Materialism and Idealism in Organizational Research

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Abstract

Organization theory needs a framework that can elucidate the technological, economic, political and symbolic forces that are at work in and on organizations. Much organizational research can be seen as materialist, by virtue of its granting primary causal efficacy to technical–economic forces, or idealist by virtue of privileging political–symbolic forces. The conflict between materialism and idealism has often been inflated and/or obscured by conceptual strategies of specialization, eclecticism and reductionism. A metatheoretical approach to materialism and idealism is presented that clarifies the fundamental nature of the approaches and distinguishes areas of possible reconciliation from areas of irreducible conflict.

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Introduction

The fundamental premise of this paper is that the behaviour of organizations and the people within them reflects both the material forces of technology and economics and the ideational forces of politics and symbols. For example, organizational structure has been analyzed as reflecting technical forces (Thompson 1967), economic forces (Williamson 1985), political forces (Pfeffer 1981b) and symbolic forces (Barley 1986). This paper seeks to clarify the debate between proponents of these competing perspectives on organizations and to identify areas of possible reconciliation as well as areas where the conflict is irreducible.

At the societal level such forces are to some extent institutionalized in distinct, relatively autonomous institutional systems such as 'the economy' and 'the State' (Polanyi 1944). Some sociologists and historians have sought to elaborate integrative schemes at the societal level of analysis (Parsons 1951). Nonetheless, this autonomy makes it possible for intellectual disciplines focused exclusively on one of these forces to generate fruitful research programmes.

In contrast, the question of the interrelation of these forces has been a pressing one for organizational research (Etzioni 1961; Zald 1970; Benson 1975; Fombrun 1986). When we shift levels of analysis from the society to the organization, we find that the business firm (the focal type

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of organization in this essay) owes its *raison d'etre* to its ability to marshal all four types of forces. Moreover, within most such organizations, there is a low degree of institutional autonomy of the various forces.

The theoretical issues raised by the interrelation of material and ideational forces have not been adequately addressed by organizational research due, in part, to a lack of conceptual tools. The purpose of this paper is fourfold: First, we explicate alternative conceptual strategies available for tackling this interrelation. Second, we develop a set of tools for pursuing the strategy we see as most fruitful for addressing the debate — metatheory. Third, we use these tools to delimit areas of possible reconciliation between the two competing theories, and finally, we suggest some implications of our argument for organizational research.

The paper is in three parts. In the first we show that the debate among proponents of technological, economic, political and symbolic perspectives is pervasive. We argue that it can be recast in the form of a debate between two positions — materialism and idealism. Materialists give causal priority to the technical and economic forces; these are represented theoretically by production frontiers, paths of technological development, and efficiency pressures, among other concepts. Idealists privilege the influence of more directly human factors, such as power, language, desires and norms; they thus accord causal primacy to the political and symbolic spheres. While organizational research is shaped by a number of central debates (Burrell and Morgan 1979; Astley and Van de Ven 1983), the materialism/idealism debate has not been well articulated because researchers lack the tools for clarifying the implications of each of these two positions.

The second part identifies four conceptual strategies for untangling these implications. Materialist or idealist reductionism pre-judges the outcome of the debate by forcing a perspective on one's theory. Specialization, a strategy that ostensibly turns its back on the question of the interrelation among the forces, often leads to an implicit endorsement of either materialism or idealism. In a strategy of eclecticism, the debate is entirely moot, as no attempt is made to generalize the relative causal roles of the four forces. The metatheory strategy, while perhaps the most difficult strategy to pursue, is potentially rewarding and we therefore outline it in greater detail.

In the third part we identify conceptual tactics for avoiding the collapse of idealist or materialist metatheory into eclecticism or reductionism. We discuss three such tactics: specifying the time horizon of analysis, the domain of analysis, and different forms of causality. These tactics provide tools for interweaving materialist and idealist perspectives into richer stories. Our articulation of distinctively metatheoretical forms of materialism and idealism thus helps theoretical research capture more of the richness revealed by historical research.

The Importance of the Materialism/Idealism Debate to Organization Theory

Sociological theory offers a rich history of debate between idealist and materialist theories. Mann (1979) has reviewed the claims made by materialists such as Marx and by idealists such as Parsons, Weber and Durkheim. He argues that simplistic versions of the debate — versions that construe idealism as the autonomy of disembodied ideas and materialism as the influence of unreflective practice — have proven unproductive. A more sophisticated version construes material and ideational forces as each encompassing both practices and ideas in the technological–economic sphere and the political–symbolic sphere, respectively. Interpreted in this way, the competition between materialism and idealism in explaining the broad lines of social change has been one of the central debates in social theory.

This dimension of social theory has received little attention within organization studies. Other debates have received more explicit and careful discussion: the agency–structure debate (Reed 1985); the four paradigms that result from the debates between 'radical change' and 'regulation' and between 'subjective' and 'objective' views of organizations (Burrell and Morgan 1979); and the debates between voluntarist and determinist perspectives and between macro and micro perspectives on organizations (Astley and Van de Ven 1983). The importance of these debates does not diminish that of the materialism/idealism conflict. It is at the heart of the contest for explanatory power between competing organizational research streams focused on technology, economics, politics, and symbols. The first two carry the banner of materialism and the latter that of idealism. The continued development and elaboration of these research streams continually re-poses the question of their interrelation and thus embodies the tension between materialism and idealism.

By way of illustration, we can show this tension at work in the competition between various theories of organizational structure. The first group of theories focuses on the most material force, technology. These theories highlight the constraints and opportunities of productive techniques, whether resulting from the limits of physical ability (i.e. machinery) or mental ability (i.e. technological knowledge). From this perspective, the characteristics of effective methods of production limit the range of effective organizational structures (Woodward 1965, 1970). Perrow's (1970) and Thompson's (1967) dimensionalizations of the technology construct remain the foundations of the classical theory of organization design (Galbraith 1977). Empirical research has sought to identify the influence of different forms of task or technology on organizational structure (see Scott 1990, for a review).

The force of competitive pressure toward efficient use of resources is the centerpiece of a growing body of research in the economic theory of organizations. Transaction cost theory, for example, suggests that organizational structure is influenced by the efficiency properties of alternative

control mechanisms (Williamson 1975; Monteverde and Teece 1982). Similarly, Stinchcombe (1990) argues that structure evolves toward the most cost-effective information-processing arrangement.

The political perspective on organizations has grown rapidly in popularity. It focuses on the exercise of power in and over organizations. Several researchers suggest that organizational structure is determined primarily by its usefulness as a means of pursuing sectional interests (Edwards 1979; Salaman 1979). Empirical work includes studies of the foundations of power (Pfeffer 1981b) and of the dynamics of politics within organizations (Pettigrew 1973; Riley 1983).

The development and influence of values and cognitive structures is addressed by a symbolic perspective. Research from this perspective explores how organizational structure takes on a symbolic role (Zucker 1977); how the symbolic aspects of structure influence behaviour (Mumby 1988); and how societal values and symbols influence structure (Meyer and Rowan 1977; Hamilton and Biggart 1988).

As these four strands of organization theory have developed, the question of their interrelation has become both more urgent and more difficult. A 'unified theory' of organizational structure may not be desirable or even feasible. Yet each strand competes with the others for explanatory power. We lack a framework for adjudicating their competing claims.

The need for such a framework is exacerbated by the fact that the materialist–idealist tension is just as great and just as poorly articulated in research on other elements of formal organizations beyond structure. Different typologies of such elements have emerged in the more practitioner-oriented research (Beer 1980; Kotter 1978; Pascale and Athos 1981; and Tichy 1983). Taking this research as our starting point, we can identify structure as one of five domains of managerial activity, each of which consists of an institutionalized set of related practices. The first domain is that of organizational capabilities, embodied in physical equipment and human skills. The second domain is that of organizational systems and procedures such as accounting, budgeting and remuneration. The third domain encompasses the structural relations both between horizontally-linked sub-units and between hierarchical levels. The fourth domain is that of strategy: 'the pattern of objectives, purposes, or goals and major policies and plans for achieving these goals' (Andrews 1980). The fifth and final domain is organizational culture: the artifacts (stories, value-statements, rituals, etc.) that express the organization's value system and assumptions (Schein 1985). We do not claim that these five domains exhaust the identifiable domains of management practice; indeed, we could add other domains, such as physical space (Pfeffer 1982) or the environment (Kotter 1978; Beer 1980). However, we can use this categorization to see how the idealism/materialism debate permeates organizational research.

Figure 1 generalizes our discussion of the four perspectives on structure for all five managerial domains. Each row of Figure 1 displays the contri-

Figure 1. Four Forces/Perspectives on Five Domains of Management

Force/Perspective	Domain of Management				
	Capabilities	Systems	Structure	Strategy	Culture
Technology	Design hierarchies (Clark 1985)	Impact of new technologies (Beniger 1986: Chap. 9)	Contingency theory (Thompson 1967)	New technology and mfg. strategies (Goldhar and Jelinek 1983)	Task cultures (Lawrence and Lorsch 1967)
Economics	Chamberlinian economics (Penrose 1980)	Information economics (Stinchcombe 1990)	Organization design (Galbraith 1977)	Industrial economics (Caves and Porter 1977)	Efficient cultures (Ouchi 1980)
Politics	Radical labour-process theory (Braverman 1974)	The politics of information (Covaleski and Dirsmith 1986)	Structure as reflecting the interests of the dominant parties (Pfeffer 1978)	Politics of strategic decisions (Pettigrew 1973)	Ideology (Mumby 1988)
Symbols	Learning routines (Argyris and Schon 1978)	Information use as signal (Feldman and March 1981)	Institutionalization theory (Meyer and Rowan 1977)	Enactment (Weick 1979)	Myths, rituals and ceremonies (Frost et al. 1985)

butions of a particular perspective to the analysis of each management domain and each column shows the contributions of the various perspectives to our understanding of a single domain. Some organizational research does not map onto this representation, either because it addresses a domain we have not included or because it spans several rows or columns. Nevertheless, the rough categorization of 20 research topics depicted in Figure 1 suggests the generality of the materialist/idealist tension.

This framework can usefully be compared to that of Zald (1970). We have recast his two domains — internal and external — in a five-fold breakdown. In the spirit of a 'friendly amendment', we distinguish technical and economic forces within Zald's 'economic' sphere. This distinction is based on the difference between forces in which conflicts of interest between social agents are at issue (economic) and forces in which such conflicts are not at issue (technical). Similarly, we identify political and symbolic forces within his 'political' sphere. This allows us to address the influence of cognitive and normative elements in which power relations are not always implicated.

This section has shown the undercurrent of tension between materialist and idealist approaches across a broad range of issues in organizational research. Having broadly outlined the terrain of the debate, the following section explicates the alternative theoretical strategies for moving it forward.

Strategies for Studying Interrelations Among the Four Forces

The simultaneous presence of all four types of forces in many phenomena of interest to organizational researchers obliges us to confront the question of the interrelations among these forces. We can identify four strategic responses to this challenge. These theoretical strategies are generic enough to be found in other debates. We shall argue that while each has strengths and weaknesses, one of them — the metatheoretical strategy — is likely to allow the most fruitful debate between materialists and idealists.

Specialization

The first strategy is to refuse to consider forces outside the scope of a single focal force and/or to argue the merits of disciplinary specialization. Given the complexity of the world, the heterogeneity of theoretical models and languages, and the powerful institutional pressures for specialization within academia, the researcher may conclude that integration is unfeasible, unfruitful, or simply inopportune. For instance, Pfeffer (1978) reviews technical–economic and political approaches to the question of organizational structure and concludes:

'There are, it appears, two perspectives for analyzing social structures. One asks the appropriateness of a given structure for the coordination of interdependence to achieve some task; the other asks why and how structure is a result of organizational influence processes and the consequences of a given structure for the distribution of control and power within organizations. It is likely that these are complementary rather than competing perspectives. Because the usual emphasis is on the question of designing structures for task achievement, this book analyzes structure primarily from the latter perspective of influence and control.' (Pfeffer 1978: 26)

Whether in a complementary or competitive spirit, such specialization is popular in organization theory. Another example is the denial of organizational adaptation in the early population ecology writings (Hannan and Freeman 1977). Specialization extends even to the appropriation of theoretical niches by journals such as *The Journal of Economic Behavior and Organization*.

One merit of specialization is the strength and coherence of the tradition of research on which future researchers can draw. Perrow's (1970) technical/economic focus on organizational structure, for example, has strongly influenced an ongoing research stream. Because of the clarity and internal coherence of Perrow's account, it has generated some of the more durable organization theoretic constructs (the dimensions of 'analyzability' and 'uncertainty') (Scott 1987).

The weakness of specialization is obvious: it ignores the relationship between the focal force and other forces. In the domain of organizational structure, for instance, Perrow's (1970) account of organizational structure contrasts with Pfeffer's (1978) political account, or even more sharply with that of Meyer and Rowan's (1977) symbolic account. None of them can be enriched by confrontation with the other, however, since from each perspective, other forces are interpreted as mere noise in the data.

Idealism and materialism appear only implicitly within a specialization strategy. For instance, Pfeffer's focus on political forces can be construed as implicitly endorsing the idealist view that political forces are the most important in shaping organizations. Clearly, once an author has offered the standard disclaimer of the specialization strategy — that other forces and perspectives will be ignored for heuristic reasons, as in the quote by Pfeffer above — any debate or dialogue between idealism and materialism becomes moot.

Reductionism

The second approach to interrelating the four forces is a grand theory of integration premised on the universal causal primacy of one force. Perhaps the paradigmatic form of reductionism is the pursuit of a purely technical–economic account of organizational structure (e.g. Williamson 1975, 1985). Accounts of structure generated in the specialization strategy discussed above are typically silent on the role of alternative causal

forces; by contrast, Williamson's transaction-cost theory has spurred attempts to show explicitly the economic roots of authority (Ouchi 1979) and of organizational culture (Wilkins and Ouchi 1983). These attempts have extended our understanding of those phenomena, contributing fruitful insights, such as the concept of 'clan'.

Idealist reductionism has also made its mark in sociological theory. Garfinkel's (1967) ethnomethodology reduced society to a cognitive order (Heritage 1984). Others conceive of social relations as a symbolically mediated negotiated order (Strauss et al. 1963) or as determined by symbolic interactions (Blumer 1969). In organization theory, idealist reductionism is reflected in theories of the 'enactment' of organizational characteristics (Weick 1979) and of environments (Smircich and Stubbart 1985; Pfeffer and Salancik 1978). The internal critique of cognitive reductionism has been articulated by other idealists who point to the influence of subconscious and/or affective influences on action (Zucker 1977), and the external critique has been advanced by materialist research on innovation and technological change which demonstrates the resistance of the material world to cognitive efforts (Rosenberg 1976).

The merit of reductionism is that, in contrast to specialists, who ignore the issue of theoretical justification of their focus, reductionists attempt to show how the influence of all other forces can be reduced to a single force. The weakness of the reductionist approach is its tendency to oversimplify the issues it tackles. In order to mitigate this weakness, reductionists often redefine a research topic exclusively in terms of the single issue it can more adequately address. By addressing organizational structure in terms of 'information processing', for instance, Galbraith (1977) is able to reduce organization design to an economic issue: the efficient allocation of information. This reductionist strategy persisted until Daft and Lengel (1984) challenged the appropriateness of the purely economic perspective on information processing and re-focused attention on the importance of symbolic factors in the information-processing model.

Reductionist theories thus often provide strained and over-simplified characterizations of their object domains. This does not reduce the value of the concepts uncovered by such attempts so much as it demonstrates the limits of reductionism as a generic theoretical strategy. Unfortunately, whatever other virtues this conceptual strategy may possess, it is unlikely to foster productive dialogue between materialists and idealists.

Eclecticism

A third strategy is to argue that analysis of organizations must indeed weave together the influence of all four forces, but that it is impossible to uncover any general relationship between them. A paradigmatic example is Weber's (1978) account of the development of capitalism and the role played in this development by the Protestant ethic. In a speech to the German Sociological Association, Weber stated his general position:

'I would like to protest the statement by one of the speakers that some one factor, be it technology or economy, can be the "ultimate" or "true" cause of another. If we look at the causal lines, we see them run, at one time, from technical to economic and political matters, at another, from political to religious and economic ones, etc. There is no resting point.' (*Verhandlungen der Ersten Deutschen Soziologenages*, p. 101, cited in Guenther Roth's "Introduction" in Weber, 1978)

Tichy (1983) takes this approach in analyzing the process of organizational change, suggesting that technical, political and cultural dynamics are woven together in a way that allows no systematic determination by any one element. While Tichy's framework opens up many interesting avenues for researchers, it gives little direction as to which avenues are more fruitful than others. On a more abstract register, DiMaggio and Powell's (1983) taxonomy of forms of isomorphism suggests that political forces (coercive isomorphism) and symbolic forces (mimetic and normative isomorphism) are both at work alongside more conventional, technical–economic factors in determining organizational structure. Although DiMaggio and Powell (1983) imply that technical–economic forces on organizational design are diminishing in importance relative to the institutional forces, they offer no argument as to under which conditions which of them would be more influential.

An eclectic strategy is well-suited to portraying the complexity of organizational phenomena. It frees the researcher to range across several approaches and thus tends to generate richer accounts than its more single-minded alternatives. The weakness of the eclectic approach is that this richness is purchased at the cost of a loss of generalizability. The idealist/materialist debate cannot take shape on the eclectic terrain, but without this debate, substantive issues of the relative influence of the four forces will be ignored.

Metatheory

'A metatheory presumes that several theories . . . are adequate but apply under different conditions; it attempts to specify those conditions and the relationships among the theories' (Poole and Van de Ven 1988: 5). Turner's (1987) discussion of approaches to theory-building reminds us that 'meta' means 'coming after' or 'subsequent to'. This emphasizes that metatheory differs from reductionism by its acceptance of the causal roles of the different forces and of the validity of alternative theoretical perspectives. The metatheoretical approach differs from the eclectic approach in its systematic specification of the conditions under which particular theoretical perspectives are appropriate. Metatheories with a predominantly materialist emphasis thus accord overall causal dominance to material forces, but specify some non-negligible role for ideational forces, and vice versa for metatheories of an idealist flavour.

Metatheoretical approaches suffer from complexity in accounting for a wide range of theories that are themselves complex. Nonetheless metatheory offers a way to avoid reductionist oversimplification and eclectic agnosticism. An implicitly metatheoretical approach is at work in Chandler's (1962) account of the rise of the multi-divisional form of corporate organization (the M-form). This account incorporates the technological, economic, political and symbolic aspects of the business environment and of corporate strategy that fostered the M-form. Chandler highlights ideational forces such as leadership and strategic vision in accounting for the adoption of the M-form by particular corporations. He also argues, however, that the historical evolution of corporate structure is constrained by the economic demands of the market and the evolution of technology. Chandler goes to considerable length in *Strategy and Structure* (1962) to interweave the political/symbolic and the technical–economic forces. He argues that the technical–economic forces shape the relative effectiveness of different strategies and thus the long-term distribution of organizational forms. However, in the shorter term, the adoption of these strategies and the organizational redesign needed to implement them depend on the political–symbolic dynamics of the individual firm and its top management.

Incorporating several forces into a single account calls for the researcher to navigate between the Scylla of reductionism and the Charybdis of eclecticism. To avoid reducing all causality to a single privileged force (i.e. reductionism), the metatheory must accommodate causality of the contrary form in some (non-trivial) way. To avoid eclecticism, the metatheory must provide a systematic, rather than *ad hoc*, account of the variation in causal efficacy. With the theoretical modesty characteristic of historians, Chandler offers no rules specifying under what conditions different types of forces are most efficacious. Benson (1975), by contrast, does suggest a generic relationship between material and ideational forces in his model of inter-organizational relations. He specifies a number of ideational elements of the 'superstructure' of interorganizational relations among organizations: interorganizational consensus over the scope and nature of tasks of an organization, workers' evaluations of the value of the organization, and patterns of cooperation between organizations. These tend toward 'balance', as an increase in one generates pressures toward increases in the others. The range of these ideational forces is 'constrained', however, by the interorganizational power relationships rooted in the more material political–economic forces of the 'base' on which the symbolic superstructure rests. Another example of an integrative scheme is Clegg's (1989) analysis of the interrelation between 'system integration' (dominated by technical–economic imperatives) and social integration (embodying the political and symbolic forces that both enable and constrain social action).

Such frameworks are, however, all too rare in organization theory. Multidisciplinary organizational researchers seldom avoid the seductions of reductionism or eclecticism and thus seldom offer 'switching rules' or

'metacontingencies' that specify the conditions under which certain theories are more fruitful or applicable.

One reason for the lack of switching rules is that the materialist/idealist debate has remained largely hidden. The implicit form of materialism and idealism associated with specialization can hardly be expected to further the debate. When it appears in more explicit but reductionist form, the dialogue between materialists and idealists has often been acrimonious and even less fruitful. Even when participants have tried to situate themselves on a metatheoretical plane, idealists often caricature materialism as deterministic, reductionist, objectivist or functionalist; conversely, materialists caricature idealism as voluntarist or subjectivist (Mann 1979). Since neither materialist nor idealist metatheorists have very clearly laid out their approaches, both the debate between them and the tools for constructing materialist or idealist metatheory remain underdeveloped.

Three Tactics for a Metatheory Strategy

In this section we identify three complementary ways of constructing the switching rules necessary for idealist and materialist metatheories. (Since by definition, metatheories allow some causal weight to both material and ideational forces, we should write 'predominantly materialist — or idealist — metatheories', but the reader will allow our simplified notation.) The first two tactics hinge on the scope of the phenomena that the theory addresses (following Poole and Van de Ven, 1988). The third strategy is to recognize different forms of causality, thus allowing a more complex interweaving of the four forces. These strategies yield a richer and clearer characterization of the debate between materialism and idealism in its most adequate form — metatheory.

Time Horizon

The micro-economic analysis of the firm's cost curves provides the paradigmatic formulation of explicit time-frame dependence, stating which factors are exogenous in the short run and how short-run dynamics evolve into long-run outcomes (Samuelson 1989). In contrast, the idealist/materialist debate in organization theory is often short-circuited by lack of specification of the temporal scope conditions in many of the contending theories.

For many metatheoretical idealists and materialists, the short run is characterized by an indeterminate concatenation of several forces, while in the long run a discernable trend coalesces around a dominant force. To avoid reductionism, materialists often allow that over a short time-horizon, political–symbolic factors may strongly influence strategic decisions; it is, they argue, only in the long run that technical–economic forces determine the viable strategies. Lawrence and Lorsch's (1967)

contingency approach to organizational structure implies such a logic. While individual firms in their sample displayed a range of structural characteristics, the high-performing firms were those whose structures matched environmental demands. Contingency theory assumes that in the long run, competition drives the majority of the low-performing firms with the poor-fitting structures to either adopt the well-fitting structure or to fail. Further developments of this model recognize that some environments are more munificent than others and that this munificence moderates the weight of the material forces, perhaps lengthening the time for long-run effects to be realized (Lawrence and Dyer 1983).

Idealists often avoid reductionism by arguing that while technological impediments may frustrate a manager's strategic vision in the short run, the long-run contours of firm's strategic direction are determined by the leaderhip exercised by creative human intervention. A sociological version of such an idealist position is Weber's 'switchman' metaphor:

> 'Not ideas, but material and ideal interests, directly govern men's conduct. Yet very frequently the "world images" that have been created by "ideas" have, like switchmen, determined the tracks along which action has been pushed by the dynamic of interest.' (Weber, in Gerth and Wright Mills 1968: 280)

Piore and Sabel (1984) explain the long-run evolution of production technology in similar terms, emphasizing the role of political rather than symbolic forces:

> '[R]elatively short periods of technological diversification punctuate longer periods of uniformity. The technological knowledge that is accumulated during the interludes of diversity creates the possibility of divergent breakthroughs: branching points. At these technological divides, the different political circumstances in different regional or national economies moves technology down correspondingly different paths.' (Piore and Sabel 1984: 39)

Within organization theory, Greiner's (1972) account of five stages of organizational growth displays this logic. Each stage culminates in a more or less predictable crisis whose resolution requires management intervention to solve primarily political/symbolic problems, such as leadership crises or crises of trust among organization members.

Thus one tactic buttressing the metatheoretical strategy is to distinguish between various time-horizons of analysis. This has two advantages. First, when similar time-horizons are adopted, materialist and idealist research can be fruitfully contrasted. For instance, materialists view the long-run effects of technical–economic influences as the walls of a tunnel through which the organization travels, its destination pre-determined by these material forces. In the idealist view, material constraints are more like branches that provide alternative paths; at each node, the path taken, and thus the final destination, is determined by ideational forces. Each of these perspectives relegates the other forces to the short run: the materialist perspective allows for ideational influences only within the

constraints of natural selection; the idealist perspective accords material forces causality only in the periods between ideationally determined turning points.

The second advantage of time-horizon switching rules is that this tactic forces metatheorists to develop richer theories that link short- and long-term dynamics. A fruitful debate was opened when Child (1972) challenged Lawrence and Lorsch's (1967) materialist account of the long-run determination of structure with his argument for equifinality and the determining role of strategic choice. The debate began to bear fruit when materialist researchers such as Donaldson (1987) took up the challenge and tried to specify how the opportunities for choice that they acknowledge as characteristic of short-term dynamics lead to a materialistically determined long-run outcome — in Donaldson's schema, through a process of 'structural adjustment to regain fit'. Donaldson's study is but one example, albeit one of too few, of how the specification of a metatheoretical approach can help identify both opportunities for reconciling the contrasting approaches and the more interesting divergences that persist after this partial reconciliation is effected.

Domains of Organizational Analysis

A second tactic for metatheory is to establish scope conditions that identify the phenomena for which a theory is analytically most appropriate. We can explain the logic of this scope condition using the two-dimensional framework depicted in Figure 1, above. Before using this schema here, we need, however, to clarify its conceptual status, since the distinction between forces and domains raises the question of their interrelationship. We view the causal relationship between domains and forces as analogous to that specified by Giddens (1979) between 'institutions' and 'structures'. The domains constitute sets of associated practices embodied in institutions, which are thus conceptually distinct from the underlying structural forces. We see domains and forces as being in a structurationist relationship. Thus, for instance, political power shapes organizational structure, but organization structure in turn shapes the distribution of power through the institutionalization of power bases (Pfeffer and Salancik 1978). (Giddens's theory itself has little to say on this relationship because, while he distinguishes the three levels of structure, institutions and action, he focuses on the relationship between structure and action.)

Metatheoretical materialists and idealists avoid reductionism in organizational analysis by arguing that their favoured forces may not be the only relevant factors in every domain of organizational reality. Indeed, if we order the managerial domains of Figure 1 along a material–ideational spectrum, metatheoretical materialists and idealists will agree that material forces have relatively more influence on more material domains than do ideational forces, and vice versa for more ideational domains.

Such an ordering of the domains could be justified using Boulding's

(1956) scheme of system types (framework, clockwork, cybernetic, open, blueprinted-growth, internal image, symbol processing, social and transcendental systems). Underlying this ordering of system types is the idea that the survival of more complex systems relies on some sort of representation of the system and of its relation with its environment. Simple systems endure without any self-referential qualities. Systems of intermediate complexity rely on concrete analogs that reflect system–environment relationships. At higher levels of system complexity, systems require symbolically mediated representations of both self and environment.

This suggests that the ordering of our five domains in Figure 1 might indeed be mapped onto the material–ideational dimension. Capabilities represent the building blocks of organizational functioning; this domain thus presents a clockwork picture of the organization and is the most material of the five domains. Systems embody a rudimentary feedback-loop in their monitoring and control function and thus represent a cybernetic system, the next most material. The structural domain embodies blueprints for growth and provides internal images. Strategy creates internal images through symbol processing to represent the determination and implementation of organizational goals. Culture embodies internal images, symbol processing patterns and above all social and transcendental values.

By ordering the domains in this manner, our two-dimensional framework allows metatheoretical researchers a second tactic for pursuing their own (materialist or idealist) paradigm without reductionism or eclecticism. Both materialists and idealists avoid reductionism by assuming (a) that material forces are relatively more effective in shaping material domains than in shaping the ideational domains; and (b) that ideational forces are relatively more effective in shaping ideational domains than in shaping material domains. This approach also avoids eclecticism because it assigns more or less influence to the subordinate forces depending on the domain. Assuming the validity of our ordering of the domains according to their material or ideational character, idealists could thus recognize that technical/economic forces are more influential in the domains of capabilities and systems than they are in the domain of culture — even if, as idealists, they believe that ideational forces dominate material forces in every domain. Materialists will also agree that the more ideational forces are relatively more effective in shaping the more subjective realities of strategy and culture than in shaping the more material domains of capabilities and systems — even if, as materialists, they believe that economics and technology dominate ideational forces in every domain. (Note that the effectiveness of this tactic does not depend on the specific ordering of the domains: one might argue, for example, that structure is more, not less, material than systems, but it would still be possible to differentiate the causal efficacy of four forces according to the domain under study.)

This tactic is especially fruitful when harnessed to the first tactic based

on time-horizon. In the long run, materialists emphasize material forces and idealists emphasize ideational forces in every domain. In the short run, materialist metatheory may grant primacy to ideational factors (and idealist metatheory may grant primacy to material factors) in certain domains. Lawrence and Lorsch (1967), for instance, pursue a metatheoretical materialist agenda in this way. They show how, at a given point in time, symbolic forces — distinctions between how different task groups' conceive of their tasks — generate different task-group cultures. In the long run, however, Lawrence and Lorsch argue that these symbolic forces give way to technical–economic ones, and in this time-horizon, cultural distinctions are determined by the nature of the tasks facing the groups. Such a research programme creates an interesting space for the partial reconciliation of materialist and idealist perspectives.

A second interesting area of reconciliation is found in the medium run. For metatheoretical materialists, the short-run influence of ideational forces gives way to material forces first in the more material domains of capabilities and systems, next in the domain of structure, and finally in the domains of strategy and culture. In the transition from the short-run ideational determination of some domains to the long-run material determination of all, the determinant forces are therefore found along the diagonal of the 4x5 matrix. A reconciliation results because applying the same logic to the metatheoretical idealist perspective generates the same result: in the transition from short-run material causes to long-run idealist causes, the medium run is characterized by a distribution of powerful causal forces along the diagonal.

Thus in the medium term, both materialists and idealists might agree that the capabilities and systems that characterize organizations are primarily influenced by technical–economic forces. For metatheoretical materialists, this is where long-run materialism begins to emerge; for metatheoretical idealists, this is where short-run material influence finally wanes. Both perspectives would agree that the domains of strategy and culture are shaped primarily by ideational forces in the medium term. For materialists, these are the domains most resistant to material influences; for idealists, this is where ideational determination first takes hold. As these two research programmes diverge in pursuing the long run, the cleavage between the two perspectives is clarified.

Forms of Causality

Our third tactic for pursuing a metatheory strategy focuses on the form of the causal relationships among the forces. Organizational research often oversimplifies causal relations. While philosophers and sociologists have identified different forms of causality (e.g. Althusser 1977; Wright 1978), this theme has not received the attention it deserves in organization theory.

Our starting-point for a concept of causality that clarifies the materialist/idealist debate is the distinction between ultimate cause and

proximate or 'efficient' cause (Aristotle 1980). Althusser's (1977) distinction between determinacy and dominance echoes such an idea. For Althusser, the determinant 'instance' (force) in a given mode of production 'identifies' the instance that will be the proximate cause of social change in that mode of production. The latter, proximate cause is considered the 'dominant' force in that particular context (James 1985). Althusser draws this distinction from Marx's (1977) claim about the relative role of economics, politics, and religion. Marx argues thus:

> 'My view is that each particular mode of production, and the relations of production corresponding to it at each given moment, in short "the economic structure of society", is "the real foundation, on which arises a legal and political superstructure and to which correspond definite forms of social consciousness", and that "the mode of production of material life conditions the general process of social, political and intellectual life." [Marx here quotes his *Preface to A Contribution to the Critique of Political Economy*, 1859, pages 20–21.] In the opinion of [some writers] this is all very true for our own times, in which material interests are preponderant, but not for the Middle Ages, dominated by Catholicism, nor for Athens and Rome, dominated by politics . . . . One thing is clear: the Middle Ages could not live on Catholicism, nor could the ancient world on politics. On the contrary, it is the manner in which they gained their livelihood which explains why in one case politics, in the other case Catholicism, played the chief part.' (Marx 1977: 175–176)

For Marx and Althusser, economic forces are the trans-historical determinant factor and they play this role by determining which particular force — political, economic, or symbolic — will dominate any particular historical epoch.

Such a notion of causality can help organization theory to identify zones of possible reconciliation of idealism and materialism. One can slightly recast Ouchi's transaction cost-based account of control systems in organizations to provide an example (Ouchi 1979; Wilkins and Ouchi 1983). In our recasting of Ouchi's theory, technological characteristics of work determine the relative dominance of technical, economic, political or symbolic forces in shaping organizational structure. When the organization's technology is stable and well understood, work is 'meterable' (Williamson 1975) and Tayloristic practices allow managers to specify a detailed division of labour and appropriate incentive systems. They thus control workers through the impersonal, material forces of technology and economics and avoid dependence on their own power and symbolic manipulation (Braverman 1974; Edwards 1979; Wilkinson 1983). Technological uncertainty makes meterability more difficult and expensive. Less meterable work is more efficiently managed through the political medium of managerial authority than through economic incentives (Williamson et al. 1975). At an even higher level of technological instability, authority relationships themselves become problematic, since supervisors lack an adequate understanding of their subordinates' contributions to the organization. In this situation organizational survival is dependent upon the development of

symbolic relationships that substitute for both economic incentives and political control. The 'clan' replaces both the market and the hierarchy as the most effective mode of organizing (Ouchi 1980).

A second example that can be interpreted through the lens of this more complex notion of causality is Pfeffer's account of intra-organizational power. Pfeffer offers what amounts to a metatheoretical account in which economics is the determinant instance. When the acquisition of economic resources is problematic, power accrues to those in control of key resources (Pfeffer and Salancik 1978). In this instance, power has a technical–economic foundation. Pfeffer and Salancik (1977) point out, however, that once managers have power they often take measures that (intentionally or unintentionally) institutionalize it. The greater the stability of the economic contingencies, the more stable will be the dominant coalition, and the greater the opportunity to decouple its power from those economic contingencies and to give it an institutional basis. In a more speculative article, Pfeffer (1981a) suggests that when the nature of economic contingencies is itself unclear, power may accrue to the manager (or managerial coalition) who can provide symbolic leadership, thus giving his/her power a symbolic basis. Thus the nature of the organization's economic contingencies determines whether technology, economics, politics or symbols provide the basis for intra-organizational power.

As in the case of the other tactics, these theories both partially reconcile the two perspectives — by incorporating ideational forces in predominantly materialist accounts — and highlight crucial areas of divergence by arguing that technical–economic forces, rather than political–symbolic, determine the effectiveness of control regimes (Ouchi) and the bases of power (Pfeffer).

Metatheory at Work

We have proposed three tactics for a metatheory strategy. Each of them is conceptually complex. Lest the reader feel that combining all three tactics confounds more than clarifies, consider once again Chandler's (1962) account of the rise of the M-form. His historical perspective clearly employs the time-horizon tactic, his consideration of the mutual influences of strategy and structure makes use of distinction between organizational domains and causal forces, and his method for interweaving these elements is a display of a complex causal argument at its most elegant. Chandler sums up his research on the emergence of the M-form thus:

> 'The comparison of the experience of a sizable sample of large industrial enterprises with that of four pioneers in modern American business . . . emphasizes that a company's strategy in time determined its structure and that the common denominator of structure and strategy has been the application of the enterprise's resources to market demand. . . . The performance of these companies further suggests that a self-generating force for the growth of the industrial enterprise within a market economy like that of the United States has been the drive to

keep resources effectively employed. The same need has shaped the ways, particularly the structure, by which a firm has been managed.' (Chandler 1962: 383)

The major elements of our metatheoretical framework are all represented in Chandler's model of the development of the M-form.

First, Chandler distinguishes between domains and forces. His analysis is focused on the relationship between the domains of strategy and structure. Nonetheless, Chandler invokes technical and economic forces as the underlying causes of the rise of the M-form.

Second, Chandler clearly distinguishes between ideational and material forces. Ideational elements enter the analysis through the political–symbolic determination of the strategy of any particular firm in the short run. Material forces enter both through the efficiency properties of organizational structure and through the pressure of market competition toward efficient use of resources.

Third, Chandler relates these forces to different causal dynamics that operate in different time-frames. In the short run, Chandler is an idealist: political–symbolic forces embodied in strategy outweigh and reshape technical–economic forces embodied in structure. In his analysis of the long run, he expresses his materialist determinism: economic forces eventually assert themselves over ideational forces, since the 'self-generating force for the growth of the industrial enterprise within a market economy like that of the United States has been the drive to keep resources effectively employed'.

Finally, Chandler avoids simplistic reductionism of this long-run determination by using the distinction between proximate and final cause. Having identified short-run and long-run causal chains, Chandler pieces them together by concluding that 'the common denominator of structure and strategy [is] market demand'. This implies that the domination of structure by ideational factors (namely strategy) is determined by material forces (namely market demand).

Chandler's account does not present itself as a universal theory. However, organization theorists need conceptual strategies and tactics that enable us to apprehend both the richness of individual histories and their commodities, and this explication of Chandler has shown the potential value of the metatheoretical approaches we have proposed.

Conclusions

Macro sociology has a long history of debates between materialist and idealist perspectives. The richness of the sociological research programmes originated by Marx, Weber, Durkheim and Parsons attests to the fruitfulness of this debate, especially when formulated in more elaborated, metatheoretical form. Organization researchers have paid less attention to this debate, even though it has been a strong undercurrent

shaping the field and has thus tended to surface in relatively unfruitful specialist, reductionist or eclectic forms.

With the aim of facilitating the emergence of more robust metatheories, we have identified three conceptual tactics. While these tactics clarify theoretical problems, they raise their own methodological difficulties. First, the tactics of time-horizon and domain-dependence do not generate easily testable hypotheses. Analyzing the relative influence of technological, economic, political and symbolic forces in several domains and time-frames requires the breadth and richness afforded by historical and comparative studies. Such hypotheses do not easily lend themselves to the large-sample statistical analysis that dominates the field. Second, the determinant/dominant distinction stretches current theoretical models and research techniques. Statistical techniques can only test such conceptualizations in a piecemeal fashion. Unfortunately, the tail often ends up wagging the dog and our theories often come to look as flat and simplistic as the techniques with which we test them.

We recognize both some limitations of a metatheoretical approach and some strengths of reductionist, eclectic and specialized alternatives. Nonetheless, we have argued that metatheory provides the most fruitful terrain on which to bring materialism and idealism into critical contact. Without this critical contact, a number of central issues in organization theory remain clouded by polemic and mutual ignorance, impeding further theoretical development. Clearly distinguishing time-frames, organizational domains and forms of causality can help metatheoretically inclined researchers to steer between reductionism and eclecticism and can clarify the idealism/materialism debates among them.

Note

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