This article reviews the strategic decision making literature by focusing on the dominant paradigms—i.e., rationality and bounded rationality, politics and power, and garbage can. We review the theory and key empirical support, and identify emergent debates within each paradigm. We conclude that strategic decision makers are boundedly rational, that power wins battles of choice, and that chance matters. Further, we argue that these paradigms rest on unrealistic assumptions and tired controversies which are no longer very controversial. We conclude with a research agenda that emphasizes a more realistic view of strategic decision makers and decision making, and greater attention to normative implications, especially among profit-seeking firms in global contexts.

Change swept strategic management research during the past decade. Triggered by the work of Miles and Snow (1978) and later Porter (1980, 1985), strategic content research flourished. The next decade may bring a similar revolution to strategic process. As Rumelt, Schendel, and Teece (1991: 22) write: 'Both theoretical and empirical research into the sources of advantage has begun to point to organizational capabilities, rather than product market positions or tactics, as the enduring source of advantage.' And, of course, strategic process research never really lost favor among the Japanese and Europeans.

Central among strategic process issues is strategic decision making. It is crucial because it involves those fundamental decisions which shape the course of a firm. During the past 30 years, many researchers have recognized the centrality of the topic by tackling issues in strategic and more generally, organizational decision making. Overall, research has progressed from the early musings of Simon to a plethora of ideas by a spectrum of authors. However, a quick examination suggests that the character of the field resembles a 'crazy quilt' of perspectives. A more thorough scrutiny reveals a field based on mature paradigms and incomplete assumptions.

A primary purpose of this paper is to review the literature on strategic decision making. Following Mintzberg, Raisinghani, and Theoret (1976: 246), we define a strategic decision as one which is 'important, in terms of the actions taken, the resources committed, or the precedents set.' That is, we focus on those infrequent decisions made by the top leaders of an organization that critically affect organizational health and survival. We review the major choice paradigms (i.e., rationality and bounded rationality, politics and power, and garbage can). Our contribution is a synthesis of theory, key empirical support, and emergent debates.

A second purpose is to suggest an agenda for future research. Here we propose bringing strategic decision making closer to mainstream strategy by emphasizing normative implications, especially profit-making firms and international
contexts. And, we propose creating more realistic views of strategic decision making by opening up our conceptions of cognition and conflict. Our contribution here is a research agenda which ties to the strategy field, centers on a few, key research areas, and is capable of breaking the constraints of current paradigms.

We conclude that much progress has been made in understanding strategic decision making. It is clear that people are rational, but only boundedly so, that power wins battles of choice, and that chance affects the course of strategic decision making. It is also clear that a synthesis of bounded rationality and political perspectives provides a compelling description of strategic decision making. Yet, it is equally apparent that these traditional paradigms rest on tired debates about single goals and perfect rationality, and on unrealistic assumptions about how people think, behave, and feel. Thus, it is an opportune time for path-breaking visions of strategic choice.

RATIONALITY AND BOUNDED RATIONALITY

In its most basic form, the rational model of choice follows the everyday assumption that human behavior has some purpose. In research on decision making, this translates into a common model of rational action (March and Simon, 1958; Allison, 1971), sometimes referred to as the synoptic or comprehensive model of decision (e.g., Anderson, 1983; Nutt, 1976, 1984). According to this model, actors enter decision situations with known objectives. These objectives determine the value of the possible consequences of an action. The actors gather appropriate information, and develop a set of alternative actions. They then select the optimal alternative. For example, Simon’s identification, development, and selection model (Simon, 1965) is a simplified version of this rational model.

Typically, the research in the rational tradition sets up this ideal as a ‘straw man’ in order to develop variations on the model. The original debate involved the heroic nature of cognitive assumptions (e.g., Simon, 1957; Lindblom, 1959; Cyert and March, 1963). For example, Simon (1957) challenged the validity of the classic economic actor by rejecting the Hobbesian notion of consistent, value-maximizing calculation in human behavior. Later variations accepted the rational model, but rearranged the pieces to allow repetition and variety (e.g., Mintzberg et al., 1976; Nutt, 1984; Hickson et al., 1986). The most recent incarnation transformed the rational vs. boundedly rational dichotomy into a continuum, probing whether (e.g., Fredrickson, 1984; Fredrickson and Mitchell, 1984; Fredrickson and Iaquinto, 1989) and when (e.g., Dean and Sharfman, 1992) decision making is rational (Table 1).

Cognitive limitations

Several empirical studies reveal cognitive limitations (e.g., Cyert and March, 1963; Carter, 1971; Anderson, 1983; Pinfield, 1986). The original work is by Cyert, March, and colleagues (Cyert and March, 1963). These authors presented theory and case studies which demonstrate that goals can be inconsistent across people and time, search behavior is often local, and standard operating procedures guide much of organizational behavior.

While Cyert and March developed a global critique, later authors focused on specific steps of rational decision making. For example, in a review of six top-level planning decisions, Carter (1971) formulated a fine-grained view of search processes by segmenting them into two types. Personnel-induced search occurs when strong executives with definite objectives in mind stimulate search, and opportunity-induced search occurs when firms engage in search when unexpected opportunities arise.

Allison (1971) challenged the rational model by showing how standard operating procedures applied to strategic decisions in government by using them to describe the behavior of the Executive Committee of the National Security Council (ExCom) during the 1962 Cuban Missile Crisis. Allison argued that the actions arising from an organization yesterday best predict the actions today. He traced this stability to the standard operating procedures within an organization. Thus, for example, the timing of the discovery of offensive missiles in Cuba reflected the standard operating procedures for data analysis by the relevant government agencies.

Anderson’s (1983) review of ExCom decision making during the Cuban Missile Crisis centers on goals and alternatives, captured in the ‘decision
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<td>Cyert and March, (and colleagues), 1963</td>
<td>Computer simulation, case studies</td>
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<td>Allison, 1971</td>
<td>Case study</td>
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<td>Carter, 1971</td>
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<td>Fredrickson and Mitchell, 1984</td>
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<td>29 firms; unstable environment</td>
<td></td>
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<td>Fredrickson and Iaquinto, 1989</td>
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<td>Fredrickson, 1985</td>
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<td>Isenberg, 1986</td>
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<td>Bourgeois and Eisenhardt, 1988</td>
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<td>Eisenhardt, 1989</td>
<td>Case studies</td>
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<td>Langley, 1989</td>
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<td>Formal analysis &amp; social interaction are closely related</td>
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<tr>
<td>Dean and Sharfman, 1992</td>
<td>Field study</td>
<td>57 strategic decisions in 24 companies</td>
<td>Use of rational decision processes in organizations</td>
<td>Organizations use procedural rationality for little threat and understood issues</td>
</tr>
</tbody>
</table>

making by objection' model. The author observed that ExCom considered few alternative courses of action simultaneously. Instead, participants raised objections to a current alternative. Further, in order to avoid high risk, decision makers often selected alternatives that even they did not expect would solve the problem. Finally, instead of the rational process of goal definition, followed by alternative generation and choice, Anderson observed the nearly simultaneous discovery of goals and choices through social processes.

Taken as a group, these and other studies indicate the limitations of each step of the rational model. Goals are unclear and shift over time. People often search for information and alternatives haphazardly and opportunistically. Analysis of alternatives may be limited and decisions often reflect the use of standard operating procedures rather than systematic analysis.

**Rearrangement and repetition**

A more recent variation of the rational model accepts the model, but rearranges its pieces to allow repetition and variety in their order (e.g.,
Mintzberg et al., 1976; Nutt, 1984; Hickson et al., 1986). This work recognizes that decisions have unique patterns of solution.

One example is the study by Mintzberg et al., (1976) of 25 decision processes from which they generated a model of the structure of apparently ‘unstructured’ strategic decisions. Three basic phases — the identification, development and selection phases of decision making — form the heart of the model. In the classic rational model of choice, these stages occur sequentially. In Mintzberg et al’s study, these phases have no sequential relationship. Rather, within each phase, decisions follow various routines: decision recognition and diagnosis routines during the identification phase, search and design routines during the development phase and screen, evaluation-choice and authorization routines during the selection phase. The phases and their routines can come in any order and can repeat. The result is that steps in a rational strategic decision process actually shift, branch, cycle and recycle.

Another example is Nutt’s (1984) study of decisions in health-related organizations. This study also indicates that the pieces of the rational model are valid, but that they do not necessarily follow a simple, causal sequence. The author found five types of decision processes, which vary primarily in their approach to search. For example, in the historical process, people draw ideas from the practices of others in order to guarantee that the idea will work. The off-the-shelf approach uses aggressive search to find the best available technique while in appraisal processes, managers use the scientific method to evaluate the effectiveness of ideas with unknown value.

More recently, the Bradford group (e.g., Hickson et al., 1986) examined 150 widely varying strategic decisions in the U.K. They determined that the linearity of the decision process is highly variable. The amount of cycling and the shape of the process depends on how complex and political the decision is. Simple matters with little debate follow smooth and often constricted decision making processes. In contrast, complex and contentious matters had more complicated processes with delays and recycling. Thus, like the previous studies this study suggests that decision processes vary depending upon decision characteristics as executives apparently bypass or revisit different aspects of the choice over time.

**Rationality vs. bounded rationality**

A third variation presents rationality and bounded rationality as a dichotomy or continuum (e.g., Harrison and Phillips, 1991). Some of this research takes a contingency slant. For example, Mintzberg and Waters (1982) noted how organization size affected the rationality of strategic decision making. Dean and Sharfman (1992) examined rationality in a study of 57 strategic decisions in 24 firms. They found that threatening environments, high uncertainty, and external control decreased rationality.

Often this research indicates how decision makers can move along the rationality vs. bounded rationality continuum, typically by increasing conflict (e.g., Cosier, 1981; Janis, 1982, 1989; Nutt, 1989; Schweiger, Sandberg, and Ragan, 1986; Schweiger, Sandberg, and Rechner, 1989; Cosier and Schwenk, 1990). These authors acknowledge that decision processes are often boundedly rational and so seek to improve the rationality, usually by using more information and creating more diverse viewpoints. For example, Janis (1982) studied a number of strategic decision situations and uncovered a pattern of behavior he called ‘groupthink,’ an excessive tendency to seek concurrence. He prescribed several divergence-inducing antidotes to groupthink such as creating a devil’s advocate, introducing outside experts, and encouraging argument.

Similarly, Schweiger, Sandberg, and Ragan (1986) compared the results from groups using dialectical inquiry, devil’s advocacy, and consensus approaches to decision making. Like Janis, they found that normative methods for increasing conflict succeed. Both dialectical inquiry and devil’s advocate groups produced better recommendations and assumptions than did consensus groups. However, the improved performance came at the expense of group satisfaction and acceptance of the decision.

Still other research tackles the normative question of where is the optimal point on the continuum (e.g., Dess, 1987; Priem, 1990). The most prevalent argument is that more complex or turbulent environments require less rationality (e.g., Fredrickson, 1984; Miller, 1987). A good example is a series of studies in the paint and forest products industries by Fredrickson and colleagues (Fredrickson and Mitchell, 1984; Fredrickson, 1984; Fredrickson and Iaquinto, 1989).
These studies demonstrated the predicted negative relationship between the rationality or as they term it, ‘comprehensiveness,’ of the decision process — how exhaustive and inclusive the decision process is — and firm performance in an unstable environment and a predicted positive relationship in a stable environment. The most recent study in this series (Fredrickson and Iaquinto, 1989) demonstrated the strength and stability of this relationship over time.

An alternate view

Taken as a group, these studies assume that rationality and bounded rationality anchor ends of a continuum. However, new threads of research break from this dominant view. This work argues that rationality is multidimensional, and so strategic decision makers are rational in some ways, but not others. And, it argues that such behaviors are effective, particularly in fast-paced environments.

One example is Isenberg’s (1986) comparison of thinking protocols of general managers and undergraduate students in a problem solving case. Isenberg found that managers made contingency plans, a rational strategy. But, they also acted quickly on incomplete information, a bounded rationality strategy. Fredrickson also found that executives engaged in some, but not all, aspects of rational choice. As Fredrickson wrote (1985: 821): ‘the executives’ approaches were simultaneously rational and intuitive.’ In a study of strategic choice in 8 microcomputer firms, Eisenhardt (1989) showed that effective decision makers developed many alternatives, but only thinly analyzed them. They also sought information from many sources, but focused on a few. In other words, these executives were rational in some ways, but not others. Moreover, Eisenhardt (1989) also found that these behaviors were effective in fast-paced environments. In contrast, ‘noncomprehensive describes the way that slow (strategic decision making) teams accelerate’ (Eisenhardt, 1989: 565).

Thus, this research calls into question the long standing view of a rationality vs. bounded rationality continuum. Rather, it suggests a set of decision making tactics or heuristics which are rational in some ways, but not others and which are effective in fast-paced, uncertain settings. Decision makers are seen as adjusting their rationality in complex ways, rather than blindly and uniformly being more or less rational.

Summary

Overall, the original debate, which shaped the paradigm, over whether decision makers are rational or boundedly rational is no longer very controversial. Empirical research clearly supports (1) the existence of cognitive limits to the rational model. Decision makers satisfice instead of optimize, rarely engage in comprehensive search, and discover their goals in the process of searching. The empirical research also suggests that (2) many decisions follow the basic phases of problem identification, development and selection, but that they cycle through the various stages, frequently repeating, often going deeper, and always following different paths in fits and starts. Furthermore, (3) the complexity of the problem and the conflict among the decision makers often influence the shape of the decision path.

On the other hand, there is no single theory of bounded rationality, but rather many variations. There is ‘decision by objection’ (Anderson, 1983), ‘root vs. branch’ (Lindblom, 1959), ‘constricted, sporadic, flow’ (Hickson et al., 1986) and so forth. This is the fruit of a paradigm developed in reaction to the ‘straw man’ of purely rational choice.

Secondly, a heuristic perspective, in which decision makers are rational in some ways, but not others is emerging. This nascent perspective runs counter to the traditional view of rationality as a monolithic construct and suggests a debate between this monolithic conception and a more multidimensional approach to how strategic decision makers actually think.

POLITICS AND POWER

The roots of the political perspective on strategic decision making lie in the political science literature of the 1950s. Various authors of that era developed a view of decision making in government which emphasized the conflictual nature of the legislative process. That view held that decisions were the result of a process in which decision makers have different goals, they come together through coalitions, and the
preferences of the most powerful triumph. This paradigm was obviously well-suited to the legislative branch of government where there are competing interests, sharply defined coalitions, and clear winners.

Similar to the boundedly rational model, the application of the political model to strategic decision making was a reaction to the prevailing economic assumptions that organizations possess a single, superordinate goal. As March wrote (1962: 663), 'I will argue that the business organization is properly viewed as a political system and that viewing the firm as such a system both clarifies conventional economic theories of the firm and (in conjunction with recent developments in theoretical languages) suggests some ways of dealing with the classical problems in the theory of political systems generally.' While the boundedly rational model was a reaction to cognitive assumptions about individuals, the political model was a reaction to social assumptions about groups. In the political model, people are individually rational, but not collectively so.

The key assumption is that organizations are coalitions of people with competing interests. While these individuals may share some goals such as the welfare of the firm, they also have conflicts. For example, some people in a business firm may favor growth while others may favor profitability or public service. These conflicting preferences arise from different bets on the shape of the future, biases induced by position within the organization, and clashes in personal ambitions and interests (Allison, 1971).

The heart of the political perspective is the process by which conflict is resolved among individuals with competing preferences. Simply put, decisions follow the desires and subsequent choices of the most powerful people (March, 1962; Hinings et al., 1974; Salancik and Pfeffer, 1974). Further, decision makers often attempt to change the power structure by engaging in political tactics such as coalition formation, cooptation, strategic use of information, and the employment of outside experts.

There are two streams of research within the political perspective (Table 2). One consists of vivid case studies illustrating the political perspective in a variety of contexts. The other contains a series of deductive studies, many of which were conducted by Pfeffer and his colleagues in the 1970s, that demonstrate the power of the political model. We turn now to examine how consistent the empirical research is with theory.

**Organizations as political systems**

The view that organizations are political systems (i.e., collectives of people with at least partially conflicting goals) has been supported by several colorful case studies (e.g., Allison, 1971; Baldridge, 1971; Pettigrew, 1973; Quinn, 1980; Pettigrew, 1985; Eisenhardt and Bourgeois, 1989). Perhaps the best example is Baldridge's (1971) book, *Power and Conflict in the University*. The research chronicles several key decisions taken at New York University (NYU) in the 1960s that occurred as NYU shifted from an open enrollment, part-time school to a demanding, research-oriented university.

The complex structure within NYU was clearly consistent with the political view of the firm. On the one hand, the participants—faculty, administrators, students, trustees, alumni—shared a common interest in the welfare of the university. On the other hand, their interests obviously also diverged. As Baldridge (1971: 107) described, NYU was a 'pluralistic system, often fractured by conflicts along lines of disciplines, faculty subgroups, student subcultures, splits between administrators and faculties, and rifts between professional schools.'

Several examples bring to life the conflicts among the groups. A decision to change the student body to a more qualified, full-time group pitted the Commerce and Education Schools and some faculty against the central administration, the trustees, the Graduate School of Business, and more research-minded faculty. A proposed tuition increase coaligned students and some faculty against the administration. A series of organizational restructurings created conflict among deans, department heads and the administration. In each case, the conflict between these participants was not simply a misunderstanding, but a fundamental difference in self-interest.

Another example is Pettigrew's (1973) study of computer adoption within a British retailer. The author sketched the firm as a patently political system. He focused on three managers (Kenny, O'Reilly, and Turner) and their selection of computer vendors for automating the firm.
Table 2. Summary of empirical research: Power and politics

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<td>Case study</td>
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<td>Pettigrew, 1973</td>
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<td>Salancik and Pfeffer, 1974</td>
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<td>Borum, 1980</td>
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Table 2. Continued

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<td>Dean and Sharfman, 1992</td>
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<td>Differing interests lead to political behavior; trust and importance of decision mitigate politics; theory exaggerates level of politics</td>
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Consistent with the political model, each manager had well-defined, yet conflicting, preferences regarding computer vendors. Kenny favored the current vendor, Newton, and one specific technical approach. In contrast, Turner and O'Reilly favored different vendors and technical approaches from each other and from Kenny. These preferences arise not only from genuine disagreements about technology and the quality of the different vendors, but also from differences in the managers' positions within the firm and their perceptions of self-interest.

There are further examples of case studies of politics in decision making. Allison's (1971) study of the Cuban missile crisis reveals that deep divisions existed among President Kennedy's advisors regarding an appropriate reaction to the deployment of Russian missiles in Cuba based on different assumptions and their place in the hierarchy. Quinn's (1980) study of strategic decision making processes within nine large, international corporations, including Chrysler and General Motors describes these firms as political systems. As Quinn outlined the firms, the organizations were comprised of constantly changing groups of people with diverse talents and interests. In their study of U.S. microcomputer firms, Eisenhardt and Bourgeois (1988) noted that conflict among executives regarding appropriate action was common. Thus, the organization as a political system of conflicting preferences has wide support from studies in government, universities, large corporations, and high technology firms.

**Decision as the preferences of the powerful**

A second feature of the political model is the assertion that choice reflects the preferences of powerful people. Here too the empirical evidence supports the political perspective. For example the NYU research (Baldrige, 1971) describes how the choices among competing options were ultimately a reflection of the inequalities within the power structure of the university. The weak Commerce and Education Schools lost to the powerful central administration in a series of decisions that changed the NYU student body from a less-qualified, part-time group into a full-time, high quality, residential student body. As one Commerce faculty member described (Baldrige, 1971: 53), 'A real power struggle developed, but in this battle the administration had most of the weapons.'

Some of the best evidence that powerful people triumph comes from deductive studies. The original study (Pfeffer and Salancik, 1974) examined budgeting at a major university by juxtaposing rational and political models of choice. The authors found that the power of university
departments influenced their share of the budget and did so more than rational criteria such as student units taught. This capability of powerful individuals and groups to get what they want was then replicated in other studies of universities and charitable funding agencies which also contrasted predictions from political and rational models (e.g., Pfeffer and Moore, 1980; Hills and Mahoney, 1978).

**Politics**

A third feature of the political model is the assertion that people at least sometimes engage in politics. By politics, we mean those observable, but often covert, actions by which people enhance their power to influence a decision. Examples of politics include coalition formation, lobbying, cooptation, withholding agendas, and control of agendas (Pettigrew, 1973; Pfeffer, 1981, 1992).

Sometimes politics involve tactics of information—i.e., manipulation and control of critical information channels. Pettigrew's (1973) study of a British retailer demonstrated how one manager, Kenny, restricted information flow to the board and vendors. Kenny effectively blocked the access of other managers to board members and slanted information from vendors to favor his preferred course of action.

Sometimes politics emphasize the tactics of timing and opportunism. Quinn's (1980) study of executive choice indicated that effective managers used such politics, which he termed 'logical incrementalism.' Senior executives developed a broad strategy of what they wished to accomplish, but implemented that strategy in a series of piecemeal, opportunistic decisions along 'corridors of indiscrimination.' This selective approach allows executives to build a power base for their ideas, to accelerate or delay as necessary, and to be flexible as the need to change arises (Quinn, 1980).

Sometimes the sheer variety of tactics is evident. In the Eisenhardt and Bourgeois (1988) study of politics in microcomputer firms, executives used many political tactics such as coalition formation, withholding information, and the use of expert consultants to gain advantage over others.

The most comprehensive treatments of politics are Pfeffer's (1981, 1992) discussions of a wide variety of political tactics by which people both gain power directly and attempt to make themselves appear less political in the process. Although Pfeffer's work is not an empirical study, his collection of anecdotes and accounts from popular business journals added to more systematic research in order to illustrate the use of politics.

**An alternate view**

Taken together, these studies and others indicate that politics are common in strategic choice. However, underneath this consistency lies a deep division emerging within the literature. The traditional view is that politics arise from conflict (e.g., Pfeffer, 1981; March, 1962). That is, people with conflicting preferences engage in politics in order to gain a favorable decision. Politics are assumed to be fluid (e.g., Gamson, 1961; March, 1962; Stevenson, Pearce, and Porter, 1985). Decision makers easily move from one alliance to another as positions and decisions shift. They vary their political tactics like teenagers change radio stations. And, ultimately, the traditional view is that politics are essential to organizations (e.g., Quinn, 1980; Pfeffer, 1981, 1992). Creating effective change and adaptation within organizations depends upon effective use of politics. Pfeffer (1992) cites studies from government (Sapolsky, 1972), big business (Pascale, 1984) and nonprofits (Borum, 1980) to support this view. For example, Pfeffer quoted Sapolsky's (1972) study of the Polaris submarine development as follows: 'The success of the Polaris program depended upon the ability of its proponents to promote and protect the Polaris. Competitors had to be eliminated; reviewing agencies had to be outmaneuvered; congressmen, admirals, newspapermen, and academicians had to be coopted. Politics is a system requirement.'

However, a contradictory view is emerging. Politics are triggered by power imbalances. Frustrated executives turn to politics as a last resort in autocratic and power-vacuum situations. For example, autocratic CEOs created an atmosphere of frustration and mistrust in which subordinates came to regard politics as their last resort to getting their views considered (Eisenhardt and Bourgeois, 1988). Politics are static. Empirical evidence suggests that decision makers rely on the same allies and the same politics time after time (e.g., Pettigrew, 1973).
In their study of microcomputer computer firms, Eisenhardt and Bourgeois (1988: 754) observe: ‘They (executives) routinely seek out alliances with the same people. When usual allies disagree on an issue, they generally do not seek out more favorably disposed executives. Rather, they either drop the issue or pursue their interests alone.’ Finally, politics are seen as ineffective. Many people dislike politics, finding them inefficient, unpleasant, and unnecessary (e.g., Gandz and Murray, 1980; Sharfman and Dean, 1992). As one executive described, ‘Lobbying isn’t a good use of time’ (Eisenhardt and Bourgeois, 1988: 750). These authors concluded that politics creates animosity, wastes time, disrupts information channels, and ultimately leads to poor performance. Other research (e.g., Sharfman and Dean, 1992) suggests that the pervasiveness of politics has been exaggerated. Traditional theorists have underestimated the degree to which executives will put aside parochial interests for the good of the firm.

Summary
In summary, most scholars accept the central ideas of the political perspective: that (1) organizations are comprised of people with partially conflicting preferences, (2) strategic decision making is ultimately political in the sense that powerful people get what they want, and (3) people engage in political tactics such as cooptation, coalition formation, and use of information to enhance their power. These observations fit both the published research and most people’s day-to-day experience within organizations. And these central ideas form a much more coherent theory than do those of bounded rationality. Thus, the original debate over whether organizations have single or multiple goals is no longer very controversial. However, an emerging debate within the paradigm is whether politics are a positive, conflict-driven phenomenon or a power-driven process signaling dysfunctional decision making.

GARBAGE CAN
First articulated by Cohen, March and Olsen (1972), the garbage can model describes decision making in highly ambiguous settings called organized anarchies. The model was largely a reaction to rational and political models of choice which Cohen and colleagues believed lacked sufficient sensitivity to decision making in a complex, unstable, ambiguous world.

Central to the garbage can perspective are organizations termed ‘organized anarchies,’ organizations beset by extreme ambiguity (Cohen et al. 1972). The ambiguity surfaces in three principal ways. One is problematic preferences: the inconsistent and ill-defined preferences that decision makers often possess. As the authors noted, decision makers are as likely to discover their goals through action as they are to understand them prior to choice. Second, organized anarchies have unclear technology. People have only a loose understanding of means and ends. Organizational participants gain knowledge by trial-and-error learning, but without clear understanding of underlying causes. Third, organized anarchies are characterized by fluid participation. Decision making participants come and go from the decision process, with their involvement depending upon their energy, interest and other demands on their time (Cohen et al., 1972). Therefore, anticipating who will actually be involved in a decision is difficult.

The garbage can model describes the accidental or random confluence of four streams: (1) choice opportunities—occasions which call for a decision, (2) solutions—answers looking for problems, (3) participants—people with busy schedules who might pay attention, and (4) problems—concerns of people within and outside the organization. Thus, decision making occurs in a stochastic meeting of choices looking for problems, problems looking for choices, solutions looking for problems to answer, and decision makers looking for something to decide.

In comparison to political and rational models, the garbage can model calls attention to the importance of chance. What gets decided depends very strongly on timing and luck. Moreover, decisions themselves have a fuzzy character. They lack the clear beginning and end points of rational and political models. Garbage can participants wander in and out of the decision. Their preferences differ as well. The sharply honed goals assumed by the political model and even the more vague ones of the boundedly rational perspective are missing as individuals are not sure about what they want and change.
their minds often anyway. Decisions are not the result of analysis by boundedly rational individuals or the power of a coalition, but rather are a random confluence of events.

Research within the garbage can perspective follows three streams (Table 3). First, there are studies (e.g., Padgett, 1980; Carley, 1986; Masuch and LaPotin, 1989) which follow the simulation tradition of the original statement of the model. For example, Anderson and Fischer (1986) develop a more fine-grained model of a garbage can process, achieving similar results to the original simulation (Cohen et al., 1972). More typically, these studies introduce variations on the organized anarchy themes. For example, Padgett (1980) developed different assumptions about which decision makers can influence the decision and then showed the implications of that change.

The simulation tradition has generated some provocative ideas. However, field research has not kept pace. Instead of probing the simulation results, most field researchers have focused on description. Hence, the second stream of research uses case studies (e.g., Kreiner, 1976; Weiner, 1976; Olsen, 1976) to demonstrate the descriptive accuracy of the garbage can model, perhaps adding nuances such as deadlines. These case studies confirm elements of the perspective, but also suggest an alternative, less random model. We now turn to this evidence.

Organizations as anarchies

Empirical evidence suggests that some organizations can be accurately characterized as organized anarchies (e.g., Olsen, 1976; Kreiner, 1976; Levitt and Nass, 1989). The evidence is drawn primarily from government and education examples (March and Olsen, 1976), with more recent efforts applying the garbage can model to military organizations (March and Weissinger-Baylon, 1986).

Olsen's (1976) study of the selection of a new dean at a U.S. university provides a good illustration. Olsen reported that the preferences of the various decision makers were 'multiple, inconsistent, ill-defined, and changing.' At the outset, most participants desired a new dean who was young. They also preferred a person who was well-trained in mathematics, and a serious academic who could support the philosophy of the school. As candidates turned the school down, the criteria shifted to ones which could be met by the more realistic pool of candidates.

Olsen (1976) also described fluid participation, another characteristic feature of organized anarchies. Many people were engaged in the selection process, but in a part-time fashion. Further, he argued that the key decision makers switched over time from the faculty, to the dean and a few close associates, and finally to the vice chancellor as the school's problems in attracting candidates mounted.

Decision as a random confluence of streams

The heart of the garbage can model is the premise that decisions are the result of a random confluence of people, problems, solutions, and choice opportunities. Again, some of the empirical evidence is convincing. For example, Rommetveit (1976) put together a chart of changing participants, problems, solutions, and choice opportunities for an approximately 7-year decision to locate a medical school in Tromso, Norway. Over the course of the decision, problems such as how to improve the local region, reform medical education, and build a regional hospital arose. Similarly, solutions shifted from building a university in Tromso, to adding an extension of other universities, shifting clinical work to Trondheim and so forth.

Several case studies amplify the garbage can model. One set of results concerns deadlines. Decision making processes tend to become less like a garbage can as deadlines are imposed. For example, Weiner (1976) explored the impact of deadlines on the garbage can process to integrate the San Francisco school district. Deadlines forced the 'ejection' of extraneous garbage from the can and a focusing on the remaining issues. The number of participants decreased. But these fewer participants became more knowledgeable and their participation was more frequent. In addition, problems and solutions became clearly intertwined.

Related empirical results concern time perspectives. A number of authors (e.g., Kreiner, 1976; Olsen, 1976; Rommetveit, 1976) have observed that a longer time perspective improves the fit with the garbage can model, whereas a short time perspective is better captured by rational
<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Method</th>
<th>Sample</th>
<th>Description</th>
<th>Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohen, March and Olsen, 1972</td>
<td>Computer simulation</td>
<td>N/A</td>
<td>Introduces garbage can model of decision making in organized anarchies</td>
<td>Decision making as a combination of problems, solutions, people and opportunities</td>
</tr>
<tr>
<td>Kreiner, 1976</td>
<td>Case study</td>
<td>Danish experimental free school</td>
<td>Example of a garbage can process</td>
<td>Description of garbage can decision making</td>
</tr>
<tr>
<td>Olsen, 1976</td>
<td>Case study</td>
<td>Major American public university</td>
<td>Selection of a dean as rational conflict &amp; garbage can</td>
<td>Evidence supports the garbage can model</td>
</tr>
<tr>
<td>Rommetveit, 1976</td>
<td>Case study</td>
<td>Norway</td>
<td>Decision to locate third medical school in Norway</td>
<td>Evidence supports the garbage can model</td>
</tr>
<tr>
<td>Weiner, 1976</td>
<td>Case study</td>
<td>San Francisco Unified School District</td>
<td>Decision process for desegregating elementary schools</td>
<td>Evidence supports garbage can; consequences of deadlines</td>
</tr>
<tr>
<td>Padgett, 1980</td>
<td>Mathematical model</td>
<td>N/A</td>
<td>Stochastic garbage can model for bureaucracy</td>
<td>Implications of ambiguity; managerial implications</td>
</tr>
<tr>
<td>Anderson and Fischer, 1986</td>
<td>Monte Carlo Simulation</td>
<td>N/A</td>
<td>Develops a Monte Carlo model of variation of garbage can</td>
<td>Results consistent with the garbage can</td>
</tr>
<tr>
<td>Carley, 1986</td>
<td>Computer simulation</td>
<td>N/A</td>
<td>Simulation measuring the efficiency of garbage can &amp; structured processes</td>
<td>Measures of efficiency possible</td>
</tr>
<tr>
<td>March and Weissinger-Baylon, 1986</td>
<td>Case studies</td>
<td>Military organizations</td>
<td>Applications of garbage can to military</td>
<td>Military does not fit pure garbage can models; garbage can needs structure to fit military</td>
</tr>
<tr>
<td>Pinfield, 1986</td>
<td>Case study</td>
<td>Canadian Federal Bureaucracy</td>
<td>Comparison of structured &amp; garbage can models</td>
<td>Both models help understanding; decisions not as random as garbage can predicts</td>
</tr>
</tbody>
</table>

Continued over
and political models of choice. Apparently, as time progresses, the scope of decisions increases, the participants become more varied, and the number of solutions becomes larger.

Taken together, the above research supports the existence of organized anarchies and the garbage can decision making process (i.e., random confluence of independent streams). However, a closer look at this and other work suggests that the support is less than robust.

An alternative view

A good illustration is the empirical support for problematic preferences. For example, in the Olsen (1976) study of dean selection which is cited above, the importance, if not ranking, of criteria such as philosophical kinship to the school and academic leadership remained throughout the decision process. Thus, while there was some variation and ambiguity about what people wanted in a dean, there were common themes throughout the choice process. Similarly, Kreiner’s (1976) study of decision making in a Danish free-school indicates that certain values such as Marxism and children’s rights for self-determination were relevant throughout the decision process.

Participation is not always so random either. Again using Kreiner’s (1976) study of a Danish free-school, although all parents and teachers could participate in decision making, a core group of six people dominated choice processes. Moreover, they faced a predictable group of opponents.

Some of the results for decision making as a random confluence of streams are also modest. For example, in Kreiner’s (1976) study of decision making within an experimental free-school, the story of the decision begins with the observation that two teachers in the third grade could not get along with one another and proceeds from there. At the end, the reader is told that the story exhibits a garbage can choice process, but without any real conceptual tie between the story and the model. Kreiner (1976: 170) simply concludes: ‘We have described decision making in a standard garbage can situation.’

Another approach in the case studies has been to assert that, since small perturbations in circumstances could have dramatically changed the outcome of choices, the garbage can model must be accurate. For example, Olsen (1976) claims that the garbage can model provides a superior explanation to rational and political explanations of decision making because only the garbage can model can support the existence of multiple outcomes that could have happened under slightly different circumstances. However, such a backhanded argument seems better able to refute other theories than to confirm the garbage can.
Comparative research

More recently, a third stream of research on garbage can models (e.g., Pinfield, 1986; Magjuka, 1988; and Levitt and Nass, 1989) has compared the garbage can model with other perspectives. These studies partially affirm the descriptive accuracy of the garbage can model, but then show how alternative perspectives strongly challenge the model.

For example, Levitt and Nass (1989) found evidence for the existence of organized anarchies in their study of textbook publishing. But, once the research went beyond an individual case study description, other mechanisms imposed more order than the garbage can model allows. For example, the authors indicated that the institutional factors constrain or ‘put a lid on’ the garbage can.

Similarly, Pinfield (1986) studied the decision to develop a human resource strategy within the Canadian government. While Pinfield found some support for a garbage can interpretation, he also found that participation was not randomly fluid, but rather was a consequence of institutional roles, politics, and the phase of the decision process. Thus, participation was somewhat predictable. He also observed that streams of problems, people, choice opportunities and solutions were not independent, but rather linked together by the issue at hand. Further, individuals attempted (often successfully) to manage choice opportunities and the participation of others in the process (Pinfield, 1986).

Perhaps the strongest critique comes in another study of participation. Magjuka (1988) extensively studied participation in public school curriculum reform over several years using two school systems, several hundred teachers, and multiple levels of participation at the school and district levels. This author found that the garbage can was supported at the individual level. That is, individual teachers did come and go at random in the process of curriculum reform. However, overall patterns of participation were clearly predictable from psychological and demographic variables as well as from position in the social network. The author concludes (Magjuka, 1988: 256) that the results suggest an interpretation ‘that does not support the Garbage Can or is in any sense congenial to the underlying thrust of the Garbage Can theory. The results indicate that patterns of participation are purposive, rational, and predictable.’

Summary

To summarize, empirical research only modestly supports (1) the central idea of the garbage can perspective that organization anarchies exist. Similarly, the empirical research modestly confirms that (2) decisions occur as a result of chance intersection among changing problems, choice opportunities, solutions, and people (i.e., garbage can model). Finally, (3) the model is more robust as time frames become longer, deadlines are removed, and institutional forces are diminished.

Overall, the empirical support underlying organized anarchies and the garbage can model, which is often single case studies in book chapters, has modest methodological validity and is surprisingly soft. Thus, a central debate emerges. Does the garbage can model describe actual decision making or is it simply a labeling of the unexplained variance of other, more powerful, descriptions of strategic decision making? If the latter, it may more accurately be described as an extreme form of bounded rationality.

Finally, a synthesis of the empirical support for the three traditional paradigms suggests that strategic decision making is best described as a combination of boundedly rational and political insights. Bounded rationality shapes the cognitive limits and the looping of strategic decision processes, and the political perspective shapes the social context. While useful, the garbage can perspective is less empirically robust than these other perspectives.

TOWARDS A NEW RESEARCH AGENDA

The previous sections look to the past in describing the three major strategic decision perspectives (Table 4). These paradigms offer continuing research opportunities. The emerging debates surrounding them—i.e., whether bounded rationality is a monolithic construct or set of heuristics, whether politics are effective or dysfunctional, and whether the garbage can model is relevant at all—are particularly useful avenues for research.
Table 4. Comparison of strategic decision making perspectives

<table>
<thead>
<tr>
<th>Concept</th>
<th>Rationality and bounded rationality</th>
<th>Politics and power</th>
<th>Garbage can models</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key contribution</td>
<td>Breakdown of perfect rationality</td>
<td>Breakdown of consistent organizational goals</td>
<td>Temporal logic rather than causal logic</td>
</tr>
<tr>
<td>Organization</td>
<td>Collection of people pursuing common direction</td>
<td>Coalition of people with competing interests</td>
<td>Organized anarchy</td>
</tr>
<tr>
<td>Participation</td>
<td>Depends upon decision needs</td>
<td>Depends upon interests, power</td>
<td>Fluid: depends on load &amp; structure</td>
</tr>
<tr>
<td>Cognition</td>
<td>Plodder</td>
<td>Superhero</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Search and analysis</td>
<td>Local, to find a solution</td>
<td>To justify view, to win</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Goals</td>
<td>Reasonably consistent or sequential attention</td>
<td>Conflicting, multiple</td>
<td>Ambiguous, shifting</td>
</tr>
<tr>
<td>Conflict</td>
<td>Positive but no attention to resolution</td>
<td>High, stimulates ‘game’ of politics</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Choice processes</td>
<td>Intendedly rational with cognitive limits &amp; loops</td>
<td>Conflict of interests dominated by powerful coalitions</td>
<td>Random collisions of problems, solutions, participants, &amp; opportunities</td>
</tr>
<tr>
<td>Emphasis</td>
<td>Problem solving</td>
<td>Resolving conflict</td>
<td>Problem wandering</td>
</tr>
<tr>
<td>New debates</td>
<td>Rationality as monolithic construct vs. set of heuristics</td>
<td>Politics as effective vs. ineffective</td>
<td>Garbage can as valid description vs. labeling of unexplained variance</td>
</tr>
</tbody>
</table>

However, in this section, we sketch a bolder agenda for strategic decision making research. The agenda is shaped by three criteria. We wanted an agenda which would tie strategic decision making research more closely to mainstream strategy concerns. Given its emphasis on nonprofit organizations and descriptive, rather than normative, results, the extant research often seems peripheral to strategy issues.

At the same time, we also wanted an agenda that would break the shackles of current paradigms. In our view, the classic debates about single organizational goals and perfect rationality which shape the current perspectives are not very controversial any more. Most scholars believe that people are boundedly rational, that decision making is essentially political, and that chance matters. Yet, these classic debates constrain the realism of strategic decision research. We seek an agenda in which empirical findings could transcend traditional perspectives to new, more realistic views.

Finally, we also wanted an agenda that builds on past research. While current paradigms have shortcomings, they also have important insights. Further, while many paths are possible, the emerging debates within those paradigms, which we described earlier, are excellent launching pads from which to begin a new agenda.

**Cognition**

First on the agenda is cognition. The rational perspective has focused on incremental problem solving as its approach to thinking. While this made sense given the interest in refuting the myth of classic ‘economic man,’ it seems likely that strategic decision makers are more than the
myopic plodders of this perspective. Offering caricatures of cognition, political and garbage can perspectives are even less realistic. At one extreme, the garbage can ignores the cognitive capability of decision makers. At the other extreme, the political model assumes that people are cognitive superheroes who integrate the desires of all participants and calculate comprehensive political strategy to further their clearly understood aims. Neither resonates with reality.

One way to achieve a more realistic view of cognition is to study heuristics of strategic choice. As described earlier, previous research suggests that heuristics are important, especially for senior managers (e.g., Isenberg, 1986; Fredrickson, 1985; Eisenhardt, 1989) because they provide a more realistic, multidimensional view of rationality. For example, strategic decision makers develop many alternatives, but analyze them superficially (Eisenhardt, 1989). Although psychological research often is descriptive (e.g., Nisbett and Ross, 1980), some research examines the effectiveness of heuristics as well (e.g., Payne, Bettman, and Johnson, 1988). A next step on the agenda is to blend this psychological research with strategic decision making by exploring which heuristics are most relevant to strategic decision makers, how they work, why they work, and when they are most appropriate.

A second step to enhance the realism of cognition is to incorporate insight. Insight appears to be a process which involves the juxtaposition of competing alternatives or problems leading to a quantum shift in gestalt. For example, Mintzberg and Waters (1982) note the complete reconceptualization of strategy in a matter of days by the executives of Steinberg's grocery chain. The authors write (1982: 482): 'And so, over the course of one eventful weekend, its name was changed to 'Wholesale Groceria,' prices were slashed, personal services cut, and full self-service instituted'. However, apart from this study, theory and findings are in short supply. We suggest research to probe how insight occurs, how it can be enhanced, and how it can be controlled if too frequent.

Studying intuition is a third way to create a more realistic view of how strategic decision makers actually think. Here there are past exemplars such as Mintzberg and Waters (1982) and Eisenhardt (1989) which reveal that intuition is related to continuous engagement in the details of business and is linked to firm success. Where insight involves quantum shifts in understanding, intuition refers to more incremental adaptations based on deep, intimate knowledge of the situation. As Eisenhardt (1989: 555) writes, ‘executives who attend to real-time information are actually developing their intuition. Aided by intuition, they can react quickly and accurately to changing stimuli.’ Yet, these studies are only rough beginnings that indicate the need for more. Future research could profitably examine how intuition develops, how intuition can be separated from superstitious learning, and how intuition reinforces and relates to insight and heuristics.

Normative implications

Second on our agenda is normative research. Traditional research has primarily been descriptive (e.g., Baldrige, 1971; March and Olsen, 1976; Hickson et al., 1986). This made sense in the context of the old debates. Indeed, these debates sought to challenge the Hobbesian rationality of the classic economic model and so the traditional agenda appropriately developed more descriptively accurate models. So, for example, bounded rationality sought to show that people were not able to match the cognitive ideal, while the political model sought to demonstrate that decision makers do not necessarily agree on goals. However, with these descriptions accomplished, it is time to move on. This is particularly important since normative implications are at the heart of strategic management.

We suggest several steps. First is simply to do more normative studies. For example, research could probe the previously mentioned paradigm debates such as is it effective to be rational, is it effective to be rational in some ways, but not others, or are politics effective. Also possible are studies which probe contingencies. Here, research could ask how effective strategic choice processes vary with the size of the firm, degree of government regulation, or pace of technical change. Studies of different cultures would be particularly timely since most research on strategic decision making has been conducted in Northern European and North American contexts. Yet, strategic decision making may be quite different in other cultures, especially as notions of hierarchy and group dynamics vary.

A second step is to conduct studies on a
variety of outcomes. Past research has a limited range of outcomes. Part of the problem is empirical. Much research has been conducted in nonprofit organizations, field simulations, and laboratory studies. While valuable, settings such as lab studies, schools and government agencies seem less relevant to strategic management where the focal concern is profit-seeking firms in often highly competitive settings. Part of the problem is theoretical. A successful outcome is implicitly gauged by decision quality in the rational perspective. In the political perspective, success is individuals getting their own way in battles over turf. The garbage can lacks any real connection with success at all. Yet, many real strategic decision makers are concerned with other outcomes as well. Although some work has been done (e.g., Eisenhardt, 1989; Judge and Miller, 1991), studies could explore how to make strategic decision processes faster, creative, or more adaptive, and how to ensure better implementation of decisions. Studies could extend Burgelman’s (1991) work to examine decision outcomes at different levels of organizations. And, of course, research could explore when are specific outcomes most important, and how, if at all, process outcomes such as decision quality, speed, and implementation are simultaneously achievable.

Conflict

Conflict is the final agenda item. Reacting to the assumption of a single, organizational goal in the classic economic model, the political perspective established the presence of conflict in strategic decision making and the importance of shifting alliances and political tactics. With this description in hand, it is time to move on to a more realistic understanding of conflict.

Unfortunately, current paradigms are not very helpful. At one extreme, the garbage can model ignores conflict even as different perspectives clearly exist in organizations. In the middle, the rationality perspective acknowledges conflict as a means to improve problem solving (e.g., Janis, 1982; Schweiger et al., 1986; Schweiger et al., 1989), but provides no insight on how to deal with frequent consequences such as dissatisfaction and slow pace. And, there is no real insight on how conflict is actually resolved. At the other extreme, the political model emphasizes and even glorifies conflict. However, conflict is not always so intertwined with parochial self-interest as the political model claims (Sharfman and Dean, 1992). Strategic decision makers are often ambivalent about politics (Gandz and Murray, 1980), and less likely to politicize important decisions (Sharfman and Dean, 1992). This latter point suggests that conflict resolution through politics may be less acceptable for strategic decisions than elsewhere.

One step to enhance the realism of conflict is to explore the benefits and costs of conflict. As noted earlier, conflict can lead to a more thorough, creative strategic decision making process (e.g., Janis, 1982; Tjosvold, 1985; Schweiger et al. 1989; Cosier and Schwenk, 1990). And yet, conflict can retard the process (e.g., Mintzberg et al., 1976; Hickson et al., 1986), and tear apart a decision making group by creating winners and losers in an atmosphere of frustration, anger, and resentment (e.g., Baldridge, 1971; Pettigrew, 1973). We suggest research to explore whether some sources of conflict are more beneficial than others, whether there is an optimal level of conflict, how conflict relates to emotion and decision speed, and overall, how strategic decision makers can gain the benefits of conflict without the costs.

Another way to enhance the realism of conflict is to examine politics. As noted earlier, an emergent debate is whether politics are fundamentally a positive, conflict-driven phenomenon or a power-driven phenomenon related to dysfunctional decision making. The former views conflict as a purely cognitive phenomenon while the latter sees its emotional effects in the creation of anger, frustration, and animosity. Future research could probe this debate by attempting to understand how conflict and power interact with each other and with politics as well as by examining the normative implications of this controversy. Also critical are the emotional effects on decision makers of the interplay among conflict, power, and politics.

Incorporating new approaches to conflict resolution is a third approach to a more realistic view of conflict. Emerging evidence indicates that strategic decision makers resolve conflict not only through political means (the usual approach within traditional strategic decision making perspectives), but also by developing cooperative decision styles, building trust, main-
taining equity, and evoking humor (e.g., Sharfman and Dean, 1992; Eisenhardt and Bourgeois, 1993). A next step here is to combine this work with the negotiation literature (e.g., Bazerman and Neale, 1991) to develop a more realistic view of conflict resolution approaches, their effectiveness, and their applicability in different, strategic choice settings.

CONCLUSION

A primary purpose of this paper is to review the strategic decision making literature. Our synthesis of the empirical findings confirms that organizations are accurately portrayed as political systems in which strategic decision makers have partially conflicting objectives and limited cognitive capability. Further, strategic decision making is best described by an interweaving of both boundedly rational and political processes. It is boundedly rational in that strategic decision makers are cognitively limited and engage in a cycling among rational decision making steps. It is political in that strategic decision makers also engage in politics and that ultimately the most powerful among them determine decisions. In contrast, we observe that the garbage can model is less relevant for strategic decision making. It remains a clever reminder of the importance of chance, but is empirically less robust than the other paradigms.

A second purpose of the paper is to suggest a future research agenda. At one level, we advocate research on the central, emerging debates which we identified in each of the paradigms—i.e., whether rationality is monolithic or heuristic, whether politics are effective or not, whether the garbage can model is relevant at all.

More importantly, we also propose a broader agenda. Part of that agenda involves creating a more realistic view of strategic decision making by opening up our conceptions of cognition and conflict to include insight, intuition, emotion, and conflict resolution. A second part of that agenda involves bringing strategic decision making research closer to mainstream strategy by emphasizing normative implications, especially in profit-making firms and global contexts.

Research on strategic decision making has accomplished an enormous amount since Simon’s break from the sterile view of ‘economic man.’ However, the original debates about single organizational goals and perfect rationality, which shape both his attack and the current paradigms, are no longer very controversial. They neglect important ways in which decision makers think, behave, and feel. In addition, the existing empirical research is often distant from the normative concerns of complex organizations at the heart of strategic management. Thus, the opportunity is here for richer visions of strategic decision makers and decision making.

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REFERENCES


and top-level corporate decisions'. *Administrative Science Quarterly*, 16, pp. 413–428.


