

The Social Construction of Organizational Knowledge: A Study of the Uses of Coercive, Mimetic, and Normative Isomorphism

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Arguing that knowledge in the social sciences is socially constructed through the selective interpretation of major works, we examine the fate of a classic article in organizational theory, DiMaggio and Powell's 1983 essay on institutional isomorphism. We show that one aspect of this article, the discussion of mimetic isomorphism, has received attention disproportionate to its role in the essay. A detailed examination of 26 articles in which researchers attempted to operationalize various components of DiMaggio and Powell's model shows that measures used to capture one of their concepts could have served as valid measures of one of the others. Findings show that DiMaggio and Powell's thesis has become socially constructed, as authors have selectively appropriated aspects of the work that accord with prevalent discourse in the field, and that centrally located researchers in sociology and organizational behavior are more likely than other scholars to invoke this dominant interpretation of their article. •

Scholars have many motives for their writings. The most obvious and immediate issue is that publishing is the primary indicator of success in one's career. For academic scholars, publication forms the basis of hiring, tenure, and promotion decisions, as well as the basis of one's reputation. Not only must one publish, but one's writings must receive critical acceptance from one's peers. But even more important than critical acceptance are two additional goals: scholars want their work to be read, and they want their work to influence that of other scholars. In the sciences, one's scholarly influence can be gauged by the extent to which other scientists make use of one's theories, hypotheses, and findings (Cole, 1992). This influence manifests itself in citations but also in the extent to which one's work is the subject of discussion or even the basis of an article or book itself. At its highest level of influence, one's work forms the basis of a school of thought, a perspective, or approach whose origin is attributed to the work of a particular scientist (or a small number of scientists).

Whatever the extent of pure curiosity, self-fulfillment, and joy in work that might motivate the efforts of scientists, most hope that their work will be, if not revolutionary, at least influential. But the possibility that one's work will be used by others raises an interesting question: What if that work is misinterpreted or used in a way that differs from the original intent of the author? "Just spell my name right" is a common plea among those striving for careers in music and theater, indicating that one's primary concern is to be known, regardless of the basis of that knowledge. The sciences are not the music industry, however, and it seems reasonable to assume that a scholar's work, when used by others, will be accurately interpreted. But we know that this is not always true. Latour (1987: 40) noted that "a paper may be cited by others . . . in a manner far from its own interests" and even "to support a claim which is exactly the opposite of what its author intended." At the same time, classic works are frequently described as often cited but rarely read. This accounts for the surprise that readers often experience when they actually go back and read such works.

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The fact that classic works in a field are often cited and discussed without being carefully read (or read at all) suggests the possibility that these works can become social constructions, taking on identities created as much by their users as their authors. However frequent or infrequent such events may be in the natural sciences, they are far from rare in the social sciences.¹ Examples of such socially constructed reinterpretations of classic works abound. As Adatto and Cole (1981: 151) noted in their discussion of citations to classic works, such references “selectively present knowledge that fits in with the currently held paradigms.” Virtually any work in which an author reexamines classic texts will reveal a series of widely assumed truths that turn out to be false. These “truths,” similar to what Merton (1987) called pseudofacts, often form the basis of subsequent works, leading to even further distortion of the original classic (Cole, 1975: 212–213; Small, 1978: 338; Cronbach, 1992; Hamilton, 1996).

In this paper we argue that the interpretation and uses of knowledge have a socially constructed character and that this can lead organizational researchers, as well as scholars in general, toward misleading representations of phenomena. We illustrate this argument by examining the uses of a highly influential article in organizational theory: DiMaggio and Powell’s (1983) piece on institutional isomorphism. We show that although there are several components to DiMaggio and Powell’s argument, one aspect of their discussion has received disproportionate attention—at the expense of other, equally prominent formulations—which we believe can be accounted for by the extent to which this component corresponds with prevailing discourse in organizational theory.

THE SOCIAL CONSTRUCTION OF ORGANIZATIONAL KNOWLEDGE

A fundamental tenet of sociology is that the social world is socially constructed (Berger and Luckmann, 1966). Events occur, but only certain elements of them are catalogued by the participants. Actors and observers emphasize some moments and ignore others. Through multiple social interactions, the character and meaning of these events take shape, and eventually the events take on lives of their own. With this social construction comes distortion, not necessarily a complete negation of reality, but a modified and selective picture. In science, it would seem possible to avoid such distortions. Unlike ordinary social events, which are episodic and can fade from memory, scientific works are, by definition, on record on the printed page. If memory fails, one can always return to the text. At the same time, texts, like events, are open to multiple interpretations and are not always read or, if read, are not always read carefully or in close proximity to the time they are used.

An influential work of scholarship may contain many ideas. When the work is read, some ideas will resonate with readers more than will others, and those ideas are the ones likely to be used by other scholars. Once particular ideas (that is, subsections of a text) have been appropriated, cited, and discussed, however, their interpretation takes on a col-

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Whatever their frequency in scientific work, such socially reconstructed facts may be quite common in popular applications of the natural sciences. The late Carl Sagan denied that he ever used the phrase “billions and billions” in his popular television series, “Cosmos.” “I never said it,” he stated in the opening sentence of his last book (1997: 3), playfully titled *Billions and Billions*. But the phrase provided fodder for a long line of comedians and commentators.

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lective character, and they can become the accepted representation of the original work. Scholars may then find it unnecessary to read the original work but can rely instead on collectively sanctioned interpretations, which may ultimately come to exaggerate, or distort, the original text. As an example, social scientists for many years assumed that Berle and Means, in their classic study of corporate ownership and control (1968), viewed officers as in control of large American corporations, a view that is in fact incorrect. When Berle and Means spoke of managers, they meant the board of directors as well as the firm's senior officers (1968: 196; see also Zeitlin, 1974). Similarly, Kanter's (1977) discussion of life in a large corporation is widely believed to have demonstrated that the restricted opportunities for women employees explain their lower aspirations for advancement, when in fact Kanter presents a compelling but only suggestive hypothesis of this association.

Although few scholars are likely to believe that distortion or selective interpretation of a work is a good thing, one might legitimately ask whether its deleterious consequences extend beyond the frustrations that authors of the work might experience. If such distortions become the basis of useful hypotheses that lead to an improved understanding of the world, then perhaps it should not matter if they fail to represent fully the thrust of the original piece. The problem is that selective readings of particular works may reflect tendencies among researchers to ignore or fail to give sufficient attention to significant social phenomena.

This issue is especially salient in current North American organizational analysis, in which researchers have placed considerable weight on the cognitive processes of organizational decision makers and underplayed the extent to which their decisions are constrained by the power and coercion of other organizational actors. In a comparative analysis of two leading organizations journals, one (*Administrative Science Quarterly*) from the United States and one (*Organization Studies*) from Europe, Usdiken and Pasadeos (1995) found that the European articles were significantly more likely to emphasize power and coercive forces than were the American ones. If this finding reflects a general tendency in American organizational research to underemphasize external power and coercion, then even though DiMaggio and Powell (hereafter D&P) do deal with these issues in their 1983 article, American consumers of D&P might be disproportionately likely to neglect these aspects of their work. This issue takes on added importance because DiMaggio and Powell's article was a major statement within the new institutional theory.

Institutional Theory and Institutional Isomorphism

Prior to the 1970s, most organizational analysis involved a focus on the internal workings of organizations. It is true that some works, especially those in the old institutional school of Selznick (1949), Gouldner (1954), and Zald (1970), emphasized organizations' ties with their environments. It is also true that even within contingency theory (a dominant approach in the 1960s), authors such as Thompson (1967) and Lawrence and Lorsch (1967) were concerned with organiza-

tions' interactions with their environments. But it was only in the 1970s that organizations' relations with their environments became a major focus of research.

In the late 1970s, a series of works appeared that have formed the basis of much organizational theory for the past two decades. These works include Williamson's (1975) book on transaction-cost economics, Hannan and Freeman's (1977) article on the population ecology of organizations (see also Aldrich, 1979), Pfeffer and Salancik's (1978) book on organizations' resource dependence on external environments, and Meyer and Rowan's (1977) article on organizations as myth and ceremony. One of the most important approaches to emerge from this period was what is now called the new institutional theory. This approach has its roots both in the earlier, old institutional theory works of Selznick, Gouldner, and Zald as well as the social constructionist literature in sociology (Berger and Luckmann, 1966). Its two primary foundational works are generally believed to be the articles by Meyer and Rowan (1977) and DiMaggio and Powell (1983).

Meyer and Rowan suggested that to achieve legitimacy with their constituents, organizations were prone to construct stories about their actions that corresponded to socially prescribed dictates about what such an organization should do. These stories did not necessarily have any connection to what the organization actually did, but rather, they were used as forms of symbolic reassurance to mollify potentially influential publics. DiMaggio and Powell further developed this theme, tying it more explicitly to organizational and sociological theory. Noting the remarkable similarity of organizations in contemporary industrialized societies, they raised the question of why organizations are so similar. They argued, consistent with Meyer and Rowan, that this similarity has arisen not because of competition or an objective requirement of efficiency but rather as a result of organizations' quests to attain legitimacy within their larger environments. The latter is due in part to the organizations' reliance on resources from these environments, as suggested by Pfeffer and Salancik (1978).

The argument is historical: in the early years of an organizational field (a group of organizations, such as members of an industry, customers and suppliers, consumers, and regulatory agencies, that constitute a recognized area of institutional life), the organizations within it may be highly diverse. Over time, in response to institutional pressures, D&P argued, the organizations come increasingly to resemble one another. And the argument is empirical: organizational fields can be identified only by investigation of processes that allow them to become socially defined as such, including an increase in interaction among organizations in the field, the development of clearly defined structures of domination and coalition, an increase in field-relevant information, and an increase in mutual awareness by members of the field (1983: 148). To describe the process of homogenization, D&P adopted the ecological concept of isomorphism. They identified two types of isomorphism, competitive and institutional. Competitive isomorphism involves pressures toward similarity resulting from market competition, as in the type de-

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scribed by population ecologists (Hannan and Freeman, 1977; Aldrich, 1979) and, earlier, Weber. Institutional isomorphism, the focus of D&P's discussion, involves organizational competition for political and institutional legitimacy as well as market position. According to D&P (1983: 150), it is "a useful tool for understanding the politics and ceremony that pervade much modern organizational life."

D&P then proposed three mechanisms through which institutional isomorphism occurs: coercive, mimetic, and normative. Coercive isomorphism is driven by two forces: pressures from other organizations on which a focal organization is dependent and an organization's pressure to conform to the cultural expectations of the larger society. Coercive isomorphism, at least in the first instance, is thus analogous to formulations of the resource dependence model, in which organizations are viewed as constrained by those on whom they depend for resources (Pfeffer and Salancik, 1978). Such constraints, in D&P's view, could include pressures to bring an organization's structure in line with the demands of powerful alters. They viewed mimetic isomorphism as a response to uncertainty. In situations in which a clear course of action is unavailable, organizational leaders may decide that the best response is to mimic a peer that they perceive to be successful. D&P viewed normative isomorphism as a result of professionalization, involving two processes. First, members of professions receive similar training (such as that received by physicians, attorneys, and university professors), which socializes them into similar worldviews. Second, members of professions interact through professional and trade associations, which further diffuses ideas among them.

D&P took pains to point out that these three mechanisms through which institutional isomorphism is diffused are not necessarily empirically distinguishable. Each involves a separate process, but two or more could operate simultaneously and their effects will not always be clearly identifiable. D&P gave each of the three mechanisms considerable attention, bolstering each by several empirical illustrations. The discussion of normative isomorphism receives the greatest attention in the article, however, nearly four full columns. The discussions of coercive and mimetic isomorphism receive almost exactly two columns each, or about half the space of the discussion of normative isomorphism. Considering the significant amounts of attention given to the three types, it would seem likely that all three would have ample opportunities for future adoption and application. If any one type might receive precedence, it might be normative isomorphism, given that nearly twice as much space was devoted to its presentation. Alternatively, coercive isomorphism might receive the highest level of attention, since it is the first of the three types discussed by the authors (and thus the first that readers would normally see). Yet it is mimetic isomorphism that has attracted the most attention.

The Selective Interpretation of Isomorphism

D&P's three processes of institutional isomorphism are rooted in different conceptions of how behavior diffuses. These conceptions, coercion, mimesis, and transmission of norms, represent three broad theoretical orientations. To the

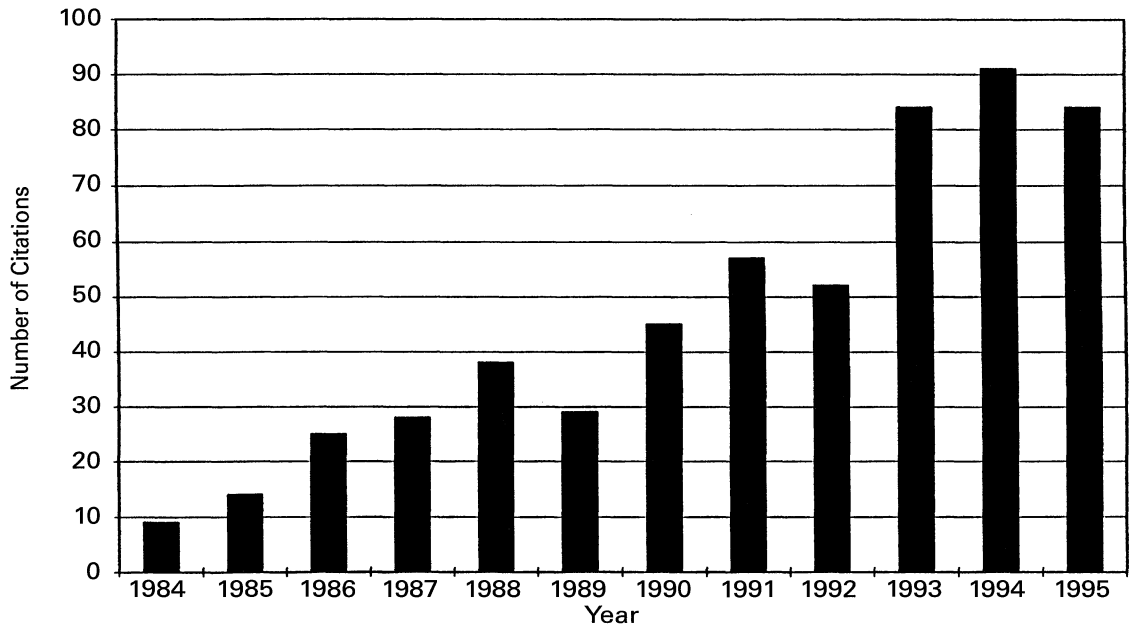
extent that researchers using D&P's article were focusing on all three processes, we would expect to observe a roughly equal use of the three concepts. If our argument that American organizational researchers have tended to underemphasize the role of power and coercion is correct, however, we would expect users of D&P to focus disproportionately on mimetic isomorphism at the expense of normative and, especially, coercive isomorphism. Our first task, then, is to examine whether this is in fact the case.

Before we proceed, two points are in order. First, we focus here on North American journals, not because we believe that organizational work outside North America is unimportant, but because the tendency to underplay issues of power and constraint may be a uniquely North American phenomenon. Because North America, particularly the United States, remains the center of organizational theory and research, what happens here is of special significance, and there is evidence that power and coercion are relatively neglected in American organizational research (Usdiken and Pasadeos, 1995). Second, we focus primarily on empirical rather than solely theoretical treatments of D&P because it allows us to examine researchers' operational definitions of their concepts. It is in these operational definitions that the potential for selective interpretation of D&P should be more easily identifiable. Our focus on empirical applications of D&P's thesis also represents a more conservative test of our argument, because full-fledged attempts at empirical testing are likely to involve more careful attention to a work than do the brief, often ceremonial references characteristic of most citations. Nevertheless, we have systematically analyzed a sample of nonempirical applications of D&P and have found that the patterns of use in the theoretical treatments correspond closely with those in the empirical ones.

To analyze the uses of D&P's article, we identified all citations to the paper from 1984 (the year in which citations commenced) through 1995. Figure 1 presents a graph of these citations. The graph is almost completely monotonic, and although it does not present cumulative frequencies, it follows a roughly S-shaped distribution common to diffusion curves. The graph contains significant jumps at years 3 (1986), 7 (1990), and 10 (1993). Through 1995, the paper had received 556 citations. Through August of 1995, 160 of these had appeared in six major journals, the *American Sociological Review* (25), the *American Journal of Sociology* (25), *Social Forces* (12), *Administrative Science Quarterly* (56), the *Academy of Management Journal* (25), and *Organization Science* (17).

For our analysis, we read all 160 articles in these six journals. We then coded each of the articles based on the extent of their citation to D&P. Consistent with the findings of previous studies (Chubin and Moitra, 1975; Cole, 1975; Moravcsik and Murugesan, 1975), most citations (115 of the 160) involved brief mention of the article, with no accompanying discussion. Sixty-nine of these 115 (which we refer to as category 1) included no reference to one or more of the isomorphic processes discussed by D&P. The other 46 articles (category 2) included either an explicit or implicit reference to one or more isomorphic processes but only brief

Figure 1. Total citations to DiMaggio and Powell's (1983) article, 1984–1995.



reference to D&P. Of the remaining 45 articles, 19 (category 3) contained actual discussions of D&P's concepts but did not explicitly operationalize one or more of these concepts as part of an empirical test. Finally, there were 26 cases (category 4) in which authors attempted to operationalize and empirically test one or more components of D&P's thesis.

The second author coded all articles into one of these categories. The first author reviewed and, if necessary, reevaluated the 45 articles in the last two groups. We further coded the 26 articles in the final category in terms of which combination, from one to all three, of D&P's concepts were operationalized. Because articles were classified into this category only if authors were explicit about which isomorphic process they were operationalizing, coding was straightforward and interrater reliability was nearly perfect. In only two cases did the first author raise questions about codings provided by the second author. These cases were resolved through discussion. Our analysis focused on the 26 articles classified into the last category.²

Table 1 provides a list of the 26 papers, broken down by our coding of their operationalization of D&P's concepts. In 20 of the 26 papers, authors operationalized only one of the three forms of institutional isomorphism. Four of the remaining six articles included operationalizations of two of the three forms. The remaining two papers contained operationalizations of all three types.³ Thus, more than three-quarters of the papers focused on only one of D&P's three types, and of these 20, twelve used mimetic isomorphism only, compared with five instances of coercive isomorphism only and three of normative only. If the probability of an author operationalizing one of these concepts were perfectly randomly distributed, we would expect 6.67 of these 20 articles to focus on mimetic isomorphism only. The observed frequency of 12 yields a chi square of 6.40 with one degree of freedom, with

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We conducted an additional reliability analysis on the articles in categories 2 and 3. Although there was slightly more disagreement here, which is unsurprising given the greater ambiguity in these categories, we agreed on 52 of the 59 articles for which both of us could identify an isomorphic process (we disagreed on whether it was possible to code six additional articles). Further details of this reliability analysis are available on request.

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We noted earlier that D&P distinguished types of isomorphism from the mechanisms by which isomorphism occurs. Given this distinction, we should refer to coercive, mimetic, and normative isomorphism as processes or mechanisms, rather than types or forms of isomorphism. D&P themselves subsequently referred to the three processes as types, however, and it is difficult rhetorically to avoid such descriptors. We therefore follow D&P in referring to the three isomorphic processes as types, while noting that we remain conscious of D&P's original distinction.

Table 1

Operationalizations of Institutional Isomorphism in Six Major Journals, by Type*

Mimetic only (12)

Fligstein, 1985, *ASR*
 Fennell and Alexander, 1987, *AMJ*
 Fligstein, 1987, *ASR*
 Mizruchi and Stearns, 1988, *ASQ*
 Galaskiewicz and Wasserman, 1989, *ASQ*
 Schoonhoven, Eisenhardt, and Lyman, 1990, *ASQ*
 Davis, 1991, *ASQ*
 Haveman, 1993, *ASQ*
 Bolton, 1993, *OS*
 Haunschild, 1994, *ASQ*
 Han, 1994, *SF*
 Lomi, 1995, *ASQ*

Coercive only (5)

Covaleski and Dirsmith, 1988, *ASQ*
 Rao and Neilsen, 1992, *ASQ*
 Greening and Gray, 1994, *AMJ*
 Lehrman, 1994, *SF*
 Konrad and Linnehan, 1995, *AMJ*

Normative only (3)

Galaskiewicz, 1985, *ASR*
 Galaskiewicz and Burt, 1991, *ASQ*
 Mezas and Scarselletta, 1994, *ASQ*

Coercive and normative (2)

Ginsberg and Buchholtz, 1990, *AMJ*
 Sutton, Dobbin, Meyer, and Scott, 1994, *AJS*

Mimetic and normative (2)

Mezas, 1990, *ASQ*
 Burns and Wholey, 1993, *AMJ*

Coercive, mimetic, and normative (2)

Levitt and Nass, 1989, *ASQ*
 Palmer, Jennings, and Zhou, 1993, *ASQ*

* *AJS* = *American Journal of Sociology*, *AMJ* = *Academy of Management Journal*, *ASQ* = *Administrative Science Quarterly*, *ASR* = *American Sociological Review*, *OS* = *Organization Science*, and *SF* = *Social Forces*.

a probability of less than .012. This means that mimetic isomorphism was used significantly more often than one would expect by chance. For the six articles in which two or three of the types were used, the distribution was more balanced. Normative isomorphism appeared in all six, while coercive and mimetic isomorphism appeared in four articles each. If we include all 26 articles and assume that the random probability of an author using any combination of types of isomorphism was equal (an expected frequency of 3.71 articles per type), then the observed frequency of mimetic isomorphism only (12 times) yields a chi square of 21.56 with one degree of freedom, a probability of less than .0001.

These tabulations appear consistent with the view that mimetic isomorphism has been emphasized disproportionately compared with the other two types, but the findings are open to interpretation.⁴ One could argue that the emphasis on mimetic isomorphism, although clearly representing a plurality, is not overwhelming, since of the 26 articles in the sample, only 12 used mimetic isomorphism exclusively. Nevertheless, authors have used mimetic isomorphism significantly more often than would be expected by chance. To assess to what extent this disproportionate attention has been warranted, we examined how authors have applied D&P's model.

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An analysis of the full set of 160 articles, available on request, yielded a similar pattern.

Operationalizations of Institutional Isomorphism

Empirical articles in North American sociology and organizations journals are overwhelmingly of a certain type. Most involve the derivation and test of carefully specified hypotheses, and the vast majority involve the use of quantitative data. For reviewers and readers of journal articles, the most important criteria are whether the hypotheses are convincing and make plausible use of the theories on which they are based. Objections raised by reviewers and post-publication critics often revolve around two issues: plausibility of the hypotheses (that is, does the author make a good case for her or his argument as well as take alternative explanations into account?) and validity issues (are the author's indicators appropriate representations of the concepts that he or she purports to measure?).

These issues are especially salient in uses of DiMaggio and Powell's thesis, because they themselves noted that the three forms of institutional isomorphism, although analytically distinct, are not always easy to distinguish empirically. Here, we examine the specific measures of mimetic isomorphism used by authors of selected articles from among the 26 that provide operational definitions. Although our focus here is on identifying problems with operationalizations of mimetic isomorphism, our basic point, that the measures are open to alternative interpretations, holds for operationalizations of coercive and normative isomorphism as well. The articles in this section were chosen for illustrative purposes only, but they are representative of the full set of 26 articles.⁵

One of the first applications is an article by Fligstein (1985) on adoption of the multidivisional form (MDF). He proposes to test simultaneously five different accounts of the rise of the MDF: Chandler's strategy-structure hypothesis; Williamson's transaction cost explanation; Hannan and Freeman's population ecology model; a power-control model derived from Pfeffer, Perrow, and others; and DiMaggio and Powell's thesis, which Fligstein terms "organizational homogeneity theory." This attempt to operationalize these five models represents a creative and largely successful accomplishment of a very difficult task. Interesting for our concerns, though, is how Fligstein handles D&P's argument. He begins (1985: 380) by referring, although not by name, to all three forms of isomorphism. In operationalizing the model, however, he abandons any reference to coercive and normative isomorphism. "DiMaggio and Powell's argument is more difficult to operationalize," he states. "The issue is how to capture a mimetic effect" (p. 384). To identify a mimetic effect, Fligstein proposes to examine the percentage of firms in a particular firm's industry that had adopted the MDF by the beginning of the decade in question. This is a creative measure that has been used by a number of subsequent researchers. It yields a supportive finding in four of the five decades that Fligstein examines.

That firms are more likely to adopt the MDF when others in their industry have adopted is certainly consistent with D&P's discussion of mimetic isomorphism, and Fligstein's suggestion that this finding represents a mimetic effect is

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An analysis of all 26 articles is available on request from the authors.

quite plausible. Unfortunately, there is no reason to assume that this outcome could not have resulted from coercive and/or normative pressures. Fligstein notes (1985: 380) that "organizations may be forced to conform structurally because of the cultural expectations of competitors, suppliers, or the state." He also notes that "the professionalization of managers tends to create a particular world view of appropriate organizational behavior" (p. 380). These formulations are consistent with coercive and normative isomorphism, respectively. That corporations adopted the MDF when large numbers of others in their industry did so could be explained by either of these processes, in addition to or in place of the voluntary, self-conscious mimicry of others. Our purpose is not to criticize this important work but only to raise the interesting question of why the author chose to focus on only one of D&P's three types of isomorphism, even though he mentioned all three in his initial discussion of the model.

It would be unfair to single out Fligstein in this discussion, especially considering the treatment accorded D&P's thesis by other authors. In a study of hospitals' use of boundary spanning strategies, for example, Fennell and Alexander (1987) hypothesize that acute care community hospitals in the United States are more likely to join multihospital systems in states in which multihospital systems already operate. The authors treat this plausible hypothesis as an example of mimetic isomorphism, although they are careful to note (1987: 465) that this hypothesis taps the concept only indirectly. In fact, however, there is no assurance that a hospital's becoming part of a larger system was a result of a voluntary strategy of emulation. It is equally possible that hospitals in areas with multihospital systems faced pressures to join in order to maintain legitimacy (coercive isomorphism). It is also possible that the idea of joining could disseminate through social networks among officials within regions (normative isomorphism). Moreover, it is not clear that a decision by a particular hospital to join a multihospital system is a voluntary one, even within these constraints. Hospitals can be absorbed into larger systems in the same way that for-profit corporations can be acquired by other for-profit firms.

In a study of the appointment of representatives of financial institutions to the boards of 22 large nonfinancial firms, Mizuchi and Stearns (1988) use the aggregate, economy-wide demand for capital (in terms of total amount borrowed) as a component of the larger environmental context within which firms operate. In their argument suggesting a positive association between aggregate demand and the appointment of financial directors (1988: 201), the authors frame their hypothesis in terms of the resource dependence model (Pfeffer and Salancik, 1978: 43–54), noting that its high aggregate usage indicates the importance of capital as a resource. In describing their finding of a positive effect of demand on financial director appointments (1988: 206), however, they abandon their reference to the resource dependence model and discuss the finding instead in the context of D&P's mimetic isomorphism. This finding shows that firms are more likely to appoint bankers to their boards when the overall level of borrowing in the economy is high.

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But it does not demonstrate that firms are mimicking others in their board appointments. At most it shows that if firms are mimicking others in their borrowing (which itself is unproven in this analysis), there tend to be relatively high numbers of bankers appointed to firm boards. In fairness to Mizruchi and Stearns, this discussion played only a minor role in their study. But it is unclear why the authors chose to interpret this effect in terms of mimetic isomorphism, especially when they couched their initial discussion of the variable in terms of the resource dependence model.

In an explicit test of D&P's mimetic isomorphism thesis, Galaskiewicz and Wasserman (1989) argue that organizations are likely to mimic those with whom they have one or more boundary spanning ties. Examining contributions to 326 non-profit organizations by 75 for-profit firms headquartered in the Minneapolis-St. Paul area, Galaskiewicz and Wasserman examine D&P's suggestion that mimetic processes will tend to occur under conditions of uncertainty. Like Fligstein, Galaskiewicz and Wasserman begin their discussion (1989: 454–455) by referring to and discussing all three types of isomorphism. In developing their hypotheses, however, they drop their references to coercive and normative isomorphism, despite the fact that their hypotheses could be interpreted in these alternative terms and despite Galaskiewicz's own important earlier study (1985) of normative isomorphism. This can be seen in their first two hypotheses. They note (1989: 457) that firms are especially susceptible to being influenced by high-status opinion leaders if the latter are in direct contact with the firm's executives while soliciting contributions for particular causes, which would appear to be indicative of coercive isomorphism, but no reference to coercive isomorphism appears. For these and the remaining hypotheses, corporate donations are said to be "heavily influenced" by peer networks, a point consistent with D&P's discussion of normative isomorphism. Galaskiewicz and Wasserman make an important advance on D&P's model by showing how isomorphism occurs through network ties. It is quite possible, and plausible, to assume that organizations mimic peers with whom they are directly tied, and the authors' findings are consistent with their hypotheses. Although mimetic isomorphism is clearly relevant here, however, coercive and normative isomorphism may be equally, if not more relevant. In their important suggestion that mimetic isomorphism can occur through network ties, the authors exclude the possibility that the processes they describe can result from coercive and normative pressures as well.

In a study of the movement of California-based savings and loan institutions into new markets, Haveman (1993) combines institutional arguments with population ecology theory to show that California thrifts tended to imitate the behavior of successful peers by following them into the same markets. She conceptualizes this similarity of behavior in terms of mimetic isomorphism. Her analysis contains an impressive number of control variables, which increases the probability that she is tapping not merely a similar set of responses to similar environmental conditions. Still, she assumes that the isomorphic behavior is the result of mi-

metic processes. This is a plausible argument, bolstered by two findings: organizations tend to follow the behavior of both large others and highly profitable others. But it is possible that the thrifths Haveman studied diversified in response to real or anticipated pressure from actors in their environment, as suggested by D&P's model of coercive isomorphism, or in response to communication with peers or to common socialization experiences that created certain views about diversification, as suggested in D&P's discussion of normative isomorphism.

The above examples all involved the use of mimetic isomorphism in cases in which coercive and/or normative isomorphism were plausible alternative explanations. While there have been more individual applications of mimetic isomorphism than of the other two types combined, normative and coercive isomorphism have also received undue attention in operationalizations of D&P's model. In a study of financial reporting practices among *Fortune* 200 firms, Mezas (1990) develops operational definitions for normative as well as mimetic isomorphism, yet his operationalizations of normative isomorphism are also interpretable in terms of coercive and mimetic isomorphism. Two studies, by Levitt and Nass (1989) and Palmer, Jennings, and Zhou (1993), operationalize the three isomorphic processes simultaneously. Although their indicators are extremely creative, all are potentially interpretable in terms of one or another alternative process.⁶

What is problematic in nearly all of these studies is that researchers are positing a particular process that results in a behavioral outcome, but they are measuring only the outcome while assuming the process (Covaleski and Dirsmith, 1988, is an exception). This is a problem that pervades quantitative research in the social sciences, and it may be unfair to accuse these authors of something that is more broadly pervasive. The problem here is that the focus on one isomorphic process leads to a failure to consider that an alternative process might be operative. This may result in a distorted or at least potentially incomplete picture of the phenomenon under investigation. One possible response to this issue is to suggest that these operational problems reflect ambiguities in D&P's concepts, which we will address later in the paper. What our analysis to this point indicates, however, is that researchers' operationalizations of D&P are open to reinterpretation. Because the measures used could often reflect coercive, mimetic, or normative processes, the decision about which concept to use is discretionary. This raises the question of why researchers choose to emphasize one concept as opposed to another.

Why Mimetic Isomorphism?

To the extent that our selective perceptions of social scientific works develop through social interaction among scholars, these interpretations can become social constructions, with a meaning that may or may not reflect the full character of the original work. Such appears to be the case with D&P. There are many components to their article, yet only a subset are routinely associated with it. Few consumers of D&P's article ever note the distinction between competitive and institutional isomorphism, for example. In fact, in only

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For those interested in further discussion of these studies, as well as a study by Covaleski and Dirsmith (1988) using coercive isomorphism only, we can provide this material on request.

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one of the 26 articles in which D&P's concepts were operationalized (Fennell and Alexander, 1987) did authors make reference to this distinction. At least two other studies (Finlay, 1987; Oliver, 1988) among the full set of 160 explicitly discussed the distinction, but these articles were not among the 26 in category 4. Among the three mechanisms of institutional isomorphism, it is mimetic isomorphism that has drawn the most attention. Although it is not universally the case, one could say that D&P's article has been socially constructed as a statement about mimetic isomorphism. If so, why?

We believe that mimetic isomorphism has become the centerpiece of D&P's paper because it accords with the prevalent discourse in American organizational theory. Just as Adatto and Cole (1981) showed that sociologists, as of 1980, adapted and molded Max Weber to suit their emphasis on quantitative, deductive reasoning (to the relative exclusion of Weber's historical and interpretive sides), organizational scholars may have emphasized mimetic isomorphism because it reflects the dominant tendency in American organizational analysis to minimize relations of power and coercion among organizations in favor of a cognitive approach to perception and action.⁷ Coercive isomorphism involves interorganizational power and requires a view that organizations' actions can be constrained by the actions of other, more powerful units. This view, although consistent with the resource dependence model, has been associated primarily with a group of political sociologists who have focused on corporate power, and only tangentially on organizational analysis per se. Normative isomorphism involves not only internalization of norms, a view that has been out of fashion among sociologists for more than two decades, but also social pressures by members of other organizations, which implies at least some degree of external coercion (Perrow, 1986a: 272). Because mimetic isomorphism allows organizational researchers to examine environmental effects without the need to focus on coercion by powerful organizations, it is consistent with the type of theorizing that dominates contemporary organizational discourse in North America.

Our argument is consistent with the results presented by Usdiken and Pasadeos (1995), who found that articles in a leading European organizations journal, *Organization Studies*, were far more likely to focus on themes of external power and coercion than were articles in the leading U.S. journal, *ASQ*. To consider this argument further, we conducted an analysis of citations to D&P in *Organization Studies* (*OS*) to see if the pattern of interpretation differed from that in the American journals. We found only 14 citations to D&P in *OS* during the period of our study, lower than all of the American journals.⁸ Because there were only 14 citations, two of which we were unable to locate, we will not be able to draw unqualified conclusions from this analysis, but the findings are interesting nonetheless. Of the 12 articles we could locate in *OS* whose authors cite D&P, eight made mention of one or more isomorphic processes. Of these, only one mentioned mimetic isomorphism only, although it was normative isomorphism (three articles), rather than coercive isomorphism (one article) that was the more prevalent alternative.

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See DiMaggio and Powell (1991: 14–27) for a discussion of the latter, Pfeffer (1997: 54–55) for a discussion of the former. In pointing to what he views as the increasing prominence of economic models in organizational analysis, Pfeffer (1997: 54) suggests that “by stressing markets and the operation of voluntary exchange, power, coercion, and exploitation are left out of view.”

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The American journal *Organization Science* had only 17 citations to D&P, but these dated from 1990, the year of the journal's founding.

Also interesting is the fact that in four of the eight articles, researchers mentioned two or more isomorphic processes, a departure from the American tendency to mention only one of the concepts. Given the small number of articles, it is difficult to draw definitive conclusions from this analysis, but two points are of note, both of which are consistent with the findings of a difference between European and American organizational theory. First, perhaps not surprisingly, given that the authors are American, D&P's article appears to have had less influence in Europe than in the United States. More interesting is our finding, albeit based on only a few articles, that the pattern of references to isomorphic processes is less focused on mimetic isomorphism in Europe than in the United States.

Despite the disproportionate attention to mimetic isomorphism in American journals, this attention is not exclusive: neither all, nor even a majority of the articles in American journals operationalize mimetic isomorphism only. This raises the question of why, among the authors in American journals, some scholars focus on mimetic isomorphism while others focus on one or more of the alternative concepts. Our next goal is to account for this variation in usage. Before doing so, however, it is necessary to address three possible alternative interpretations of the emphasis on mimetic isomorphism we found.

Alternative Explanations

Among authors in the American journals who have focused on only one of D&P's three types of institutional isomorphism (more than three-fourths of the relevant papers), 60 percent have focused on mimetic isomorphism alone, more than have operationalized coercive and normative isomorphism combined. But there are three possible alternative explanations for our finding of a disproportionate and not fully warranted focus on mimetic isomorphism.⁹ First, it is possible that the ambiguity in the above operationalizations reflects an inherent ambiguity in D&P's thesis itself. DiMaggio and Powell are very explicit in their article that the three forms of institutional isomorphism are to be considered ideal types. They further note that the distinctions among the three types are analytical and thus not necessarily empirical. This would, almost by definition, make it difficult to construct discrete operational definitions of the three concepts. In their own words:

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. Yet while the three types intermingle in empirical settings, they tend to derive from different conditions and may lead to different outcomes. (1983: 150)

A key component of this discussion is D&P's point that the three types tend to derive from different conditions: political influence and the problem of legitimacy (coercive isomorphism), standard responses to uncertainty (mimetic), and professionalization (normative). To distinguish the three processes, then, it is necessary to identify the existence and effect of these different conditions. Given D&P's explicit

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Several colleagues have suggested that one reason for the disproportionate attention given to mimetic isomorphism is that it is simply easier to operationalize than either coercive or normative isomorphism. We strongly disagree. Because coercive isomorphism is consistent with the resource dependence model, it can be measured with such widely used data as input-output tables (which tap interdependence), dependence on government contracts, or whether a firm operates in a regulated industry. Normative isomorphism can be measured by either social network ties or common background ties, such as having attended the same or similar universities or originating in similar functional areas of a firm. It is true that the most widely used indicator of mimetic isomorphism, proportion of prior adopters in one's organizational field, requires less effort to code than do the indicators mentioned above, but as we have shown, it is a mistake to assume that this indicator taps mimetic rather than coercive or normative processes. If anything, given the difficulty of identifying organizational officials' subjective states, mimetic processes are the most difficult of the three to measure.

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warning, as well as their awareness of the potential empirical overlap among their three concepts, it is unfair to criticize them for lack of clarity. The processes with which they dealt are extremely difficult to observe even in a historical analysis and even more difficult to operationalize with quantitative indicators. The alternative, which is neglecting to recognize the distinctions, seems far less desirable than the ambiguity with which we are faced.

It is also true that some users of D&P's thesis are well aware of the difficulty of disentangling the three processes. In a paper on the conversion of nonprofit health maintenance organizations (HMOs) to for-profit status, Ginsberg and Buchholtz (1990) refer at various points to all three of D&P's types. Among the sources of speed of conversion to for-profit status the authors note are the prior presence of for-profit HMOs in the same state and supportive state legislation. Rather than attempt to force these variables into specific types of isomorphism, the authors point to the difficulty of doing so, noting that state legislation, for example, could involve both normative and coercive factors. Instead, they sensibly treat these variables as aspects of general institutional hypotheses rather than as examples of specific isomorphic processes.

Similarly, in a study of the adoption of matrix management programs, Burns and Wholey (1993) note the difficulty of distinguishing mimetic and normative processes. They cite earlier, pre-D&P studies by Knoke (1982) and Rowan (1982) in which the same indicators were used to measure both effects. Burns and Wholey treat the cumulative level of prior adoption as an indicator of both mimetic and normative forces. Although the authors do not mention it, this variable could capture coercive forces as well, since, as they note, normative pressures can be exerted by dominant actors.

The difficulty of distinguishing the three processes of institutional isomorphism is therefore not the problem per se. The problem is in situations in which authors focus on one type at the exclusion of other types that might represent equally plausible accounts of the process. Although Fligstein (1985), for example, considers a wide range of possible explanations for the rise of the multidivisional form, he does not consider the possible pressures placed on some organizations by other organizations. Thus, when firms in an industry with a high prevalence of the MDF adopt, it is assumed to result from a voluntary process of mimetic isomorphism. By failing to consider coercive and normative isomorphism, either as alternative interpretations of the prior adopters variable or as variables requiring their own operationalization, Fligstein selectively appropriates D&P's model and fails to take full advantage of its explanatory power.¹⁰

A second possible objection to our argument is that the authors of the above works have in fact dealt with the full range of topics specified by D&P but have used other authors as their sources. This argument suggests that mimetic isomorphism is what is genuinely original and unique about D&P's model and that the processes they designated as coercive and normative isomorphism have already been described in other terms by other authors. DiMaggio himself

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In fairness to Fligstein, we should note that in his subsequent book (1990), he emphasizes the overarching role of a major external organization, the state, in affecting changes in organizational forms.

has raised this suggestion. In a letter to the first author, responding to a question about why users of the model seemingly tended to focus on mimetic rather than coercive isomorphism, DiMaggio replied:

You are right that most of the stuff that cites Woody's and my paper focuses more on the non-coercive kinds of isomorphic processes. I think that may just be because the coercive kind is pretty consistent with resource-dependence theory and some of the earlier [John] Meyer stuff, so there is lots of other stuff to cite for that. (DiMaggio, private communication; used with permission)

Along similar lines, the lack of attention to normative isomorphism could be due to its similarity to network analytic formulations. What D&P refer to as normative isomorphism could be viewed as ordinary processes of network influence by other researchers. In one sense, however, this argument for mimetic isomorphism as novelty is untenable. One could just as easily suggest that portions of a work that accord with well-established themes would be those most likely to be adopted. Original portions of works are often ignored precisely because they do not resonate with current thinking, while aspects of the works that ring familiar are invoked. The fact that the component of D&P most frequently adopted was new must therefore be explained by its content rather than its novelty. Nevertheless, the first part of the argument deserves scrutiny. Is it possible that those users of D&P who focus on mimetic isomorphism in fact do deal with issues of power and coercion but refer to other authors in doing so? To answer this question, we reviewed the 12 articles in which authors explicitly operationalized mimetic isomorphism only. If the criticism is correct, then an unspecified but sizeable number of these articles should have variables, drawn from sources other than D&P, that capture the processes of coercive and/or normative isomorphism. In fact, however, only one of the 12 articles (Schoonhoven, Eisenhardt, and Lyman, 1990) provides a clear example of this phenomenon. Three of the remaining eleven articles (Mizuchi and Stearns, 1988; Davis, 1991; Haunschild, 1994) appear to provide possible examples, but closer examination reveals that they do not.

Schoonhoven, Eisenhardt, and Lyman (1990) examine the speed with which start-up firms bring their first revenue-producing products to market. The authors note, consistent with D&P's discussion of coercive isomorphism, that new firms may experience pressures to model themselves after other firms in their industries. Instead of citing D&P for this point, the authors cite Meyer and Rowan (1977) and Meyer and Scott (1983). They then move to a discussion of D&P but focus on mimetic isomorphism, noting that "when a substantial proportion of new ventures founded in the same year are speeding their products to market, this may create pressures to mimic the research and development productivity of the cohort" (1990: 186). This example illustrates the point DiMaggio made in the letter quoted above, in which he suggests that authors tend to ignore coercive isomorphism because the concept is easily captured by works that appeared earlier, but it represents the only such case among the 12 articles. Not only do those who operationalize mimetic isomorphism in most cases fail to rule out coercive or

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normative isomorphism as plausible alternatives, but they also as a rule neglect to consider these alternatives, even those that are rooted in different theoretical perspectives.¹¹

The third and most serious possible objection to our argument is that organizational scholars have in fact focused on issues of interorganizational power and influence but that scholars who have done this have tended to ignore D&P altogether. Because our analysis has focused only on articles, in a subset of journals, in which D&P were cited, it is possible that we have a biased representation of organizational studies. To the extent that scholars focusing on interorganizational power have operated within contexts other than institutional theory, they may have been less likely to rely on D&P for their theoretical inspiration. This is consistent with claims, such as those by Perrow (1986a: 265–272) and Hirsch (1997), that the new institutional theory in general fails to give sufficient emphasis to the role of power and conflict. The difficulty with responding to this argument is that it is testable only if one can develop a falsifiable conception of what does and does not constitute organizational analysis. Stern and Barley (1996), for example, have argued, similar to our position, that recent organizational research has tended to underemphasize issues of societal-level power and constraints on organizations. In response, Scott (1996) has suggested that whether one views organizational scholars as having ignored issues of macro-level power depends on one's definition of what constitutes organizational analysis. By defining the field more broadly, Scott identifies a number of studies that, he believes, do what Stern and Barley recommend. For us to fully address this last objection, then, would require a universally agreed upon conception of what constitutes a work of organizational research. Still, three points tend to weigh against the sample-bias argument. First, not all of the articles in our data set are situated in an institutional theory framework. In fact, of the twelve articles that operationalize only mimetic isomorphism, five (Mizuchi and Stearns, 1988; Schoonhoven, Eisenhardt, and Lyman, 1990; Davis, 1991; Haunschild, 1994; Lomi, 1995) could be clearly placed within traditions other than institutional analysis. Three others (Galaskiewicz and Wasserman, 1989; Haveman, 1993; Han, 1994) combine institutional theory with alternative perspectives. These works do not necessarily provide a random sample of those within the population ecology, resource dependence, and network analysis literatures, but they do suggest that D&P's article is relevant to a wide range of organizational research. The second limitation of the sample-bias argument concerns D&P's article itself. Regardless of who has tended to use it, the article contains within it discussions of interorganizational power/coercion and influence processes through social networks. Were the article to be interpreted and used in accordance with its content, we would expect more prominent treatments of coercive and normative isomorphism. Our data indicate that the consumers of D&P have made unbalanced use of it. Because the operationalizations of mimetic isomorphism could have been used as measures of coercive or normative isomorphism, the field has rendered a selective and, therefore, socially constructed interpretation of the article.

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Fligstein, among the five models he tests, considers a "control theory based on power" (1985: 377). Given the association of coercive isomorphism with the exercise of interorganizational power, it is possible that this concept was already taken into account in Fligstein's operationalization of the power-control model, but this is not the case. The power-control model Fligstein adopted is explicitly an intraorganizational one, based on which branch of the organization (production, sales, or finance) controls the organization internally (1985: 384). The author therefore does not present a direct test of the coercive isomorphism explanation, although his operationalization of mimetic isomorphism could be interpreted within that framework.

We have addressed three possible objections to our argument that D&P's article has been socially defined as a statement about mimetic isomorphism, but we can provide an empirical test that will allow us to evaluate our argument further. Such a test is possible, ironically, because of the variation in scholars' uses of D&P's thesis. Had virtually all researchers who operationalized D&P dealt with mimetic isomorphism only, we would have no logical basis for explaining why. Because authors have in fact operationalized all three types, often in combinations of two or more, it is possible to develop an explanation for why some authors have focused exclusively on mimetic isomorphism while others have not.

WHO USES MIMETIC ISOMORPHISM? AN EMPIRICAL TEST

In a scientific community, there are certain worldviews that may be shared by a significant proportion of its members. In the social sciences, these worldviews are reflected in widely accepted narratives about various social phenomena, which we refer to as dominant discourses. We argue that when a particular interpretation of a work prevails, it is because that reading accords with the dominant discourse in the field. If the dominant discourse in North American organizational theory emphasizes the voluntary actions of organizational leaders, while deemphasizing external power and coercion, then the dominant discourse on DiMaggio and Powell's article is one that focuses on mimetic isomorphism.

A dominant discourse is not necessarily all-encompassing. First, it need not be universally shared. Competing narratives will always exist to some degree. Second, although those who subscribe to a dominant discourse may develop the ability to impose their interpretation on the field, this will not always occur. For one thing, while these actors may have a disproportionate amount of influence, their power is not absolute. Not all journal submissions will be reviewed by adherents of the dominant discourse. Nor will all adherents of the dominant discourse necessarily be hostile to alternative interpretations. Some may find these interpretations intriguing, or even enlightening, in the same way that social actors are often jolted out of their familiar worldviews by exposure to alters from different cultural milieus. Over time, however, as with other innovations, a dominant discourse is likely to gain legitimacy only when it is adopted by socially central actors (Strang and Soule, 1998).

Although the mimetic isomorphism interpretation of D&P may reflect the dominant discourse in North American organizational theory, not all authors have applied this interpretation, so we need to account for this variation in usage. As noted above, for a discourse to maintain its dominance, it must eventually attain prevalence within central locations in a discipline. To the degree that interpretations of a work are socially constructed, they may be disseminated informally through social networks as much as through direct contact with the text. Those who have access to these social networks should therefore be disproportionately likely to be exposed to conceptions of a work that accord with the dominant discourse. It follows that those centrally located in

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social networks within the field of organizational analysis should be those most likely to invoke the mimetic isomorphism interpretation of D&P. Scholars who are more socially and professionally peripheral will be less conversant with the dominant interpretation of a work, both because they are less likely to be informally exposed to these interpretations and because, as a consequence, they are more likely to acquire their knowledge of a work from direct contact with the text. This means that relatively peripheral scholars will be more likely to provide either nondominant or more "literal" interpretations of a work. In using the term literal (which may or may not correspond with a nondominant reading), we are not implying that there is a single, correct reading of D&P or any other work. We do believe, however, that some readings come closer to capturing the content of a work than do other readings. In our data, this could manifest itself in two ways: either by the incorporation of two or more of D&P's concepts, which indicates a broader use of the article, or by the use of indicators that are less open to alternative interpretations. Of the 14 articles that use one or more concepts other than mimetic isomorphism, six use two or more concepts simultaneously. By the above definition, these six could be viewed as more literal readings of D&P than are those that use mimetic isomorphism only. We shall not attempt to demonstrate that the remaining eight articles use less ambiguous indicators of coercive or normative isomorphism than do the twelve articles that use mimetic isomorphism only. But we will suggest that these eight constitute nondominant interpretations of D&P. We should stress that our suggesting the possibility that centrally located scholars might be less likely to invoke a representative reading of D&P is not meant as a criticism of either those who are or are not the data sources for this paper. It reflects only the fact that scholars of all types, even if they have at one time carefully studied a work in question, often develop their current views about the content of such works from their discussions with other scholars. Centrally located scholars, we suggest, will be more likely to develop their views of major works through the informal social ties that proliferate in centrally located settings than will scholars more peripheral in disciplinary social networks. We therefore suggest the following proposition:

Proposition 1: The more centrally located a scholar is in a disciplinary social network, the more likely the scholar is to apply readings of a major work that accord with the dominant discourse in the field.

The question is how to operationalize and test this proposition. As already noted, we have defined a dominant reading of D&P as an author's use of mimetic isomorphism only. Our discussion above, in which we showed the ways in which authors' measurements of mimetic isomorphism could have been reinterpreted in terms of coercive or normative isomorphism, increases our confidence that the use of mimetic isomorphism in most cases is a potentially malleable decision subject to social influences. Our concern, then, is to predict which authors are likely to focus on mimetic isomorphism to the exclusion of the alternative concepts. Our suggestion in the above proposition is that it is scholars most central in the area of organizational analysis

who are most likely to invoke this socially constructed reading.

One indicator of an author's centrality in a disciplinary social network is whether the scholar works in an elite university or department. Scholars in top-ranked departments or schools have more immediate access to new and important work within a field. They are therefore more likely to be aware of major trends and intellectual fashions (Perrow, 1986b). They are also likely to experience discussions of new and important ideas and to be exposed to prevalent interpretations of major works. Scholars in less central settings have, on average, less access to leading scholars within a field and fewer opportunities to acquire verbal information about currently fashionable ideas and interpretations. As a result, they are more likely to acquire their knowledge of a work in a solitary manner, by direct contact with a text. Acquiring knowledge in this way increases the probability of either a less fashionable or (what we have termed, with some consternation) a more literal reading of the work, rather than the verbally filtered, more socially dominant reading to which scholars at more highly ranked institutions are exposed. This suggests the following hypothesis:

Hypothesis 1: Scholars who are employed in top-ranked sociology or organizational behavior departments will be more likely than will other scholars to operationalize mimetic isomorphism to the exclusion of coercive and normative isomorphism.¹²

In the previous section, we argued that organizational scholars have emphasized mimetic isomorphism because it accords with the dominant worldview of organizational scholars in North America. Although the possibility of coercion and influence by powerful external forces was a significant component of D&P's work, it has received less attention than have the more cognitive decision-making processes captured in mimetic isomorphism. Scott (1996), however, suggested that a sizeable number of scholars have in fact addressed these issues and that issues of large-scale change are underrepresented in organizational analysis only to the extent that we define the field narrowly. If Scott is correct, then among North American organizational scholars, those who are sociologists should be more attentive to issues of power and coercion than are those trained in organizational behavior and related fields. If this is the case, then users of D&P who are sociologists should be more likely than nonsociologists to consider the concepts of coercive and normative as well as mimetic isomorphism. This suggests the following hypothesis:

Hypothesis 2: Organizational scholars trained as sociologists will be less likely to operationalize mimetic isomorphism to the exclusion of coercive and normative isomorphism than will scholars trained in organizational behavior and other fields.

Data and Measures

The data for our analysis consist of the 26 articles from six major American journals in sociology and organizational theory in which authors provided operational definitions of one or more of D&P's three types of institutional isomorphism. These articles are listed in table 1, above. For each article, we gathered information about the article and all of

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It is possible that scholars have received appointments at elite universities *because* they have conformed to the socially dominant discourse. If this were true, then centrality could be a consequence as well as a cause of adherence to a dominant discourse. We acknowledge this possibility, but we believe that it is not inconsistent with our argument. First, knowledge of the dominant discourse and appointments to elite universities are more easily acquired if one has already had experience in central environments. Second, in our analysis, we ensure that employment in an elite department precedes publication of a scholar's article.

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the authors. Our primary dependent variable was a binary outcome measure indicating whether or not the author(s) operationalized mimetic isomorphism only. As noted in table 1, there were 12 articles that fit this criterion. Our key independent variables were whether the author was employed in a top-ranked department/school and whether the author was trained as a sociologist.

Two problems immediately presented themselves. First, 15 of the 26 articles involved multiple authors. Most (12) of these cases involved dual authorship. Two articles contained three authors each, and one article contained four authors. In cases of multiple authors, if any of the authors was employed in a top-ranked department or school, we coded the variable affirmative for that article, on the grounds that it would allow all of the article's authors to have immediate access to the dominant discourse.¹³ Second, there were three individuals who appeared as authors of more than one article. Two of them appeared twice, while a third appeared three times. This phenomenon means that the 26 observations are not statistically independent. Given our small number of observations and the small amount of overlap, it might have been advisable to ignore the problem and conduct our analysis with all 26 cases. To ensure that our findings were not biased by this nonindependence, however, we also conducted a parallel analysis based on 21 fully independent cases, determined as follows. Among the multiple cases, one author who appeared twice had identical data in both articles for all variables. We therefore deleted one of his entries and retained the other. A second author who appeared twice had identical data in both articles except for one variable. In this case, we deleted one case and took the mean of the two cases for the variable (highly ranked department) in question. The third author, who appeared three times, had different outcomes, using normative isomorphism only in two cases and mimetic isomorphism only in the third. We deleted all three articles for this author. As shown below, the results were virtually identical regardless of whether we used the full sample of 26 articles or the truncated sample of 21 articles.

Our dependent variable, mimetic isomorphism only, was coded based on our earlier classification of the articles (described above). Articles in which authors used mimetic isomorphism only were coded 1. Employment in a highly ranked department/school was a dummy variable, coded 1 if at least one author was primarily affiliated with either a sociology department or an organizational behavior department in a business school ranked among the top 25 departments/schools in the most recent *U.S. News and World Report* rankings at the time from which the data were gathered (1995). These rankings are known to be generally stable over time. In this coding, scholars employed at highly ranked institutions but in departments other than sociology or organizational behavior (such as accounting or communications) were treated as zeros. We also examined whether an author received his or her Ph.D. from a highly ranked department, but there was insufficient variation from which to conduct a systematic analysis (there were only five cases in which no author had a degree from a highly ranked institution). Among

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Our original goal was to perform a similar coding for the variable indicating whether the author was trained as a sociologist. We planned to code the variable as affirmative if one or more authors held sociology doctorates. It turned out, however, that there were only three cases in which multiple authors were split between those who were and were not trained as sociologists. We made qualitative coding decisions for each of these. In the first case, the second (and clearly less senior) author had received a Ph.D. in sociology but had been a long-time professor in a business school and was primarily identified with that community (as evidence of this, we note that he did not appear once on the program of the Annual Meeting of the American Sociological Association between 1979 and 1998). Because the senior author was a highly visible member of the business school community, with business school training, we coded that article as authored by a nonsociologist. In a second case, one of the two authors was trained as a sociologist, and this author was clearly the primary substantive force in the article, while the second author, a statistician, played a primarily methodological role. We coded this case as authored by a sociologist. In the third case, one author was trained as a sociologist and the other was not. Because the authors' prior and subsequent collaboration led us to believe that they contributed roughly equally to the paper's theoretical orientation, we coded this article as 0.5, or one-half sociologist and one-half nonsociologist. An alternative variable is whether one or more authors was currently employed (as opposed to having been trained) in a sociology department. Had we used this variable, the coding would have been identical for all 26 cases. In only one case in addition to that described above was an author with a sociology Ph.D. employed in a business school at the time of publication, and that author had a coauthor who taught in a sociology department.

the 26 articles, authors were split almost evenly (14 versus 12) on the dimension of elite versus nonelite employment.

Our second key exogenous variable was whether an author was trained in a sociology department. This was also a dummy variable, coded 1 if at least one of the authors of an article received a sociology Ph.D. As noted in footnote 13, three of our cases deviated slightly from this coding, in one case leading to assignment of a code of 0.5. As we also noted, in one case we coded an article with a sociologist coauthor as an organizational behavior Ph.D. Because this article used coercive isomorphism only, our coding decision led to a more conservative estimate of our results. Had we coded the variable for this case even 0.5 for sociology Ph.D., it would have strengthened our findings.

In addition to our two primary substantive variables, we also examined control variables for the year of publication and whether the article appeared in a sociology or management journal (coded 1 for those that appeared in the *American Journal of Sociology*, the *American Sociological Review*, or *Social Forces* and 0 otherwise). Because of the small number of cases and because neither of these variables contributed to the estimation of our model, we report our equations both with and without these two variables.

We also considered an alternative operational definition for centrality in the discipline: a researcher's professional and social closeness to the authors themselves. On the one hand, because DiMaggio and Powell are the originators of the theory, closeness to them would suggest a thorough and deep familiarity with their argument. If that were the case, then scholars close to D&P would be expected to provide broader and less socially constructed readings of the articles, unless D&P themselves were encouraging particular uses.¹⁴ On the other hand, even if the authors' friends and professional colleagues had carefully read the original article close to the time that they conducted their studies, as members of the discipline closely tied to two central figures, these scholars might be more likely than are less central scholars to be conversant with the prevailing discourse in the field. In other words, closeness to the authors might be viewed as an alternative indicator of centrality in the discipline, which, if we are correct, should render a scholar more likely to subscribe to the socially constructed view of D&P's original thesis. To examine this, we administered a survey to Paul DiMaggio and Walter Powell, in which we presented them with a list of every author of the 26 articles in our data set. The questionnaire contained two components, a professional closeness scale (from 1 through 5, based on the subject's degree of familiarity with the author's work) and a social closeness scale (from 1 through 7, based on the subject's strength of personal relation with the author). All four measures, two each for the two subjects, were highly correlated, ranging from .76 to .91, with an average of .82. All four were also highly correlated with whether an author was located in a highly ranked department, ranging from .58 to .72. Despite the high correlation between these measures and our alternative measure of centrality (employment in a highly ranked department), the latter measure was a stronger predictor of the use of mimetic isomorphism only than

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An anonymous reviewer has noted that DiMaggio and Powell themselves, in the introductory essay to Powell and DiMaggio's 1991 book on the new institutionalism, seemed to advocate a primarily cognitive approach to institutional analysis (see DiMaggio and Powell, 1991: 14–27). This suggests that D&P might, by 1991, have accepted the socially constructed reinterpretation of their own essay. In private communication, however, both authors have told us that they had encouraged others to consider the coercive and normative elements of their original piece and that they were disappointed by users' lack of attention to these features of the paper.

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were any of the former. One possible reason for this, noted above and confirmed to us in private correspondence by both Paul DiMaggio and Walter Powell, is that closeness to D&P might have had the counteracting effect of alerting authors to otherwise neglected aspects of the D&P work, including perhaps the concepts of coercive and normative isomorphism. Because of its less ambiguous meaning, we report our findings based on the highly ranked department indicator of disciplinary centrality.

RESULTS

Table 2 presents means, standard deviations, and correlations among the five variables in our analysis based on all 26 articles. Because four of the five variables are binary, we also present, in parentheses, the frequencies of positive responses for these variables. Only one variable, highly ranked department, has a strong bivariate association with the use of mimetic isomorphism only. Being a sociologist is negatively associated, as predicted, but this association does not differ significantly from zero. There are, however, other associations of interest. There is a slight tendency for the use of mimetic isomorphism only to decline over time, although this association is not statistically significant. This tendency is unexpected, since, consistent with Tolbert and Zucker's (1983) discussion of late versus early adoption of innovations, we might expect socially constructed uses of D&P to increase over time. This finding is a result of the fact that three of the first five and five of the first eight articles in table 1 involved the use of mimetic isomorphism only. At the same time, there is a clear tendency over time for operationalizations of D&P to be presented increasingly by nonsociologists, in management journals, and by scholars in non-elite departments. The move away from sociology journals probably reflects the fact that the paper was originally published by sociologists in a sociology journal (Powell was located in a management school at the time, but he was strongly identified with the field of sociology) and may have only later diffused to organizational scholars in nonsociology settings. It is also interesting that among users of D&P, sociologists, as well as those who publish in sociology journals, tend to be disproportionately placed in highly ranked departments.¹⁵

Table 3 presents six logistic regression equations, with the use of mimetic isomorphism only regressed on various combinations of predictors. The first three equations are based on a data set of all 26 articles. Equations 4, 5, and 6 are drawn from the truncated data set of 21 cases, in which multiple appearances by the same authors are removed. For each data set, we present the full model (including the two control variables), followed by two models in which we successively remove the two control variables. In equations 2 and 5, we remove the control for whether the article was published in a sociology journal. This variable was correlated .64 with our substantive variable for whether one or more authors was a sociologist, so we lose little predictive power (and in fact gain in terms of the reliability of the model estimation) by removing it. In equations 3 and 6, we remove the control for year of publication, which had virtually no effect

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Ideally, one would want to study a diffusion process over time. Our ability to use time in this analysis is confounded by two interesting facts. First, sociologists in the data set were more likely than nonsociologists to be employed in elite universities; second, sociologists were less likely to publish in this area over time. Among nonsociologists, there was a positive, although not statistically significant tendency toward an increased use of mimetic isomorphism over time ($r = .187$, $p = .27$).

Table 2

Means, Standard Deviations, and Correlations among Variables (N = 26)*						
	Mean	S.D.	2	3	4	5
1. Mimetic isomorphism only (12)	.462	.508	.393	-.042	-.177	-.040
2. Highly ranked department (14)	.538	.508		.436	-.361	.388
3. Sociologist (12.5)	.481	.500			-.338	.643
4. Year of publication	91.1	3.1				-.217
5. Sociology journal (7)	.269	.452				

* All variables except year of publication are dummy variables, coded 1 for affirmative responses. Values in parentheses represent the frequency of yes responses. The noninteger value for the variable "sociologist" is a result of an interpolated 0.5 coding for one case. See text for details.

Table 3

Determinants of the Use of Mimetic Isomorphism Only*						
Independent variables	(1)	(2)	(3)	(4)	(5)	(6)
Constant	6.759 (0.468)	6.654 (0.462)	-0.824 (-1.182)	9.852 (0.548)	8.667 (0.502)	-0.778 (-1.064)
Highly ranked dept./school	2.503** (2.004)	2.442** (1.954)	2.548** (2.060)	3.449** (1.935)	3.481** (1.970)	3.600** (2.000)
Sociologist	-1.343 (-0.928)	-1.675* (-1.319)	-1.553 (-1.246)	-2.826* (-1.370)	-2.445* (-1.373)	-2.442* (-1.340)
Year of publication	-0.082 (-0.526)	-0.081 (-0.520)		-0.116 (-0.591)	-0.103 (-0.546)	
Sociology journal	-0.600 (-0.451)			0.713 (0.392)		
χ^2	6.556	6.351	6.078	8.473	8.316	8.010
D.f.	4	3	2	4	3	2
p	.161	.096	.048	.076	.040	.018

* $p < .10$; ** $p < .05$; all probabilities are one-tailed.

* Logit coefficients are reported on the first line with T-statistics in parentheses. Equations 1–3 contain the full data set with all 26 cases. Equations 4–6 contain the truncated data set with 21 cases, in which multiple observations involving the same individual authors have been removed.

on our dependent variable. These equations, with only our two substantive variables, provide the best-fitting models.

Given the small number of cases and the fact that the articles are drawn only from leading journals in two fields, one must exercise some caution in interpreting these findings. Nevertheless, they are strongly supportive of hypothesis 1: scholars who are relatively central in the discipline, as represented by their employment in highly ranked departments, are significantly more likely than other scholars to have operationalized mimetic isomorphism to the exclusion of coercive and normative isomorphism. This suggests, consistent with our argument, that centrally located scholars are more likely than less central scholars to operate with a socially constructed rather than a literal reading of a work.

The findings on hypothesis 2 are less strong but still consistently supportive. Those trained as sociologists are, as predicted, more likely to take into account aspects of D&P's argument (coercive and normative isomorphism) that emphasized power and influence. This effect is not statistically significant in the full model with the full data set (equation 1), due perhaps in part to lack of sufficient independent variance once year and, especially, appearance in a sociology journal were controlled. The effect also approaches but does not

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reach statistical significance in the model in equation 3. The sociologist effect is marginally significant, if a .10 probability level is imposed, in the four remaining models, however, including all three models based on the truncated data set. Our results thus hold more strongly in the data set in which we remove the nonindependent observations.

Most important, though, is our finding that centrality within a discipline, with its concurrent exposure to the dominant intellectual discourse, renders a scholar more likely to work with a socially constructed rather than a literal reading of a major work. Scholars in both sociology and organizational behavior who are located in highly ranked departments or schools are more likely than other scholars to operationalize mimetic isomorphism only, to the exclusion of coercive and normative isomorphism. Given that, as we showed above, these authors could have just as easily used their measures of mimetic isomorphism as indicators of one of the two alternatives, it suggests that they have indeed invoked a selective application of DiMaggio and Powell's classic article.

DISCUSSION

We have argued, consistent with scholars from a range of perspectives (Cole, 1975, 1992; Latour, 1987), that scholarly works, like historical events, are subject to a number of possible interpretations and that readers have choices about what they will and will not appropriate from the work. We have suggested that authors will tend to emphasize components of a work that accord with their own previous conceptions. When dominant conceptions exist within a scientific field, particular works will tend to be interpreted within those conceptions. Organizational researchers' treatment of the classic DiMaggio and Powell article appears to conform to this tendency. Among the three processes of institutional isomorphism specified by D&P, one process, mimetic, has received disproportionate attention. We believe that this has occurred because D&P's discussion of mimetic isomorphism is consistent with the dominantly held view among leading North American organizational researchers that emphasizes cognitive decision-making processes at the expense of inter-organizational power and coercion. Once the concept of mimetic isomorphism became identified as the key contribution of D&P's article, the work took on an identity apart from the article itself. D&P as a statement about mimetic isomorphism became the dominant, socially constructed version of the article.

To illustrate our argument, we showed that in virtually every case in which researchers attempted to operationalize mimetic isomorphism, the measure they used could have easily been reinterpreted in terms of either coercive or normative isomorphism. This suggests a selective use of D&P. But not all authors have ignored coercive and normative isomorphism. In fact, in slightly more than half of the articles in which D&P's concepts have been operationalized, authors have used at least one of the two alternative types. This variation, paradoxically, allowed us to further test our argument by predicting which authors were more likely to focus on mimetic isomorphism only. We suggested that there were two possible readings of D&P's work, the dominant,

socially constructed version gleaned from association with the spoken discourse of the field and a broader, more grounded version derived from a more direct connection to the text itself.

We hypothesized that researchers who were centrally located in the profession would be more likely than more peripheral researchers to invoke the socially constructed version of D&P, as represented by the use of mimetic isomorphism. We also suggested that sociologists, who are more exposed than those trained in organizational behavior departments to issues of power and coercion, would be more likely to invoke coercive and normative isomorphism in addition to mimetic isomorphism. Our findings, based on an analysis of 26 articles in six leading American journals in which authors operationalized D&P's concepts, strongly supported the first argument and marginally supported the second. Researchers employed in highly ranked departments, whether in sociology or organizational behavior, were indeed more likely than those based in less prestigious departments to operationalize mimetic isomorphism only. Those trained in sociology departments were also less likely to focus on mimetic isomorphism only, although the effect of this variable was not as strong. Our discussions of specific articles and our analysis of aggregate data thus indicate that D&P's argument has been selectively appropriated. This finding has implications for study of organizations in particular and the transmission of knowledge in general.

Implications for Organizational Theory

As we noted at the outset of the paper, the new institutional theory has become a leading perspective within organizational analysis. Whatever its prominence in the field as a whole, institutional theory is clearly the leading perspective among organizational sociologists in the United States. The foundational statement of the new institutional theory is generally believed to be the article by Meyer and Rowan (1977). Increasingly, authors cite DiMaggio and Powell, along with Meyer and Rowan, as a second foundational statement of the approach. DiMaggio and Powell have apparently accepted this categorization, as evidenced by their publication of an anthology designed to provide a comprehensive overview of the perspective (Powell and DiMaggio, 1991). Although there are good reasons that D&P's article became associated with institutional theory, this article also has relevance to other major perspectives. This is demonstrated by the number of the 26 articles that are not situated within institutional theory. At the same time, noninstitutionalists who have invoked D&P have tended to treat it as an example of institutional theory, so that a citation to D&P represents an acknowledgement of the institutional approach. And among D&P's three types of institutional isomorphism, it is mimetic isomorphism that has become most closely identified with institutional theory.

Institutional theory is based on the notion that, to survive, organizations must convince larger publics that they are legitimate entities worthy of support (Meyer and Rowan, 1977). To gain this legitimacy, organizations create myths about themselves, through the perpetuation of symbolic and

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ceremonial activities and stories about their activities. The organization's actual behavior becomes severed from the socially constructed stories that it creates, stories that are then appropriated by constituents. Once these perceptions are picked up by an organization's publics, they become the social definition of the organization itself. The organization becomes institutionalized, as in school systems that become defined as entities that mold individuals to be well-informed, productive members of a democratic society. DiMaggio and Powell's (1983) article certainly contains elements consistent with this argument. There is no one inherently efficient way to structure an organization, D&P suggest. Instead, there are only socially constructed definitions of efficiency. Organizations, concerned with survival and thus their legitimacy, take on forms not necessarily because particular forms are technically appropriate but rather because they conform to socially accepted notions of what is appropriate. The concept of mimetic isomorphism, in which organizational leaders, operating in a sea of uncertainty, mimic their peers because they do not know what else to do, fits closely with this view.

But institutional theory's concern with legitimacy raises another issue. For Meyer and Rowan, organizations' need for legitimacy is a function of their need to extract resources from their environment. This view is much closer to Pfeffer and Salancik's (1978) resource dependence model, in which organizations become more or less powerful based on the extent to which others depend on them for resources. It is also well captured by DiMaggio and Powell's concept of coercive isomorphism, in which organizations adopt structures mandated, overtly or covertly, by the organizations on which they are dependent. This model, although it speaks to the issue of legitimacy, also involves the potential exercise of power and coercion. But it is theoretically as much a part of institutional theory as is mimetic isomorphism. Normative isomorphism contains elements of both institutional theory and network analysis. On the one hand, it results from common sources of socialization, which could be viewed as common exposure to a set of socially constructed myths, such as the similar worldviews of chief executive officers who attended the same business school. On the other hand, it results from the dissemination of ideas through social networks, in which members of one organization directly influence those of another.

Our point is that DiMaggio and Powell's article speaks to resource dependence, network theory, and, as several of the articles we have examined demonstrate, the population ecology model as well as institutional theory and that institutional theory itself is applicable to issues of power, coercion, and diffusion via networks (Powell, 1991; Scott, 1991). Yet users of D&P, one of the key works associated with institutional theory, have, in the major journals, underemphasized these elements of the argument. The D&P argument has, at least among some researchers, become an institutionalized myth, a story about mimetic isomorphism. This myth is not a complete fabrication. Mimetic isomorphism is one of the key elements of D&P's article. But it is only one element, and the others have tended to receive less attention than one would expect, given their significance to D&P's model.

CONCLUSION

We provided evidence that D&P's article has been selectively applied, to the point that significant numbers of scholars present an unbalanced picture of their work. It is clear that regardless of which forms of institutional isomorphism authors examine, their indicators are open to alternative interpretations. Because alternative uses have been possible, the emphasis on one form to the exclusion of others constitutes a selective representation of D&P's work. We have shown that this selective representation amounts to a social construction of the D&P thesis.

Our conclusion, we should emphasize, is necessarily limited by the scope of our sample. We have examined in detail only articles from the leading American journals in sociology and organizational analysis, and only those articles in which authors developed operational indicators of institutional isomorphism. We have thus failed to consider alternative arenas, in which other trends in the use of D&P are possible (note, for example, the articles by Orru, Biggart, and Hamilton and Singh, Tucker, and Meinhard in the 1991 volume edited by Powell and DiMaggio). Still, we believe that our focus on the major American journals is useful, because these journals help define both the meanings associated with major works and the ways in which those works are used. Our sample from these journals indicates that authors have focused on certain aspects of D&P's article while underemphasizing other components. But this raises a question: What harm is there in such a selective treatment? Perhaps researchers have distorted D&P's original purpose, but one could argue that these researchers have used D&P's model as a tool for the development of plausible hypotheses. Whether the hypotheses derived from D&P capture their arguments with perfect accuracy could be seen as irrelevant.¹⁶ Who would dispute the value, for example, of Fligstein's finding that firms in industries with high numbers of prior adopters are themselves likely to adopt the multidivisional form? Does it matter if this finding does not conclusively prove the tenability of D&P's argument about mimetic isomorphism? Either way, it is still an interesting finding.

We believe that it does matter. The problem is not with any particular finding or any particular study. The problem arises in cases in which authors stipulate only one type of isomorphic process while ignoring equally plausible alternative accounts. When authors assume that only voluntary mimicry accounts for an organization's behavior, without considering alternative explanations, including coercion, then one may be providing a limited picture of a phenomenon. If one fails to consider alternative accounts provided by the authors of one's source, then one's distortion of that source is not only misrepresenting the theory on which one's analysis is based, but it is providing a limited and biased picture of the processes one is trying to describe.

Our concern, then, is not with the selective appropriation of DiMaggio and Powell per se but, rather, that this selective appropriation provides a limited picture of the world and at the same time unfairly implicates them as accessories to this limited picture. Our purpose has been to understand this

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Some scholars (Escarpit, 1971, for example) have suggested that the ambiguity in certain works is actually a positive force that creates a dynamic tension conducive to the development of new knowledge. To that extent, the selective interpretation of D&P could be beneficial, provided that it generates multiple rather than uniform interpretations.

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process rather than to provide a solution. But just as a realization of the latent functions described by Merton many decades ago created the means for rendering them manifest, an understanding of the ways in which socially constructed knowledge provides a particular representation of the world might provide the means for broadening our portrayals in the future. This should not be taken as a criticism of the many excellent works we have examined. Instead, we should see it as an opportunity to extend those important contributions.

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