

Specifying External Relations: Definition of and Actors in an Organization's Environment¹

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Organization-environment concerns have become an increasingly important topic for both academic researchers and organizational practitioners. Unfortunately, some of the academic perspectives on organization-environment relations have emphasized the study of constructs within an organization's environment more than specific activities that an organization may adopt with actors in its environment. This paper proposes a three-step process for bridging academic research and organizational practice around organization-environment relations. First, distinctions between environments as nonmanipulable elements and niches as manipulable elements can be made. Resource dependence, efficiency, and uncertainty perspectives on environments have particular application at organization-niche interfaces. Ecology and uncertainty perspectives have relevance at the organization-environment interface. Second, niches can be at least partially identified through methods used to define strategic groups or populations. Classification and evolutionary analyses are two promising techniques that can be used to define populations and niches. Third, once niches are defined, actors within a niche can be identified and specific relationships between an organization and actors examined.

¹This research has been sponsored by grants from Office of Naval Research, Hewlett Packard, International Business Machines, Alcoa Foundation, and the General Electric Foundation. Bill McKelvey, Bob Sutton, and Jay Barney have been helpful in developing the concepts in this draft.

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INTRODUCTION

This paper attempts to build a bridge. This bridge spans organization-environment theorists who work to explain what happens external to an organization on one bank, and managers who seek alternative strategies for better managing their external relations on the other bank. Many academic studies have emphasized the organization's ability to adapt to environmental demands. These investigations include, but are not limited to, studies of organizations (i) reducing or adapting to environmental uncertainty (Lawrence & Lorsch, 1967; Thompson, 1967; Perrow, 1970; Duncan, 1972; Leblebici & Salancik, 1981), (ii) acquiring scarce resources (Yuchtman & Seashore, 1967; Pfeffer & Salancik, 1978), and (iii) increasing efficiency through lowered transition costs (Williamson, 1975; Ouchi, 1980; Ouchi & Barney, 1982). While these studies demonstrate the capacity of organizations for self-determinism, a fourth area of study has emphasized the environment's determining role in organizational actions (Hannan & Freeman, 1977; Aldrich, 1979; Hannan & Freeman, 1981). While all of these studies attempt to explain relationships between an organization and its environment, they have been shunned, to a great extent, by managers seeking to manage those same relationships. The ambiguous and overly conceptual nature of the models seems to detract from their usefulness to managers (Schoonhoven, 1981; Leblebici & Salancik, 1981). Two reasons for the ambiguity of these studies and a possible means of resolving this ambiguity will be addressed in this paper.

First, ambiguity exists in *conceptualizations of organization environments*. Each of the four perspectives attempts to conceptualize environments, but those conceptualizations offer managers rather ambiguous definitions of what constitutes an organization's environment (Starbuck, 1976). This paper proposes a study of concepts developed in the population perspective that may resolve some of the conceptual vagueness associated with other organization-environment theories.

Second, vagueness in the above four perspectives stems in part from a tendency to study generalized dimensions of organization-environment relations while failing to identify specific relations that an organization may have with actors in its environment. Actors are organizations external to the focal organization from which the focal organization receives or allocates valued resources. This paper offers a tentative model that specifies actors in an organization's environment and encourages study of environmental dimensions as they relate to specific transactions between a focal organization and external actors. Using the definition of environment and model of actors in an organization's environment presented in the paper may help develop "greater precision than is provided by these richly

suggestive, but ambiguous statements” (Schoonhoven, 1981, p. 351) of common organization-environment studies. From defining environments more clearly and from focusing study of organization-environments on specific actors, a bridge may be built that spans working with organizations from both scientific and practical viewpoints.

DEFINITION OF ENVIRONMENTS

A primary effort of many organization-environment theorists is to conceptualize an organization’s environment. Each of four current perspectives—uncertainty, resource dependence, efficiency, and ecology—on organization-environment relations offers alternative views of an organization’s external relations. The concept of the environment offered by each perspective is reviewed below.

Characterizing the environment in information terms has been and is currently a major thrust of firm-environment theorists (Thompson, 1967). In this view, the environment is conceptualized as a source of uncertainties that affect organizations and to which organizations must respond. Following from this view, organizations must reduce or adapt to the environmental uncertainty. Uncertainty, as a general concept, has been broken into a number of dimensions as represented in Fig. 1 (see Jurkovich, 1974, for a complete discussion of these terms). Issues of complexity, homogeneity, volatility, and routineness define central dimensions of uncertainty in the environment to which organizations much adapt. Theory and research, in this perspective, measure an organization’s environment based on these dimensions, then assess the extent to which an organization adapts to its environmental uncertainty (Terreberry, 1968).

Environments have also been described in terms of resources that an organization must acquire to prosper over time (Pfeffer & Salancik, 1978). From this perspective, environments represent resources of personnel, information, product and services, and funds (Aldrich, 1972; Benson, 1975). As indicated in Fig. 2, organizations can lower their own resource dependence by either controlling or acquiring valued resources. As such, organizations engage in activities to lower their dependence on environmental actors and to increase dependence of other organizations on them. In this way, United Way agencies with alternative fundings sources had less resource dependence in two studies than other United Way agencies and were thus more likely to be successful (Pfeffer & Leong, 1977; Provan, Beyer, & Kruytbosch, 1980).

A third description of an organization’s environment considers the transactions that an organization conducts with external actors. From this transaction cost or efficiency perspective, characteristics of an organiza-

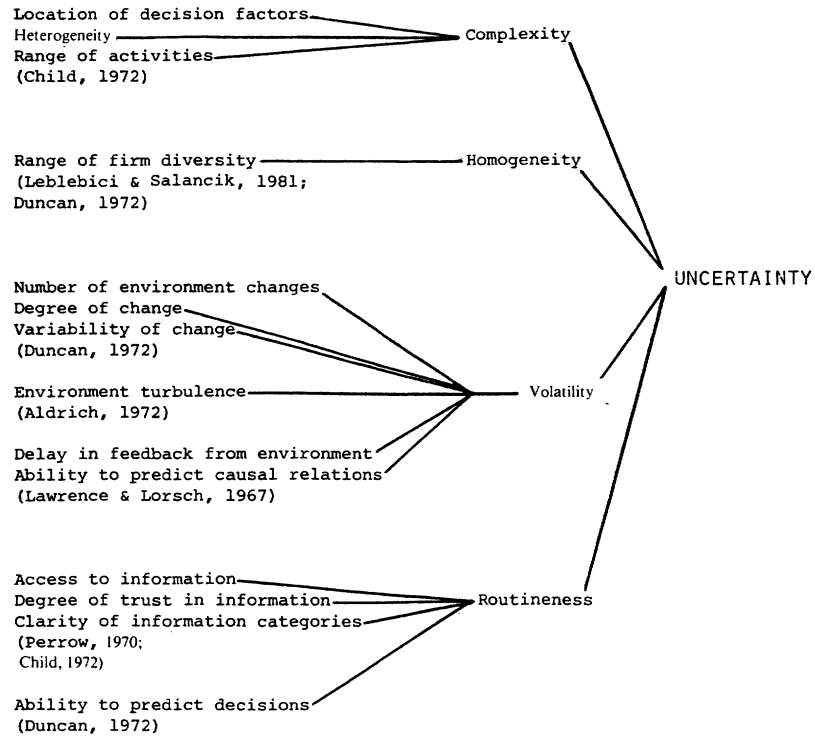


Fig. 1. Uncertainty perspective and environment dimensions.

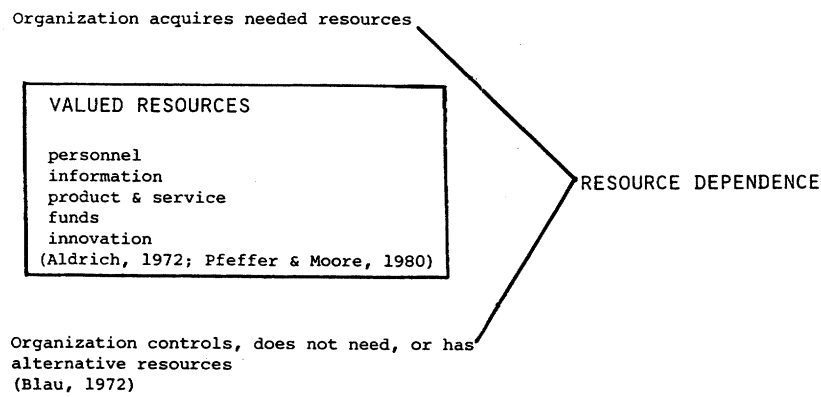
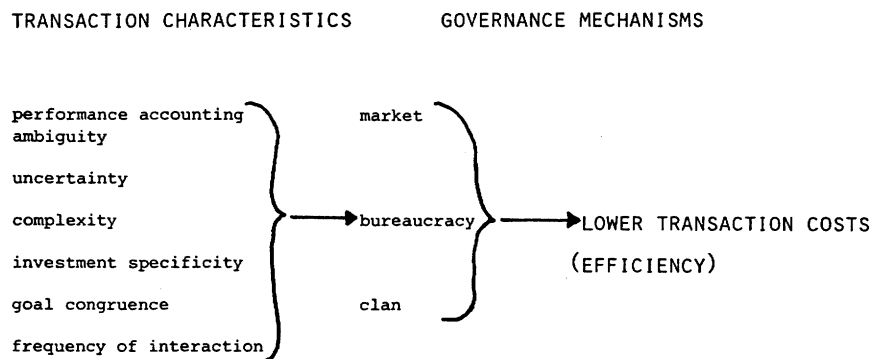


Fig. 2. Resource dependence perspective and environment dimensions.

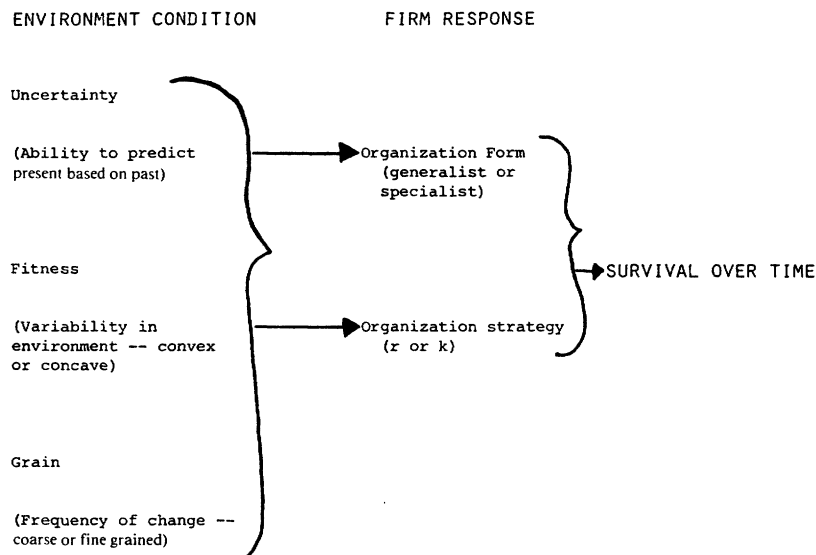
tion's transactions with outside parties are matched with its means of governing those transactions to lower transaction costs and produce more efficient boundary relations (Williamson, 1975, 1979, 1980; Ouchi & Barney, 1982). Characteristics of the organization's transactions with environmental actors include performance accounting ambiguity, uncertainty, complexity, goal congruence, frequency of interaction, and investment specificity (see Fig. 3). As the efficiency perspective is developed, characteristics of an organization's transactions with actors in the environment are identified so that organizations may respond with alternative governance mechanisms—market, bureaucracy, or clan. An appropriate match between transaction characteristics and governance mechanisms produces lower transaction costs and more efficient boundary relations.

The above three perspectives present the environment as a set of stimuli that organizations can and must respond to in order to remain effective. A fourth perspective, called by Hannan and Freeman (1977, 1981) population ecology, examines environments as forces that affect organizations, but to which organizations cannot adapt because of structural inertia. This perspective characterizes environments as arenas in which competition for resources becomes a struggle for survival. Essentially, the environment determines which organizations will survive over time. Dimensions of the environment in this view include uncertainty, fitness, and gain (see Fig. 4 for a review of these terms). Organizations that are isomorphic with their environments are more likely to be fit, or to



References: Williamson, 1975; 1979; 1980; Ouchi, 1980; Ouchi and Barney, 1982.

Fig. 3. Efficiency perspective and environment dimensions.



Reference: Hannan and Freeman (1977), Brittain and Freeman (1980), Hannan (1980), Hannan and Freeman (1981)

Fig. 4. Ecology perspective and environment dimensions.

persist in a given environment (Hawley, 1950; Hannan & Freeman, 1980; Hannan & Freeman, 1981).

While not exhaustive, these four perspectives are indicative of current organization-environment research. These four perspectives on environments are similar in at least two ways. Each defines environments as all activities that are external to the focal organization and each defines the environment in terms of dimensions that characterize those activities. The focus on dimensions has led to criticisms of these early attempts. These criticisms focus on the vagueness and impracticality of organization-environment research (Miles, Snow, & Pfeffer, 1974; Schoonhoven, 1981; Leblebici & Salancik, 1981). Although current research on efficiency (Barney, 1982) begins to overcome these criticisms, it is difficult to specify the particular conditions of uncertainty, resource dependence, efficiency, and ecology that affect an organization without a more precise definition of environment.

The population perspective (McKelvey, 1982) on organization-environment relations begins to overcome the ambiguity and vagueness in the organization-environment studies discussed briefly above. By

overcoming these ambiguities, this more precise definition of environments begins to span academic theory and organizational practice. In Fig. 2, the targets of investigation in a population perspective are arranged in four levels. At the top, organization environments are defined as a set of external forces that impose constraints on and provide resources to an individual organization and over which the organization has varying degrees of control. General environmental forces include what Hall (1977) describes as technological, legal, political, economic, demographic, ecological, and cultural conditions. An organization has little control over most of these nonmanipulable forces in its environment.

In addition, external forces are composed of niches. Niches are (i) a population of organizations with similar characteristics and (ii) a set of actors such as competitors, financiers, customers, and suppliers, with which organizations in a population interact and over which organizations have relatively more control. This definition of niche is similar to the definition of strategic group offered by Porter (1980). A population is a group of organizations that are homogeneous in that they share a high proportion of similar attributes, especially relating to technical, organizational, and managerial processes directly involved in turning out products or services that return value or profit from the surrounding environment. In theory, niches represent environmental resources (actors such as customers, suppliers, and financial institutions), while populations evolve from internal characteristics of organizations. An industry would likely be composed of a number of different populations. While an industry is likely to have a number of populations, some populations may be in diverse industries. For example, a population of the largest firms in the United States (Exxon, American Telephone & Telegraph, General Motors), while centered in one industry (e.g., oil, communications, automobiles), are involved in a number of industries.

The bottom level of analysis is comprised of individual organizations within a population. Organizations are defined as independent legal entities that are organized around a workplace technology and that produce products or services.

The separation of environments into two components, a nonmanipulable environment over which the organization has little control

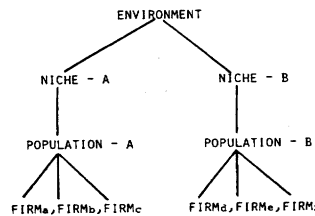


Fig. 5. Targets of investigation in population perspective.

and a manipulable environment (called the niche) over which the organization has more control, provides some clarification on organization-environment relations (McKelvey, 1982). This distinction between environment relations (McKelvey, 1982). This distinction between environments and niches helps specify the focus and limitations of much current organization-environment research (Levin & White, 1961). Issues raised by the resource the organization's niche, since establishing external relations to acquire resources and govern transactions efficiently is a more directly controllable organizational activity. For example, the tactics of joint ventures, mergers, sharing boards of directors, and long-term contracts proposed by Pfeffer and Salancik (1978) are managerial activities from a resource dependence perspective with actors in an organization's niche. The process of governing transactions with external actors through market, bureaucratic, or clan governance mechanisms also focuses on efficiency of niche relations.

The ecology perspective deals more with nonmanipulable environmental forces, affecting organizations indirectly over long periods of time. The ecology research on unions (Hannan, 1980), restaurants (Hannan & Freeman, 1981), and the electronics industry (Brittain & Freeman, 1980) deals with environmental, or nonmanipulable issues over long time periods.

Uncertainty has relevance at both niche and environment domains. When discussing the uncertainty of particular external relationships with suppliers, regulatory agencies, or customers, then uncertainty refers more to the organization's niche. When dealing with uncertainty of political, economic, or technological conditions, uncertainty is more focused on environmental issues. In general, the resource dependence and efficiency perspectives deal more directly with organizational niches, the ecology perspective deals with organizational environments, and the uncertainty perspective deals with both (see Fig. 6).

Separating an organization's external activities into niches and environments also helps evaluate studies of organization-environment relations. For example, Terborg & Komocar (1981) find that an awareness of events in the organization's environment and niche is needed to more fully predict organizational performance. Explicitly defining external variables of community buying power and unemployment as nonmanipulable environment variables clarifies what variables are under study. In addition, future research on niche activities (e.g., the organization's relationship with a specific customer, banker, or supplier) and their impact on performance may occur.

The environment and niche classification of forces external to an organization helps point toward future, more comprehensive research endeavors on organization-environment relations. Conceptualizing nonmanipulable environment issues as more consistent with an ecological perspective and niches as more consistent with resource dependence and

efficiency perspectives also offers an overall framework for studying organization-environment relations. Differences and limitations of each perspective are made more explicit. In brief, the population perspective provides conceptual clarity for studies of organization-environment relations by making explicit differences between environments and niches. This clarification on environments begins to bridge academic and practical work on organizations.

One difficulty and possible reason why the above distinction of environments has not been more developed is the difficulty in operationalizing a firm's niche. Definition and study of niches is a major piling on which this paper's bridge is built. As discussed above, niches have dual meanings. The meanings are similar, although derived differently, depending on the principle of inquiry used to define the niche. Schwab (1960) defines four major principles of inquiry, or approaches to scientific study, two of which are commonly used in defining niches. From a rationalistic principle of inquiry, niches represent a set of actors such as competitors, financiers, customers, and suppliers with which the populations of organizations interact. Niches represent environmental resources that support a population of organizations (Aldrich, 1979). From a reductionist view, niches represent a population of organizations with similar characteristics. In this view, a set of similar organizations forms a population. A population of similar organizations then survives by establishing stable transactions with external actors (e.g., customers, suppliers, financiers) in its niche.

From either principle of inquiry, the niche represents a set of environmental actors with which the organization and population of organizations must interact and over which an individual organization has relatively more control. It is difficult to operationalize niches from the rationalistic principle of inquiry. In the absence of a population of organizations that exist within a niche, it is difficult to specify the environmental resources that create a niche. The reductionist principle of inquiry offers a more practical approach to defining niches and actors in an organization's environment. From the reductionist perspective, niches are characterized by first grouping similar organizations into populations, then by specifying interfaces between organizations in a population and external actors. The methodology for operationalizing niches from a reductionist perspective first requires definition of similar organizations or populations.

The most common approach to defining populations has been to select one or two key elements of an organization, then join organizations into groups based on those limited number of characteristics (e.g., Etzioni, 1961; Blau & Scott, 1962; Fottler, 1981; Carroll, 1981). These classifications have been criticized as too simplistic (Carper & Snizek, 1980) and inadequate for empirical research (McKinney, 1966, Chap. 5). While these

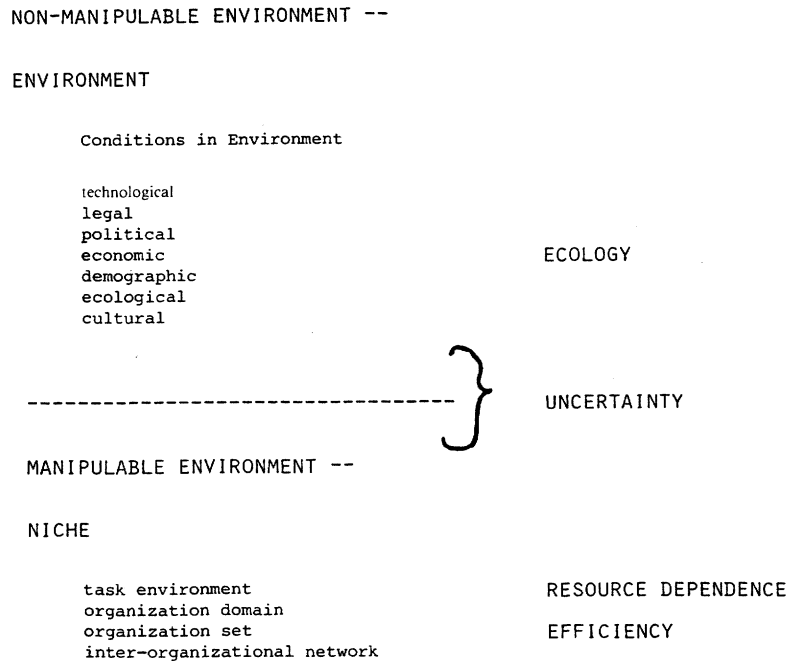


Fig. 6. Population distinction of environment and niche.

traditional efforts have not been successful, other means of defining niches as groups of organizations with similar characteristics are available. The alternatives, although not fully developed, include evolutionary analysis (akin to Chandler's, 1977, work) and numerical taxonomy as used in biology (Sneath & Sokal, 1973). These alternative approaches are discussed in detail in McKelvey (1982).

Since evolutionary analysis requires specification of key variables that distinguish organizations and application of constructs of variation, selection, and retention—all of which need further development—a reasonable first step in defining populations and niches is likely to be numerical taxonomy. Numerical taxonomy examines a number of attributes of a large sample of organizations and groups similar organizations into clusters. Each cluster represents a population of organizations which face similar niche demands (see Ulrich, 1982, for discussion and application of this technique). While numerical taxonomy is not the only means of specifying populations and niches, it offers an alternative that may then be the basis for more explicit conceptions of environments.

More specific definitions of environments is a first piling to make research on organization-environment both richly suggestive, more precise, and more amenable for organizational practitioners. Separating the environment into nonmanipulable, environmental, and manipulable niche activities may be a primary effort at classifying environments. Defining niches from a reductionist principle of inquiry and techniques such as numerical taxonomy may be an operational step in defining populations and niches (Ulrich, 1981). After environments have been clarified, a second piling to bridge environmental research and practice is to focus on issues faced by organizational practitioners as related to specific actors in the organization's environment.

ACTORS IN AN ORGANIZATION'S ENVIRONMENT

As reviewed above, much of the research on organization-environment relations has emphasized study of issues faced by an organization in dealing with its environment. While identifying dimensions of an organization's environment from any of the four perspectives helps paint a conceptual picture of what happens outside an organization, continued study of only these *issues* may not support theory and research that helps guide managerial actions. Managers worry less about dimensions to their environments than about strategies for interacting with particular actors in the organization's environment.

To bridge environmental theory and managerial action, models and research should first identify the salient components of an organization's environment. In the above discussion, the niche represents the manipulable set of environmental activities that populations and organizations face and over which managers have some control. Identification of an organization's niche, or strategic group, can be derived through taxonomic techniques that cluster similar organizations into populations. Once populations are defined, specific actors in an organization's niche can be specified. As defined above, actors are the external organizations with which a focal organization interfaces.

The basic premise of identifying actors in an organization's niche is that in the abstract, concepts such as uncertainty, resource dependence, and efficiency, remain "richly suggestive, but ambiguous" (Schoonhoven, 1981). For example, an electronics firm was recently having difficulty maintaining a stable supply of needed parts for its products. To approach the manager of this firm and review the uncertainty, nonroutineness, and complexity of the firm's environment—in the abstract—is of little assistance in deciding how to secure a more stable supply of parts. However, if these concepts can

be linked to specific relationships between a focal organization and actors in that organization's niche, then the suggestive concepts also become specific and practical. For example, to talk about means of reducing uncertainty in the firm's relationship with a supplier—through joint ventures, acquisition of the supplier products (Klein, Crawford, & Alchian, 1978)—makes the uncertainty more appropriate and relevant for guiding organizational action.

To begin to specify actors in an organization's niche is a difficult, yet important step in clarifying organization-environment relations and in bridging academic theory and organizational practice. Three criteria are proposed to identify actors in an organization's niche. First, the focal organization and actor have direct interactions. The direct interaction between an organization and supplier makes the supplier a significant actor in the organization's niche. Second, the focal organization and actor have frequent interactions. Customers who use an organization's product or services likely have frequent interactions with the focal organization and are part of the actors in an organization's niche. Third, an organization's niche actors either provide to or receive from the focal organization a valued product or service. Trade associations that provide information, labor associations that supply personnel, competitors who challenge the organization, and government agencies that regulate activities are examples of actors in an organization's niche who provide a valued service. These three criteria are implicitly used by Dill (1958) in defining a task environment, Evan (1966) in defining an organization set, and Hall (1977) in distinguishing a specific environment. Figure 7 shows the above actors as they interface with a focal organization. These are examples of some of the external actors with which an organization must interface to manage boundary relations. Each of these actors is important as an organization struggles for existence within a niche.

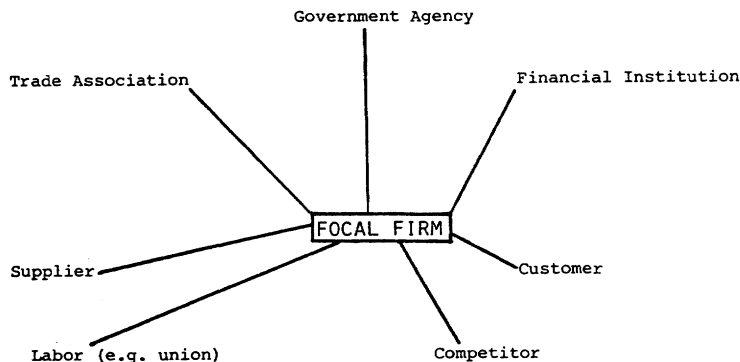


Fig. 7. Actors in an organization's niche environment.

ACTORS

ISSUES	GOVERNMENT	TRADE ASSOCIATION	SUPPLIER	LABOR	COMPETITOR	CUSTOMER	FINANCIAL INSTITUTION
<u>UNCERTAINTY</u> complexity homogeneity volatility routineness							
<u>RESOURCE DEPENDENCE</u> org. acquires resources org. controls resources							
<u>EFFICIENCY</u> Transaction characteristics Performance accounting ambiguity Uncertainty Complexity Investment specificity Goal congruence Frequency of interaction Governance mechanisms Market Bureaucracy Clan							

Fig. 8. Actors and issues in an organization's niche.

The specific interfaces between focal organizations and actors may be studied by identifying (i) the issues raised by the uncertainty, resource dependence, and efficiency perspectives and (ii) the actors to whom those issues apply. This overall view is portrayed in Fig. 8. With this view, applications and limitations of organization-environment studies can be made. For example, work on uncertainty by Burns and Stalker (1961), Lawrence and Lorsch (1967), and Hickson, Hinings, Lee, Schenck, & Pennings (1971) focuses on organization structure adaptations due to environmental uncertainty. However, the actor causing the uncertainty is never specified—are there uncertain relationships with federal agencies? banks? customers? suppliers? union? or competitors? Not knowing the actor(s) causing uncertainty limits application of the research because it is unclear what relationship needs the most clarity. Some recent uncertainty research (Leblebici & Salancik, 1981) highlights the source of the uncertainty, in this case, customers of a bank and their ability to repay loans. Knowing the specific actor causing uncertainty allows managers to act with the actor to reduce uncertainty.

Most work in the resource dependence perspective has dealt, at least implicitly with specific actors. Hirsh (1975) reviews how an organization can affect legislation to maintain control over critical resources coopting institutional gatekeepers, acquiring patents, copyrights, or trademarks, or gaining control over distribution channels are specific managerial activities that can be directed at niche actors. Pfeffer and Leong (1977) and Provan et al. (1980) review strategies of United Way agencies in acquiring power such as having suppliers become committed to the agency. Miles et al. (1974) review a number of resource acquisition and control strategies that relate to specific actors, such as long-term contracts and joint ventures with suppliers or customers, alternative market forms with competitors, and trade associations with competitive firms. While these and other efforts within the resource dependence framework begin to specify resource acquiring and controlling tactics with specific actors, further classifications about which actors can be used to acquire resources and to control resources can be made. For example, a manager needs to acquire resources of capital (from banks, venture capitalists, equity markets), products (from supplier), or personnel (from labor market, unions, or other source). The alternative resource dependence strategies (to acquire resources or to control resources) may differ depending on the particular resource and actor. In the efficiency perspective, much of the research remains at the theoretical level, with efforts made to define transaction characteristics (Williamson, 1975, 1979, 1980; Teece, 1980; Ouchi & Barney, 1982) and to review alternative governance mechanisms (Klein, Crawford, & Alchian, 1978; Ouchi, 1980). Research is being developed, however, which examines

specific organization-actor transactions (Ouchi, Barney, & Ulrich, 1981). This work includes the study of transactions and governance mechanisms between an organization and supplier (Armour & Teece, 1979; Teece, 1980; Krickx, 1980), organization and trade association (Stevens, 1982), and organization and banks (Barney, 1982).

In brief, managers representing organization interface with many actors in their niche. As the issues studied in organization-environment research can be linked to specific actors with which managers must deal, the nature of organization-niche interface should become more explicit. Linking theory and research to specific actors is the second supporting pile of the bridge between academic research and organizational practice.

CONCLUSIONS AND IMPLICATIONS

Organization-environment concerns have become an increasingly important topic for both academic researchers and organizational practitioners. Unfortunately, some of the academic perspectives on organization-environment relations have emphasized the study of *constructs* within an organization's environment more than specific activities that an organization may adopt with actors in its environments. This paper proposes a three-step process for bridging academic research and practice around organization-environment relations. First, distinctions between environments as nonmanipulable elements can be made. The resource dependence, efficiency, and uncertainty perspectives on environments have particular application at organization-niche interfaces. Ecology and uncertainty perspectives have relevance at the organization-environment interface. Second, niches can be at least partially identified through methods used to define strategic groups or populations. Classification and evolutionary analyses are two promising techniques that can be used to define populations and niches. Third, once niches are defined, actors within a niche can be identified and specific relationships between an organization and actors examined.

Building the bridge between academic and practical work on organizations and environments may not follow quickly. It requires specification of both theoretical constructs and application of those constructs. It may also require interdisciplinary research between organization theorists and such disciplines as political science with its focus on government relations, marketing with its emphasis on customer relations, industrial relations with union studies, and finance with studies of banking functions. However, the potential payoff for this work is high. It may allow for organization theory to deal more directly with issues in

theoretical, yet practical ways. It may also allow for researchers in organization theory to recognize the focus of their research while also acknowledging the limitations and parameters of the research.

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