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THE IRON CAGE REVISITED: INSTITUTIONAL ISOMORPHISM AND COLLECTIVE RATIONALITY IN ORGANIZATIONAL FIELDS*

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What makes organizations so similar? We contend that the engine of rationalization and bureaucratization has moved from the competitive marketplace to the state and the professions. Once a set of organizations emerges as a field, a paradox arises: rational actors make their organizations increasingly similar as they try to change them. We describe three isomorphic processes—coercive, mimetic, and normative—leading to this outcome. We then specify hypotheses about the impact of resource centralization and dependency, goal ambiguity and technical uncertainty, and professionalization and structuration on isomorphic change. Finally, we suggest implications for theories of organizations and social change.

In *The Protestant Ethic and the Spirit of Capitalism*, Max Weber warned that the rationalist spirit ushered in by asceticism had achieved a momentum of its own and that, under capitalism, the rationalist order had become an iron cage in which humanity was, save for the possibility of prophetic revival, imprisoned “perhaps until the last ton of fossilized coal is burnt” (Weber, 1952:181–82). In his essay on bureaucracy, Weber returned to this theme, contending that bureaucracy, the rational spirit’s organizational manifestation, was so efficient and powerful a means of controlling men and women that, once established, the momentum of bureaucratization was irreversible (Weber, 1968).

The imagery of the iron cage has haunted students of society as the tempo of bureaucratization has quickened. But while bureaucracy has spread continuously in the eighty years since Weber wrote, we suggest that the engine of organizational rationalization has shifted. For Weber, bureaucratization resulted from three related causes: competition among

capitalist firms in the marketplace; competition among states, increasing rulers’ need to control their staff and citizenry; and bourgeois demands for equal protection under the law. Of these three, the most important was the competitive marketplace. “Today,” Weber (1968:974) wrote:

it is primarily the capitalist market economy which demands that the official business of administration be discharged precisely, unambiguously, continuously, and with as much speed as possible. Normally, the very large, modern capitalist enterprises are themselves unequalled models of strict bureaucratic organization.

We argue that the causes of bureaucratization and rationalization have changed. The bureaucratization of the corporation and the state have been achieved. Organizations are still becoming more homogeneous, and bureaucracy remains the common organizational form. Today, however, structural change in organizations seems less and less driven by competition or by the need for efficiency. Instead, we will contend, bureaucratization and other forms of organizational change occur as the result of processes that make organizations more similar without necessarily making them more efficient. Bureaucratization and other forms of homogenization emerge, we argue, out of the structuration (Giddens, 1979) of organizational fields. This process, in turn, is effected largely by the state and the professions, which have become the great rationalizers of the second half of the twentieth century. For reasons that we will explain, highly structured organizational fields provide a context in which individual efforts to deal rationally with uncertainty and constraint often lead, in the aggregate, to homogeneity in structure, culture, and output.

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ORGANIZATIONAL THEORY AND ORGANIZATIONAL DIVERSITY

Much of modern organizational theory posits a diverse and differentiated world of organizations and seeks to explain variation among organizations in structure and behavior (e.g., Woodward, 1965; Child and Kieser, 1981). Hannan and Freeman begin a major theoretical paper (1977) with the question, "Why are there so many kinds of organizations?" Even our investigatory technologies (for example, those based on least-squares techniques) are geared towards explaining variation rather than its absence.

We ask, instead, why there is such startling homogeneity of organizational forms and practices; and we seek to explain homogeneity, not variation. In the initial stages of their life cycle, organizational fields display considerable diversity in approach and form. Once a field becomes well established, however, there is an inexorable push towards homogenization.

Coser, Kadushin, and Powell (1982) describe the evolution of American college textbook publishing from a period of initial diversity to the current hegemony of only two models, the large bureaucratic generalist and the small specialist. Rothman (1980) describes the winnowing of several competing models of legal education into two dominant approaches. Starr (1980) provides evidence of mimicry in the development of the hospital field; Tyack (1974) and Katz (1975) show a similar process in public schools; Barnouw (1966-68) describes the development of dominant forms in the radio industry; and DiMaggio (1981) depicts the emergence of dominant organizational models for the provision of high culture in the late nineteenth century.

What we see in each of these cases is the emergence and structuration of an organizational field as a result of the activities of a diverse set of organizations; and, second, the homogenization of these organizations, and of new entrants as well, once the field is established.

By organizational field, we mean those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products. The virtue of this unit of analysis is that it directs our attention not simply to competing firms, as does the population approach of Hannan and Freeman (1977), or to networks of organizations that actually interact, as does the inter-organizational network approach of Laumann et al. (1978), but to the totality of relevant actors. In doing this, the field idea com-

prehends the importance of both *connectedness* (see Laumann et al., 1978) and *structural equivalence* (White et al., 1976).¹

The structure of an organizational field cannot be determined a priori but must be defined on the basis of empirical investigation. Fields only exist to the extent that they are institutionally defined. The process of institutional definition, or "structuration," consists of four parts: an increase in the extent of interaction among organizations in the field; the emergence of sharply defined interorganizational structures of domination and patterns of coalition; an increase in the information load with which organizations in a field must contend; and the development of a mutual awareness among participants in a set of organizations that they are involved in a common enterprise (DiMaggio, 1982).

Once disparate organizations in the same line of business are structured into an actual field (as we shall argue, by competition, the state, or the professions), powerful forces emerge that lead them to become more similar to one another. Organizations may change their goals or develop new practices, and new organizations enter the field. But, in the long run, organizational actors making rational decisions construct around themselves an environment that constrains their ability to change further in later years. Early adopters of organizational innovations are commonly driven by a desire to improve performance. But new practices can become, in Selznick's words (1957:17), "infused with value beyond the technical requirements of the task at hand." As an innovation spreads, a threshold is reached beyond which adoption provides legitimacy rather than improves performance (Meyer and Rowan, 1977). Strategies that are rational for individual organizations may not be rational if adopted by large numbers. Yet the very fact that they are normatively sanctioned increases the likelihood of their adoption. Thus organizations may try to change constantly; but, after

¹ By *connectedness* we mean the existence of transactions tying organizations to one another: such transactions might include formal contractual relationships, participation of personnel in common enterprises such as professional associations, labor unions, or boards of directors, or informal organizational-level ties like personnel flows. A set of organizations that are strongly connected to one another and only weakly connected to other organizations constitutes a *clique*. By *structural equivalence* we refer to similarity of position in a network structure: for example, two organizations are structurally equivalent if they have ties of the same kind to the same set of other organizations, even if they themselves are not connected: here the key structure is the *role* or *block*.

a certain point in the structuration of an organizational field, the aggregate effect of individual change is to lessen the extent of diversity within the field.² Organizations in a structured field, to paraphrase Schelling (1978:14), respond to an environment that consists of other organizations responding to their environment, which consists of organizations responding to an environment of organizations' responses.

Zucker and Tolbert's (1981) work on the adoption of civil-service reform in the United States illustrates this process. Early adoption of civil-service reforms was related to internal governmental needs, and strongly predicted by such city characteristics as the size of immigrant population, political reform movements, socioeconomic composition, and city size. Later adoption, however, is not predicted by city characteristics, but is related to institutional definitions of the legitimate structural form for municipal administration.³ Marshall Meyer's (1981) study of the bureaucratization of urban fiscal agencies has yielded similar findings: strong relationships between city characteristics and organizational attributes at the turn of the century, null relationships in recent years. Carroll and Delacroix's (1982) findings on the birth and death rates of newspapers support the view that selection acts with great force only in the early years of an industry's existence.⁴ Freeman (1982:14) sug-

gests that older, larger organizations reach a point where they can dominate their environments rather than adjust to them.

The concept that best captures the process of homogenization is *isomorphism*. In Hawley's (1968) description, isomorphism is a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions. At the population level, such an approach suggests that organizational characteristics are modified in the direction of increasing compatibility with environmental characteristics; the number of organizations in a population is a function of environmental carrying capacity; and the diversity of organizational forms is isomorphic to environmental diversity. Hannan and Freeman (1977) have significantly extended Hawley's ideas. They argue that isomorphism can result because nonoptimal forms are selected out of a population of organizations *or* because organizational decision makers learn appropriate responses and adjust their behavior accordingly. Hannan and Freeman's focus is almost solely on the first process: selection.⁵

Following Meyer (1979) and Fennell (1980), we maintain that there are two types of isomorphism: competitive and institutional. Hannan and Freeman's classic paper (1977), and much of their recent work, deals with competitive isomorphism, assuming a system

² By organizational change, we refer to change in formal structure, organizational culture, and goals, program, or mission. Organizational change varies in its responsiveness to technical conditions. In this paper we are most interested in processes that affect organizations in a given field: in most cases these organizations employ similar technical bases; thus we do not attempt to partial out the relative importance of technically functional versus other forms of organizational change. While we shall cite many examples of organizational change as we go along, our purpose here is to identify a widespread class of organizational processes relevant to a broad range of substantive problems, rather than to identify deterministically the causes of specific organizational arrangements.

³ Knoke (1982), in a careful event-history analysis of the spread of municipal reform, refutes the conventional explanations of culture clash or hierarchal diffusion and finds but modest support for modernization theory. His major finding is that regional differences in municipal reform adoption arise not from social compositional differences, "but from some type of imitation or contagion effects as represented by the level of neighboring regional cities previously adopting reform government" (p. 1337).

⁴ A wide range of factors—interorganizational commitments, elite sponsorship, and government support in form of open-ended contracts, subsidy, tariff barriers and import quotas, or favorable tax laws—reduce selection pressures even in competi-

tive organizational fields. An expanding or a stable, protected market can also mitigate the forces of selection.

⁵ In contrast to Hannan and Freeman, we emphasize adaptation, but we are not suggesting that managers' actions are necessarily strategic in a long-range sense. Indeed, two of the three forms of isomorphism described below—mimetic and normative—involve managerial behaviors at the level of taken-for-granted assumptions rather than consciously strategic choices. In general, we question the utility of arguments about the motivations of actors that suggest a polarity between the rational and the nonrational. Goal-oriented behavior may be reflexive or prerational in the sense that it reflects deeply embedded predispositions, scripts, schema, or classifications; and behavior oriented to a goal may be reinforced without contributing to the accomplishment of that goal. While isomorphic change may often be mediated by the desires of managers to increase the effectiveness of their organizations, we are more concerned with the menu of possible options that managers consider than with their motives for choosing particular alternatives. In other words, we freely concede that actors' understandings of their own behaviors are interpretable in rational terms. The theory of isomorphism addresses not the psychological states of actors but the structural determinants of the range of choices that actors perceive as rational or prudent.

rationality that emphasizes market competition, niche change, and fitness measures. Such a view, we suggest, is most relevant for those fields in which free and open competition exists. It explains parts of the process of bureaucratization that Weber observed, and may apply to early adoption of innovation, but it does not present a fully adequate picture of the modern world of organizations. For this purpose it must be supplemented by an institutional view of isomorphism of the sort introduced by Kanter (1972:152–54) in her discussion of the forces pressing communes toward accommodation with the outside world. As Aldrich (1979:265) has argued, “the major factors that organizations must take into account are other organizations.” Organizations compete not just for resources and customers, but for political power and institutional legitimacy, for social as well as economic fitness.⁶ The concept of institutional isomorphism is a useful tool for understanding the politics and ceremony that pervade much modern organizational life.

Three Mechanisms of Institutional Isomorphic Change

We identify three mechanisms through which institutional isomorphic change occurs, each with its own antecedents: 1) *coercive* isomorphism that stems from political influence and the problem of legitimacy; 2) *mimetic* isomorphism resulting from standard responses to uncertainty; and 3) *normative* isomorphism, associated with professionalization. This typology is an analytic one: the types are not always empirically distinct. For example, external actors may induce an organization to conform to its peers by requiring it to perform a particular task and specifying the profession responsible for its performance. Or mimetic change may reflect environmentally constructed uncertainties.⁷ Yet, while the three types intermingle in empirical setting, they tend to derive from different conditions and may lead to different outcomes.

Coercive isomorphism. Coercive isomorphism results from both formal and informal pressures exerted on organizations by other organizations upon which they are dependent and by cultural expectations in the society within which organizations function. Such pressures may be felt as force, as persua-

sion, or as invitations to join in collusion. In some circumstances, organizational change is a direct response to government mandate: manufacturers adopt new pollution control technologies to conform to environmental regulations; nonprofits maintain accounts, and hire accountants, in order to meet tax law requirements; and organizations employ affirmative-action officers to fend off allegations of discrimination. Schools mainstream special students and hire special education teachers, cultivate PTAs and administrators who get along with them, and promulgate curricula that conform with state standards (Meyer et al., 1981). The fact that these changes may be largely ceremonial does not mean that they are inconsequential. As Ritti and Goldner (1979) have argued, staff become involved in advocacy for their functions that can alter power relations within organizations over the long run.

The existence of a common legal environment affects many aspects of an organization's behavior and structure. Weber pointed out the profound impact of a complex, rationalized system of contract law that requires the necessary organizational controls to honor legal commitments. Other legal and technical requirements of the state—the vicissitudes of the budget cycle, the ubiquity of certain fiscal years, annual reports, and financial reporting requirements that ensure eligibility for the receipt of federal contracts or funds—also shape organizations in similar ways. Pfeffer and Salancik (1978:188–224) have discussed how organizations faced with unmanageable interdependence seek to use the greater power of the larger social system and its government to eliminate difficulties or provide for needs. They observe that politically constructed environments have two characteristic features: political decisionmakers often do not experience directly the consequences of their actions; and political decisions are applied across the board to entire classes of organizations, thus making such decisions less adaptive and less flexible.

Meyer and Rowan (1977) have argued persuasively that as rationalized states and other large rational organizations expand their dominance over more arenas of social life, organizational structures increasingly come to reflect rules institutionalized and legitimated by and within the state (also see Meyer and Hannan, 1979). As a result, organizations are increasingly homogeneous within given domains and increasingly organized around rituals of conformity to wider institutions. At the same time, organizations are decreasingly structurally determined by the constraints posed by technical activities, and decreasingly held together

⁶ Carroll and Delacroix (1982) clearly recognize this and include political and institutional legitimacy as a major resource. Aldrich (1979) has argued that the population perspective must attend to historical trends and changes in legal and political institutions.

⁷ This point was suggested by John Meyer.

by output controls. Under such circumstances, organizations employ ritualized controls of credentials and group solidarity.

Direct imposition of standard operating procedures and legitimated rules and structures also occurs outside the governmental arena. Michael Sedlak (1981) has documented the ways that United Charities in the 1930s altered and homogenized the structures, methods, and philosophies of the social service agencies that depended upon them for support. As conglomerate corporations increase in size and scope, standard performance criteria are not necessarily imposed on subsidiaries, but it is common for subsidiaries to be subject to standardized reporting mechanisms (Coser et al., 1982). Subsidiaries must adopt accounting practices, performance evaluations, and budgetary plans that are compatible with the policies of the parent corporation. A variety of service infrastructures, often provided by monopolistic firms—for example, telecommunications and transportation—exert common pressures over the organizations that use them. Thus, the expansion of the central state, the centralization of capital, and the coordination of philanthropy all support the homogenization of organizational models through direct authority relationships.

We have so far referred only to the direct and explicit imposition of organizational models on dependent organizations. Coercive isomorphism, however, may be more subtle and less explicit than these examples suggest. Milofsky (1981) has described the ways in which neighborhood organizations in urban communities, many of which are committed to participatory democracy, are driven to developing organizational hierarchies in order to gain support from more hierarchically organized donor organizations. Similarly, Swidler (1979) describes the tensions created in the free schools she studied by the need to have a "principal" to negotiate with the district superintendent and to represent the school to outside agencies. In general, the need to lodge responsibility and managerial authority at least ceremonially in a formally defined role in order to interact with hierarchical organizations is a constant obstacle to the maintenance of egalitarian or collectivist organizational forms (Kanter, 1972; Rothschild-Whitt, 1979).

Mimetic processes. Not all institutional isomorphism, however, derives from coercive authority. Uncertainty is also a powerful force that encourages imitation. When organizational technologies are poorly understood (March and Olsen, 1976), when goals are ambiguous, or when the environment creates symbolic uncertainty, organizations may model themselves on other organizations. The

advantages of mimetic behavior in the economy of human action are considerable; when an organization faces a problem with ambiguous causes or unclear solutions, problemistic search may yield a viable solution with little expense (Cyert and March, 1963).

Modeling, as we use the term, is a response to uncertainty. The modeled organization may be unaware of the modeling or may have no desire to be copied; it merely serves as a convenient source of practices that the borrowing organization may use. Models may be diffused unintentionally, indirectly through employee transfer or turnover, or explicitly by organizations such as consulting firms or industry trade associations. Even innovation can be accounted for by organizational modeling. As Alchian (1950) has observed:

While there certainly are those who consciously innovate, there are those who, in their imperfect attempts to imitate others, unconsciously innovate by unwittingly acquiring some unexpected or unsought unique attributes which under the prevailing circumstances prove partly responsible for the success. Others, in turn, will attempt to copy the uniqueness, and the innovation-imitation process continues.

One of the most dramatic instances of modeling was the effort of Japan's modernizers in the late nineteenth century to model new governmental initiatives on apparently successful western prototypes. Thus, the imperial government sent its officers to study the courts, Army, and police in France, the Navy and postal system in Great Britain, and banking and art education in the United States (see Westney, forthcoming). American corporations are now returning the compliment by implementing (their perceptions of) Japanese models to cope with thorny productivity and personnel problems in their own firms. The rapid proliferation of quality circles and quality-of-work-life issues in American firms is, at least in part, an attempt to model Japanese and European successes. These developments also have a ritual aspect; companies adopt these "innovations" to enhance their legitimacy, to demonstrate they are at least trying to improve working conditions. More generally, the wider the population of personnel employed by, or customers served by, an organization, the stronger the pressure felt by the organization to provide the programs and services offered by other organizations. Thus, either a skilled labor force or a broad customer base may encourage mimetic isomorphism.

Much homogeneity in organizational structures stems from the fact that despite con-

siderable search for diversity there is relatively little variation to be selected from. New organizations are modeled upon old ones throughout the economy, and managers actively seek models upon which to build (Kimberly, 1980). Thus, in the arts one can find textbooks on how to organize a community arts council or how to start a symphony women's guild. Large organizations choose from a relatively small set of major consulting firms, which, like Johnny Appleseeds, spread a few organizational models throughout the land. Such models are powerful because structural changes are observable, whereas changes in policy and strategy are less easily noticed. With the advice of a major consulting firm, a large metropolitan public television station switched from a functional design to a multidivisional structure. The stations' executives were skeptical that the new structure was more efficient; in fact, some services were now duplicated across divisions. But they were convinced that the new design would carry a powerful message to the for-profit firms with whom the station regularly dealt. These firms, whether in the role of corporate underwriters or as potential partners in joint ventures, would view the reorganization as a sign that "the sleepy nonprofit station was becoming more business-minded" (Powell, forthcoming). The history of management reform in American government agencies, which are noted for their goal ambiguity, is almost a textbook case of isomorphic modeling, from the PPPB of the McNamara era to the zero-based budgeting of the Carter administration.

Organizations tend to model themselves after similar organizations in their field that they perceive to be more legitimate or successful. The ubiquity of certain kinds of structural arrangements can more likely be credited to the universality of mimetic processes than to any concrete evidence that the adopted models enhance efficiency. John Meyer (1981) contends that it is easy to predict the organization of a newly emerging nation's administration without knowing anything about the nation itself, since "peripheral nations are far more isomorphic—in administrative form and economic pattern—than any theory of the world system of economic division of labor would lead one to expect."

Normative pressures. A third source of isomorphic organizational change is normative and stems primarily from professionalization. Following Larson (1977) and Collins (1979), we interpret professionalization as the collective struggle of members of an occupation to define the conditions and methods of their work, to control "the production of producers" (Larson, 1977:49–52), and to establish a cognitive

base and legitimation for their occupational autonomy. As Larson points out, the professional project is rarely achieved with complete success. Professionals must compromise with nonprofessional clients, bosses, or regulators. The major recent growth in the professions has been among organizational professionals, particularly managers and specialized staff of large organizations. The increased professionalization of workers whose futures are inextricably bound up with the fortunes of the organizations that employ them has rendered obsolescent (if not obsolete) the dichotomy between organizational commitment and professional allegiance that characterized traditional professionals in earlier organizations (Hall, 1968). Professions are subject to the same coercive and mimetic pressures as are organizations. Moreover, while various kinds of professionals within an organization may differ from one another, they exhibit much similarity to their professional counterparts in other organizations. In addition, in many cases, professional power is as much assigned by the state as it is created by the activities of the professions.

Two aspects of professionalization are important sources of isomorphism. One is the resting of formal education and of legitimation in a cognitive base produced by university specialists; the second is the growth and elaboration of professional networks that span organizations and across which new models diffuse rapidly. Universities and professional training institutions are important centers for the development of organizational norms among professional managers and their staff. Professional and trade associations are another vehicle for the definition and promulgation of normative rules about organizational and professional behavior. Such mechanisms create a pool of almost interchangeable individuals who occupy similar positions across a range of organizations and possess a similarity of orientation and disposition that may override variations in tradition and control that might otherwise shape organizational behavior (Perrow, 1974).

One important mechanism for encouraging normative isomorphism is the filtering of personnel. Within many organizational fields filtering occurs through the hiring of individuals from firms within the same industry; through the recruitment of fast-track staff from a narrow range of training institutions; through common promotion practices, such as always hiring top executives from financial or legal departments; and from skill-level requirements for particular jobs. Many professional career tracks are so closely guarded, both at the entry level and throughout the career progression,

that individuals who make it to the top are virtually indistinguishable. March and March (1977) found that individuals who attained the position of school superintendent in Wisconsin were so alike in background and orientation as to make further career advancement random and unpredictable. Hirsch and Whisler (1982) find a similar absence of variation among *Fortune* 500 board members. In addition, individuals in an organizational field undergo anticipatory socialization to common expectations about their personal behavior, appropriate style of dress, organizational vocabularies (Cicourel, 1970; Williamson, 1975) and standard methods of speaking, joking, or addressing others (Ouchi, 1980). Particularly in industries with a service or financial orientation (Collins, 1979, argues that the importance of credentials is strongest in these areas), the filtering of personnel approaches what Kanter (1977) refers to as the "homosexual reproduction of management." To the extent managers and key staff are drawn from the same universities and filtered on a common set of attributes, they will tend to view problems in a similar fashion, see the same policies, procedures and structures as normatively sanctioned and legitimated, and approach decisions in much the same way.

Entrants to professional career tracks who somehow escape the filtering process—for example, Jewish naval officers, woman stockbrokers, or Black insurance executives—are likely to be subjected to pervasive on-the-job socialization. To the extent that organizations in a field differ and primary socialization occurs on the job, socialization could reinforce, not erode, differences among organizations. But when organizations in a field are similar and occupational socialization is carried out in trade association workshops, in-service educational programs, consultant arrangements, employer-professional school networks, and in the pages of trade magazines, socialization acts as an isomorphic force.

The professionalization of management tends to proceed in tandem with the structuration of organizational fields. The exchange of information among professionals helps contribute to a commonly recognized hierarchy of status, of center and periphery, that becomes a matrix for information flows and personnel movement across organizations. This status ordering occurs through both formal and informal means. The designation of a few large firms in an industry as key bargaining agents in union-management negotiations may make these central firms pivotal in other respects as well. Government recognition of key firms or organizations through the grant or contract process may give these organizations legiti-

macy and visibility and lead competing firms to copy aspects of their structure or operating procedures in hope of obtaining similar rewards. Professional and trade associations provide other arenas in which center organizations are recognized and their personnel given positions of substantive or ceremonial influence. Managers in highly visible organizations may in turn have their stature reinforced by representation on the boards of other organizations, participation in industry-wide or inter-industry councils, and consultation by agencies of government (Useem, 1979). In the nonprofit sector, where legal barriers to collusion do not exist, structuration may proceed even more rapidly. Thus executive producers or artistic directors of leading theatres head trade or professional association committees, sit on government and foundation grant-award panels, or consult as government- or foundation-financed management advisors to smaller theatres, or sit on smaller organizations' boards, even as their stature is reinforced and enlarged by the grants their theatres receive from government, corporate, and foundation funding sources (DiMaggio, 1982).

Such central organizations serve as both active and passive models; their policies and structures will be copied throughout their fields. Their centrality is reinforced as upwardly mobile managers and staff seek to secure positions in these central organizations in order to further their own careers. Aspiring managers may undergo anticipatory socialization into the norms and mores of the organizations they hope to join. Career paths may also involve movement from entry positions in the center organizations to middle-management positions in peripheral organizations. Personnel flows within an organizational field are further encouraged by structural homogenization, for example the existence of common career titles and paths (such as assistant, associate, and full professor) with meanings that are commonly understood.

It is important to note that each of the institutional isomorphic processes can be expected to proceed in the absence of evidence that they increase internal organizational efficiency. To the extent that organizational effectiveness is enhanced, the reason will often be that organizations are rewarded for being similar to other organizations in their fields. This similarity can make it easier for organizations to transact with other organizations, to attract career-minded staff, to be acknowledged as legitimate and reputable, and to fit into administrative categories that define eligibility for public and private grants and contracts. None of this, however, insures that

conformist organizations do what they do more efficiently than do their more deviant peers.

Pressures for competitive efficiency are also mitigated in many fields because the number of organizations is limited and there are strong fiscal and legal barriers to entry and exit. Lee (1971:51) maintains this is why hospital administrators are less concerned with the efficient use of resources and more concerned with status competition and parity in prestige. Fennell (1980) notes that hospitals are a poor market system because patients lack the needed knowledge of potential exchange partners and prices. She argues that physicians and hospital administrators are the actual consumers. Competition among hospitals is based on "attracting physicians, who, in turn, bring their patients to the hospital." Fennell (p. 505) concludes that:

Hospitals operate according to a norm of social legitimation that frequently conflicts with market considerations of efficiency and system rationality. Apparently, hospitals can increase their range of services not because there is an actual need for a particular service or facility within the patient population, but because they will be defined as fit only if they can offer everything other hospitals in the area offer.

These results suggest a more general pattern. Organizational fields that include a large professionally trained labor force will be driven primarily by status competition. Organizational prestige and resources are key elements in attracting professionals. This process encourages homogenization as organizations seek to ensure that they can provide the same benefits and services as their competitors.

PREDICTORS OF ISOMORPHIC CHANGE

It follows from our discussion of the mechanism by which isomorphic change occurs that we should be able to predict empirically which organizational fields will be most homogeneous in structure, process, and behavior. While an empirical test of such predictions is beyond the scope of this paper, the ultimate value of our perspective will lie in its predictive utility. The hypotheses discussed below are not meant to exhaust the universe of predictors, but merely to suggest several hypotheses that may be pursued using data on the characteristics of organizations in a field, either cross-sectionally or, preferably, over time. The hypotheses are implicitly governed by *ceteris paribus* assumptions, particularly with regard to size, technology, and centralization of external resources.

A. *Organizational-level predictors.* There is

variability in the extent to and rate at which organizations in a field change to become more like their peers. Some organizations respond to external pressures quickly; others change only after a long period of resistance. The first two hypotheses derive from our discussion of coercive isomorphism and constraint.

Hypothesis A-1: *The greater the dependence of an organization on another organization, the more similar it will become to that organization in structure, climate, and behavioral focus.* Following Thompson (1957) and Pfeffer and Salancik (1978), this proposition recognizes the greater ability of organizations to resist the demands of organizations on whom they are not dependent. A position of dependence leads to isomorphic change. Coercive pressures are built into exchange relationships. As Williamson (1979) has shown, exchanges are characterized by transaction-specific investments in both knowledge and equipment. Once an organization chooses a specific supplier or distributor for particular parts or services, the supplier or distributor develops expertise in the performance of the task as well as idiosyncratic knowledge about the exchange relationship. The organization comes to rely on the supplier or distributor and such transaction-specific investments give the supplier or distributor considerable advantages in any subsequent competition with other suppliers or distributors.

Hypothesis A-2: *The greater the centralization of organization A's resource supply, the greater the extent to which organization A will change isomorphically to resemble the organizations on which it depends for resources.* As Thompson (1967) notes, organizations that depend on the same sources for funding, personnel, and legitimacy will be more subject to the whims of resource suppliers than will organizations that can play one source of support off against another. In cases where alternative sources are either not readily available or require effort to locate, the stronger party to the transaction can coerce the weaker party to adopt its practices in order to accommodate the stronger party's needs (see Powell, 1983).

The third and fourth hypotheses derive from our discussion of mimetic isomorphism, modeling, and uncertainty.

Hypothesis A-3: *The more uncertain the relationship between means and ends the greater the extent to which an organization will model itself after organizations it perceives to be successful.* The mimetic thought process involved in the search for models is characteristic of change in organizations in which key technologies are only poorly understood (March and Cohen, 1974). Here our prediction diverges somewhat from Meyer and Rowan

(1977) who argue, as we do, that organizations which lack well-defined technologies will import institutionalized rules and practices. Meyer and Rowan posit a loose coupling between legitimated external practices and internal organizational behavior. From an ecologist's point of view, loosely coupled organizations are more likely to vary internally. In contrast, we expect substantive internal changes in tandem with more ceremonial practices, thus greater homogeneity and less variation and change. Internal consistency of this sort is an important means of interorganizational coordination. It also increases organizational stability.

Hypothesis A-4: *The more ambiguous the goals of an organization, the greater the extent to which the organization will model itself after organizations that it perceives to be successful.* There are two reasons for this. First, organizations with ambiguous or disputed goals are likely to be highly dependent upon appearances for legitimacy. Such organizations may find it to their advantage to meet the expectations of important constituencies about how they should be designed and run. In contrast to our view, ecologists would argue that organizations that copy other organizations usually have no competitive advantage. We contend that, in most situations, reliance on established, legitimated procedures enhances organizational legitimacy and survival characteristics. A second reason for modeling behavior is found in situations where conflict over organizational goals is repressed in the interest of harmony; thus participants find it easier to mimic other organizations than to make decisions on the basis of systematic analyses of goals since such analyses would prove painful or disruptive.

The fifth and sixth hypotheses are based on our discussion of normative processes found in professional organizations.

Hypothesis A-5: *The greater the reliance on academic credentials in choosing managerial and staff personnel, the greater the extent to which an organization will become like other organizations in its field.* Applicants with academic credentials have already undergone a socialization process in university programs, and are thus more likely than others to have internalized reigning norms and dominant organizational models.

Hypothesis A-5: *The greater the participation of organizational managers in trade and professional associations, the more likely the organization will be, or will become, like other organizations in its field.* This hypothesis is parallel to the institutional view that the more elaborate the relational networks among organizations and their members, the greater

the collective organization of the environment (Meyer and Rowan, 1977).

B. *Field-level predictors.* The following six hypotheses describe the expected effects of several characteristics of organizational fields on the extent of isomorphism in a particular field. Since the effect of institutional isomorphism is homogenization, the best indicator of isomorphic change is a decrease in variation and diversity, which could be measured by lower standard deviations of the values of selected indicators in a set of organizations. The key indicators would vary with the nature of the field and the interests of the investigator. In all cases, however, field-level measures are expected to affect organizations in a field regardless of each organization's scores on related organizational-level measures.

Hypothesis B-1: *The greater the extent to which an organizational field is dependent upon a single (or several similar) source of support for vital resources, the higher the level of isomorphism.* The centralization of resources within a field both directly causes homogenization by placing organizations under similar pressures from resource suppliers, and interacts with uncertainty and goal ambiguity to increase their impact. This hypothesis is congruent with the ecologists' argument that the number of organizational forms is determined by the distribution of resources in the environment and the terms on which resources are available.

Hypothesis B-2: *The greater the extent to which the organizations in a field transact with agencies of the state, the greater the extent of isomorphism in the field as a whole.* This follows not just from the previous hypothesis, but from two elements of state/private-sector transactions: their rule-boundedness and formal rationality, and the emphasis of government actors on institutional rules. Moreover, the federal government routinely designates industry standards for an entire field which require adoption by all competing firms. John Meyer (1979) argues convincingly that the aspects of an organization which are affected by state transactions differ to the extent that state participation is unitary or fragmented among several public agencies.

The third and fourth hypotheses follow from our discussion of isomorphic change resulting from uncertainty and modeling.

Hypothesis B-3: *The fewer the number of visible alternative organizational models in a field, the faster the rate of isomorphism in that field.* The predictions of this hypothesis are less specific than those of others and require further refinement; but our argument is that for any relevant dimension of organizational strat-

egies or structures in an organizational field there will be a threshold level, or a tipping point, beyond which adoption of the dominant form will proceed with increasing speed (Granovetter, 1978; Boorman and Leavitt, 1979).

Hypothesis B-4: *The greater the extent to which technologies are uncertain or goals are ambiguous within a field, the greater the rate of isomorphic change.* Somewhat counterintuitively, abrupt increases in uncertainty and ambiguity should, after brief periods of ideologically motivated experimentation, lead to rapid isomorphic change. As in the case of A-4, ambiguity and uncertainty may be a function of environmental definition, and, in any case, interact both with centralization of resources (A-1, A-2, B-1, B-2) and with professionalization and structuration (A-5, A-6, B-5, B-6). Moreover, in fields characterized by a high degree of uncertainty, new entrants, which could serve as sources of innovation and variation, will seek to overcome the liability of newness by imitating established practices within the field.

The two final hypotheses in this section follow from our discussion of professional filtering, socialization, and structuration.

Hypothesis B-5: *The greater the extent of professionalization in a field, the greater the amount of institutional isomorphic change.* Professionalization may be measured by the universality of credential requirements, the robustness of graduate training programs, or the vitality of professional and trade associations.

Hypothesis B-6: *The greater the extent of structuration of a field, the greater the degree of isomorphics.* Fields that have stable and broadly acknowledged centers, peripheries, and status orders will be more homogeneous both because the diffusion structure for new models and norms is more routine and because the level of interaction among organizations in the field is higher. While structuration may not lend itself to easy measurement, it might be tapped crudely with the use of such familiar measures as concentration ratios, reputational interview studies, or data on network characteristics.

This rather schematic exposition of a dozen hypotheses relating the extent of isomorphism to selected attributes of organizations and of organizational fields does not constitute a complete agenda for empirical assessment of our perspective. We have not discussed the expected nonlinearities and ceiling effects in the relationships that we have posited. Nor have we addressed the issue of the indicators that one must use to measure homogeneity. Organizations in a field may be highly diverse

on some dimensions, yet extremely homogeneous on others. While we suspect, in general, that the rate at which the standard deviations of structural or behavioral indicators approach zero will vary with the nature of an organizational field's technology and environment, we will not develop these ideas here. The point of this section is to suggest that the theoretical discussion is susceptible to empirical test, and to lay out a few testable propositions that may guide future analyses.

IMPLICATIONS FOR SOCIAL THEORY

A comparison of macrosocial theories of functionalist or Marxist orientation with theoretical and empirical work in the study of organizations yields a paradoxical conclusion. Societies (or elites), so it seems, are smart, while organizations are dumb. Societies comprise institutions that mesh together comfortably in the interests of efficiency (Clark, 1962), the dominant value system (Parsons, 1951), or, in the Marxist version, capitalists (Domhoff, 1967; Althusser, 1969). Organizations, by contrast, are either anarchies (Cohen et al., 1972), federations of loosely coupled parts (Weick, 1976), or autonomy-seeking agents (Gouldner, 1954) laboring under such formidable constraints as bounded rationality (March and Simon, 1958), uncertain or contested goals (Sills, 1957), and unclear technologies (March and Cohen, 1974).

Despite the findings of organizational research, the image of society as consisting of tightly and rationally coupled institutions persists throughout much of modern social theory. Rational administration pushes out non-bureaucratic forms, schools assume the structure of the workplace, hospital and university administrations come to resemble the management of for-profit firms, and the modernization of the world economy proceeds unabated. Weberians point to the continuing homogenization of organizational structures as the formal rationality of bureaucracy extends to the limits of contemporary organizational life. Functionalists describe the rational adaptation of the structure of firms, schools, and states to the values and needs of modern society (Chandler, 1977; Parsons, 1977). Marxists attribute changes in such organizations as welfare agencies (Pivan and Cloward, 1971) and schools (Bowles and Gintis, 1976) to the logic of the accumulation process.

We find it difficult to square the extant literature on organizations with these macrosocial views. How can it be that the confused and contentious bumbling that populate the pages of organizational case studies and theories combine to construct the elaborate and well-

proportioned social edifice that macrotheorists describe?

The conventional answer to this paradox has been that some version of natural selection occurs in which selection mechanisms operate to weed out those organizational forms that are less fit. Such arguments, as we have contended, are difficult to mesh with organizational realities. Less efficient organizational forms do persist. In some contexts efficiency or productivity cannot even be measured. In government agencies or in faltering corporations selection may occur on political rather than economic grounds. In other contexts, for example the Metropolitan Opera or the Bohemian Grove, supporters are far more concerned with noneconomic values like aesthetic quality or social status than with efficiency *per se*. Even in the for-profit sector, where competitive arguments would promise to bear the greatest fruit, Nelson and Winter's work (Winter, 1964, 1975; Nelson and Winter, 1982) demonstrates that the invisible hand operates with, at best, a light touch.

A second approach to the paradox that we have identified comes from Marxists and theorists who assert that key elites guide and control the social system through their command of crucial positions in major organizations (e.g., the financial institutions that dominate monopoly capitalism). In this view, while organizational actors ordinarily proceed undisturbed through mazes of standard operating procedures, at key turning points capitalist elites get their way by intervening in decisions that set the course of an institution for years to come (Katz, 1975).

While evidence suggests that this is, in fact, sometimes the case—Barnouw's account of the early days of broadcasting or Weinstein's (1968) work on the Progressives are good examples—other historians have been less successful in their search for class-conscious elites. In such cases as the development of the New Deal programs (Hawley, 1966) or the expansion of the Vietnamese conflict (Halperin, 1974), the capitalist class appears to have been muddled and disunited.

Moreover, without constant monitoring, individuals pursuing parochial organizational or subunit interests can quickly undo the work that even the most prescient elites have accomplished. Perrow (1976:21) has noted that despite superior resources and sanctioning power, organizational elites are often unable to maximize their preferences because "the complexity of modern organizations makes control difficult." Moreover, organizations have increasingly become the vehicle for numerous "gratifications, necessities, and preferences so that many groups within and without the orga-

nization seek to use it for ends that restrict the return to masters."

We reject neither the natural-selection nor the elite-control arguments out of hand. Elites do exercise considerable influence over modern life and aberrant or inefficient organizations sometimes do expire. But we contend that neither of these processes is sufficient to explain the extent to which organizations have become structurally more similar. We argue that a theory of institutional isomorphism may help explain the observations that organizations are becoming more homogeneous, and that elites often get their way, while at the same time enabling us to understand the irrationality, the frustration of power, and the lack of innovation that are so commonplace in organizational life. What is more, our approach is more consonant with the ethnographic and theoretical literature on how organizations work than are either functionalist or elite theories of organizational change.

A focus on institutional isomorphism can also add a much needed perspective on the political struggle for organizational power and survival that is missing from much of population ecology. The institutionalization approach associated with John Meyer and his students posits the importance of myths and ceremony but does not ask how these models arise and whose interests they initially serve. Explicit attention to the genesis of legitimated models and to the definition and elaboration of organizational fields should answer this question. Examination of the diffusion of similar organizational strategies and structures should be a productive means for assessing the influence of elite interests. A consideration of isomorphic processes also leads us to a bifocal view of power and its application in modern politics. To the extent that organizational change is unplanned and goes on largely behind the backs of groups that wish to influence it, our attention should be directed to two forms of power. The first, as March and Simon (1958) and Simon (1957) pointed out years ago, is the power to set premises, to define the norms and standards which shape and channel behavior. The second is the point of critical intervention (Domhoff, 1979) at which elites can define appropriate models of organizational structure and policy which then go unquestioned for years to come (see Katz, 1975). Such a view is consonant with some of the best recent work on power (see Lukes, 1974); research on the structuration of organizational fields and on isomorphic processes may help give it more empirical flesh.

Finally, a more developed theory of organizational isomorphism may have important implications for social policy in those fields in

which the state works through private organizations. To the extent that pluralism is a guiding value in public policy deliberations, we need to discover new forms of intersectoral coordination that will encourage diversification rather than hastening homogenization. An understanding of the manner in which fields become more homogeneous would prevent policy makers and analysts from confusing the disappearance of an organizational form with its substantive failure. Current efforts to encourage diversity tend to be conducted in an organizational vacuum. Policy makers concerned with pluralism should consider the impact of their programs on the structure of organizational fields as a whole, and not simply on the programs of individual organizations.

We believe there is much to be gained by attending to similarity as well as to variation among organizations and, in particular, to change in the degree of homogeneity or variation over time. Our approach seeks to study incremental change as well as selection. We take seriously the observations of organizational theorists about the role of change, ambiguity, and constraint and point to the implications of these organizational characteristics for the social structure as a whole. The foci and motive forces of bureaucratization (and, more broadly, homogenization in general) have, as we argued, changed since Weber's time. But the importance of understanding the trends to which he called attention has never been more immediate.

REFERENCES

- Alchian, Armen
1950 "Uncertainty, evolution, and economic theory." *Journal of Political Economy* 58:211-21.
- Aldrich, Howard
1979 *Organizations and Environments*. Englewood Cliffs, NJ: Prentice-Hall.
- Althusser, Louis
1969 *For Marx*. London: Allan Lane.
- Barnouw, Erik
1966- *A History of Broadcasting in the United States*, 3 volumes. New York: Oxford University Press.
- Boorman, Scott A. and Paul R. Levitt
1979 "The cascade principle for general disequilibrium dynamics." *Cambridge/New Haven: Harvard-Yale Preprints in Mathematical Sociology*. Number 15.
- Bowles, Samuel and Herbert Gintis
1976 *Schooling in Capitalist America*. New York: Basic Books.
- Carroll, Glenn R. and Jacques Delacroix
1982 "Organizational mortality in the newspaper industries of Argentina and Ireland: an ecological approach." *Administrative Science Quarterly* 27:169-98.
- Chandler, Alfred D.
1977 *The Visible Hand: The Managerial Revolution in American Business*. Cambridge: Harvard University Press.
- Child, John and Alfred Kieser
1981 "Development of organizations over time." Pp. 28-64 in Paul C. Nystrom and William H. Starbuck (eds.), *Handbook of Organizational Design*. New York: Oxford University Press.
- Cicourel, Aaron
1970 "The acquisition of social structure: toward a developmental sociology of language." Pp. 136-68 in Jack D. Douglas (ed.), *Understanding Everyday Life*. Chicago: Aldine.
- Clark, Burton R.
1962 *Educating the Expert Society*. San Francisco: Chandler.
- Cohen, Michael D., James G. March and Johan P. Olsen
1972 "A garbage can model of organizational choice." *Administrative Science Quarterly* 17:1-25.
- Collins, Randall
1979 *The Credential Society*. New York: Academic Press.
- Coser, Lewis, Charles Kadushin and Walter W. Powell
1982 *Books: The Culture and Commerce of Book Publishing*. New York: Basic Books.
- Cyert, Richard M. and James G. March
1963 *A Behavioral Theory of the Firm*. Englewood Cliffs, NJ: Prentice-Hall.
- DiMaggio, Paul
1981 "Cultural entrepreneurship in nineteenth-century Boston. Part 1: The creation of an organizational base for high culture in America." *Media, Culture and Society* 4:33-50.
- 1982 "The structure of organizational fields: an analytical approach and policy implications." Paper prepared for SUNY-Albany Conference on Organizational Theory and Public Policy. April 1 and 2.
- Domhoff, J. William
1967 *Who Rules America?* Englewood Cliffs, NJ: Prentice-Hall.
- 1979 *The Powers That Be: Processes of Ruling Class Domination in America*. New York: Random House.
- Fennell, Mary L.
1980 "The effects of environmental characteristics on the structure of hospital clusters." *Administrative Science Quarterly* 25:484-510.
- Freeman, John H.
1982 "Organizational life cycles and natural selection processes." Pp. 1-32 in Barry Staw and Larry Cummings (eds.), *Research in Organizational Behavior*. Vol. 4. Greenwich, CT: JAI Press.
- Giddens, Anthony
1979 *Central Problems in Social Theory: Action, Structure, and Contradiction in Social Analysis*. Berkeley: University of California Press.

- Gouldner, Alvin W.
1954 *Patterns of Industrial Bureaucracy*. Glencoe, IL: Free Press.
- Granovetter, Mark
1978 "Threshold models of collective behavior." *American Journal of Sociology* 83:1420-43.
- Hall, Richard
1968 "Professionalization and bureaucratization." *American Sociological Review* 33:92-104.
- Halperin, Mortin H.
1974 *Bureaucratic Politics and Foreign Policy*. Washington, D.C.: The Brookings Institution.
- Hannan, Michael T. and John H. Freeman
1977 "The population ecology of organizations." *American Journal of Sociology* 82:929-64.
- Hawley, Amos
1968 "Human ecology." Pp. 328-37 in David L. Sills (ed.), *International Encyclopedia of the Social Sciences*. New York: Macmillan.
- Hawley, Ellis W.
1966 *The New Deal and the Problem of Monopoly: A Study in Economic Ambivalence*. Princeton: Princeton University Press.
- Hirsch, Paul and Thomas Whisler
1982 "The view from the boardroom." Paper presented at Academy of Management Meetings, New York, NY.
- Kanter, Rosabeth Moss
1972 *Commitment and Community*. Cambridge, MA: Harvard University Press.
1977 *Men and Women of the Corporation*. New York: Basic Books.
- Katz, Michael B.
1975 *Class, Bureaucracy, and Schools: The Illusion of Educational Change in America*. New York: Praeger.
- Kimberly, John
1980 "Initiation, innovation and institutionalization in the creation process." Pp. 18-43 in John Kimberly and Robert B. Miles (eds.), *The Organizational Life Cycle*. San Francisco: Jossey-Bass.
- Knoke, David
1982 "The spread of municipal reform: temporal, spatial, and social dynamics." *American Journal of Sociology* 87:1314-39.
- Larson, Magali Sarfatti
1977 *The Rise of Professionalism: A Sociological Analysis*. Berkeley: University of California Press.
- Laumann, Edward O., Joseph Galaskiewicz and Peter Marsden
1978 "Community structure as interorganizational linkage." *Annual Review of Sociology* 4:455-84.
- Lee, M. L.
1971 "A conspicuous production theory of hospital behavior." *Southern Economic Journal* 38:48-58.
- Lukes, Steven
1974 *Power: A Radical View*. London: Macmillan.
- March, James G. and Michael Cohen
1974 *Leadership and Ambiguity: The American College President*. New York: McGraw-Hill.
- March, James C. and James G. March
1977 "Almost random careers: the Wisconsin school superintendency, 1940-72." *Administrative Science Quarterly* 22:378-409.
- March, James G. and Johan P. Olsen
1976 *Ambiguity and Choice in Organizations*. Bergen, Norway: Universitetsforlaget.
- March, James G. and Herbert A. Simon
1958 *Organizations*. New York: Wiley.
- Meyer, John W.
1979 "The impact of the centralization of educational funding and control on state and local organizational governance." Stanford, CA: Institute for Research on Educational Finance and Governance, Stanford University, Program Report No. 79-B20.
1981 Remarks at ASA session on "The Present Crisis and the Decline in World Hegemony." Toronto, Canada.
- Meyer, John W. and Michael Hannan
1979 *National Development and the World System: Educational, Economic, and Political Change*. Chicago: University of Chicago Press.
- Meyer, John W. and Brian Rowan
1977 "Institutionalized organizations: formal structure as myth and ceremony." *American Journal of Sociology* 83:340-63.
- Meyer, John W., W. Richard Scott and Terence C. Deal
1981 "Institutional and technical sources of organizational structure explaining the structure of educational organizations." In Herman Stein (ed.), *Organizations and the Human Services: Cross-Disciplinary Reflections*. Philadelphia, PA: Temple University Press.
- Meyer, Marshall
1981 "Persistence and change in bureaucratic structures." Paper presented at the annual meeting of the American Sociological Association, Toronto, Canada.
- Milofsky, Carl
1981 "Structure and process in community self-help organizations." New Haven: Yale Program on Non-Profit Organizations, Working Paper No. 17.
- Nelson, Richard R. and Sidney Winter
1982 *An Evolutionary Theory of Economic Change*. Cambridge: Harvard University Press.
- Ouchi, William G.
1980 "Markets, bureaucracies, and clans." *Administrative Science Quarterly* 25:129-41.
- Parsons, Talcott
1951 *The Social System*. Glencoe, IL: Free Press.
1977 *The Evolution of Societies*. Englewood Cliffs, NJ: Prentice-Hall.
- Perrow, Charles
1974 "Is business really changing?" *Organizational Dynamics* Summer:31-44.
1976 "Control in organizations." Paper presented at American Sociological Association annual meetings, New York, NY.

- Pfeffer, Jeffrey and Gerald Salancik
1978 *The External Control of Organizations: A Resource Dependence Perspective*. New York: Harper & Row.
- Piven, Frances Fox and Richard A. Cloward
1971 *Regulating the Poor: The Functions of Public Welfare*. New York: Pantheon.
- Powell, Walter W.
Forth- "The Political Economy of Public Television." New Haven: Program on Non-Profit
ing Organizations.
1983 "New solutions to perennial problems of bookselling: whither the local bookstore?" *Daedalus*: Winter.
- Ritti, R. R. and Fred H. Goldner
1979 "Professional pluralism in an industrial organization." *Management Science* 16:233-46.
- Rothman, Mitchell
1980 "The evolution of forms of legal education." Unpublished manuscript. Department of Sociology, Yale University, New Haven, CT.
- Rothschild-Whitt, Joyce
1979 "The collectivist organization: an alternative to rational bureaucratic models." *American Sociological Review* 44:509-27.
- Schelling, Thomas
1978 *Micromotives and Macrobehavior*. New York: W. W. Norton.
- Sedlak, Michael W.
1981 "Youth policy and young women, 1950-1972: the impact of private-sector programs for pregnant and wayward girls on public policy." Paper presented at National Institute for Education Youth Policy Research Conference, Washington, D.C.
- Selznick, Philip
1957 *Leadership in Administration*. New York: Harper & Row.
- Sills, David L.
1957 *The Volunteers: Means and Ends in a National Organization*. Glencoe, IL: Free Press.
- Simon, Herbert A.
1957 *Administrative Behavior*. New York: Free Press.
- Starr, Paul
1980 "Medical care and the boundaries of capitalist organization." Unpublished manuscript. Program on Non-Profit Organizations, Yale University, New Haven, CT.
- Swidler, Ann
1979 *Organization Without Authority: Dilemmas of Social Control of Free Schools*. Cambridge: Harvard University Press.
- Thompson, James
1967 *Organizations in Action*. New York: McGraw-Hill.
- Tyack, David
1974 *The One Best System: A History of American Urban Education*. Cambridge, MA: Harvard University Press.
- Useem, Michael
1979 "The social organization of the American business elite and participation of corporation directors in the governance of American institutions." *American Sociological Review* 44:553-72.
- Weber, Max
1952 *The Protestant Ethic and the Spirit of Capitalism*. New York: Scribner.
1968 *Economy and Society: An Outline of Interpretive Sociology*. Three volumes. New York: Bedminster.
- Weick, Karl
1976 "Educational organizations as loosely coupled systems." *Administrative Science Quarterly* 21:1-19.
- Weinstein, James
1968 *The Corporate Ideal in the Liberal State, 1900-1918*. Boston, MA: Beacon Press.
- Westney, D. Eleanor
Forth- *Organizational Development and Social Change in Meiji, Japan*.
ing
- White, Harrison C., Scott A. Boorman and Ronald L. Breiger
1976 "Social structure from multiple networks. I. Blockmodels of roles and positions." *American Journal of Sociology* 81:730-80.
- Williamson, Oliver E.
1975 *Markets and Hierarchies, Analysis and Antitrust Implications: A Study of the Economics of Internal Organization*. New York: Free Press.
1979 "Transaction-cost economics: the governance of contractual relations." *Journal of Law and Economics* 22:233-61.
- Winter, Sidney G.
1964 "Economic 'natural selection' and the theory of the firm." *Yale Economic Essays* 4:224-72.
1975 "Optimization and evolution in the theory of the firm." Pp. 73-118 in Richard H. Day and Theodore Graves (eds.), *Adaptive Economic Models*. New York: Academic.
- Woodward, John
1965 *Industrial Organization, Theory and Practice*. London: Oxford University Press.
- Zucker, Lynne G. and Pamela S. Tolbert
1981 "Institutional sources of change in the formal structure of organizations: the diffusion of civil service reform, 1880-1935." Paper presented at American Sociological Association annual meeting, Toronto, Canada.