

Mapping Organizational Culture: An Integration of Communication and Organizational Design

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Abstract

This article provided a method for mapping and describing organizational culture. Compared to the study of communication and organizations, the study of organizational culture by communication scholars is relatively new. Although, organizational communication literature generally mentions culture's importance, little has been done to illustrate its explicit relationships with communication and organizational design theories. Consequently, the seven major organizational design theories were integrated with communication design elements and cross-cultural corporate research results to map and describe characteristics of organizational culture.

The proliferation of international business activity has created a need and stimulated interest in understanding cultural complexities. Today, employees are influenced by membership in numerous "cultures" based on elements such as ethnic or national origin, religion, gender, geographic region, age (Gollnick & Chin, 1990), and organizational membership. For example, a United States citizen with an Hispanic heritage who works for Mitsubishi Motor Manufacturing in Bloomington, Illinois has membership in a Midwestern United States culture and operates within its belief and value systems. That person is also a corporate employee and must function in ways consistent with the corporation and its Japanese socio-cultural values. Although the Japanese corporation may alter operating policies to facilitate activities in the United States, it will retain many of its Japanese belief systems to insure consistency with the home office in Japan. The requirement to accommodate multiple cultures will cause the Illinois manufacturing plant will to select a particular

approach or organizational design to aid in improving auto manufacturing processes. Sometimes the design elements will be compatible with divergent belief systems; at other times, incompatibilities will exist.

What's the significance of highlighting these "obvious" complexities and potential conflicts within a corporate culture? Put quite simply – organizational designs are culturally-bound paradigms for solutions; they are operationalizations of cultural frames of reference that determine how problems are solved and relationships defined (Trompenaars, 1993); they guide strategy for organizational development. Essentially, principles associated with a specific design become norms that influence employee actions and represent defining features of that organization's culture. So, identifying a predisposition for solving problems, i.e., an organizational design, contributes to an increased appreciation and understanding of organizational culture.

The study of organizational culture in the United States is relatively new. Scholars and practitioners embraced the concept of organizational culture during the latter part of the Twentieth Century in an effort to move away from "mechanistic" models of design, enhance international competitiveness, and raise consciousness about oppressive environments in American corporations (Daniels, Spiker, & Papa, 1997; Modaff & DeWine, 2002). During the past two decades many organizational communication books contained discussions of culture (often a chapter), yet none used cultural frameworks to understand, describe, and evaluate organizational designs that had been previously developed. Often, discussions of culture appeared to have little in common with design theories. In fact, Conrad and Poole (2002) remarked that, ". . . we have examined strategies of organizing in isolation of one another. We did so because each strategy is so complicated that it is impossible to treat them together" (p. 127).

In response to this omission in the literature, the purpose of this essay is to provide a culturally sensitive mapping or comparison of organizational designs by integrating communication, organization, and cross-cultural theory and research. Initially, cultural differences in organizational and communication designs will be described and mapped using the Communication Design Matrix (CMD) (Long, 1979; Cummings, Long, & Lewis, 1987; Long, DeJoy, Javidi, & Javidi, 1997). This will be followed by a set of conclusions about the use of this approach as a basis for understanding organizational culture.

Cultural Differences in Organizational and Communication Designs

Organizational creation and development tends to be a deliberate activity, reflecting traditional organizational designs and the current state of technology required for managing and transforming resources. Consequently, an organization tends to be a logical-rational object that is shaped by societal

beliefs and values, giving rise to organizational culture. Organizational cultures can be differentiated by:

1. *Work vs. person emphasis*: The general relationship between employees and the organization is often operationalized as task vs. personal need emphasis which is manifested in communication content.
2. *Empowerment level*: The vertical or hierarchical system of authority and responsibility defining supervisory-subordinate relationships; described as centralized or decentralized power distribution; reflected in role specialization and exchange.
3. *Goal orientation*: Employee perceptions of organizational destiny, purpose, and goals.
4. *Environmental Interface*: Societal values and norms. (Long, DeJoy, Javidi, & Javidi, 1997).
- 5.

It is possible to produce a two-dimensional description of organizational communication behaviors by merging *work versus person emphasis* and *empowerment level*. Long (1979) originally conceptualized organizational components along two continua – role specialization to role exchange (derived from the concept of empowerment level) and proportion of time spent communicating about the task versus personal needs and goals (i.e., work versus person emphasis). These components, operationalized in a slightly different way (task versus person and egalitarian versus hierarchical), have also been used to map national and corporate cultures (Trompenaars, 1993). Figure 1 on the next page visually displays differences in four types of organizational cultures that vary in terms of learning, change, operations, reward systems, conflict management, and motivational strategies (Javidi & Javidi, 1991; Trompenaars, 1993).

Quadrant 1, Work Role Emphasis (Role-Oriented Cultures)

The role-oriented organizational culture emphasizes and values specialized work roles and employees who best fill those roles. This *work role emphasis* also reflects affinity for hierarchical and functional role differentiation. Trompenaars (1993) found that role-oriented cultures in were indicative of corporations in Germany, the Netherlands, and Denmark.

In role oriented cultures, status is ascribed to superior roles which are distant and powerful. Learning is achieved through logical, analytical processes. Promotion is a function of assuming a hierarchically higher position with a broader role definition, particularly in terms of power.

Empowerment levels tend to be low in Quadrant 1, with authority and responsibility maintained by those in management roles. This makes implementation of participative management and Continuous Quality

Improvement (CQI) methods difficult since these assume delegation of authority and responsibility to members of a team who occupy interacting organizational roles throughout the hierarchy and across functions. Bureaucracy, Scientific Management, and Principles of Management organizational designs are compatible with role oriented cultures.

Bureaucracy. Max Weber, a German sociologist, is known as the father of Bureaucracy, although evidence of bureaucratic applications exist for ancient Egypt. Principles of bureaucracy, developed in 1909, emphasize division of labor, specialization, hierarchy of authority, standardized operations, and were heavily influenced by socialist philosophy. The capitalistic industrialists of the early 1900s who hungered for economic growth read Weber selectively. One of Weber's notions that received little attention, for example, was that the staff of an organization should not own any part of the organization. While many profit-

oriented organizations passed over this socialist-oriented principle, the idea of public ownership was central to Weber's ideal of a bureaucratic organizational design.

Scientific Management. Frederick Taylor formalized Scientific Management in 1911. He was concerned with the best way to accomplish a task in the shortest period of time, popularizing "time and motion" studies. He is also often credited as creator of the saying – "time is money." Taylor studied employees with a mathematical mind and a stopwatch. He constantly looked for ways to help workers complete their tasks in less time and with greater efficiency. Time-and-motion studies, standardization of tools and parts, and analysis of minute work-related details were part of Taylor's means to maximize profit through greater worker output. The guiding principle for this approach was derived from the Industrial Revolution: *Productivity increases as cost-per-unit produced decreases.* Taylor valued scientific selection of workers (prospective workers should be selected through a battery of tests designed to find the worker most fit for a job), measuring effectiveness (application of the scientific method), managers as planners (managers are responsible for designing tasks to maximize efficiency and for training workers in the "best" method), and workers as doers (workers should do their best to perform tasks as they were designed). Critics suggest Taylor was insensitive to the needs of workers. However, this criticism is probably not justified. Taylor did not dehumanize workers; rather he emphasized the independence of individual employee activities from an objective, scientific perspective. In fact, Taylor argued that a worker's cooperation and coordination with others was essential.

Principles of Management. In 1929, the English translation of Henri Fayol's 1916 French journal article on management was published. His "principles of management" design was similar in many ways to his contemporary, Frederick Taylor, but was presented at a far more general level. He described the management of organizations in terms of planning, organizing, commanding, coordinating, and controlling. Among the many principles were unity of command (an individual must have only one boss to prevent conflicting demands), unity of directing (employees engaged in similar tasks should be assigned similar objectives), and equity of treatment (meaning there should be both "kindness" and "justice" in a manager's treatment of employees). Fayol was one of the first of the early organizational theorists to recognize that strict adherence to formal communication line charts could be problematic and cumbersome. He suggested there were times when a situation required individuals at the same organizational level, but in different departments, to bypass superiors and confer. This emergency bypass procedure, known as Fayol's bridge or gangplank, was one of the first efforts to recognize limitations of strict reliance on formal hierarchical communication. It must be noted, however, that this horizontal channel was not really a "bypass" since the

employees were required to get permission from their supervisors before communicating with other departments.

Bureaucracy, Scientific Management, and Principles of Management are located in Quadrant 1 of the Communication Design Matrix (CMD) because of the work emphasis and focus on specialized tasks (see Figure 2). Bureaucracy and Principles of Management differ from Scientific management, however, with the organization as a primary unit of analysis and an emphasis on the managerial activities. In contrast, Scientific Management views the task and manager-worker dyad as primary units of analysis with emphasis on production processes.

For Quadrant I corporate cultures, the purpose of communication is to facilitate and enhance task accomplishment, as well as studying, planning, and implementing task activities. Hence, communication role behaviors are planned, concrete, and specialized. The primary communication behavior emphasized for managers is a source role; a receiver role for workers is primary. As a result, employees become highly specialized in communication roles, more time is spent communicating about work than socio-emotional issues; formal communication flow is primarily downward; productive individuals tend to be

highly skilled in a few communication roles and unskilled in those not required for task completion. In role-oriented corporate cultures, employees tend to be keenly aware of status differences between themselves and those with whom they communicate.

Quadrant II, Team Work Emphasis (Project Oriented Cultures)

Project oriented cultures value establishing teams that cross task, hierarchical, and functional boundaries in order to apply all perspectives of expertise when solving problems or improving processes. A team-work emphasis is commonly found in United States, Canadian, and British corporate cultures. Status is achieved by project group members who contribute to total goal accomplishment. Work emphasis, role exchange, and collaboration are dominant values. Empowerment levels are high – authority and responsibility are granted to those responsible for the task process (see Figure 2).

Participative Management expresses project oriented cultural values. This design, developed by Rensis Likert in 1961, is consistent with the previously discussed designs in recognizing that management is a hierarchical system. According to this approach, however, the extent of an organization's emphasis on the hierarchical system is determined by whether job roles or employees are the basis for the organization's design. To illustrate, Likert identified four systems of management, ranging from the highly job-centered System I to the highly employee-centered System IV. Likert insisted that System IV, participative management, was consistently the most effective method for solving problems and improving processes. Participative management encourages unrestricted, open, work communication among persons within a group -- in participative management, role exchange takes place within interdependent work teams and it is often difficult to distinguish a supervisor from subordinates. Likert's *linking pin theory* characterized organizations as a series of overlapping groups, where the "linking pins" were individuals who were members of more than one group. For example, a supervisor would be considered the "leader" and a member of his/her work group, while he/she is a member or follower in the hierarchical group above. Often, the person in a linking-pin role is called a *liaison* to minimize the status differential between leader-follower roles and enhance open communication during decision-making. The liaison provides a communication link between two or more groups, representing one group (i.e., group agent) while deliberating with another group. Likert's notion of linking pin was an important shift in managerial values, allowing upward, downward, and lateral communication to occur.

Participative management is located primarily in Quadrant 2 of the CMD (see Figure 2). It does acknowledge the need for enactment of person communication roles, but the emphasis is actually directed toward enhancing productivity through work team or group collaboration. Participative management has the following characteristics: The primary unit of analysis is

the group; strongest emphasis is on the management of a team with consideration given to enhancing the quality of work life and employee satisfaction; in stark contrast to previously discussed designs (Bureaucracy, Scientific Management, and Principles of Management), this approach values communication role exchange (rather than specialization) because high priority is based on project/team work and it is believed that shared leadership is necessary for effective group decision-making. Consequently, group members must be skilled, comfortable, and involved in many different communication roles -- communication flow is unrestricted within the group. Work content during communication is emphasized, with the assumption that resolution of conflicts with personal needs and goals will occur as needed. It is also assumed that as groups become more and more participative, members will more equally distribute the amount of time spent in all communication roles and contribute to each other's self-actualization efforts.

Quadrant 3, Team Person Emphasis (Fulfillment Oriented Cultures)

Fulfillment oriented cultures have a "team-person" emphasis and value each group member's "personal" contributions. Trompenaars (1993) found fulfillment-oriented cultures in Swedish organizations where the corporate needs were sometimes considered as secondary to individual need-fulfillment. It is believed that employees should spontaneously relate to each other. In this type of corporate culture, status is achieved through creativity; process orientations and "co-creativity" are promoted; management enthusiastically provides constructive criticism. Consequently, role exchange with personal emphasis is a high priority (see Figure 2).

Socio-technical systems organizational design most closely reflects a fulfillment oriented corporate culture. Socio-technical systems was developed by British organizational theorists Trist and Bamforth in 1951, and based on their studies of coal-mining operations (Cummings, Long, and Lewis, 1987). During the previous year, the mining operation had undergone several important technological changes. Theoretically, the new technology and consequent division of labor would allow workers to become more skilled and efficient in a specialized role. However, productivity dropped, arguments developed over pay schedules, and workers often complained about how distasteful their particular job was. To counter these problems, Trist and Bamforth developed a way to make use of the technical advances in mining while preserving the social benefits derived from the group or work team concept that had been previously used. Hence the term, socio-technical system.

A socio-technical approach suggests the team of workers should be trained in all aspects of the technology. Then workers can rotate as necessary through all the specialized tasks required by the new machines, introducing variety into work. The group again assumes responsibility for setting its own rate of

production and handling its own conflicts. Pay is dependent upon the entire group's output, including all shifts.

Trist and Bamforth tested this mining system on a small scale and compared it with the more specialized approach used in the mines. Comparisons between the two approaches yielded the following: Output per shift was 3.5 tons for the reorganized method and 5.3 tons for the socio-technical system; absenteeism was considerably lower among the socio-technical workers.

Based upon their findings, they concluded that: Production in organizations cannot be optimized without optimizing social and technical systems. In other words, neither system should be viewed as fixed. One system influences the other.

Socio-technical systems design places great value on task closure, autonomy, solidarity, group stability, and cohesiveness as necessary conditions to reach social and technological system balance – closure is completion of a whole task by group assignment rather than individual assignment; autonomy means group self-direction; solidarity is derived from a sense of common goals and interdependence; group stability occurs when conditions are such that every member has command of many skills, the opportunity to learn new skills, and the opportunity to accomplish all tasks; cohesiveness is realized when differences in status, skill, and prestige are reduced within the group.

The socio-technical system design actually overlaps Quadrants 2 and 3 on the CMD since it is assumed that task and individual conditions influence each other and that an optimal balance between work and personal needs is most desirable. The group is the primary unit of analysis. Since communication roles are shared, this approach assumes willingness and ability for each group member to enact all communication behaviors (see Figure 2).

Quadrant 4, Person Role Emphasis (Family Oriented Cultures)

Family oriented cultures possess a "*person role emphasis*," believing there is a need for leaders to "take care of" employees; employees value placing the organization's needs above their own and will "sacrifice for the good of the cause." Corporations with this set of cultural beliefs were found in India, Spain, and Japan, where relationships were defined holistically -- individual membership was de-emphasized and harmonious group or "family" outcomes were valued most. Consistent with patriarchal values, managers enact a "fatherhood" role (Javidi & Javidi, 1991; Trompenaars, 1993). Thus, a dominant personal "need" for a supervisor in the hierarchy was to care and make decisions for the subordinate, while the subordinate's primary need was "self-sacrifice," reflecting preference for role specialization with a paternal emphasis on subordinates' personal needs.

Human relations designs are indicative of family-oriented corporate cultures and are located in quadrant 4 (see Figure 2). Elton Mayo, who some call the father of industrial psychology, was a professor in the Harvard Business

School when he directed a series of research projects at the Hawthorne Western Electric plant. These studies laid groundwork for the human relations movement and contributed to a shift in American corporate culture

Mayo's research was designed to determine the relationship between worker output and working conditions. At first, the research effort appeared to be in vain because the expected relationships between working conditions and productivity were not found. However, Mayo began to notice the unexpected. While studying the effects of lighting intensity on worker output, he recorded an interesting event: Each time the lights were adjusted, whether made brighter or dimmer or practically turned off, worker productivity improved. Mayo suggested the increase in productivity was not due to changes in lighting, but to the attention workers received. This phenomenon was dubbed the Hawthorne effect, and an era of research about the influence of human variables on organizations began. The Western Electric studies were not rigorous and were filled with mixed, often insignificant, results. However, implications of the research gained the business world's attention.

Mayo and his followers became champions, or more accurately were made into champions by others, of a management philosophy that focused upon an employee's sense of "family" or "community." Mayo advocated ways to enhance communication, providing clearer understanding of worker attitudes, grievances, and personal goals. Tools, tasks, and the environment were viewed as variables that should stimulate an atmosphere of cooperation among employees. Basically, Mayo argued that the feelings and attitudes of workers could not be ignored. His work generated a radical new tradition of studying human relationships in organizations.

Human relations approaches differed significantly from classical approaches (Scientific Management, Bureaucracy, and Principles of Management) by focusing on worker needs and goals. The primary unit of analysis was the individual (i.e., specific worker needs). The dyad was used to implement the approach (i.e., supervisor communicates with subordinate to assess personal needs). As the human relations movement matured, it provided a foundation for the evolution of designs toward a more formalized theory of participation.

Obvious differences do exist when organizational cultures are compared. However, cultural mapping on the CMD suggests that in many cases differences are subtle and should be measured in "degrees", rather than gross classification into one category/quadrant or the other. Methods exist that would permit more precise spatial mapping to illustrate direction and degrees of separation among cultures (see, for example, Cummings, Long, & Lewis 1987; Lewis, Cummings, & Long, 1982; Long, 1979). Beyond spatial mapping of organizational culture, however, specific conclusions can be drawn about the viability of using communication and organizational design to explain and understand organizational culture.

Some Conclusions about Mapping Organizational Culture

The Communication Design Matrix permitted mapping and comparisons of communication behaviors, organizational designs, and corporate cultures found in different regions of the world. Covariance among conceptual elements provided support for seven conclusions about the efficacy of using this approach.

1. There is no single best organizational culture or organizational design.

Organizational cultures reflect differences in work-person emphasis, empowerment levels, goal orientation, and environmental interface. One particular culture is not inherently “better” than another – given a set of conditions, one may be more appropriate than another! Principles derived from contingency theory research (Cummings, Long, & Lewis, 1987) imply that corporate culture, i.e., design, should reflect the nature of the organization’s technology, size, legal incorporation, character of its markets, constraints, and overall environment. As such, a contingency design incorporates all quadrants of the CMD, maintaining sensitivity to individual, organizational, socio-cultural beliefs, values, and conditions (represented by the oval in Figure 2).

2. National and organizational cultures tend to covary.

To some extent, an organization’s culture will reflect values that characterize the society in which it functions. In a country fostering capitalistic values, such as the United States where strong emphasis is placed on productive efficiency and financial strength, many have argued that corporate values have determined the nature of social values. In some cases, organizations have been viewed as microcultures or a subset of macro or societal culture (Goodall, 1985). Yet, cultural differences between a society and its organizations may exist – businesses may adopt some characteristics of society while retaining characteristics of its “leaders.” For example, smaller, “family”-oriented businesses and larger, corporate entities in the United States have been shown to exhibit remarkably different value systems, with smaller organizations reflecting more of a Quadrant 4 framework for dealing with organizational issues and larger organizations represented in Quadrants 1 and 2 (Cummings, Long, and Lewis, 1987). In fact, Trompenaars (1993) suggested that smaller organizations often had a tendency to deviate from the national culture.

3. Descriptions of organizational culture require accounting for macro- and micro-cultural interactions.

Organizational and societal culture may be congruent or have some degree of commonality (see Figure 3 on the next page) – they are not isolated, they interact.

There is an employee-societal-organizational-global interface that creates a cultural mosaic and influences corporate values, beliefs, and ways of solving problems. The mosaic is dynamic, reflecting pressure and interactions at all levels. Drawing conclusions based on examination of a single or dated element in the interface may render a cultural depiction inaccurate. The Communication Design Matrix and comparisons in Figure 4 on the next page provide a template for organizing observations at macro and micro levels.

4. An understanding of organizational culture enhances the validity of attributions about organizational behavior.

An organization's culture provides an expression of what the organization values, its rules, and accepted behaviors. Organizational culture and its components, e.g., philosophy, strategy, and management style, provide a valid and reliable basis for describing "why" an organization behaved in a particular way and assists in "discovering" why two similar behaviors may have remarkably different foundations.

5. Communication concepts are useful tools for defining organizational culture.

Communication is one of the most obvious manifestations of organizational design and the act of management. As such, mapping techniques used here provide a powerful method for observing cultural change as well as comparing

multiple cultures simultaneously. In addition, there are many other communication frameworks that can be integrated into the CMD. For example, researchers have provided other symbolic manifestations of culture: Regularities in interaction, such as language used and rituals associated with deference and demeanor; work group norms, such as “a fair day’s work for a fair day’s pay”; dominant values such as “product quality” or “price leadership”; employee or customer policy, such as “the customer is always right” or “our employees are our most treasured resource”; rules for getting along or the “ropes” a newcomer must learn in order to be accepted, such as “don’t rock the boat”; the climate or feeling conveyed by the physical layout, such as “cleanliness, openness, ease of contact, etc.” (Schein, 1985, p. 6).

6. *Organizational designs have inherent cultural beliefs and values.*

Late 19th and early 20th century organizational designs (Scientific Management, Bureaucracy, Principles of Management) valued task performance and yielded guidelines for behavior to enhance total productive efficiency. Although probably unintended by their creators, these designs contained prescriptive guidelines with implicit and explicit assumptions about the suitability of employees to perform specific tasks, largely based upon physical characteristics and stereotypes. In contrast, mid-Twentieth century designs placed high value on employee needs and incorporated them in management practices to maximize employee satisfaction levels (human relations approaches). However, human relations approaches were limited because they did not consider the potential for tension when organizational and employee needs were simultaneously emphasized. A notable exception was the development of sociotechnical systems design, calling for a balance between task and personal needs. However, successful application of that approach, to date, has been infrequent.

7. *The CMD perspective permits simultaneous comparison major organizational designs.*

As a summary of this essay and a response to Conrad and Poole's (2002) concern that ". . . strategy is so complicated that it is impossible to treat them together" (p. 127), Figure 4 provides a comparison of major designs by unit of analysis, functional emphasis, and communication characteristics. The comparison below provides a frame of reference for identifying cultural variations in organizations. It is not an "end" – rather it is a starting point for discovering an organization's culture.

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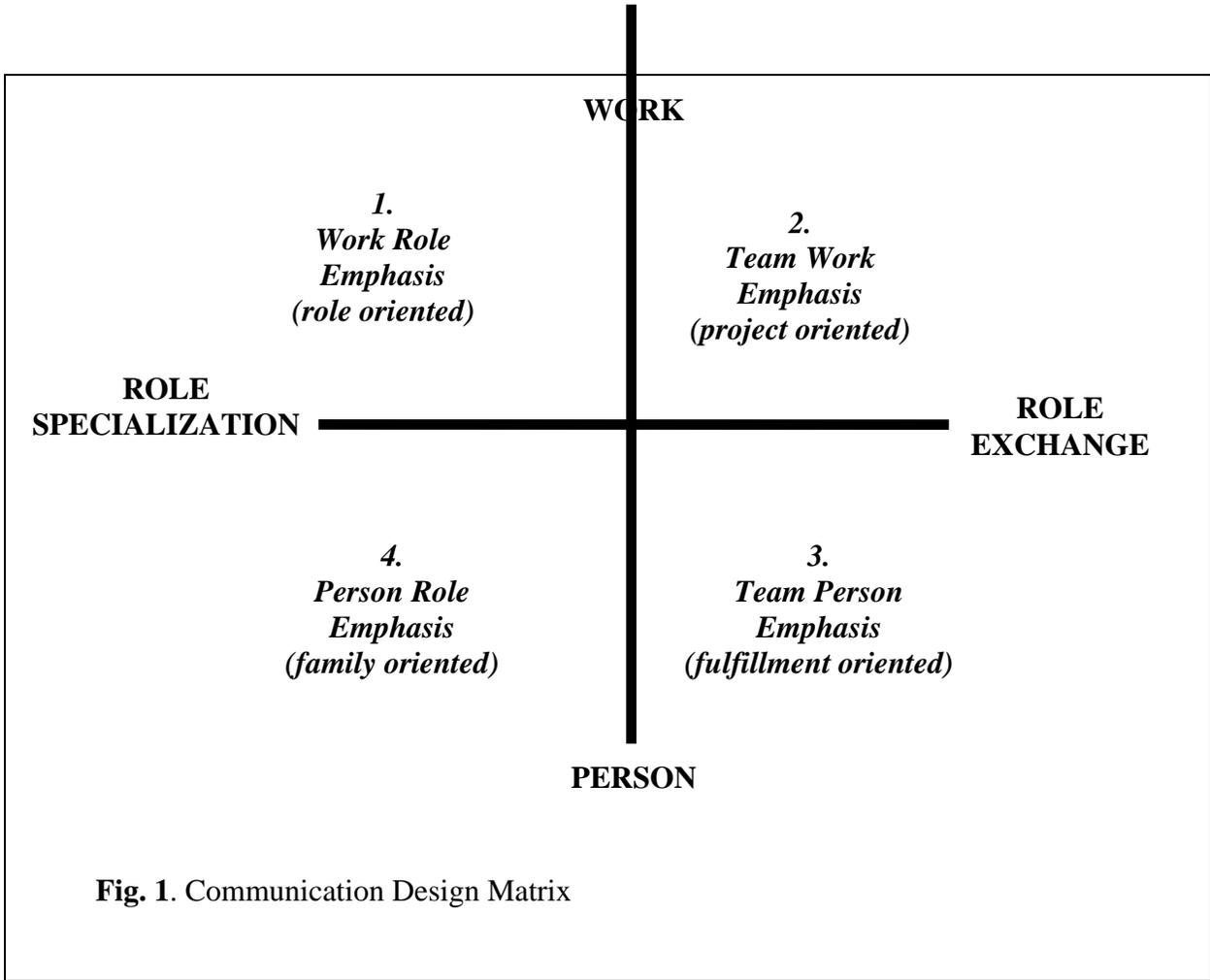
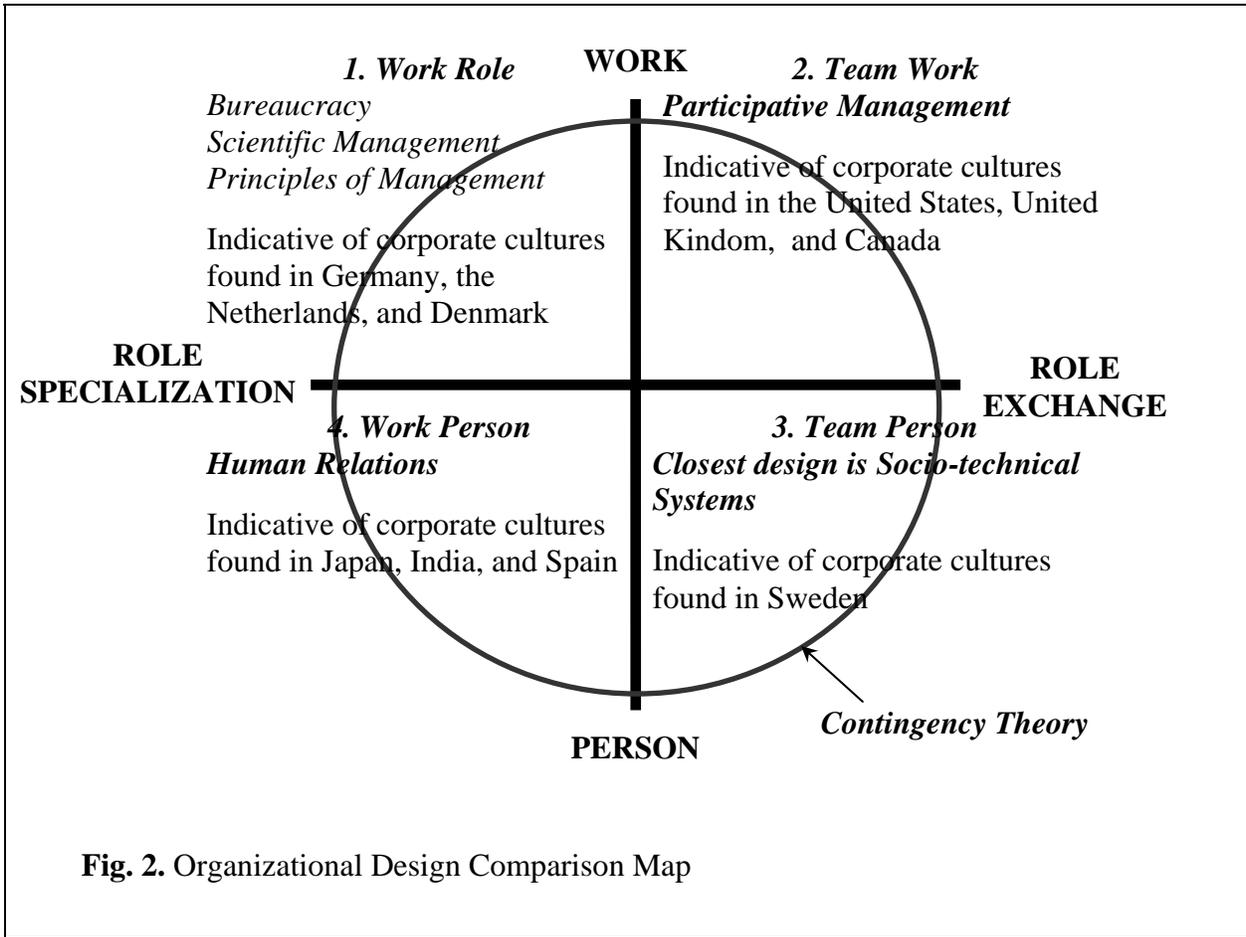
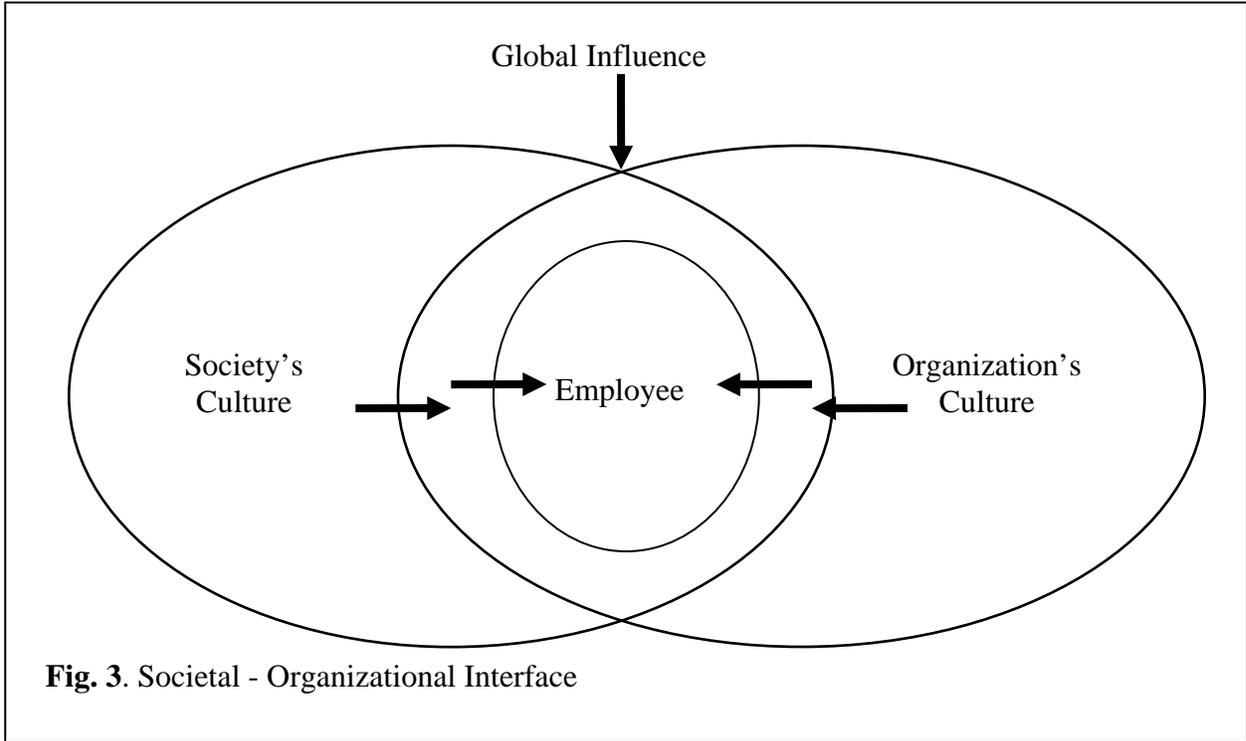


Fig. 1. Communication Design Matrix





Design	Unit of Analysis	Function Emphasis	Empowerment	Culture	Content Emphasis
<i>Scientific Management</i>	dyad; worker & manager	task completion	role special- ization	role	work; aimed at enhancing production
<i>Bureaucracy</i>	org.	managerial	role special- ization	role	work; aimed at enhancing production
<i>Principles of Management</i>	org.	managerial	role special- ization	role	work; aimed at enhancing production
<i>Human Relations</i>	individual	human resources	role special- ization	family	person; aimed at enhancing job satisfaction
<i>Participative Management</i>	group	managerial, primary; human resources, secondary	role ex- change	project	work primarily, also person; aimed at enhancing production through empowerment
<i>Contingency</i>	org.	production & adaptation to environment	Contingent on environ- ment and production process	varies	work; aimed at enhancing production
<i>Socio-technical Systems</i>	group	Balance between human resources & production	role ex- change	Project & fulfill- ment	work and person balance; assumes the need for a fit between technology and social system

Fig. 4. Comparison of Major Organizational Designs

