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Author(s): Alan D. Meyer

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Mingling Decision Making Metaphors¹

ALAN D. MEYER

University of Wisconsin-Milwaukee

Organizational decisions provide conceptual playing fields wherein scientists adhering to rival theories based on different metaphors skirmish indecisively. Organizational decisions, however, are also empirical arenas wherein practitioners espousing discordant theories-in-use reconcile their differences pragmatically. Practitioners' decision-making metaphors encountered while studying capital budgeting suggest how disjoint perspectives are assimilated and shifts from instrumental to symbolic actions are triggered. Implications for decision theories are discussed, and potential benefits of incorporating practitioners' knowledge into organizational science are considered.

The whole of scientific inquiry has been portrayed as an intrinsically metaphoric undertaking (Black, 1962, Hesse, 1980; Schon, 1963), and considerable attention has been devoted recently to describing just how extensively metaphors permeate organizational science (Burrell & Morgan, 1979; Morgan & Smircich, 1980). This paper's objective is to demonstrate how metaphors can contribute to theory building by fostering a synthesis of rival models of organizational decision making.

A debate now is underway between those writers commending metaphoric thinking as the quintessence of creative theoretical cognition (Brown, 1976; Weick, 1979) and those condemning it for luring thinkers up blind alleys and fostering facile, nonintellectual embellishments (Pinder & Bourgeois, 1982). The crux of the debate is whether metaphors advance and enrich organizational science, and therefore should be propagated, or impede and enfeeble organizational science and therefore should be eradicated. Morgan, for example, prescribes a "conscious and wide-ranging theoretical pluralism" (1980, p. 612) that welcomes such unorthodox metaphors of organizations as cultures and language games to offset blind spots created by the field's traditional theoret-

ical metaphors of machines and organisms. Conversely, Pinder and Bourgeois call for an immediate "moratorium" on the further use of metaphor in theory building, followed by "attempts to expunge those that already exist in our theories and models of organizational phenomena" (1982, p. 650). They recommend replacing figurative language with literal language and coining specialized terminology for describing organizations.

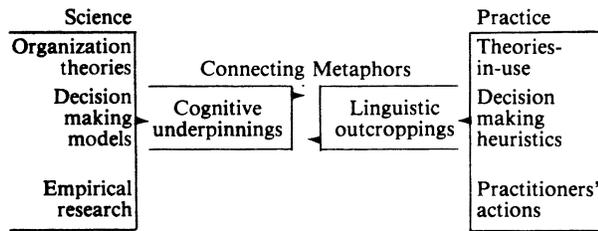
But writers attach different meanings to the word *metaphors*, and this semantic discrepancy may underlie much of the disagreement about their utility. Advocates customarily use metaphor to denote *cognitive juxtapositions* that foster discovery by transferring the ideas and associations of one system or level of meaning to another (Black, 1962; Brown, 1976). Opponents, however, typically use metaphor to denote *linguistic images* that lend vividness and punch at the expense of scientific precision (Hempel, 1965; Pinder & Bourgeois, 1982).

This paper acknowledges that metaphors serve both cognitive and linguistic functions, and it sides with those asserting that they enrich organizational science. But, whereas many advocates ply metaphysical logic to prove that metaphors breed useful rivalry between competing theories, the author hopes to demonstrate their practical utility in forging a theoretical synthesis. The approach here involves looking for metaphors immanent in decision theories, listening for them while doing fieldwork, and using them in writing results.

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The argument draws substantially on Manning's (1979) discussion of "metaphors of the field," the images invoked by organizational actors to invest meaning in their daily activities. It does not, however, adopt the phenomenological or ethnomethodological viewpoints that organizations are nothing more than mental events or social constructions (Morgan & Smircich, 1980).

Figure 1
How Decision Metaphors
Link Organizational Science
with Organizational Practice



Instead, as depicted in Figure 1, the approach taken here honors both organizational science and organizational practice, proposing that because metaphors permeate both, they provide convenient vehicles for commuting between the realms of social fact and organization theory. If decision models are cognitive metaphors whose implications have been spelled out (Brown, 1976), then metaphors of the field (Manning, 1979) invoked by practitioners to describe their choices may constitute theoretical molecules capable of revitalizing the decision models.

Rival Metaphors of Organizational Decisions

Organizational decisions have long furnished arenas for indecisive skirmishes among proponents of theories undergirded by mechanistic, organismic, pluralistic, and cybernetic metaphors (Morgan & Smircich, 1980). This contest itself resembles an unrefereed language game wherein the players' actual gains and losses are indeterminate, but surrogate points are scored by recruiting prominent scholarly players and winning the pages of prestigious journals.

This state of affairs, which amounts to the social construction of scientific knowledge, stems not from metaphoric thinking, but from the *suspension* of metaphoric thinking. Theorists developing a model

in terms of a particular metaphor, but then dispensing with it as though it were "a ladder to be kicked away once the new theoretical plateau has been reached" (Brown, 1976, p. 174), can come to believe in their theories so strongly and apply them so literally as to transform the theories into myths (Hesse, 1980). Such theorists undervalue rival theories and become susceptible to seeing organizational life as a metaphor for their own theories. Thus can the choice of every dean be construed as a garbage-can decision, and each labor negotiation another game of prisoner's dilemma (Lutz, 1982). The implication of this point for organizational science is that consciousness of metaphors should be heightened and their "as if" quality should be preserved.

The organization of the following argument parallels the chronology of an informant-based effort to extend organizational decision theory, and the written text incorporates metaphors gleaned from both spheres. The upshot is an amalgamation of theorists' seemingly contradictory models and decision makers' seemingly contradictory accounts of organizational choices. The field metaphor of "pliant utility functions" is elaborated into a new model suggesting how disjoint perspectives are assimilated and shifts between instrumental and symbolic modes of choice are triggered.

Unearthing Metaphors in the Field

For six years, a team (including this author) studied decision processes flowing through (and around) organizational structures to crystallize in the form of hospitals' capital budgets for medical equipment. (For a more detailed description of this research, see Greer, 1983, 1984; or Meyer, 1983.) The study encompassed 25 organizations and 300 budgetary choices. Field interviews with 378 informants occupying different decisional vantage points yielded over 3,000 pages of transcripts. Decision making metaphors induced from these transcripts constitute outcroppings of practitioners' theories-in-use (Argyris, 1976).

The Cartography of Capital Budgeting

While describing the capital-budgeting process, informants repeatedly likened it to an overland journey. Investment proposals "traveled" through the hospitals, usually "arriving on schedule" unless they were "ambushed" or "sidetracked." Because maps guide journeys, this metaphor of the field was pur-

sued by charting the prescribed itineraries for medical-equipment proposals through each hospital's formal structure. Administrators, board members, and physicians specified the routes and supplied pertinent forms and documents. This information was transformed into flow charts like the one shown in Figure 2. The charts indicate that most investment proposals embark from medical-staff departments and visit a series of organizational way stations, but only hardy proposals reach their destination—an approved capital budget.

Pursuing the cartographic field metaphor had elicited heuristics from practitioners resembling the decision models posited by James March and his colleagues. These writers portray organizational choices as programmed sequences of interlocking subroutines that factor complex decisions to compensate for the cognitive limitations of individual human beings (March & Simon, 1958). Furthermore, hospitals' investment proposals seemed akin to solutions in search of problems, with the flow charts specifying the access and decision structures mapping problems, solutions, and participants onto choice opportunities (Cohen, March, & Olsen, 1972).

The fieldwork, however, indicated that investment proposals sometimes blaze uncharted trails across organizational terrain. It suggested that the choice maps obscured the importance of medical, political, and strategic decision processes. Pondy and Mitroff advise that when researchers "begin to confuse the map for the territory, then it is time to change maps" (1979, p. 21).

Theoretical Models for Hospital Decision Making

A review of the literature yielded four decision making metaphors—termed judgment, computation, negotiation, and inspiration (Thompson & Tuden, 1959)—that had been elaborated into formal models (Cyert & March, 1963; Lusted, 1968; March & Simon, 1958; Pfeffer, 1981). These seemed germane to medical capital budgeting. Corresponding decision heuristics (Greer, Greer, & Meyer, 1983) were encountered on returning to the field (Table 1). Because data can be artifacts of the models one embraces (Sproull, 1981; Weick, 1974), the isomorphism is hardly surprising. But, whereas the decision literature often treated the models as incompatible theoretical rivals (Pfeffer, 1981; Thompson & Tuden, 1959), observations suggested that practitioners' heuristics were more akin to friendly empirical adversaries.

Proposition 1. Proposed investments in medical capital equipment are evaluated on the basis of four fundamentally different decision models.

Clinical Model. The normative decision model inculcated in medical students incorporates organismic metaphors, venerates the role of clinical judgment in diagnosing patients, and emphasizes the physician's scientific obligation to advance medical knowledge (Ingelfinger, 1975; Lusted, 1968). A spirit of senatorial courtesy ordinarily prevails when doctors adapt the clinical decision making model to evaluating equipment (Greer, 1983). Benefits anticipated for individual patients constitute the most salient decision criterion, although such claims may be evaluated by assessing the professional stature of the sponsor rather than the efficacy of the equipment (Carter, 1971).

Fiscal Model. Fiscal decision making seeks to maximize an organization's financial well-being by allocating capital to those investments promising the largest discounted cash flows. Professional programs for training hospital administrators teach the virtues of computational analyses embedded in standardized procedures (March & Simon, 1958), and governmental agencies that regulate hospitals value the results of these analyses. Because the agencies scrutinize and sometimes disallow capital expenditures, budgets almost invariably incorporate demand forecasts and cost-benefit analyses.

Political Model. Hospitals are more nearly governed by tripartite alliances of trustees, administrators, and physicians (Perrow, 1963) than managed through formal authority vested in hierarchies of offices (Bucher & Stelling, 1969). Although curricula for training health professionals tend discretely to ignore organizational politics, the competition for scarce resources soon remedies this pedagogical oversight (Pfeffer, 1981). Political behavior is especially overt within hospitals and attains a degree of respectability seldom seen outside of legislative bodies. Most medical staffs are organized like parliaments, riddled with committees, and headed by elected officers. Accordingly, equipment proposals often give rise to coalitional bargaining among and between physicians, administrators, and board members (Greer et al., 1983). Private negotiations between power brokers supplement public deliberations within representative bodies.

Strategic Model. Medical equipment acquisitions are long term resource commitments shaping portfolios of health services that address discrete en-

Figure 2
A Choice Map for Proposed Investments

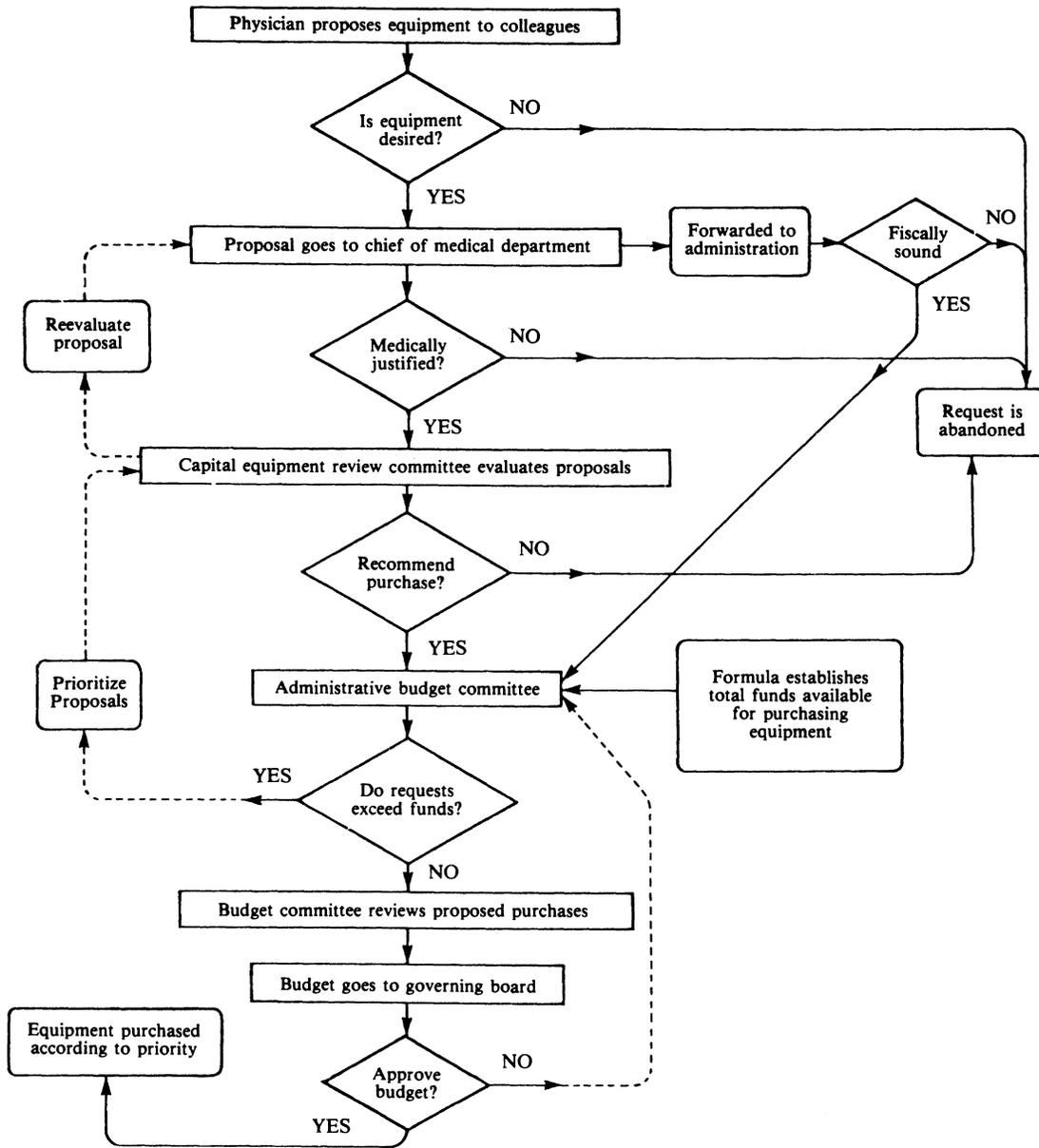


Table 1
Models for Hospital Decision Making

	<i>Clinical Model</i>	<i>Fiscal Model</i>	<i>Political Model</i>	<i>Strategic Model</i>
Root metaphor	Organism	Computation	Pluralism	Cybernetics
Espoused values	Maximizing patient welfare, advancing medical knowledge	Maximizing wealth, fiscal stability	Political assimilation of competing interests	Formulating and realizing institutional missions
Typical structuring of decisions	Professional collegia	Embodied in standardized procedures and analytical programs	Shifting issue-specific coalitions within quasi-legislative forums	Long range planning and policy making bodies
Information gathering	Personal experience and professional media	Systematic search, quantitative measurement	Gathered, used, and withheld tactically	Gleaned from diffuse sources, combined intuitively, and extrapolated holistically
Bases of influence	Professional eminence and certification of clinical expertise	Financial and computational acuity	Power based on professional status, hierarchical position, or resource scarcity	Intuitive acuity, credibility, and charisma

vironmental niches (Meyer, 1982b). Until recently, health-care environments were relatively munificent, and many hospitals equated strategic planning with the promulgation of those vague expressions of noble aspirations known in the industry as “mission statements” (Bander, 1980). But, today, munificence is giving way to austerity, and most governing boards and chief executives collaborate in strategic-planning exercises (Meyer, 1983) that build on cybernetic metaphors by acknowledging that hospitals and their environments evolve in tandem (Morgan & Smircich, 1980). Explicit strategies distilled from predictions of competitors’ behavior, demographic trends, and regulatory policies provide benchmarks for decisions about investing in capital equipment (Greer et al., 1983).

Reconnoitering Budgetary Decisions

Consider the following itinerary: a hypothetical investment in medical equipment journeys along a choice map garnering independent assessments from the models in Table 1, and the four assessments are harmonious. Perhaps the device in question restores patients’ health, generates lucrative revenues, attracts powerful sponsors, and resonates with institutional strategies. This journey is conceivable, but the fieldwork for this study suggested a more common scenario: different decision models breed discordant assessments that trigger rounds of negotiations. The negotiations generate choices, but they create tensions and dissonance. Operational levels of rationality and consensus must be restored by reinterpreting some

of the assessments and legitimizing the choices with ceremonial acts (Greer et al., 1983).

Proposition 2. Proposed investments are seldom approved officially without sufficient sensemaking and ceremony to assure that the evaluations issuing from different decision models reinforce each other.

But by acknowledging the symbolism of action and the reconstruction of meaning, this proposition discredited the choice maps and upended the decision models. Heuristics elaborated from cartographic metaphors assume that travelers journey to foreseen destinations, and models based on norms of rationality assume that instrumental actions achieve premeditated goals (March, 1976). Models building on other metaphors, however, assume that superficial appearances may be deceiving (Morgan & Smircich, 1980). Well-crafted symbols can be reified, well-rehearsed ceremonies can mimic instrumental actions, and seasoned organizational actors can project rationality, causation, and purpose into decisions where none existed (McCall, 1977). The team wondered whether the flowcharts could have transcribed scripts for ceremonial choices instead of mapping routes for decision making excursions. It seemed time to stock up on some new theoretical models, so the researchers quit the field and retired to their libraries.

Models Building on Symbolic Metaphors

The organization literature addresses cognitive revisions and symbolic actions at several levels of analysis. Individuals are said to engage in post decisional justification (O’Reilly & Caldwell, 1981) in

order to restore cognitive consistency (McGuire, 1968) and reestablish feelings of rationality, potency, and morality (Staw, 1980). Groups, subunits, and organizations are said to reconstruct social realities (Berger & Luckman, 1966) and design idiosyncratic structures (Meyer, 1982a) in order to uphold traditions (Clark, 1972) and sustain ideologies (Beyer, 1981). Leaders are said: (1) to invoke nonexistent strategies that account for deviant actions in order to resemble organizational statesmen (Mintzberg, 1976); (2) to increase members' commitment by staging melodramatic improvisations; and (3) to exploit environmental exigencies by enacting charades that bootleg unrelated changes into their organizations (Meyer, 1982b). Finally, environmental actors are said to espouse myths leading organizations seeking survival to erect ceremonial structures in order to garner resources and legitimacy (Meyer & Rowan, 1977).

Table 2
Instrumental Versus Symbolic Modes
of Decision Models

<i>Model</i>	<i>Instrumental Mode</i>	<i>Symbolic Mode</i>
Clinical	Evaluations of medical evidence that influence impending choices	Imputations of medical goals that justify prior choices
Fiscal	Financial forecasts that inform choices	Financial rituals that rationalize choices
Political	Power struggles that shape outcomes	Pluralistic ceremonies that legitimize outcomes
Strategic	Intended strategies that are pursued in prospect	Emergent strategies that are discovered in retrospect

On returning to the field, the researchers began seeing many retrospective and symbolic aspects of budgeting decisions, and they concluded that the instrumental modes of each decision model are complemented by the symbolic modes shown in Table 2. As decision processes unfolded, certain discoveries were made, including instances of: (1) doctors suddenly discerning therapeutic value in equipment they had opposed vigorously; (2) analysts inflating demand estimates and forecasting lucrative returns after equipment was enstalled; (3) committees elected to represent diverse constituents rubber-stamping decisions that were faits accomplis; and (4) strategic planners embellishing missions to accomodate new machinery.

Regulatory agencies possess normative expectations about the structures and processes that "good" hospitals should exhibit, and these norms usually equate goodness with rationality. In reaching some decisions, hospitals resemble theatrical troupes using choice maps as scripts for epics placating the regulators by camouflaging professional and institutional self-aggrandizement (Greer et al., 1983).

However, no uniform tendencies to invoke the symbolic mode appeared to characterize particular organizations or classes of decision makers. Instead, each choice seemed to evoke a unique concatenation of instrumental and symbolic acts. But organizational choices mingling instrumental and symbolic acts posed a conceptual dilemma, because no model or metaphor encompassing both had been found. A new framework was needed for describing how incongruous evaluations are assimilated and for specifying mechanisms triggering shifts between instrumental and symbolic modes of choice. A physician with a doctorate in economics provided the metaphoric seed for such a framework by remarking: "That happens when everybody's utility curves start bending."

A Pliant Utility Model

This metaphor of the field was elaborated with scholarly ones borrowed from cybernetics (Ashby, 1960), the behavioral theory of the firm (Carter, 1971; Cyert & March, 1963), the loose coupling perspective on organizations (Weick, 1976), and two studies of individual decision making (Soelberg, 1967; Webster, 1964) to synthesize a model capturing some of the dynamics of organizational choice. Although the model was fashioned inductively around hospitals' budgetary choices, it may have relevance for other organizational decisions and in other decision making organizations.

The model proposed a pliant utility function that undergoes a three-stage metamorphosis during the formation of a medical capital budget. Initially, the function increases monotonically, as shown by the dotted line in Figure 3; at an intermediate stage, large sections become constant and the curve assumes the segmented form shown by the broken line; and, finally, intermediate segments collapse to yield the simple step function shown by the solid line. Instrumental and incongruous evaluations are coupled loosely in the monotonic phase. These evaluations are assimilated near the beginning of the segmented phase, and implicit choices crystallize near the end. Implicit

choices then trigger symbolic decision making, which predominates during the step-function phase.

The Monotonic Utility Phase. Evaluation begins instrumentally within some subset of the four decision models. Because choice maps depict medical departments as the customary origins of equipment proposals, the clinical model usually provides the frame of reference for initial evaluations. In this frame, equipment regarded as “state-of-the-art” is valued, risks and benefits for individual patients are weighed, and requisite manual dexterity and medical expertise are considered. The predominant form of talk is medical jargon, a relatively precise, unambiguous language (Daft & Wiginton, 1979).

Other decision models may be activated simultaneously or sequentially, and proposals may be evaluated formally as scheduled in choice maps or they may take shortcuts to unscheduled destinations for informal evaluations. But, in any case, the models elicit different frames of reference and linguistic symbols. The fiscal model weighs costs against revenues for the whole organization, the political model gauges the potency and tenacity of sponsors versus opponents, and the strategic model matches portfolios of investments with foreseen environmental shifts. At this stage, it is unlikely that proposals have officially arrived at their political and strategic whistle-stops, but these models often are invoked on golf courses and over cocktails.

Although initial evaluations are provisional, they are semantically precise, and people behave as though seeking to maximize monotonically increasing utilities. Medical departments routinely rank competing investments, suggesting that preferences are transitive (Cyert & March, 1963), and rates of return projected by financial analysts possess the additional property of cardinality.

Loose couplings (Weick, 1976) temporarily insulate instrumental evaluations conducted within jargon groups (Pondy, 1977). Decision makers evaluate proposals independently in terms of disjoint criteria. Direct comparisons are prudently avoided, so latent conflicts cannot surface to rally fragmented opposition, undercut freedom of action, and create deadlocks.

The Segmented Utility Phase. Investment proposals move on to a forum in which they are prioritized by mapping the independent monotonic evaluations onto a discontinuous organizational utility function. This function contains at least three thresholds,

and it provides a mechanism for quasi-resolution of conflict (Cyert & March, 1963). The lowest threshold is reserved for equipment designated as “desirable or nice to have,” the middle one for equipment designated as “necessary or important,” and the uppermost for equipment designated as “urgent or essential.” Because such nomenclature is sufficiently ambiguous for application within each of the four decision models, equivocality supplants linguistic precision, communication becomes possible, and the assimilation of heterogeneous evaluations can begin.

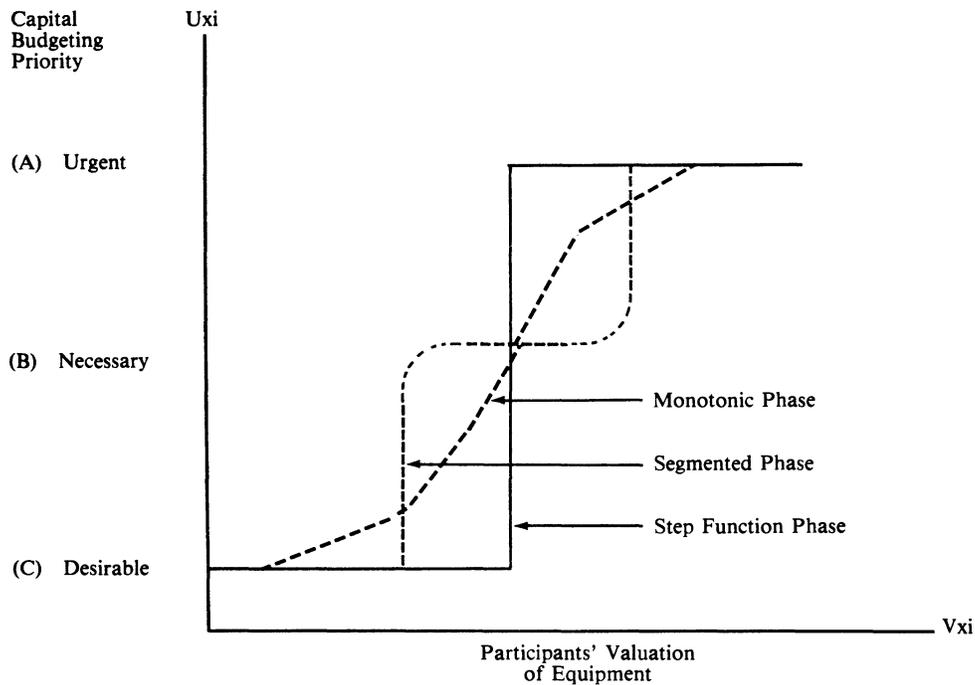
Figure 4 diagrams the characteristic decision processes of the segmented phase. Proposals accorded the highest priority (A) are thereby transformed into implicit choices (Soelberg, 1967), and instrumental evaluations dwindle as utility curves assume the step-function form and participants switch to the symbolic decision mode. Language ceases to be a technology for processing information and becomes a process of ascribing meanings. Retrospective and ceremonial cycling continues until enough harmony has been achieved for the implicit choice to become an explicit decision.

Proposition 3: Most proposed investments are implicitly chosen or rejected long before explicit decisions congeal.

Similar heuristics have been observed in studies of individual decision making. After analyzing how master’s candidates decided what job to take on graduation, Soelberg (1967) reported that the students first identified an “implicit favorite” while maximizing no more than two criteria, then during a “confirmation period” they invoked additional criteria and constructed decision rules favoring their implicit choices. Only after adequate justifications had been created did they explicitly “decide” which offers to accept. According to Webster (1964), organizations select candidates in an analogous fashion: interviewers form positive or negative impressions during the first few minutes of employment interviews and then proceed to validate them by seeking confirming evidence and ignoring disconfirming evidence.

However, as Figure 4 indicates, not every investment proposal is embellished with symbolic trimmings. Those assigned the second priority (B) hang in abeyance as they continue cycling in the instrumental mode. Dormant decision models become active, and instrumental evaluations accumulate. On the other hand, proposals consigned to the lowest priority (C) usually languish there. Equipment so designated is almost never budgeted. Sponsors recognize

Figure 3
A Pliant Utility Curve



the futility of expending more energy or squandering more political capital, and evaluation comes to a standstill.

The Step Function Phase. As investment proposals meander along choice maps, the priority thresholds shift and utility curves' middle segments begin collapsing as their upper and lower bounds converge. Patrons of the four decision models apply varied pressures determining whether a priority B proposal is elevated into priority A implicit choice or toppled into priority C limbo. In either case, the middle threshold collapses into the step function shown by the solid line in Figure 3, the choice maps are transformed into scripts, and the actors invoke dramaturgical and cultural metaphors to mend emotional rifts and construct consensual meanings.

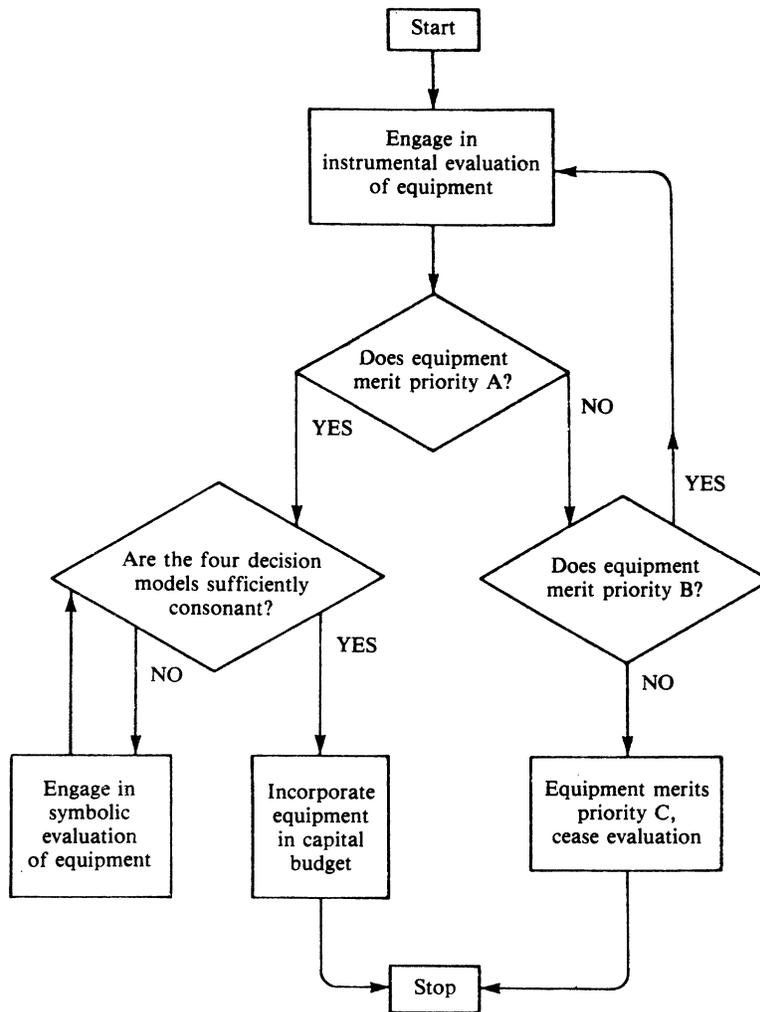
The Instrumentality of Symbolic Decision Making

Several years ago, after sponsors had overcome considerable political opposition, Hospitals A and B both invested in equipment for performing a new and somewhat experimental surgical procedure. Although

symbolic decision making was minimal in Hospital A, one medical faction prevailed and the hostility unleashed during acrimonious budgetary debates apparently subsided. But after the equipment was installed, the doctors who had been outmaneuvered referred few patients for surgery, and operating-room schedules, nursing services, and parking spaces emerged as new bones of contention. Today, the most ardent supporters of the new procedure have departed, and the equipment sits in the basement, amortizing in peace. The lesson seems to be that the emotional residues of contested decisions do not necessarily dissolve—they can crystallize, precipitate, and resurface the next time the social system is agitated.

In Hospital B, early stages of the budgetary process were just as contentious, but the administrator invoked symbolic decision making more adroitly. He had been struggling to arrange financing for a building program, and he saw in the proposal an opportunity to increase contributions by enhancing the hospital's stature in the community. He conferred in-

Figure 4
Making Choices with Segmented Utilities



formally with the board and capitalized on the board's image of the hospital as "technologically innovative" to garner its endorsement. As it grew evident that the proposal was attracting broad-based support, utilization estimates were increased, an implicit choice congealed, and instrumental evaluation gave way to symbolic action. Face-saving concessions were offered, cognitions were revised, and medical staff opposition folded.

Today, the surgical program is thriving, and the hospital occupies a new building. With the passage of time, this decision has turned into a metaphor for the organization itself; its auspicious outcomes are recited liturgically when other experiments are contemplated. The instrumentality of symbolic decision making is apparent in one physician's assertion that the decision "gave us a sense of momentum, a sense of self-esteem, and a sense that we could continue to succeed in the future."

Implications for Decision Theory

Rationality and symbolism often are regarded as competing theoretical perspectives that say more about a researcher's implicit assumptions than they say about any explicit attributes of an organization (Morgan & Smircich, 1980). This paper proposes an alternative view:

Proposition 4. Instrumental and symbolic modes of choice reinforce each other, and organizational decisions are rarely made through the exclusive use of either mode.

The boundaries separating decision making theory and data are artificial ones. They should be permeated by acknowledging that rationality and symbolism are complementary empirical phenomena, not just rival theoretical perspectives.

Symbolism has been regarded as a means of adorning and buttressing untenable decisions that are incapable of standing on their own merits (Pettigrew, 1973). This paper, however, suggests that the most extensive symbolic actions are elicited by the most viable investment proposals:

Proposition 5. The larger the anticipated benefits of a decision alternative, the sooner the symbolic mode is invoked.

Researchers should ask themselves whether genuine commitment to contested decisions can crystallize unless symbolic acts restore harmony, surface shared values, and highlight overarching objectives.

Both normative prescriptions and common sense dictate that the most important choices should be subjected to the most comprehensive and unbiased evaluations (Simon, 1957). However, the model proposed here implies a curvilinear relationship between the duration of instrumental evaluation and the benefits ascribed to decision alternatives:

Proposition 6. Instrumental evaluations continue while intermediate benefits are expected, but they terminate when either large or small benefits are expected.

The implication is that decision making is most comprehensive and objective when the stakes are modest or when the influence of sponsors is counterbalanced by the influence of opponents.

Cognitive revisions often are regarded as spurious addenda or fictional epilogues to consummated decisions, and theorists show this by calling the revisions "retrospective justifications" (O'Reilly & Caldwell, 1981). This paper adopts a less pejorative point of view:

Proposition 7. Organizational decision making is facilitated by decision makers' cognitive restructuring.

The implication is that researchers should view social actors' cognitive revisions as cogent methods of effecting decision making closure rather than as perverse misrepresentations or irksome sources of measurement error.

Decision making dynamics have been likened to a progression from the abstract and general to the concrete and specific, as exemplified by the metaphors of *realizing* goals and *absorbing* uncertainty. However, the model proposed here reverses this sequence:

Proposition 8. Linguistic equivocality and abstraction increase as choice processes unfold.

Precise argots of jargon groups yield to more ambiguous natural language, and this, in turn, is superseded by linguistic commemorations of shared beliefs. Ambiguous language supplies the lubricant that helps mesh organizational subcultures invoking different metaphors and espousing discordant ideologies.

Theories, Metaphors, and Organizational Science

This paper began by claiming that organizational science and organizational practice would benefit from heightened sensitivity to the interplay between theoretical metaphors and metaphors of the field. The argument was illustrated by considering how capital-budgeting decisions are made in professional bureaucracies in which balkanized constituencies pursue competing goals by employing incomparable criteria in evaluating investments. Rival models portray such decisions as: programmed sequences of interlocking subroutines (March & Simon, 1958); incrementally revised versions of their predecessors (Lindblom, 1959; Tversky & Kahneman, 1974); political outcomes that both reflect and remodel power structures (Pfeffer, 1981); mercurial processes with haphazard outcomes (March & Olsen, 1976); and superficial facades that camouflage organizational realities (Meyer & Rowan, 1977).

This paper sought to reconcile these models by according credibility to decision makers' theories-in-use. Metaphors provided vehicles for commuting between the realms of social fact and decision theory, but they needed remodeling over the course of the inquiry. Cartography and pliant utilities were adduced as metaphoric outcroppings during fieldwork, ela-

borated into models while conceptualizing decision making, as used as expository devices while converting the results into written text.

Theory traditionally is seen as the preserve of detached scholars, but social scientific theories stand in dialectic relationship to their subjects (Albrow, 1980). At this moment, nonrational metaphors of organizational choice seem to be proliferating. The danger is that in a headlong rush to capitalize on their genuine insights, these new metaphors will be applied as uncritically and universally as were their predecessors. But the discovery that previous theorists have imputed excessive rationality to organizations should not lead future theorists to impute excessive anarchy. Realizing how politically motivated decisions may be adorned with rational trimmings should not blind one to ritualistic political ceremonies invoked to legitimize fundamentally rational decisions.

The acknowledgement that some organizational symbols dramatically reflect historical events and sustain myths perpetuated by environmental actors should not obscure other symbols that are robust mechanisms generating commitment to future courses of action.

The choice for organizational science is not between metaphor and formal intellection. "Rather, the choice is between more or less fruitful metaphors, and between using metaphors or being their victims" (Brown, 1976, p. 178). Honoring practitioners' metaphors of the field may give rise to richer theories possessing greater relevance to organizational practice. Practitioners cannot afford the luxury of divorcing theory and action. Perhaps neither can organizational scientists.

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Alan D. Meyer is Assistant Professor in the School of Business Administration and Center Scientist in the Urban Research Center, University of Wisconsin-Milwaukee.