

The Institutionalization of Institutional Theory

PAMELA S. TOLBERT AND LYNNE G. ZUCKER

Since the publication of Meyer and Rowan's (1977) classic article, organizational analyses based on an institutional perspective have proliferated. Work sharing the banner of institutional theory has investigated a wide range of phenomena, from the spread of specific personnel policies (Tolbert and Zucker 1983; Baron et al. 1986; Edelman 1992) to the fundamental redefinition of organizational missions and forms (DiMaggio 1991; Fligstein 1985) to the development of domestic and international policies by government organizations (Strang 1990; Zhou 1993). Ironically, however, the institutional approach has yet to become institutionalized. There is very little consensus on the definition of key concepts, measures or methods within this theoretic tradition. Unlike population ecology and its standard measures of density, institutional theory has developed no central set of standard variables, nor is it associated with a standard research methodology or even a set of methods. Studies have relied on a variety of techniques, including case analysis, cross-sectional regression, longitudinal models of various types, and so forth (see also Davis and Powell 1992; Scott and Meyer 1994). Our review of the literature suggests one important source of such variation in approach: despite the sizeable body of work defined as part of this tradition, there has been surprisingly little attention given to conceptualizing and specifying the *processes* of institutionalization (though see DiMaggio 1991; Strang and Meyer 1993; and Rura and Miner 1994 for recent progress in this direction).

As noted in Zucker's (1977) early research, which focused on consequences of varying levels of institutionalization, institutionalization is

both a process and a property variable. Perhaps because her work was cast in a small groups setting, however, a process-based approach to institutionalization has not been followed in most organizational analyses. Instead, institutionalization is almost always treated as a qualitative state: structures are institutionalized, or they are not. Consequently, important questions of the determinants of variations in levels of institutionalization, and of how such variation might affect the degree of similarity among sets of organizations, have been largely neglected.

In this chapter, we address these questions by offering a theoretical specification of institutionalization processes. We begin by presenting a brief historical overview of sociological theorizing and research on organizations through the mid 1970s. This overview is intended both to clarify the links between institutional theory and previous traditions of sociological work on organizational structure, and to provide some context for understanding the receptivity of organizational researchers in the late 1970s to institutional theory as an explanatory framework. The next section reviews the initial exposition of the theory in Meyer and Rowan's (1977) seminal article, focusing on the way in which it challenged then-dominant theoretical and empirical traditions in organizational research. We point up an apparent logical ambiguity in this formulation, one which involves the phenomenological status of structural arrangements that are the objects of institutionalization processes. In the remainder of the chapter, we offer a general model of institutionalization processes, as a means both of clarifying this ambiguity and of elaborating the logical and

empirical implications of a phenomenologically based version of institutional theory, first developed by Zucker. Finally, on the basis of this analysis, we consider a range of issues that require further theoretical development and empirical study.

Our primary aims in this effort are twofold: to clarify the independent theoretical contributions of institutional theory to analyses of organizations, and to develop this theoretical perspective further in order to enhance its use in empirical research.¹ There is also a more general, more ambitious objective here, and that is to build a bridge between two distinct models of social actor that underlie most organizational analyses, which we refer to as a rational actor model and an institutional model. The former is premised on the assumption that individuals are constantly engaged in calculations of the costs and benefits of different action choices, and that behavior reflects such utility-maximizing calculations (Coleman 1990; Hechter 1990). In the latter model, by contrast, 'oversocialized' individuals are assumed to accept and follow social norms unquestioningly, without any real reflection or behavioral resistance based on their own particular, personal interests (see Wrong 1961). We suggest that these two general models should be treated not as oppositional but rather as representing two ends of a continuum of decision-making processes and behaviors. Thus, a key problem for theory and research is to specify the conditions under which behavior is more likely to resemble one end of this continuum or the other. In short, what is needed are theories of *when* rationality is likely to be more or less bounded. A developed conception of institutionalization processes provides a useful point of departure for exploring this issue.

SOCIOLOGICAL ANALYSES OF ORGANIZATIONS: THE ORIGINS OF INSTITUTIONAL THEORY

Functionalist Analyses of Organizations

The study of organizations has a relatively short history within sociology. Prior to the work of Robert Merton and his students in the late 1940s, organizations were not typically acknowledged as a distinctive social phenomenon, one worthy of study in its own right, by American sociologists. Although organizations had certainly been subjects of study by sociologists prior to the advent of functionalist analyses (see, for example, the work of American theorists associated with the Chicago School: Park 1922;

Thomas and Znaniecki 1927), such studies typically treated organizations as aspects of general social problems, such as social inequality, intercommunity relations, social deviance, and so forth; the focus of analysis was not on organizations *qua* organizations. Despite the key role assigned to formal organizations by Weber's (1946) and Michels's (1962) analyses of industrial orders, the notion that organizations represent independent social actors in modern societal processes was not widely recognized until after the pioneering work of Merton and colleagues (see Coleman 1980; 1990). As we shall explore later in our review, we conceive of both organizational and individual actors as potential creators of new institutional structure (Zucker 1988). (See also DiMaggio's 1988 discussion of 'institutional entrepreneurs'.)

Merton's (1948) initial interest in studying organizations appears to have been driven primarily by a concern with empirically testing and developing the general logic of functionalist social theory. Organizations, viewed as societies in microcosm, offered the opportunity to conduct the kind of comparative research required for empirical examination of functionalist tenets (see Selznick 1949; Gouldner 1950; Blau 1955). Thus, one of the major hallmarks of analyses of organizations produced by Merton and his students was a focus on the dynamics of social change, an issue functionalist theory had often been accused by its critics of neglecting (Turner 1974).

Concern with change was reflected in two main objectives that were characteristic of organizational studies in the functionalist tradition: examining the nature of covariation among different elements of structure, and assessing the dynamic balance between dysfunctional and beneficial outcomes of given structural arrangements. These foci directly address two key assumptions embedded in functionalist theory about survival requirements of social collectivities.

The first assumption is that the structural components of a system must be integrated in order for the system to survive, since the components are interrelated parts of the whole. A corollary derived from this main assumption is that change in one structural component necessitates adaptive changes in other components. Thus, given this general theoretical framework, empirical examination of the relationships among elements of organizational structure was a natural focus of study.

The second assumption is that existing structures contribute to a social system's functioning, at least on the balance; otherwise, the system could not survive. An implication of this assumption, adduced by Merton (1948),

is that change is likely to occur when the functional contributions of a given structural arrangement are exceeded by dysfunctions associated with that arrangement. This reasoning led to an explicit concern with identifying both the dysfunctional and functional consequences of given structural arrangements.²

Quantitative Analyses of Structural Covariation

Pursuit of the first problem, examination of interrelations among structural elements, laid the foundation for one general line of research that came to dominate and define sociological studies of organizations for the next two decades. This line of research increasingly came to be typified by quantitative analyses of covariance among the elements of formal organizational structure and by essentially economic explanations of such covariation. The rapid ascendance of this approach to organizational analysis most likely reflects its affinity with established traditions of organizational research in the field of management science, well established in most business schools by the time sociologists turned their attention to the study of bureaucracy (Follett 1942; Fayol 1949; Gulick and Urwick 1937; Woodward 1965). Formal structure was assumed to reflect organizational decision-makers' rational efforts to maximize efficiency by securing coordination and control of work activities. Thus, the finding of a positive relationship between size and complexity was explained in terms of the needs and capacity of larger organizations for efficiency-enhancing specialization, the relation between complexity and size of the administrative component in terms of the increased needs for supervision to manage coordination problems accompanying specialization, and so forth.³

Organizational research shifted focus in the late 1960s to include consideration of the effects of environmental forces in determining structure, but the basic functionalist/economic explanatory framework was retained by most work (see for example, Thompson 1967; Lawrence and Lorsch 1967). Despite the dominance of this approach to analyzing and explaining formal organizational structure (or perhaps because of it), this paradigm came under increasing fire by the early 1970s. In part, increasing skepticism reflected the general lack of cumulative empirical findings from work in this tradition (Meyer 1979). The widespread revival and reassessment of the general applicability of arguments developed earlier by Barnard (1938), Simon (1947), and March and Simon (1957), emphasizing inherent limits on organizational decision-makers' ability

to act with a high degree of rationality, may have also helped lay the groundwork for the acceptance of alternative paradigms (Weick 1969).

Reflecting the growing dissatisfaction with traditional explanations of formal structure, a new approach to organization-environment relations, labeled resource dependence (Pfeffer and Salancik 1978), became increasingly prominent during the 1970s. This perspective focused attention on decision-makers' concerns for maintaining organizational autonomy and power over other organizations. By emphasizing the determining role of power considerations in explaining organizations' structure (see Thompson and McEwen 1958), it challenged dominant theoretical approaches that focused largely or exclusively on production efficiency concerns. However, like earlier work, a resource dependence approach also was predicated implicitly on a rational actor model of decision-making in organizations, albeit one in which actors' behavior was based on calculation aimed at maximizing power and autonomy rather than pure efficiency. The operation of social influence processes, such as imitation or normatively based conformity, which might mitigate or limit autonomous decision-making, was largely ignored.

FORMAL STRUCTURE AS MYTH AND CEREMONY

Symbolic Properties of Structure

The analysis laid out in the now-classic paper by Meyer and Rowan (1977) thus offered a radical departure from conventional ways of thinking about formal structure and about the nature of organizational decision-making through which structure was produced. Their analysis was guided by a key insight, namely: formal structures have symbolic as well as action-generating properties. In other words, structures can become invested with socially shared meanings, and thus, in addition to their 'objective' functions, can serve to communicate information about the organization to both internal and external audiences (Kamens 1977). Explaining formal structure from this vantage point offered organizational researchers the opportunity to explore an array of new insights into the causes and consequences of structure.

The notion that organizations have symbolic aspects was not entirely novel: a variety of authors had previously underscored key symbolic functions served by mission statements, structural arrangements, and top-level members

of organizations (Clark 1956; Selznick 1957; Zald and Denton 1963). In the functionalist tradition, such elements were argued to be critical to securing environmental support through demonstration of the consistency between core values of the organization and those in the larger society (Parsons 1956; 1960). Meyer and Rowan's contribution to this earlier, related work lay in their systematic development of the implications of the use of formal structure for symbolic purposes, particularly in terms of highlighting limitations of more rationalistic explanations of structure.

Implications

Based on the notion that formal structure can signal organizations' commitment to rational, efficient standards of organizing, and thus provide general social 'accounts' (Scott and Lyman 1968), Meyer and Rowan's analysis specified three major implications of this notion. The first is that the adoption of formal structure can occur regardless of the existence of specific, immediate problems of coordination and control of members' activities that an organization may face.

Organizations are driven to incorporate the practices and procedures defined by prevailing rationalized concepts of organizational work and institutionalized in society. Organizations that do so increase their legitimacy and their survival prospects, independent of the immediate efficacy of the acquired practices and procedures. (1977: 340)

This argument challenged then-dominant causal models of structure in several respects. First, in terms of the determinants of structure, it directed attention to external influences not linked to actual production processes, such as the passage of legislation and the development of strong social norms within an organizational network. In so doing, the relative importance of internal organizational characteristics traditionally investigated as sources of formal structure, such as size and technology, was called into question. It also indirectly suggested alternative ways of interpreting such characteristics (e.g. as indicators both of organizations' visibility to the general public and of network linkages).

Moreover, in terms of consequences or outcomes, it led to a focus on the adoption of specific structural arrangements that had acquired social meanings, such as formal employment policies, accounting and budgeting practices, and offices and positions associated with employment equity. This indirectly challenged the utility of existing theoretical and empirical efforts to conceptualize and measure

structure in terms of general, abstract dimensions, such as formalization, complexity, and centralization.

A second major implication pointed up in Meyer and Rowan's analysis is that the social evaluation of organizations, and hence organizational survival, can rest on observation of formal structures (that may or may not actually function), rather than on observed outcomes related to actual task performance.

Thus, organizational success depends on factors other than efficient coordination and control of production activities. Independent of their productive efficiency, organizations which exist in highly elaborated institutional environments and succeed in becoming isomorphic with these environments gain the legitimacy and resources needed to survive. (1977: 352)

This claim sharply contradicted underlying market-oriented, or at least performance-oriented, assumptions about the functions of formal structure that dominated previous work: (1) that inefficient organizations – in production terms – would be selected out through a process of interorganizational competition; and (2) that correlations between measures of formal structure and such characteristics as size and technology thus resulted from the survival of organizations whose form matched the demands of their production environments. Although these assumptions underpinned the majority of quantitative analyses of determinants of structure, they were often made explicit only in studies directly examining organizational effectiveness (Goodman and Pennings 1977). The notion that organizations could survive despite very low objective performance implied the possibility of 'permanently failing' organizations (Meyer and Zucker 1989), that is organizations that survive despite evident inefficiencies that logically should cause them to fail.

Finally, the third major implication derived by Meyer and Rowan was that the relationship between actual, everyday activities and behaviors of organizational members and formal structures may be negligible.

... (F)ormal organizations are often loosely coupled ... structural elements are only loosely linked to each other and to activities, rules are often violated, decisions are often unimplemented, or if implemented have uncertain consequences, technologies are of problematic efficiency, and evaluation and inspection systems are subverted or rendered so vague as to provide little coordination. (1977: 342)

This implication also represented a direct challenge to traditional explanations of structure which, by treating formal structures as means for

coordinating and controlling activities, necessarily assumed a tight connection between structures and actual behaviors of organizational members.

AMBIGUITIES IN INSTITUTIONAL THEORY

In drawing this last implication, Meyer and Rowan decouple formal structure from action, implicitly defining institutional structures as those that are subject to decoupling. However, earlier in their argument they use the concept of institutional structures such as Berger and Luckmann (1967) and as Zucker (1977): a structure that has become institutionalized is one that has become taken for granted by members of a social group as efficacious and necessary; thus it serves as an important causal source of stable patterns of behavior.

This creates an inherent ambiguity in their underlying phenomenological argument, because the definition of 'institutionalized' itself contradicts the claim that institutional structures are apt to be decoupled from behavior. To be institutional, structure must generate action. As Giddens (1979) argues, structure that is not translated into action is in some fundamental sense not 'social' structure. Geertz sounds a similar note: 'We gain access to symbol systems only through the flow of behavior - or, more precisely, social action' (1973: 17).

The discussion of the decoupling of structure and action implies a Goffmanesque 'backstage/frontstage' definition of institutionalized structures (Goffman 1959), where the belief in the efficacy and need for such structures is subject to dispute but the structures are nonetheless viewed as serving a useful presentational purpose. This implies that such structures fundamentally lack normative and cognitive legitimacy (Della Fave 1986; Walker et al. 1986; Stryker 1994; Aldrich and Fiol 1994), and that they are not at any time real signals of underlying intention: Whether such structures are appropriately described as institutionalized, given standard definitions of the term, is dubious.

Resource Dependence versus Institutional Processes

Moreover, the ambiguity that inheres in this view of structural change in organizations leads to a fundamental confounding of institutional and resource dependence theory (Zucker 1991: 104). Scott (1987: 497) has argued that a shift in institutional theory towards explaining 'the sources or loci of "rationalized and impersonal

prescriptions"' and away from explaining the 'properties of generalized belief systems' has the advantage of enlarging the framework for explaining formal structures to include organizations' compliance with external actors' demands in order to obtain resources needed for survival. More recently, he elaborated: 'Much of the theoretical and empirical research on institutions correctly focuses on regulative agencies . . . which exercise legitimate powers to formulate and enforce rule systems . . . [which leads to an emphasis on] the flow of rewards and sanctions' (1994: 98). In this formulation, however, there is a blurring of the boundary between resource dependence and institutional theory, thereby obscuring the unique theoretical contributions of the latter, in particular, to organizational analysis.

Comparison of recent studies based on institutional theory with earlier studies cast within the framework of resource dependence serves to illustrate problems of distinguishing these theoretical perspectives. For example, using an institutional perspective to examine the effects of government laws and policies on employment structures, Sutton et al. argue: 'Faced with an apparently hostile legal environment, employers adopt due-process governance to cool out potentially litigious employees and demonstrate good-faith compliance with government mandates' (1994: 946). Likewise, Edelman suggests that organizations that construct formal structures as symbolic gestures of compliance with government policy 'are less likely to provoke protest by protected classes of employees within the firm or community members who seek jobs . . . are more likely to secure government resources (contracts, grants, etc.), and . . . are less likely to trigger audits by regulatory agencies' (1992: 1542). Thus, the adoption of structure is treated as a strategic, but apparently largely superficial change; it is the organizational counterpart of the manipulative actions of narcissistic persons who consciously use 'false fronts' as a means of gaining their own ends with other persons.⁴

Other studies described in Pfeffer and Salancik's (1978) development of resource dependence theory reflect a very similar explanatory logic. For example, they report (1978: 197-200) a case study by Pfeffer of an organization that intentionally created two separate structural units, one of which was non-profit, in order to conform to extant social definitions of appropriate form for educational organizations and to thereby secure necessary support from external constituents. Similarly, they describe (1978: 56-9) research conducted by Salancik which examined the relationship between indicators of firms' visibility and relative dependence on

federal government contracts, and the presence of organizational arrangements showing commitment to equal employment opportunity. The results indicated that greater dependence was associated with more intensive signaling of compliance with affirmative action law via creation of formal positions and written documentation of programs and policies. The overlap between these arguments and those from more recent work cast within the framework of institutional theory is striking.

The lack of theoretical distinctiveness in these studies results in part from the de-emphasis on a distinguishing feature of institutional theory, a focus on the role of cultural understandings as determinants of behavior (Strang 1994) and on the normative bounds of rational decision-making. By shifting toward an emphasis on changes in 'appearance' and downplaying the internal consequences of institutionalized structure, treating structure as *merely* symbol and signal, we end up with the implicit argument that a structure can maintain its symbolic value in the face of widespread knowledge that its effect on individuals' behavior is negligible. How such a contradiction in cultural understandings (i.e. that structures signify commitment to some action, and that structures may be unrelated to action) can endure poses an unanswered riddle in this approach.

There is a related, general problem with work that emphasizes purely symbolic, resource-securing functions of structure, one which lies in the implicit assumption that the costs of creating such structural elements are relatively low compared to the potential gains in increased resources from the environment. This assumption presumably follows from the notion that changes in formal structures often do not alter action. Although there are often-cited theoretical claims, there is no supporting empirical evidence that social activity is as ubiquitous as air and just as costless (Granovetter 1985). From the research to date, we do not know in fact whether structure is regularly decoupled from the internal functioning of the organization, nor do we know the cost of creating such structure compared to any increase in resource flows to the organization (a review of the evidence can be found in Scott and Meyer 1994).

The recasting of institutional theory to be more derivative of a resource dependence approach probably reflects, in part, general discomfort with the lack of voluntarism implied by more phenomenologically oriented versions of institutional theory, or what Oliver calls an 'overly passive and conforming depiction of organizations' (1991: 146). It may also stem from the apparent bias toward *stasis* in a phenomenological approach (DiMaggio 1988):

as currently developed in organizational analyses, the focus of an institutional approach traditionally has been on the way in which actors follow extant institutional 'scripts', and questions of how these scripts are produced, maintained and changed have been largely neglected (Barley and Tolbert 1988). It is these questions to which we turn next, using theoretical analyses by Berger and Luckmann (1967) and Zucker (1977) as our point of departure.

In addressing these issues, we make the key assumption that creating new structure takes more resources than maintaining the old: alteration and creation of organizational structures *do* constitute costs for the organization. Social structure is not simply a by-product of human activity; rather, human agency is required to produce it (Zucker et al. 1995; Zucker and Kreft 1994). Thus, structures that are altered or created must be believed to have some positive value for the organization, or decision-makers typically would not allocate resources to altering or creating new formal structure. Organizational decision-makers, of course, may have more or less discretion: sometimes decision-making power is very broad, sometimes it is very circumscribed. The analysis developed here is most applicable to instances in which decision-makers have relatively high levels of discretion concerning the adoption of structures.⁵

PROCESSES OF INSTITUTIONALIZATION

Drawing on work identified with the philosophical tradition of phenomenology, Berger and Luckmann (1967) identified institutionalization as a core process in the creation and perpetuation of enduring social groups. An institution, the outcome or end state of an institutionalization process, was defined as 'a reciprocal typification of habitualized action by types of actors' (1967: 54; following Schutz 1962; 1967).

In this definition, habitualized action refers to behaviors that have been developed empirically and adopted by an actor or set of actors in order to solve recurring problems. Such behaviors are habitualized to the degree that they are evoked with minimal decision-making effort by actors in response to particular stimuli. Reciprocal typification, in their use, involves the development of shared definitions or meanings that are linked to these habitualized behaviors (see Schutz 1962; 1967). Since typifications entail classifications or categorizations of actors with whom the actions are associated, this concept implies that the meanings attributed to habitualized action have come to be generalized, that is, to be independent of the specific individuals who carry out the

action. Zucker (1977) referred to this process of generalizing the meaning of an action as 'objectification', and identified it as one of the key component processes of institutionalization.

Earlier phenomenological analyses of institutions, then, suggest at least two sequential processes involved in the initial formation of institutions and in their spread: *habitualization*, the development of patterned problem-solving behaviors and the association of such behaviors with particular stimuli; and *objectification*, the development of general, shared social meanings attached to these behaviors, a development that is necessary for the transplantation of actions to contexts beyond their point of origination.

At a later point in their analysis, Berger and Luckmann (1967) suggest an additional aspect of institutionalization, one also identified by Zucker and termed 'exteriority'. Exteriority refers to the degree to which typifications are 'experienced as possessing a reality of their own, a reality that confronts the individual as an external and coercive fact' (1967: 58). It is related to the historical continuity of typifications (Zucker 1977), and in particular, to the transmission of typifications to new members who, lacking knowledge of their origins, are apt to treat them as 'social givens' (Berger and Luckmann 1967; Tolbert 1988). We refer to the processes through which actions acquire the quality of exteriority as *sedimentation*.

In an early experimental study, Zucker (1977) demonstrated that as the degree of objectification and exteriority of an action increased, so did the degree of institutionalization (indicated by individuals' conformity to others' behavior), and that when institutionalization is high, then transmission of the action, maintenance of that action over time, and resistance of that action to change are all also high. Nelson and Winter (1982) find a similar process operating in the creation of task routines within organizations: more institutionalized routines are more readily transmitted to new employees. Thus, transmission is both causally and consequentially related to institutionalization. By enhancing the exteriority of a set of behaviors, transmission increases the degree to which those behaviors are institutionalized; institutionalization, in turn, affects the ease of subsequent transmission (Tolbert 1988).

This set of sequential processes – habitualization, objectification and sedimentation – suggests variability in levels of institutionalization, thus implying that some patterns of social behavior are more subject to critical evaluation, modification, and even elimination than others. In short, such patterned behaviors can vary in terms of the degree to which they are deeply embedded in a social system (more objective,

more exterior), and thus vary in terms of their stability and their power to determine behavior.

Berger and Luckmann's analysis was focused on the occurrence of institutionalization processes among individual actors, not organizational actors. Zucker's experimental research extended the analysis to organizations, but still at the micro-level. Organizational actors are distinguished by a number of properties – hierarchical authority, potentially unlimited lifespan, unique legal responsibilities, and so forth (see Coleman 1980) – likely to affect the way in which institutionalization processes are played out. These processes are often played out *between* organizations as well as within them.⁶ Thus, we consider the extension of this analysis specifically to *institutional flows* between formal organizations. Figure 1 presents a summary of our analysis of the process of institutionalization, and the causal forces that are key at different points in the process.⁷

Habitualization

In an organizational context, the process of habitualization involves the generation of new structural arrangements in response to a specific organizational problem or set of problems, and the formalization of such arrangements in the policies and procedures of a given organization, or a set of organizations that confront the same or similar problems. These processes result in structures that can be classified as being at the pre-institutionalization stage.

There are voluminous literatures on organizational innovation and on organizational change that are relevant to understanding these processes (e.g. Quinn and Cameron 1988; Huber and Glick 1993). What is key for the purposes of our analysis, however, is that in this stage the creation of new structures in organizations is largely an independent activity. Since organizational decision-makers may share a common core of knowledge and ideas that make an innovation feasible and attractive, the adoption of a given innovation may and often does occur in close association with adoption processes in other organizations (i.e. simultaneous invention). Organizations experiencing a problem may, as part of their search for solutions, also consider solutions developed by others (DiMaggio and Powell 1983). Imitation *may* follow, but there is little sense of the necessity of this among organizational decision-makers, since there is no consensus on the general utility of the innovation. Hence, adoption can be predicted largely by characteristics that make a change technically and economically viable for a given organization (Anderson and Tushman 1990;

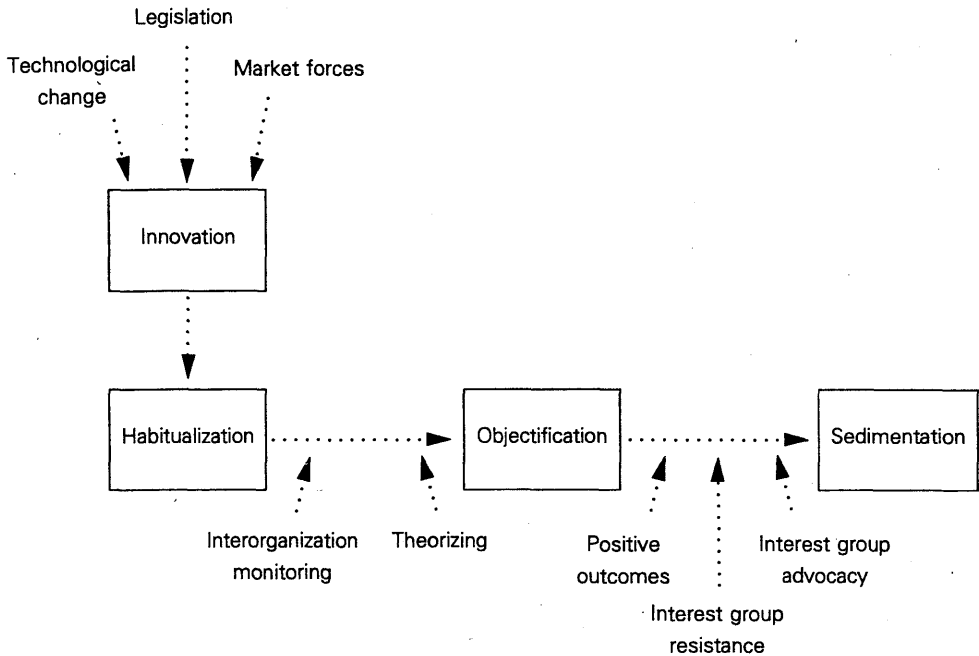


Figure 1 *Component processes of institutionalization*

Leblebici et al. 1991) and by internal political arrangements that make organizations more or less receptive to change processes (see March and Simon 1957).⁸

At the pre-institutionalization stage, then, there may be multiple adopters of a given structure, but these are likely to be comparatively few in number, limited to a circumscribed set of similar, possibly interconnected organizations facing similar circumstances, and to vary considerably in terms of the form of implementation. Such structures will not be the object of any sort of formal theorizing (Strang and Meyer 1993), and knowledge of the structures among non-adopters – especially those that are not in direct, frequent interaction with adopters – will be extremely limited, in terms of both operations and purpose (Nelson and Winter 1982).

Examples of structures at this stage of institutionalization can be readily found by comparing the organizational charts of any set of similar organizations. Such comparisons will almost certainly reveal an array of offices and policies that are idiosyncratic to one or a limited subset of the organizations – directors of electronic communications, departments of poultry science, marketing/manufacturing liaisons, etc. These sorts of structures tend to be relatively impermanent, sometimes enduring only for the length of the incumbent's tenure (see Miner 1987; 1991).

Objectification

The movement toward a more permanent and widespread status rests heavily on the next process, *objectification*, which accompanies the diffusion of structure. Objectification involves the development of some degree of social consensus among organizational decision-makers concerning the value of a structure, and the increasing adoption by organizations on the basis of that consensus. Such consensus can emerge through two different though not necessarily unrelated mechanisms.

On one hand, organizations may use evidence gathered directly from a variety of sources (the news media, first-hand observation, stock prices, and so on) to assess the risk parameters of adopting a new structure. To the extent that the results of structural change are expected to generalize, the apparent outcomes for prior organizations will be a significant determinant of the next adoption decision. Thus, objectification of structure is partially a consequence of organizations' monitoring of competitors, and efforts to enhance relative competitiveness. Recycling 'old social inventions' is a low-cost strategy, involving investment of fewer 'social resources' than creating new organizational structure.

By implication, diffusion of new structures to a given organization will have a lower hurdle than will creation *de novo* of comparable

structures in that same organization, because other organizations will have 'pre-tested' the structure, and decision-makers' perception of relative costs and benefits of adopting will be influenced by observations of other organizations' behavior. Thus, the more organizations that have adopted the structure, the more likely will decision-makers perceive the relative balance of costs and benefits to be favorable.

Our arguments here are consistent with models of sequential decision-making recently developed by economists (Banerjee 1992; Bichandani et al. 1992; see also David 1985). These models are premised on the assumptions that there is some degree of uncertainty in the outcomes of different choices, and that decision-makers will use information gained from observing the choices of others, as well as their own subjective assessments, in determining the 'best' choice. Under these conditions, the more widespread a given choice becomes, the more likely are individuals to view it as an optimal choice, and the less influential will be decision-makers' independent judgments of the value of the choice (see also Tolbert 1985; Abrahamson and Rosenkopf 1993).⁹

Objectification and diffusion of structure can also be spearheaded by what is sometimes referred to in the organizational change literature as a 'champion' – often, in this case, a set of individuals with a material stake in the promotion of the structure (DiMaggio 1988). Thus, for example, advocates of government civil service rules were often drawn from elite families whose traditional access to local political office had been broken by the development of immigrant-dominated machines (Tolbert and Zucker 1983); the spread of formalized selection procedures and performance evaluation procedures in businesses during the period following World War II was influenced by the promotional efforts of members of the emerging occupation of personnel management (Baron et al. 1986); and the role currently played by consultants in the adoption of practices identified with total quality management is widely acknowledged (Reeves and Bednar 1994; Sitkin et al. 1994). DiMaggio (1991), Rowan (1982), Covaleski and Dirsmith (1988), Chaves (forthcoming) and Ritti and Silver (1986) also offer examples of the role of interest groups in promoting structural changes in organizations.

Champions are most likely to emerge when there is a large potential 'market' for the innovation (e.g. when environmental changes have adversely affected the competitive positions of a number of established organizations). To be successful, champions must accomplish two major tasks of theorization (Strang and Meyer 1993): creation of a definition of a generic organizational problem, a definition that includes

specification of the set or category of organizational actors characterized by the problem; and justification of a particular formal structural arrangement as a solution to the problem on logical or empirical grounds (see also Galaskiewicz 1985). The first task involves generating public recognition of a consistent pattern of dissatisfaction or organizational failing that is characteristic of some array of organizations; the second task involves developing theories that provide a diagnosis of the sources of dissatisfaction or failings, theories that are compatible with a particular structure as a solution or treatment.

By identifying the set of organizations that face a defined problem and providing a positive evaluation of a structure as an appropriate solution, theorizing invests the structure with both general cognitive and normative legitimacy. To be persuasive and effective, theorizing efforts must also provide evidence that the change is actually successful in at least some cases that can be examined by others considering the adoption of new structure. On the basis of such theorizing, and the accompanying evidence, champions encourage the diffusion of structures throughout a set of organizations that are not otherwise directly connected.

Structures that have been subject to objectification and have become fairly widely diffused can be described as being at the stage of semi-institutionalization. At this stage, adopters have typically become quite heterogeneous; consequently, specific characteristics of organizations that were previously identified with adoption will have relatively limited predictive power (Tolbert and Zucker 1983). The impetus for diffusion shifts from simple imitation to a more normative base, reflecting implicit or explicit theorization of structures. As theorization develops and becomes more explicit, variance in the form that the structures take in different organizations should decline.

Examples of structures that could be classified as being at this stage include team-based production, quality circles, gain-sharing compensation plans, internal consultants, sensitivity training programs for management, managers of work/family policy, and employee assistance programs, among others. While such structures generally have a longer rate of survival in organizations compared to those in the pre-institutionalized stage, clearly not all persist indefinitely. In fact, the ultimate fate of most such structures often invests them with a fad or fashion-like quality (Abrahamson 1991). This is because structures at the stage of semi-institutionalization typically have a relatively short history. Thus, while they have acquired some degree of normative acceptance, adopters nonetheless are apt to remain cognizant of their

relatively untested quality, and consciously to monitor the accumulation of evidence (from their own organization as well as others) on the effectiveness of the structures. It is not until a structure has reached the stage of full institutionalization that actors' propensity to engage in independent evaluation of the structures significantly declines.

Sedimentation

Full institutionalization involves *sedimentation*, a process that fundamentally rests on the historical continuity of structure, and especially on its survival across generations of organizational members. Sedimentation is characterized both by the virtually complete spread of structures across the group of actors theorized as appropriate adopters, and by the perpetuation of structures over a lengthy period of time. Thus, it implies both 'width' and 'depth' dimensions of structures (Eisenhardt 1988).

Identification of factors that affect the extent of diffusion and the long-term retention of a structure is thus key to understanding the process of sedimentation. One such factor that has been pointed up in a variety of studies is the existence of a set of actors who are somehow adversely affected by the structures and who are able to collectively mobilize against them. Covaleski and Dirsmitz's (1988) analysis of legislative resistance to a new budgeting arrangement in a university provides a within-organizational example of this sort of force. At an interorganizational level of analysis, Leblebici et al.'s (1991) depiction of changes in the radio broadcast industry highlights the crucial role of small competitor organizations that, disadvantaged by established practices, actively promote alternative practices in the industry. Likewise, Rowan (1982), analyzing the spread of three different structures across school districts in California, underscored the role of conflicting interests in stemming institutionalization processes.

Even in the absence of direct opposition, sedimentation may be truncated gradually because of a lack of demonstrable results associated with a structure. A weak positive relation between a given structure and desired outcomes may be sufficient to affect the spread and maintenance of structures, particularly if advocates continue to be actively involved in theorization and promotion. However, in many cases, the link between the structure and the intended outcomes is quite distant, and demonstration of impact exceedingly difficult. Given the development and promotion of alternative structures purported to achieve the same ends, organizations are likely to abandon

older arrangements in favor of newer, promising structures (Abrahamson 1991; see analogous arguments by Abbott 1988 concerning changes in occupational jurisdictions), at least if costs associated with the change are relatively low.

Hence, full institutionalization of a structure is likely to depend on the conjoint effects of relatively low resistance by opposing groups, continued cultural support and promotion by advocacy groups, and positive correlation with desired outcomes. Resistance is likely to limit the spread of a structure among organizations identified by theorizing as relevant adopters, and continued promotion and/or demonstrable benefits are necessary to counteract entropic tendencies, and to thus ensure perpetuation of the structure over time (Zucker 1988). Examples of structures that could be characterized as fully institutionalized in the US range from tenure policies among higher education organizations, to beverage service on airplane flights, to the use of memos as a form of interoffice communication (Yates and Orlikowski 1992).

The reversal of this process, or deinstitutionalization, is likely to require a major shift in the environment (e.g. long-lasting alterations in markets, radical change in technologies) which may then allow a set of social actors whose interests are in opposition to the structure to self-consciously oppose it or to exploit its liabilities (see Rowan's 1982 description of the decline of health officers in schools following the advent of various vaccines; see also Aldrich 1979: 167; Davis et al. 1994).

Table 1 summarizes our arguments about the characteristics and consequences of the component processes of institutionalization.

IMPLICATIONS FOR RESEARCH

There are a number of implications of our analysis for empirical studies of organizations that draw upon institutional theory. Probably the most important implication, from our perspective, is the need to develop more direct measures and better documentation of claims of the institutionalization of structures, since outcomes associated with a given structure are likely to depend on the stage or level of institutionalization. Depending on the scope and form of data collection, different procedures could be used for this.

For example, analyses examining the level of institutionalization of contemporary structures could use survey research in which respondents were asked directly about the degree to which they perceived a given structure to be necessary

Table 1 *Stages of institutionalization and comparative dimensions*

Dimension	Pre-institutionalization stage	Semi-institutionalization stage	Full institutionalization stage
Processes	Habitualization	Objectification	Sedimentation
Characteristics of adopters	Homogeneous	Heterogeneous	Heterogeneous
Impetus for diffusion	Imitation	Imitative/normative	Normative
Theorization activity	None	High	Low
Variance in implementation	High	Moderate	Low
Structure failure rate	High	Moderate	Low

for efficient organizational functioning (e.g. Rura and Miner 1994), or use questionnaires that ask about attributes correlated with degree of institutionalization, such as the degree of subjective certainty about judgments made (Zucker 1977). While the development of items used to create adequate measures would undoubtedly be a contentious task, this is hardly a problem peculiar to the construct of institutionalization (we think of such standard concepts as productivity, effectiveness, uncertainty, for example). As with other difficult constructs, this problem could be grappled with in part through standard psychometric techniques.

Historical research utilizing archival data, on the other hand, could deal with the problem through more careful attention to and documentation of historical context and cultural changes surrounding the purported institutionalization of structures (Zucker 1988). Content analysis of written materials can, in some instances, provide a useful indicator of the cultural status of structures (Tolbert and Zucker 1983). Whatever methodology is used to collect data, however, plausible claims about the level of institutionalization of structures are likely to rest on a strategy involving triangulation of both sources and methods.

In addition, our analysis suggests that identification of the determinants of changes in the level of institutionalization of structures represents an important and promising avenue for both theoretical and empirical work. Extant studies have already suggested a number of potential determinants of how taken for granted a specific structure becomes, and thus how institutionalized. For example, a number of studies have shown that when large and more centrally linked organizations are innovators and early adopters of a given structure, that structure is more likely to become fully institutionalized than other structures (DiMaggio and Powell 1983; Fligstein 1985; 1990; Baron et al. 1986; Davis 1991; Palmer et al. 1993). Further, work by Mezas (1990) and his colleagues (Mezas and Scarsella 1994) suggests that the social status of forces opposing the adoption of a structure

may operate in the opposite direction: as the status of those opposed increases, the degree of institutionalization decreases.

There are other factors that, intuitively, we would also expect to have an impact on institutionalization, including: the scope or range of organizations for which a given structure is theorized to be relevant (the broader the range of organizations, the more difficult it should be to provide convincing evidence of a structure's effectiveness, and hence the lower the level of institutionalization); the number of 'champions' or size of champion groups (the greater the number of champions, the less likely are entropic processes to become operative, and thus the higher the level of institutionalization); the degree to which adoption of a structure is linked to costly changes in adopting organizations (higher investment costs should also mitigate entropic tendencies, thus resulting in a higher degree of institutionalization); the strength of the correlation between adoption and desired outcomes (creating strong incentives to maintain the structure, thus resulting in a higher degree of institutionalization); and so forth.

Studying the determinants of institutionalization processes is likely to require comparative work on the development and spread of different structures. This might involve, for example, the construction and comparison of several natural histories of structures that have been recently made the object of theorizing – quality circles, employee assistance programs, telecommuting policies, and so forth. Comparative case studies of this sort could provide important insights into whether (or not) there are any similarities in the processes through which adoption and diffusion of different types of structures occur.

Alternatively, useful insights could also be provided by comparisons of the diffusion and fate of a given structure across several industries or across several countries (see Strang and Tuma 1993). Such research has the potential to address a number of puzzles about institutionalization processes that are suggested by various empirical observations. Why do some structures (e.g. team-based production) leap industries and not

others (e.g. tenure systems)? Are institutionalization processes always less likely to affect structures in small organizations (Han 1994) and, if so, why? Why are biotechnological innovations located primarily in new small firms in the US, but primarily in large incumbent firms in Japan (Zucker and Darby 1994)?

A final major implication that we would draw from our analysis is the need to consider the contexts or conditions under which institutional, resource dependence and efficiency-oriented contingency theories are each more likely to provide useful insights for organizational scholars. Unfortunately, different theories often lead to the same predicted organizational outcomes – although the mechanisms that are postulated to produce the outcomes are quite different. Hence, it is often extremely difficult, if not impossible, to determine whether the factors highlighted by a given theoretical perspective are actually at work in determining organizational actions.

Because of this, it may be useful to confine empirical 'tests' of institutional theory to studies that are set in contexts where there are no major actors that are attempting to compel organizations to adopt a given structure, either through law or through the withholding of critical resources. Or it may be useful to compare directly unconstrained adoption processes to those that have some coercive elements, as in our examination of the adoption of civil service reform in states where it was not required by law and in states where it was legally required (Tolbert and Zucker 1983).

Likewise, it may also be useful to focus empirical application of institutional theory on analyses where the material benefits associated with a structure are not readily calculable (which is the case for many administrative innovations, as well as some technical innovations) – i.e. where efficiency-oriented contingency approaches are less obviously relevant. Or, again, it may be useful to assess how social institutions are used to increase material benefits, as for example when scientific collaborators tend to be selected from the same organization, effectively using the organizational boundaries as information envelopes to protect new discoveries from early exploitation by others (Zucker et al. 1995).

CONCLUSIONS

By highlighting the role of normative influences in organizational decision-making processes, institutional theory offers an important and distinctive extension to our repertoire of perspectives and approaches to explaining organizational structure. While the notion that decision-

makers are characterized by bounded rationality has become a staple component of the catechism of organizational research, the implications of this are not explored in any depth in most contemporary theories.¹⁰ How rationality is bounded and under what conditions it will be more or less bounded are questions that have rarely been addressed. Institutional theory offers a framework that can be useful in addressing these questions, but its utility in this respect requires further development of the theory to clarify the conditions and processes that lead structures to become institutionalized. A clearer understanding of institutionalization as a process would allow us to specify the impact of more social aspects of decision-making, such as the effects of social position of those providing information on choices made, and the conditions under which prediction of a particular choice is possible only if the social aspects are directly included in the analysis.

Addressing this general issue of conditions of applicability requires consideration of a number of problems: how and when choices or alternative lines of action become socially defined; who acts to cause change and to diffuse that change to multiple organizations, and why; and what are the potential benefits of creating similar structures, or converging to the same structures, that lead to the institutional isomorphism we so often observe. For institutional theory to develop as a coherent paradigm and thus to make an enduring contribution to organizational analyses, such questions about institutionalization processes require both conceptual and empirical answers. In this analysis, we have outlined some initial answers to these problems, answers whose extension and modification must await further theoretical development and empirical test.

NOTES

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1 Here we concentrate our analysis on institutionalization processes at the interorganizational level. Similar processes are likely to operate at the intraorganizational level as well, though the exact mechanisms as well as the consequences may differ.

See Tolbert (1988), Rura and Miner (1994) and Barley and Tolbert (1988) for discussions of the relation between intraorganizational and interorganizational processes. See Zucker (1977) for a discussion and experimental test of intraorganizational processes and consequences.

2 The evolution of this line of research includes work focusing on the relation between formal structure and the 'informal organization' and particularly on power relations among organizational members (e.g. Blau 1955; Zald and Berger 1978; Perrow 1984). Perhaps because such work was less compatible with extant management science literature, it did not achieve prominence as rapidly in the sociological literature on organizations as did work focusing on covariation among structural elements.

3 See, for example, Stinchcombe (1959), Thompson (1967), Pugh et al. (1969), Blau (1970). Hall (1987) provides a thorough review and summary of the findings of this literature.

4 Another individual-level analog is ingratiation, in which flattery and exaggerated compliance are used to meet personal needs by altering the response of someone with power or authority (Jones 1964; Jones and Wortman 1973). See also Elsbach and Sutton (1992) for a discussion of impression management by organizations.

5 D'Aunno et al. (1991) describe the way in which conflicting demands placed on community mental health organizations by different constituencies result in the adoption of incompatible and contradictory practices. We suggest that such contradictions in structure are most likely to occur when managers have little discretion over the adoption of structural changes.

6 We leave for later development change processes that operate inside a given organization. Inertia within organizations is often assumed to block internal change or at least to make it extremely difficult (Kanter 1983; 1989). Yet institutionalization processes are likely to be very important in internal organizational functioning (Zucker 1977; Pfeffer 1982).

7 As John Meyer pointed out to us, this model may be most applicable to societies that are characterized by relatively weak national states.

8 Leblebici et al. (1991) point out that when the advantages of an innovation are unclear, it is often smaller, less competitively advantaged firms who are most likely to adopt first, because the relative risks of making an error by adopting are lower for such firms.

9 This process of theorization has already been explicitly developed and empirically tested on the individual level as diffuse status characteristics (key references include Berger et al. 1972; Webster and Driskell 1978; Zelditch et al. 1980; Ridgeway and Berger 1986). It is easier to see errors in the generalization process when personal attributes such as gender or ethnicity are analyzed. But we expect similar errors at the organizational level.

10 A good example is provided by transactions costs theory (Williamson 1975), which is explicitly premised

on the assumption of bounded rationality. However, work in this tradition appears to be predicated *implicitly* on the assumption that decision-makers are capable of carrying out extremely complex calculations required to estimate the relative transaction costs associated with different relational forms, and selecting an appropriate course of action based on those calculations (i.e. of relatively *unbounded* rationality).

REFERENCES

- Abbott, Andrew (1988) *The System of Professions*. Chicago: University of Chicago Press.
- Abrahamson, Eric (1991) 'Managerial fads and fashions: the diffusion and rejection of innovations', *Academy of Management Review*, 16: 586-612.
- Abrahamson, Eric and Rosenkopf, Lori (1993) 'Institutional and competitive bandwagons: using mathematical modeling as a tool to explore innovation diffusion', *Academy of Management Review*, 18: 487-517.
- Aldrich, Howard (1979) *Organizations and Environments*. Englewood Cliffs, NJ: Prentice-Hall.
- Aldrich, Howard and Fiol, Marlene (1994) 'Fools rush in? The institutional context of industry creation', *Academy of Management Review*, 19: 645-70.
- Anderson, Philip and Tushman, Michael (1990) 'Technological discontinuities and dominant design: a cyclical model of technological change', *Administrative Science Quarterly*, 35: 604-33.
- Banerjee, Abhijit (1992) 'A simple model of herd behavior', *Quarterly Journal of Economics*, 107: 797-817.
- Barley, Stephen and Tolbert, Pamela (1988) 'Institutionalization as structuration: Methods and analytic strategies for studying links between action and structure'. Paper presented at the Conference on Longitudinal Field Research Methods, University of Texas, Austin, TX.
- Barnard, Chester (1938) *Functions of the Executive*. Cambridge, MA: Harvard University Press.
- Baron, James, Dobbin, Frank and Jennings, P. Devereaux (1986) 'War and peace: the evolution of modern personnel administration in U.S. industry', *American Journal of Sociology*, 92: 384-411.
- Berger, Joseph, Cohen, Bernard P. and Zelditch, Morris Jr (1972) 'Status characteristics and social interaction', *American Sociological Review*, 37: 241-55.
- Berger, Peter and Luckmann, Thomas (1967) *Social Construction of Reality*. New York: Anchor Books.
- Bikchandani, Sushil, Hirshleifer, David and Welch, Ivo (1992) 'A theory of fads, fashion, custom and cultural change as informational cascades', *Journal of Political Economy*, 100: 992-1026.
- Blau, Peter (1955) *The Dynamics of Bureaucracy*. Chicago: University of Chicago Press.
- Blau, Peter (1970) 'A formal theory of differentiation in

- organizations', *American Sociological Review*, 35: 201-18.
- Chaves, Mark (1996) 'Ordaining women: the diffusion of an organizational innovation', *American Journal of Sociology*, 101: 840-73.
- Clark, Burton (1956) 'Organizational adaptation and precarious values', *American Sociological Review*, 21-7.
- Coleman, James (1980) *Power and the Structure of Society*. New York: Norton.
- Coleman, James (1990) *Foundations of Social Theory*. Cambridge, MA: Harvard University Press.
- Covaleski, Mark and Dirsmith, Mark (1988) 'An institutional perspective on the rise, social transformation and fall of a university budget category', *Administrative Science Quarterly*, 33: 562-87.
- D'Aunno, Thomas, Sutton, Robert and Price, Richard (1991) 'Isomorphism and external support in conflicting institutional environments: A study of drug abuse treatment units', *Academy of Management Journal*, 34: 636-61.
- David, Paul (1985) 'Clio and the economics of QWERTY', *American Economic Review*, 75: 332-7.
- Davis, Gerald (1991) 'Agents without principles? The spread of the poison pill through the intercorporate network', *Administrative Science Quarterly*, 36: 583-613.
- Davis, Gerald and Powell, Walter (1992) 'Organization-environment relations', in M. Dunnette and L. Hough (eds), *Handbook of Industrial and Organizational Psychology*, vol. 3. Palo Alto, CA: Consulting Psychologists Press. pp. 317-75.
- Davis, Gerald, Diekmann, Kristina and Tinsley, Catherine (1994) 'The deinstitutionalization of conglomerate firms in the 1980s', *American Sociological Review*, 59: 547-70.
- Della Fave, L. Richard (1986) 'Toward an explication of the legitimation process', *Social Forces*, 65: 476-500.
- DiMaggio, Paul (1988) 'Interest and agency in institutional theory', in Lynne G. Zucker (ed.), *Institutional Patterns and Organizations: Culture and Environment*. Cambridge, MA: Ballinger. pp. 3-22.
- DiMaggio, Paul (1991) 'Constructing an organizational field as a professional project: U.S. art museums, 1920-1940', in W. Powell and P. DiMaggio (eds), *The New Institutionalism in Organizational Analysis*. Chicago: University of Chicago Press. pp. 267-92.
- DiMaggio, Paul and Powell, Walter (1983) 'The iron cage revisited: institutional isomorphism and collective rationality in organizational fields', *American Sociological Review*, 48: 147-60.
- Edelman, Lauren (1992) 'Legal ambiguity and symbolic structures: organizational mediation of civil rights law', *American Journal of Sociology*, 97: 1531-76.
- Eisenhardt, Kathleen (1988) 'Agency and institutional theory explanations: the case of retail sales competition', *Academy of Management Journal*, 30: 488-511.
- Elsbach, Kimberly and Sutton, Robert (1992) 'Acquiring organizational legitimation through illegitimate actions: a marriage of institutional and impression management theories', *Academy of Management Journal*, 35: 699-736.
- Fayol, Henri (1949) *General and Industrial Management*. London: Pitman.
- Fligstein, Neil (1985) 'The spread of the multidivisional form among large firms, 1919-1979', *American Sociological Review*, 50: 377-91.
- Fligstein, Neil (1990) *The Transformation of Corporate Control*. Cambridge, MA: Harvard University Press.
- Follett, Mary (1942) *Dynamic Administration*. New York: Harper.
- Galaskiewicz, Joseph (1985) 'Professional networks and the institutionalization of a single mind-set', *American Sociological Review*, 50: 639-58.
- Geertz, Clifford (1973) *The Interpretation of Cultures*. New York: Basic Books.
- Giddens, Anthony (1979) *Central Problems in Social Theory: Action, Structure, and Contradiction in Social Analysis*. Berkeley, CA: University of California Press.
- Goffman, Irving (1959) *Presentation of Self in Everyday Life*. New York: Doubleday.
- Goodman, Paul and Pennings, Johann (1977) *New Perspectives on Organizational Effectiveness*. San Francisco: Jossey-Bass.
- Gouldner, Alvin (1950) *Patterns of Industrial Bureaucracy*. Glencoe, IL: Free Press.
- Granovetter, Mark (1985) 'Economic action and social structure: the problem of embeddedness', *American Journal of Sociology*, 91: 481-510.
- Gulick, Luther and Urwick, L. (eds) (1937) *Papers on the Science of Administration*. New York: Institute of Public Administration, Columbia University.
- Hall, Richard (1987) *Organizations*. Englewood Cliffs, NJ: Prentice-Hall.
- Han, Shin-Kap (1994) 'Mimetic isomorphism and its effect on the audit services market', *Social Forces*, 73: 637-64.
- Hechter, Michael (1990) *Social Institutions: their Emergence, Maintenance, and Effects*. New York: Aldine de Gruyter.
- Huber, George and Glick, William (1993) *Organizational Change and Redesign: Ideas and Onsites for Improving Performance*. New York: Oxford University Press.
- Jones, E.E. (1964) *Ingratiation*. New York: Appleton-Century-Crofts.
- Jones, E.E. and Wortman, C.B. (1973) *Ingratiation: an Attributional Approach*. Morristown, NJ: General Learning Press.
- Kamens, David (1977) 'Legitimizing myths and educational organization: the relationship between organizational ideology and formal structure', *American Sociological Review*, 42: 208-19.
- Kanter, Rosabeth Moss (1983) *The Change Masters: Innovation for Productivity in the American Corporation*. New York: Simon and Schuster.
- Kanter, Rosabeth Moss (1989) *When Giants Learn to*

- Dance: Mastering the Challenge of Strategy, Management, and Careers in the 1990s*. New York: Simon and Schuster.
- Lawrence, Paul and Lorsch, Jay (1967) *Organization and Environment*. Boston: Graduate School of Business Administration, Harvard University.
- Leblebici, Hussein, Salancik, Gerald, Copay, Anne and King, Tom (1991) 'Institutional change and the transformation of interorganizational fields: an organizational history of U.S. radio broadcasting industry', *Administrative Science Quarterly*, 36: 333-63.
- March, James and Simon, Herbert (1957) *Organizations*. New York: Wiley.
- Merton, Robert (1948) 'Manifest and latent functions', in R. Merton (ed.), *Social Theory and Social Structure*. Glencoe, IL: Free Press. pp. 37-59.
- Meyer, John and Rowan, Brian (1977) 'Institutionalized organizations: formal structure as myth and ceremony', *American Journal of Sociology*, 83: 340-63.
- Meyer, Marshall (1979) 'Organizational structure as signaling', *Pacific Sociological Review*, 22: 481-500.
- Meyer, Marshall and Zucker, Lynne (1989) *Permanently Failing Organizations*. Newbury Park, CA: Sage.
- Mezias, Stephen (1990) 'An institutional model of organizational practice: financial reporting at the Fortune 200', *Administrative Science Quarterly*, 35: 431-51.
- Mezias, Stephen and Scarselletta, Mario (1994) 'Resolving financial reporting problems: an institutional analysis of the process', *Administrative Science Quarterly*, 30: 654-78.
- Michels, Robert (1962) *Political Parties*. New York: Free Press.
- Miner, Anne (1987) 'Idiosyncratic jobs in formal organizations', *Administrative Science Quarterly*, 32: 327-51.
- Miner, Anne (1991) 'Organizational evolution and the social ecology of jobs', *American Sociological Review*, 56: 772-85.
- Nelson, Richard and Winter, Sidney (1982) *An Evolutionary Theory of Economic Change*. Cambridge, MA: Harvard University Press.
- Oliver, Christine (1991) 'Strategic responses to institutional processes', *Academy of Management Review*, 16: 145-79.
- Palmer, Donald, Jennings, P. Devereaux and Zhou, Xueguang (1993) 'Late adoption of the multidivisional form by large U.S. corporations: institutional, political and economic accounts', *Administrative Science Quarterly*, 38: 100-31.
- Park, Robert E. (1922) *The Immigrant Press and its Control*. New York: Harper and Row.
- Parsons, Talcott (1956) 'Suggestions for a sociological approach to the theory of organizations', *Administrative Science Quarterly*, 1: 63-85.
- Parsons, Talcott (1960) *Structure and Process in Modern Societies*. New York: Free Press.
- Perrow, Charles (1984) *Normal Accidents*. New York: Basic Books.
- Pfeffer, Jeffrey (1982) *Organizations and Organization Theory*. Boston: Pitman.
- Pfeffer, Jeffrey and Salancik, Gerald (1978) *External Control of Organizations*. New York: Harper and Row.
- Pugh, D.S., Hickson, D.J. and Hinings, C.R. (1969) 'An empirical taxonomy of structures of work organizations', *Administrative Science Quarterly*, 14: 115-26.
- Quinn, Robert and Cameron, Kim (1988) *Paradox and Transformation: Toward a Theory of Change in Organization and Management*. Cambridge, MA: Ballinger.
- Reeves, Carol and Bednar, David (1994) 'Defining quality: alternatives and implications', *Academy of Management Review*, 19: 419-45.
- Ridgeway, Cecilia L. and Berger, Joseph (1986) 'Expectations, legitimation and dominance behavior in task groups', *American Sociological Review*, 51: 603-17.
- Ritti, Richard and Silver, Jonathan (1986) 'Early processes of institutionalization: the dramaturgy of exchange in interorganizational relations', *Administrative Science Quarterly*, 31: 25-42.
- Rowan, Brian (1982) 'Organizational structure and the institutional environment: the case of public schools', *Administrative Science Quarterly*, 27: 259-79.
- Rura, Thekla and Miner, Anne (1994) 'Degrees of institutionalization in organizational routines'. Working paper 9-94-16, University of Wisconsin, Madison, School of Business.
- Schutz, Alfred (1962) *Collected Papers: the Problem of Social Reality*, edited by M. Natanson. The Hague: Martinus Nijhoff.
- Schutz, Alfred (1967) *The Phenomenology of the Social World*. Evanston, IL: Northwestern Press.
- Scott, Marvin and Lyman, Stanford (1968) 'Accounts', *American Sociological Review*, 33: 46-62.
- Scott, Richard (1987) 'The adolescence of institutional theory', *Administrative Science Quarterly*, 32: 493-511.
- Scott, Richard (1994) 'Institutional analysis: variance and process theory approaches', in W.R. Scott and J.W. Meyer (eds), *Institutional Environments and Organizations: Structural Complexity and Individualism*. Thousand Oaks, CA: Sage. pp. 81-99.
- Scott, Richard and Meyer, John (1994) *Institutional Environments and Organizations: Structural Complexity and Individualism*. Thousand Oaks, CA: Sage.
- Selznick, Philip (1949) *TVA and the Grassroots*. Berkeley, CA: University of California Press.
- Selznick, Philip (1957) *Leadership in Administration*. New York: Harper and Row.
- Simon, Herbert (1947) *Administrative Behavior*. New York: Free Press.
- Sitkin, Sim, Sutcliffe, Kathleen and Schroeder, Roger (1994) 'Distinguishing control from learning in total

- quality management: a contingency perspective', *Academy of Management Review*, 19: 537-64.
- Stinchcombe, Arthur (1959) 'Bureaucratic and craft administration of production: a comparative study', *Administrative Science Quarterly*, 4: 168-87.
- Strang, David (1990) 'From dependency to sovereignty: an event history analysis of decolonization 1870-1987', *American Sociological Review*, 55: 846-60.
- Strang, David (1994) 'Institutional accounts of organizations as a form of structural analysis', *Current Perspectives in Social Theory*, 1: 151-74. Greenwich, CT: JAI Press.
- Strang, David and Meyer, John (1993) 'Institutional conditions for diffusion', *Theory and Society*, 22: 487-511.
- Strang, David and Tuma, Nancy (1994) 'Spatial and temporal heterogeneity in diffusion', *American Journal of Sociology*, 99: 614-39.
- Stryker, Robin (1994) 'Rules, resources and legitimacy processes: some implications for social conflict, order and change', *American Journal of Sociology*, 99: 847-910.
- Sutton, John, Dobbin, Frank, Meyer, John and Scott, W.R. (1994) 'The legalization of the workplace', *American Journal of Sociology*, 99: 944-71.
- Thomas, W.I. and Znaniecki, Florian (1927) *The Polish Peasant in Europe and America*. New York: Dover.
- Thompson, James (1967) *Organizations in Action*. New York: McGraw-Hill.
- Thompson, James and McEwen, William (1958) 'Organizational goals and environment: goal-setting as an interaction process', *American Sociological Review*, 23: 23-31.
- Tolbert, Pamela S. (1985) 'Institutional environments and resource dependence: sources of administrative structure in institutions of higher education', *Administrative Science Quarterly*, 30: 1-13.
- Tolbert, Pamela S. (1988) 'Institutional sources of culture in major law firms', in L. Zucker (ed.), *Institutional Patterns in Organizations: Culture and Environment*. Cambridge, MA: Ballinger. pp. 101-13.
- Tolbert, Pamela S. and Zucker, Lynne (1983) 'Institutional sources of change in the formal structure of organizations: the diffusion of civil service reform, 1880-1935', *Administrative Science Quarterly*, 28: 22-39.
- Turner, Jonathan (1974) *The Structure of Sociological Theory*. New York: Dorsey.
- Walker, Henry, Thomas, George and Zelditch, Morris (1986) 'Legitimation, endorsement and stability', *Social Forces*, 64: 620-43.
- Weber, Max (1946) *The Theory of Social and Economic Organization* (1924 in German), edited by A.M. Henderson and Talcott Parsons. Glencoe, IL: Free Press.
- Webster, Murray Jr. and Driskell, James E. (1978) 'Status generalization: a review and some new data', *American Sociological Review*, 43: 220-36.
- Weick, Karl (1969) *Social Psychology of Organizations*. Reading, MA: Addison-Wesley.
- Williamson, Oliver (1975) *Markets and Hierarchies*. New York: Free Press.
- Woodward, Joan (1965) *Industrial Organization: Theory and Practice*. New York: Oxford University Press.
- Wrong, Dennis (1961) 'The over-socialized conception of man in modern sociology', *American Sociological Review*, 26: 183-93.
- Yates, Joanne and Orlikowski, Wanda (1992) 'Genres of organizational communication: a structural approach to studying communication and media', *Academy of Management Review*, 17: 299-326.
- Zald, Mayer and Berger, Michael (1978) 'Social movements in organizations: *coup d'état*, insurgency and mass movements', *American Journal of Sociology*, 83: 823-61.
- Zald, Mayer and Denton, Patricia (1963) 'From evangelism to general service: the transformation of the YMCA', *Administrative Science Quarterly*, 8: 214-34.
- Zelditch, Morris Jr, Lauderdale, Patrick and Stublarec, Stephen (1980) 'How are inconsistencies between status and ability resolved?', *Social Forces*, 58: 1025-43.
- Zhou, Xueguang (1993) 'Occupational power, state capacities, and the diffusion of licensing in the American states: 1890-1950', *American Sociological Review*, 58: 536-52.
- Zucker, Lynne G. (1977) 'The role of institutionalization in cultural persistence', *American Sociological Review*, 42: 726-43.
- Zucker, Lynne G. (1988) 'Where do institutional patterns come from? Organizations as actors in social systems', in Lynne G. Zucker (ed.), *Institutional patterns and organizations: Culture and environment*. Cambridge, MA: Ballinger. pp. 23-49.
- Zucker, Lynne G. (1991) 'Postscript: microfoundations of institutional thought', in Walter W. Powell and Paul J. DiMaggio (eds), *The New Institutionalism in Organizational Analysis*. Chicago, IL: University of Chicago Press. pp. 103-7.
- Zucker, Lynne G. and Darby, Michael R. (1994) 'The organization of biotechnology science and its commercialization in Japan', UCLA Institute for Social Science Research Working Papers in the Social Sciences, Volume 6, Number 1, August.
- Zucker, Lynne G. and Kreft, Ita G.G. (1994) 'The evolution of socially contingent rational actions: effects of labor strikes on change in union founding in the 1880s', in J. Baum and J.V. Singh (eds), *Evolutionary Dynamics of Organizations*. New York: Oxford University Press. pp. 294-313.
- Zucker, Lynne G., Darby, Michael R., Brewer, Marilyn B. and Peng, Yusheng (1995) 'Collaboration structure and information dilemmas in biotechnology: organizational boundaries as trust production', in R. Kramer and T. Tyler (eds), *Trust in Organizations*. Thousand Oaks, CA: Sage.