi-level relationships can be, and generally they are, reciprocal in nature. In the paper, only top-down approach has been implemented, leaving a plenty of space for future research activities aimed at investigating micro-macro influences. In both directions, additional empirical investigations should be conducted in order to gain much better understanding of many bivariate and multivariate relationships. Such reciprocal influence between organizational behavior and work design from one side, and organizational theory and design from the other, is in compliance with main characteristics of systems theory of organizations, as well as supported by the emerging multi-level approach.

Finally, achieving a better understanding and harmonization can result in significant development of work and organizational success. At the same time, one should have in mind that business trends, and especially tendencies of organization design at macro level define the “playing field”, while each organizational unit, team and/or individual in the organization should learn how to be effective and to “play” successfully in mainly various situations. In spite of existing constraints, there is still enough space and possibilities for differentiating successful from unsuccessful business practice at micro level of work design.

REFERENCES

- Arrow, K. J. 1974. *The Limits of Organization*. Oliver E. Williamson, Scott E. Masten, eds. 1995 ed. Reprinted in *Transaction Cost Economics*. W. W. Norton, New York, 33–43.
- Celik, M. & Dogan, G. (2011). *A Theoretical Approach to Science of Management*. *International Journal of Humanities and Social Sciences* Vol. 1, No. 3.
- Daft, R. (2007) *Understanding the Theory and Design of Organizations*. Mason, OH: Thomson South Western.
- Ivanko, Š. (2013), *Modern Theory of Organization*, University of Ljubljana Faculty of Public Administration.
- Lam, A. 2011: *Innovative Organizations: Structure, Learning and Adaptation*. Paper presented at the DIME Final Conference, 6–8 April 2011, Maastricht.
- March, J. and H. Simon (1958). *Organizations*, Graduate School of Industrial Administration, Carnegie Institute of Technology, John Wiley, New York.
- Mintzberg, H. 1979. *The Structuring of Organizations: A Synthesis of the Research*. Prentice-Hall Inc., Englewood Cliffs, NJ.
- Robbins, S.P., 1990, *Organizational theory: structure, design and applications*, Prentice Hall, Englewood Cliffs, 3rd Edition.
- Scott, Richard W. (1987): "Organizations: Rational, Natural and Open Systems," Englewood Cliffs, , Prentice-Hall.
- Scott, William G."Organizational Theory:An Overview and an Appraisal," *Academy of Management Journal*, 4-1, 1961.
- Shafritz, J. M., Ott, J. S., & Jang, Y. S. (2005). *Classics of Organization Theory* (6th ed.). Belmont, CA: Wadsworth.
- Yang, Chun-Xia., Liu, Han-Min. & Wang, Xing-Xiu. (2013). *Organization Theories:From Classical to Modern*. *Journal of Applied Sciences* Vol. 13, No. 21.
- Zhu, G., 1999. *Organization Theory: History and Genre*. Nanjing University Press, Nanjing.