



Upper Echelons: The Organization as a Reflection of Its Top Managers

Author(s): Donald C. Hambrick and Phyllis A. Mason

Source: *The Academy of Management Review*, Apr., 1984, Vol. 9, No. 2 (Apr., 1984), pp. 193-206

Published by: Academy of Management

Stable URL: <https://www.jstor.org/stable/258434>

REFERENCES

Linked references are available on JSTOR for this article:

https://www.jstor.org/stable/258434?seq=1&cid=pdf-reference#references_tab_contents

You may need to log in to JSTOR to access the linked references.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



JSTOR

Academy of Management is collaborating with JSTOR to digitize, preserve and extend access to *The Academy of Management Review*

Upper Echelons: The Organization as a Reflection of Its Top Managers¹

DONALD C. HAMBRICK
PHYLLIS A. MASON
Columbia University

Theorists in various fields have discussed characteristics of top managers. This paper attempts to synthesize these previously fragmented literatures around a more general "upper echelons perspective." The theory states that organizational outcomes—strategic choices and performance levels—are partially predicted by managerial background characteristics. Propositions and methodological suggestions are included.

A question of key importance to organizational theorists is, Why do organizations act as they do? Recently prevailing theories have tended to reify organizations, variously viewing them as purposeful (Pfeffer & Salancik, 1978) or hapless (Hannan & Freeman, 1977) entities. In the field of strategy, explanations of (and prescriptions for) organizational moves have centered on techno-economic factors (Hambrick, MacMillan, & Day, 1982; Harrigan, 1980; Porter, 1980). Even when strategic "process" is studied, it typically is viewed as flows of information and decisions, detached from the people involved (Aguilar, 1967; Allen, 1979; Bourgeois, 1980; Mintzberg, Raisinghani, & Théorêt, 1976).

This paper argues for a new emphasis in macro-organizational research: an emphasis on the dominant coalition of the organization, in particular its top managers. Organizational outcomes—both strategies and effectiveness—are viewed as reflections of the values and cognitive bases of powerful actors in the organization. It is expected that, to some extent, such linkages can be detected empirically.

Anecdotal evidence in support of this view has always abounded. The popular business press regularly cites linkages between, for example, a chief executive's background in operations and his or her pursuit of a cost-reduction strategy, or between a

chief executive's long service in an industry and his or her hesitance to diversify from that industry.

But, in general, the perspective proposed here has not been put to systematic or comprehensive test. One reason may be that inquiry into the linkages among individuals, organizations, and their competitive environments necessarily requires a multidisciplinary approach. A gulf, however, continues to separate psychologists, sociologists, and researchers with a strategy or economic orientation. It would be the rare researcher who could draw equally on all camps. The present writers recognize their own limitations in this respect: this paper takes a lopsidedly macro view while making relatively crude assumptions about the psychological processes of top managers. It is hoped that future research on the topic will draw these disciplines together, allowing each to build on the others.

Inquiry into the upper echelons perspective may provide three major benefits. For the scholar, it may offer substantially greater power to predict organizational outcomes than current theories afford. A second benefit may come to those responsible for selecting and developing upper level executives. For example, light may be shed on the tendencies of organizations led by older executives, those with formal management education, or those whose dominant career emphasis has been in a particular functional area. The effect of, say, management teams with long term, stable membership, as opposed to teams with short lived membership, also may become more apparent. A third benefit may accrue to the strategist who is trying to predict a

¹The authors gratefully acknowledge support from the Strategy Research Center of Columbia University. John Anderson, Ian MacMillan, William Newman, Max Richards, and Kirby Warren made helpful suggestions on earlier drafts.

competitor's moves and countermoves. Can it be demonstrated, for example, that a competing firm headed by a team of executives who rose primarily through operations will tend to be sluggish in responding to a new product initiative? Or that a chief executive brought in from outside the industry will tend to steer the firm into new businesses, thus making the core business relatively vulnerable in the short run?

This paper has three primary aims. The first is to propose a model of how upper echelon characteristics may become reflected in organizational outcomes. The second is to review literature that has addressed the upper echelons perspective. The third is to provide a foundation and stimulus for empirical research into the links between managerial backgrounds and organizational outcomes. To meet this third aim, the paper identifies some major variables of interest, propositions, and methodological suggestions.

Development of the Model

Reconciliation with the Inertial Perspective

The view taken here is that top executives matter. The contrary view—that large organizations are swept along by events or somehow run themselves—has been argued directly by Hall (1977) and indirectly by the population ecologists (Hannan & Freeman, 1977).

The most commonly cited empirical evidence of the inertial organization is Lieberman and O'Connor's (1972) study of top executives in large corporations. Although an important study, it falls short of being a definitive test of the impact of different types of chief executives. First, it sought to determine the different impacts of successive chief executives within firms. Because new chief executives of large firms predominantly are promoted from within the firm and often are even "groomed" by the outgoing chief executive, it is not surprising that the authors found blurs between such eras. A research design that highlights differences across organizations would be a fairer test of whether different types of managers are associated with different organizational outcomes. Second, the Lieberman and O'Connor study employed a combination of dependent variables and data analysis that made it almost impossible for the leadership variable to take a major role. Two of their three dependent vari-

ables—dollar sales and earnings—are primarily indicators of the firm's size and the type of industry it is in. The third variable—return on sales—is closer to being a universal performance indicator, but it, too, carries a large industry-specific component and so is not as good a measure as return on investment or, even better, return on investment relative to the industry. In their data analysis, the authors sought first to explain variance in their performance measures by using three independent variables: year, industry, and company. Then the analysis was rerun with leadership—a set of dummy variables—included to determine how much additional variance could be explained. As might be expected, the first three independent variables were potent predictors (as high as .97) of the performance measures, so the apparent added effect of leadership was nil.

Thus, Lieberman and O'Connor's approach, which also was used by Salancik and Pfeffer (1977) in their study of the effect of mayors on city budgets, is not an appropriate test: (1) it does not allow leadership to enter earlier into the equation, and (2) the equation is almost tautological given the choice of independent and dependent variables. Weiner and Mahoney (1981) attempted to overcome these problems in a replication of Lieberman and O'Connor's study and found that their "stewardship" variable accounted for 44 percent of the variance in profitability of major firms. The point here is not to denigrate earlier research, but rather to note the methodological complexities in such studies and to observe that definitive findings on the unimportance of chief executives are not in hand.

Human Limits on Choice

Theorists of the Carnegie School have argued that complex decisions are largely the outcome of behavioral factors rather than a mechanical quest for economic optimization (Cyert & March, 1963; March & Simon, 1958). In their view, bounded rationality, multiple and conflicting goals, myriad options, and varying aspiration levels all serve to limit the extent to which complex decisions can be made on a techno-economic basis. Generally, the more complex the decision, the more applicable this behavioral theory is thought to be. So, for that class of choices called "strategic"—complex and of major significance to the organization—the behavioral theory is especially apt.

The term "strategic choice" is used here in the

same way as it was by Child (1972). It is intended to be a fairly comprehensive term to include choices made formally and informally, indecision as well as decision, major administrative choices (e.g., reward systems and structure) as well as the domain and competitive choices more generally associated with the term "strategy." Strategic choices stand in contrast to operational choices such as inventory decisions and credit policies, which lend themselves more to calculable solution.

If strategic choices have a large behavioral component, then to some extent they reflect the idiosyncracies of decision makers. As March and Simon (1958) argued, each decision maker brings his or her own set of "givens" to an administrative situation. These givens reflect the decision maker's cognitive base:

1. knowledge or assumptions about future events,
2. knowledge of alternatives, and
3. knowledge of consequences attached to alternatives.

They also reflect his or her values: principles for ordering consequences or alternatives according to preference.

These idiosyncratic givens are in place at the same time the decision maker is being exposed to an ongoing stream of potential stimuli both within and outside the organization. Thus, the givens are always being updated, but, more important for the argument here, the givens serve to filter and distort the decision maker's perception of what is going on

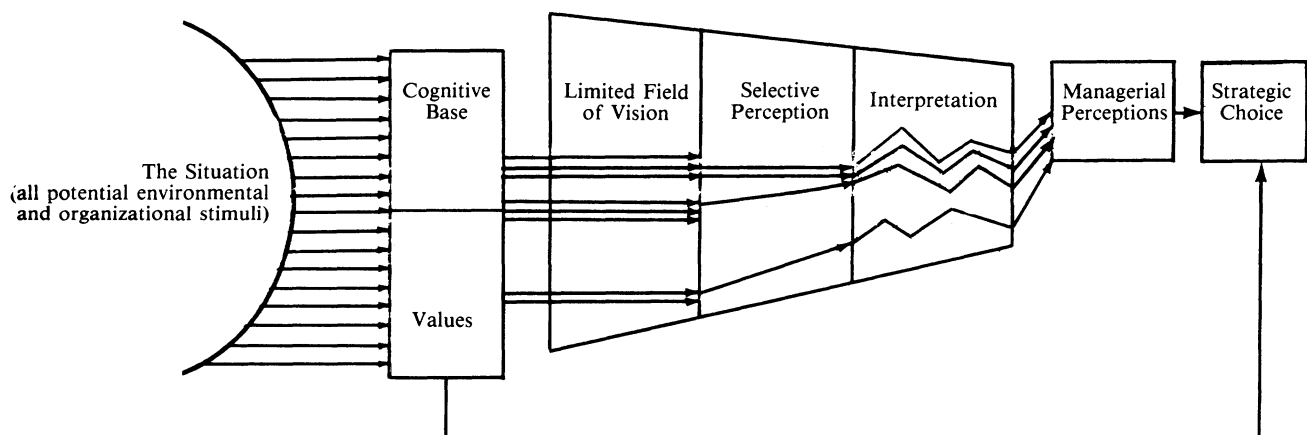
and what should be done about it.

As summarized in Figure 1, the situation a strategic decision maker faces is complex and made up of far more phenomena than he/she can possibly comprehend. The decision maker brings a cognitive base and values to a decision, which create a screen between the situation and his/her eventual perception of it.

The perceptual process can be conceptualized by taking a sequential view (Hambrick & Snow, 1977). First, a manager, or even an entire team of managers, cannot scan every aspect of the organization and its environment. The manager's *field of vision*—those areas to which attention is directed—is restricted, posing a sharp limitation on eventual perceptions. Second, the manager's perceptions are further limited because one *selectively perceives* only some of the phenomena included in the field of vision. Finally, the bits of information selected for processing are *interpreted* through a filter woven by one's cognitive base and values.

The manager's eventual perception of the situation combines with his/her values to provide the basis for strategic choice. Values are treated here as something that, on the one hand, can affect perceptions (Scott & Mitchell, 1972) but, on the other hand, can directly enter into a strategic choice, because theoretically a decision maker can arrive at a set of perceptions that suggest a certain choice but discard that choice on the basis of values.

Figure 1
Strategic Choice Under Conditions of Bounded Rationality



Emphasis on Observable Managerial Characteristics

In this paper, primary emphasis is placed on observable managerial characteristics as indicators of the givens that a manager brings to an administrative situation. Examples of such characteristics are age, tenure in the organization, functional background, education, socioeconomic roots, and financial position. In this approach, some important but complex psychological issues are bypassed in favor of an emphasis on broad tendencies that, if empirically confirmed, can be later held up to the psychologist's finer lens. Thus, this approach follows an encouragement from Weick:

There are several places in the organizational literature where investigators seem to resist defining their concepts in terms of observable actions by individuals in the mistaken belief that, in doing so, they will have to explain the actions psychologically.

If . . . properties can be defined in terms of observable individual behaviors, there is a better chance that empirical research . . . can be made more cumulative (1969, pp. 31-32).

Using background characteristics to predict both givens and behaviors has found favor in several areas of research. In marketing research, for example, demographics often serve as indicators of consumer preferences, such as the selection of media and other leisure time activities (Frank & Greenberg, 1979; Hornik & Schlinger, 1981). Moreover, relationships have been established between demographic variables and such diverse topics as jury behavior (Mills & Bohannon, 1980), type of city government (Schnore & Alford, 1963), and alcohol abuse (Boscarino, 1979). Coming closer to the present topic, background variables have been linked to values of graduate business students (Kahalas & Groves, 1979), job involvement (Sekaran & Mowday, 1981), preferences for nonmanagement jobs (Ritchie & Beardsley, 1978), participation in volunteer work (Schram & Dunsing, 1981), and to beliefs about work held by managers and bluecollar workers (Buchholz, 1977, 1978).

An emphasis on background characteristics, rather than on psychological dimensions, seems essential at this point in the development of an upper echelons perspective. First, the cognitive bases, values, and perceptions of upper level managers are not convenient to measure or even amenable to direct measurement. Despite a few notable exceptions in the literature (Guth & Taguiri, 1965; Miller, Kets de Vries, & Toulouse, 1982), top executives

probably are quite reluctant to participate in psychological batteries, at least in the numbers needed for an ongoing research program. Second, some of the background characteristics of greatest a priori interest (e.g., tenure and functional background) do not have close psychological analogs. Restriction to standard psychological dimensions (e.g., locus of control, tolerance for ambiguity, or cognitive style) could unnecessarily limit inquiries. Finally, eventual application of the upper echelons perspective in management selection/development and especially in competitor analysis would require observable background data on managers.

True, demographic indicators may contain more noise than purer psychological measures. For example, a person's educational background may serve as a muddled indicator of socioeconomic background, motivation, cognitive style, risk propensity, and other underlying traits. But, given this weakness, if demographic data yield significant findings, then the upper echelons theory will have been put to a relatively stringent test.

Unit of Analysis

The limited research that has been done on the linkages between top managers and the strategies they pursue has focused almost entirely on the chief executive, generally in the context of managerial succession (Carlson, 1972; Helmich & Brown, 1972). No such research centering on characteristics of entire top management teams is known to the authors. Although it is true that in most firms the chief executive has the most power, it still is of interest to study management teams (Bourgeois, 1980; Hamrick, 1981b). An entire team—say, the firm's officers—aligns well with Cyert and March's (1963) appealing, but little-studied, concept of the dominant coalition. At a more practical level, study of an entire team increases the potential strength of the theory to predict, because the chief executive shares tasks and, to some extent, power with other team members.

For example, assume that two firms each have chief executives whose primary functional backgrounds are in production. In Firm A, three of four other key executives also rose primarily through production-oriented careers, even though they now are serving in nonproduction or generalist roles. In Firm B, the mix of executive backgrounds is more balanced and typical—one from production, one

from sales, one from engineering, and one from accounting. Knowledge about the central tendencies of the entire top management teams improves one's confidence in any predictions about the two firms' strategies. Moreover, the study of an entire team has the added advantage of allowing inquiry into dispersion characteristics, such as homogeneity and balance. Group indicators of this latter type are among those included in propositions set forth later.

On Causality

The theory states that organizational outcomes can be partially predicted from managerial backgrounds. As with most macro-organizational theories, attention to causality is important. In fact, certain managerial backgrounds are expected to be a result of previous organizational actions.

Miles and Snow (1978) suggested that, over time, strategies are self-reinforcing. For example, an innovative "prospector" strategy calls for competences, structures, and processes that support the firm's continuing search for new products and markets; therefore, executives in marketing and product development areas come to have great power (Hambrick, 1981a). That these executives tend to choose innovative options in the future—which is the spirit of the theory—is as much a reflection of the ingrained character of the prospector strategy as of the volition of the executives.

The industry environment similarly can affect the types of managers found in top ranks. For example, banking regulations require bank presidents to have significant banking experience. This serves to tighten the circle of who can be considered for a top post, thus eliminating much of the variance in career experiences of bank presidents. Industry growth also affects the types of executives found in firms. For example, the railroad industry has experienced slow growth, offering little executive mobility since the 1950s. As might be expected, therefore, Harris (1979) reported that railroad executives are older than executives in other industries and are more likely to have risen within the ranks of their organizations. In contrast, the dynamic electronics industry is populated by younger executives with relatively short lengths of service in their firms. Any bold attempt to trace differences in organizational outcomes of railroads and electronics firms to managerial backgrounds will mask the underlying phenomenon of industry vitality. Because

of the important effect of industry characteristics, all the propositions presented below should be thought to carry the implicit phrase, "within an industry."

The theory that managerial backgrounds impact strategic decisions is muddled further: Executives often are chosen precisely because they have the "right" background or temperament to carry out actions hoped for by the board of directors or other controlling parties. Prime examples are the finance executive who is selected as CEO to conglomeratize a firm, or an operations executive who is selected as CEO to retrench and rationalize a firm.

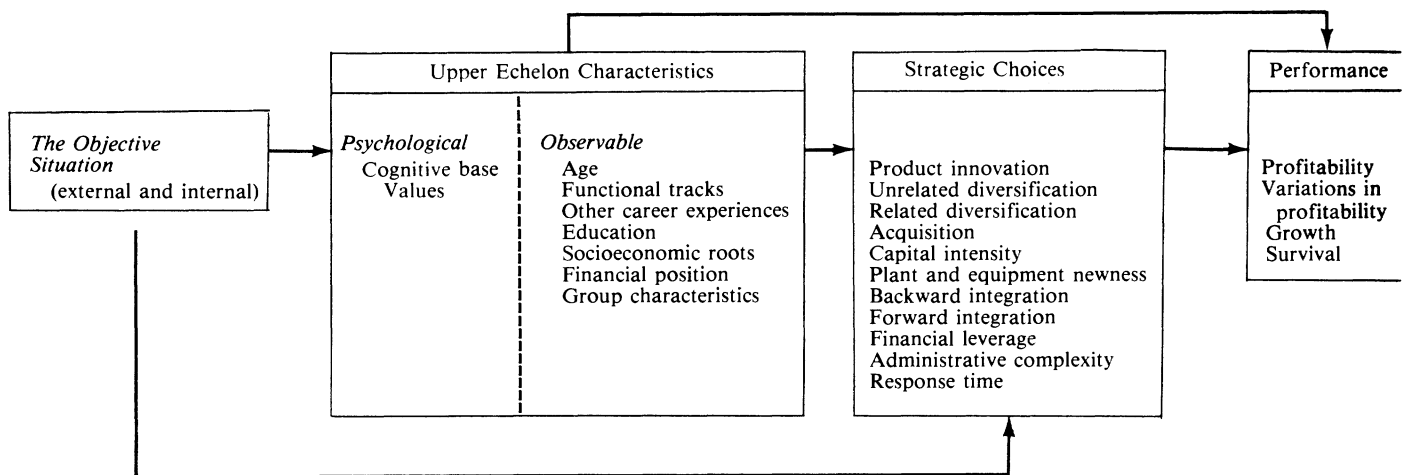
These thoughts about causality should not detract from the theory. The authors continue to argue that executive backgrounds are reflected in strategic outcomes. They only wish to note that the occurrence of a particular set of executive backgrounds in a firm is not a random process. Any research design must accommodate this, and interpretation of any research results must be tempered by it.

The Model Portrayed

Figure 2 portrays the overall upper echelons perspective. It contains less detail on the perceptual process than did Figure 1, but is more encompassing in the range of relationships it depicts. From left to right in Figure 2, the primary relationships portrayed by the single horizontal arrows first suggest that upper echelon characteristics are in part a reflection of the situation that the organization faces. This is the same theme as addressed immediately above, in which the effects of environment and strategy on executive selection were noted. More at the heart of the theory is the portrayal of upper echelon characteristics as determinants of strategic choices and, through these choices, of organizational performance. The specific strategy and performance dimensions listed are prominent in the strategy literature and are the major dependent variables in the propositions presented below.

More elaborate contingency relationships also are proposed. First, it is expected that the combination of certain situational conditions and upper echelon characteristics will lead to strategic choices that could not have been predicted as strongly by knowing only one or the other. And the situation, upper echelon characteristics, and strategic choices interact to determine organizational performance levels.

Figure 2
An Upper Echelons Perspective of Organizations



Development of Propositions

In discussing each of the upper echelon characteristics presented in Figure 2, prior literature will be drawn on, but to some extent speculations will be made because this paper primarily is an attempt to build theory—even more to encourage theory building. The propositions presented should not be taken as the only propositions that could be drawn from past inquiry or reasoning. Rather, they are illustrative and appear to be some of the most supportable and interesting. The propositions are presented as part of the paper's aim to stimulate empirical inquiry into upper echelons.

Age

The association between the age of top executives and organizational characteristics has not been the subject of many studies, but the few that exist yield strikingly consistent results: managerial youth appears to be associated with corporate growth (Child, 1974, Hart & Mellons, 1970). As Child notes, however, it is not possible, with the research designs used, to disentangle the extent to which growth leads to youth or vice versa. A related finding of these studies is that volatility of sales and earnings also is associated with managerial youth. So, what emerges is a picture of youthful managers attempting the novel, the unprecedented, taking

risks.

There are three possible explanations for the apparent conservative stance of older executives. The first is that older executives may have less physical and mental stamina (Child, 1974) or may be less able to grasp new ideas and learn new behaviors (Chown, 1960). Managerial age has been negatively associated with the ability to integrate information in making decisions and with confidence in decisions, though it appears to be positively associated with tendencies to seek more information, to evaluate information accurately, and to take longer to make decisions (Taylor, 1975). A second explanation is that older executives have greater psychological commitment to the organizational status quo (Alutto & Hrebiniak, 1975; Stevens, Beyer, & Trice, 1978). Third, older executives may be at a point in their lives at which financial security and career security are important. Their social circles, their spending traits, and their expectations about retirement income are established. Any risky actions that might disrupt these generally are avoided (Carlsson & Karlsson, 1970).

In line with the research and reasoning laid out above, the following propositions might be set forth. (Once again, all propositions should be understood to apply within an industry, but not necessarily across a diverse sample of organizations.)

P 1: Firms with young managers will be more inclined to pursue risky strategies than will firms

with older managers. Specific forms of risk include unrelated diversification, product innovation, and financial leverage.

- P 2: Firms with young managers will experience greater growth and variability in profitability from industry averages than will firms with older managers.*

Functional Track

Although members of a firm's dominant coalition—especially the chief executive—are presumed to have a generalist's view, each brings to his or her job an orientation that usually has developed from experience in some primary functional area. This functional-track orientation may not dominate the strategic choices an executive makes, but it can be expected to exert some influence. For example, Dearborn and Simon (1958) found that when a group of executives from different functional areas was presented with the same problem (a case study) and asked to consider it from a company-wide perspective, they defined the problem largely in terms of the activities and goals of their own areas.

For purposes of building a parsimonious set of propositions, functional tracks have been classified into three categories, the first two of which are based on an open-systems view (Katz & Kahn, 1966) and also align with the functional areas described as key in Miles and Snow's (1978) strategic typology. "Output functions"—marketing, sales, and product R&D—emphasize growth and the search for new domain opportunities and are responsible for monitoring and adjusting products and markets. "Throughput functions"—production, process engineering, and accounting—work at improving the efficiency of the transformation process. These two problem areas are somewhat distinct in their emphasis, and individuals who work within them are likely to develop distinctly different orientations to the firm and its environment (Lawrence & Lorsch, 1967; Miles & Snow, 1978), suggesting the following propositions:

- P 3: There will be a positive association between the degree of output-function experience of top managers and the extent to which the firm emphasizes outputs in its strategy.* Indicators of an output emphasis include product innovation, related diversification, advertising, and forward integration.
- P 4: There will be a positive association between the degree of throughput-function experience of top managers and the extent to which the firm emphasizes throughputs in its strategy.* Indica-

tors of a throughput emphasis include automation, plant and equipment newness, and backward integration.

- P 5: The degree of output-function experience of top managers will be positively associated with growth.*
- P 6: In stable, commodity-like industries, throughput-function experience will be positively associated with profitability.*
- P 7: In turbulent, differentiable industries, out-put function experience will be positively associated with profitability.*

A third functional classification was suggested by Hayes and Abernathy (1980), who documented that major firms are increasingly dominated by executives whose backgrounds are in areas such as law and finance, which are not integrally involved with the organization's core activities. The suggested propositions about executives from these peripheral functions follow from Hayes and Abernathy's concern that such executives pursue strategies that fit with their relative deficiencies in "hands-on" experience:

- P 8: The degree of peripheral-function experience of top managers will be positively related to the degree of unrelated diversification in the firm.*
- P 9: The extent of peripheral-function experience of top managers will be positively related to administrative complexity,* including thoroughness of formal planning systems, complexity of structures and coordination devices, budgeting detail and thoroughness, and complexity of incentive-compensation schemes.

Other Career Experiences

Career experiences other than functional track also can be expected to have a significant effect on the types of actions taken by a manager or an entire top management team. For example, probably more research has been done on length of service and a related variable, inside versus outside succession, than on any other characteristics of top managers. The primary and consistent conclusion coming from such studies is that chief executives brought in from the outside tend to make more changes in structure, procedures, and people than do chief executives promoted from within (Carlson, 1972; Helmich & Brown, 1972; Kotin & Sharaf, 1967). The behavioral reasons for the changes, as set forth by Carlson (1972), are: less commitment by an outsider to the status quo, a desire to weaken those who resist or resent the new chief executive, and a desire to create new, loyal lieutenants. Of

course, outside succession is most likely when the organization is performing poorly, so the corresponding changes may reflect the situation as much as the background of the decision maker.

Executives carry as part of their cognitive and emotional gifts the experiences they have had during their careers. Executives who have spent their entire careers in one organization can be assumed to have relatively limited perspectives. If an entire top management team has risen solely through the organization, it is likely that it will have a very restricted knowledge base from which to conduct its "limited search" (Cyert & March, 1963) when faced with an unprecedented problem such as a deregulation, intensive competition from imports, or a radical technological shift. On the other hand, the in-depth industry familiarity and tested working relationships enjoyed by such a team might serve the organization well in periods of stability (Kotter, 1982). This reasoning leads to the following hypotheses:

P 10: Years of inside service by top managers will be negatively related to strategic choices involving new terrain, for example, product innovation and unrelated diversification.

P 11: For an organization in a stable environment, years of inside service will be positively associated with profitability and growth.

P 12: For an organization facing a severe environmental discontinuity, years of inside service will be negatively associated with profitability and growth.

It is not only whether an executive has worked outside his or her present organization that is of interest. Of even greater relevance is the nature of the industries and companies with which he or she has been involved. For example, an executive who moves from an orderly industry into one in which rivalry is cutthroat may inadvertently allow the firm to fall behind in the unaccustomed hectic race. Or an executive with experience in a firm that tried unsuccessfully to diversify may be dissuaded from attempting diversification in another company. All these conditions are highly situational and, at this point, do not warrant specific propositions. What seems clear, though, is that executives' career experiences partially shape the lenses through which they view current strategic opportunities and problems.

Formal Education

A person's formal educational background may yield rich but complex information. To some degree, education indicates a person's knowledge and skill base. A person educated in engineering generally can be expected to have a somewhat different cognitive base from someone educated in history or law. Beyond that, if it is assumed that most people take seriously their decisions about education, then education serves to some extent as an indicator of a person's values, cognitive preferences, and so on. Granted, people make their educational decisions at a relatively early age, with incomplete information, and they sometimes later transcend those decisions. But, on average, it could be expected that students enrolled in an English literature curriculum are somewhat different from students enrolled in a business curriculum. Perhaps even students who choose to attend the Harvard Business School are somehow different from those who attended the University of Chicago Business School.

Inclusion of the educational backgrounds of managers in macro-organizational research has been limited primarily to studies attempting to predict innovation. The consistent finding is that level of education (either of the CEO or other central actors) is positively related to receptivity to innovation (Becker, 1970; Kimberly & Evanisko, 1981; Rogers & Shoemaker, 1971). These studies did not consistently include controls for age and so may be masking the tendency toward increased education in recent years. Kimberly and Evanisko examined the type of educational curriculum (administration vs. nonadministration degrees) and found no associations with the adoption of organizational innovations. This research suggests the following propositions:

P 13: The amount, but not the type, of formal education of a management team will be positively associated with innovation.

One theory of note is that education implies membership in a particular socioeconomic group (Collins, 1971). This theory has been strongly supported by research in England, where class structures are relatively pronounced. Channon (1979) and Stanworth and Giddens (1974), studying two different samples of chief executives in the U.K., each found that about 50 percent of their samples had been educated at Oxford or Cambridge. Channon noted the importance of this background for es-

tablishing strong interorganizational ties. It is unlikely that such strong findings would emerge in a U.S. sample, but there may be certain industries in which education, or even certain schools, is deemed important to business success.

It is noted that there has been little research on the effects of formal professional education (the MBA degree in particular) on corporate outcomes. There certainly are plenty of offhand suspicions that MBAs are educated to pursue short term performance at the expense of innovation and asset building. A contrary view is that the degree does not have any substantive effect in the long run for either the holder or the company, but only serves as a filtering device for matching up individuals and jobs (Pfeffer, 1981a).

The present writers' view is that professional education in management is associated with moderation. MBA candidates by their nature probably are not as innovative or risk-prone as more "self-made" executives (Collins & Moore, 1970); and business schools are not particularly well inclined or equipped (at least to date) to develop innovative or risk-taking tendencies. The analytic techniques learned in an MBA program are geared primarily to avoiding big losses or mistakes. Thus, the following proposition might be set forth:

P 14: There is no relationship between the amount of formal management education of top managers and the average performance (either profitability or growth) of their firms. However, firms whose managers have had little formal management education will show greater variation from industry performance averages than will firms whose managers are highly educated in management.

Beyond this tendency toward moderation, professional management education is expected to have an effect on the administrative complexity and sophistication of firms, both because of the types of people who are drawn to business schools, that is, "organizers and rationalizers," and because of the emphasis placed on complex administrative systems in business schools.

P 15: Firms whose top managers have had substantial formal management education will be more complex administratively than will firms whose managers have had less such training. Specific forms of administrative complexity include thoroughness of formal planning systems, complexity of structures and coordination devices, budgeting detail and thoroughness, and complexity of incentive-compensation schemes.

Socioeconomic Background

Although the socioeconomic backgrounds of senior executives have been described in some detail (Burck, 1976; Newcomer, 1955; Sturdivant & Adler, 1976), there has been almost no attempt in the organizational literature to relate socioeconomic background to organizational strategy or performance. One reason for the lack of attention to this question may lie in the apparently high degree of homogeneity among socioeconomic backgrounds of executives. In 1975, executives of major U.S. firms were almost exclusively male and white, and predominantly Protestant and Republican. Somewhat more of them came from middle-class families and from the Midwest than was true earlier in this century (Burck, 1976), but they attended largely the same group of prestigious universities as did their predecessors (Sturdivant & Adler, 1976).

Channon (1979) found some relationships between the socioeconomic backgrounds of U.K. executives and the growth strategies of their firms. First classifying firms as entrepreneur-run, family-run, and professionally managed, Channon found companies run by entrepreneurs to be the most widely diversified and to have the highest rate of acquisitions. Then Channon observed that the entrepreneurs themselves were likely to come from relatively humble origins, receive an education through secondary school only, avoid military service (many were refugees from Nazi persecution), and belong to few if any London clubs. At the other extreme were heads of professionally managed firms (lowest acquisition rate) and family-led firms (least diversified), who came from more traditional upper-class English backgrounds: public school, especially Eton; university, usually Cambridge or Oxford; military service, often in famous regiments; and appropriate club membership.

It is not possible to conclude whether it is the form of ownership (e.g., entrepreneurial) or the humble backgrounds of the entrepreneurs that were causally linked to these firms' strategies of growth and diversification. In a clinical study of entrepreneurs, Collins and Moore (1970) concluded that a common pattern is for an entrepreneur from a relatively disadvantaged background to pursue aggressive, often flamboyant strategies, presumably in order to achieve recognition and esteem. These patterns may suggest the following:

P 16: Firms whose top managers come dispropor-

tionately from lower socioeconomic groups will tend to pursue strategies of acquisition and unrelated diversification.

P 17: Such firms will experience greater growth and profit variability than will firms whose top managers come from higher socioeconomic groups.

Financial Position

The relationship between stock ownership of top executives and corporate performance has been studied at length by economists. Findings have been mixed, but they generally favor the conclusion that owner-managed firms do not outperform firms that are managed by nonowners. (See Hay and Morris, 1979 and Kania and McKean, 1976 for summaries.) Inquiry into the issue has been prompted largely by the Berle and Means (1932) thesis that owners have a greater stake in the firm than do nonowners and so will engage in more purely income-seeking behavior. Such reasoning ignores the fact, however, that many nonowner executives derive their entire livelihood from the organization and thus are quite dependent on its continuing health. Because of bonuses and other incentive compensation plans, their income often varies with corporate performance (Lewellyn, 1969; Lewellyn & Huntsman, 1970), and they also run the risk of being fired if firm performance falls off—a risk that owner-managers do not face (James & Soref, 1981; Salancik & Pfeffer, 1980).

It would seem that an improved argument lies in Masson's (1971) suggestion that managerial aspirations are due less to the proportion of a company's shares owned by management than to the proportion of the manager's income that is derived from the firm. Managers—be they owners or not—may be relatively inclined to pursue noneconomic objectives for the focal firm if they have ample income alternatives. This reasoning, when coupled with the available evidence about stock ownership, leads to the following proposition:

P 18: Corporate profitability is not related to the percent of shares owned by top managers, but is positively related to the percent of their total income that top managers derive from the firm through salaries, bonuses, options, dividends, and so on.

Group Heterogeneity

Also of relevance is the amount of dispersion, or heterogeneity, within a managerial group. Janis

(1972) argued that homogeneity, as manifested in cohesiveness and insularity, leads to inferior decision making. In his view, homogeneity is one of several conditions that bring on groupthink, which amounts to restricted generation and assessment of alternatives. A more two-sided view is offered by Filley, House, and Kerr (1976) in their summary of research on group heterogeneity and performance. They concluded that routine problem solving is best handled by a homogeneous group, and that ill-defined, novel problem solving is best handled by a heterogeneous group in which diversity of opinion, knowledge, and background allows a thorough airing of alternatives. This view may not be at odds with Janis; the decisions he studied were strictly novel, nonroutine problems.

Any discussion of group heterogeneity is aided by a concept drawn from the sociological literature: the cohort. A cohort is a group of individuals that have some relevant date in common: year of birth, year of marriage, entry into the job market, and so on. What categorizes a cohort is the societal experiences that have been imprinted on its members and have helped to shape their values and perceptions.

McNeil and Thompson (1971) looked at the number of cohorts that make up complex organizations and, specifically, at the ratio of older to newer members. The rate at which this ratio changes is a joint function of attrition and the growth or shrinkage of the organization, and it will vary among organizations and over time. In organizations undergoing rapid regeneration, the tendency is for members of younger cohorts to move quickly through the hierarchy and become peers, rather than subordinates, of older-cohort members. When this happens, the increased heterogeneity at a given management level increases conflict. Similarly, Pfeffer (1981b) noted that the existence of tenure gaps between cohorts sharpens the difference between them and produces increased conflict.

If the concept of demography can be applied to a total organization, it also can be applied to the organization's dominant coalition. The effects of the homogeneity or heterogeneity of cohort membership and gaps between cohorts would be felt as much in a small group as in a large one. Additionally, if subgroups based on age or organizational tenure can be considered, then subgroups based on functional track, education, socioeconomic background, and financial position should be considered. As dis-

cussed earlier, marketing-oriented people have different outlooks from those with production backgrounds. Professionally trained managers may view situations differently from those without a college degree, and so on. Indeed, for any variable that influences an individual's strategic choice, it can be said that the range of the group's scores on that variable also influences strategic choice through its effects on conflict and the generation of alternatives.

The concepts outlined above suggest many propositions. Three of these are:

P 19: Homogeneous top management teams will make strategic decisions more quickly than will heterogeneous teams.

P 20: In stable environments, team homogeneity will be positively associated with profitability.

P 21: In turbulent, especially discontinuous, environments, team heterogeneity will be positively associated with profitability.

Toward a Research Program

This paper has attempted to convey that the upper echelons perspective warrants systematic research and that it is, indeed, researchable. Some aspects of such a research program are relatively straightforward; but there will be difficulties in attributing cause and effect, disentangling intercorrelations, and other nettlesome factors.

It is doubtful that this research stream can progress far without greater attention to relevant literature in related fields, especially psychology and social psychology. This paper has not attempted such an in-depth foray, preferring to present a preliminary statement based primarily on the authors' backgrounds in organizational theory and strategy. Interdisciplinary research teams would seem especially promising. It also would seem prudent to seek suggestions from executive recruiters before proceeding too far with this research. Although the executive-recruiting industry is known for its secrecy, the years of experience and possibly even systematic findings or data bases in recruiting firms cannot be disregarded.

Both clinical and statistical studies are needed. Clinical studies might focus on how members of top management teams scan, transmit, analyze, and act on environmental information. They then might attempt to reconcile their findings with the managers' backgrounds—an extension of the strategic-process literature, that apparently has not been attempted so far. Statistical studies may be fruitful for uncov-

ering some broad relationships. Any such studies must control for industry, either through single industry samples or matched pair designs. Data sources for statistical studies would seem to be abundant. Both Dun and Bradstreet and Standard and Poor publish annual directories of biographical data on officers of major firms. Corporate disclosure statements (e.g., 10Ks and proxy statements) profile officers' backgrounds, their compensation, and shareholdings. Firms also generally maintain official biographical statements on officers, which accompany press announcements of promotions, major speeches, and so on. Finally, the possibility of questionnaires administered to top management teams (Bourgeois, 1980; Hambrick, 1981b) should not be ruled out.

Research on both corporate level and business level upper echelons is needed. Business level research, in particular, would shed important light on the relatively recent fashion of discussing the need for a match between the position of a business in the corporate portfolio and the characteristics of its top managers (Wissema, Van Der Pol, & Messer, 1980). In fact, access to a single firm with dozens of business units and detailed personnel records on key managers could make for a promising study.

A final methodological concern, without much concrete advice about a universal solution, is that the researcher carefully attend to the issue of chronology. In the opening section of the paper, the rather persistent problem of dubious causality was discussed. Somehow, researchers need to design their studies and interpret their results in a way that acknowledges that: (a) certain strategies and performance levels "cause" managerial profiles, as well as the reverse; (b) there are varying lag times for strategic outcomes to manifest themselves; and (c) in some organizations, the membership of the top management team is always changing. It is doubtful that these problems can be dealt with fully, but the researcher must be advised of them.

As research in this field progresses, it is expected that the general model presented in this paper will give rise to a more detailed and developed theory. Studies can be undertaken in a number of industries, and the relative strengths of background variables as predictors of outcomes can be asserted in each industry. Moreover, interactions between situational and demographic variables undoubtedly are much more extensive than have been suggested in

Propositions, 6, 7, 11, 12, 20, and 21. These interactions need to be uncovered and examined to increase understanding of the effects of demographic characteristics of top managers on the strategy and performance of their organizations.

The Possibility of Nonfindings

That the theory at hand has not already been explored at length raises the thought that the present authors may have missed the mark—that research on this theory will yield no significant results. If that should occur, which seems doubtful, its meaning still should be of interest.

Nonfindings could mean any of the following: (1) Observable demographic factors simply do not provide a reliable portrayal of a person's makeup. People are more complex than that and must be studied in a more clinical manner (Zaleznik and Kets de Vries, 1975). (2) Top managers in different firms are more homogeneous than their demographic profiles might suggest. It takes a certain kind of person to rise to the top ranks of a firm, and along the way he/she undergoes an extensive social-

ization process, such that he or she having risen, say, through marketing or been initially trained as an engineer is incidental. (3) To study only managerial teams ignores the augmentation of such people's perceptions and judgments by board members, consultants, trade associations, and so on. That is, executives really do not have blinders on. What Hambrick (1982) calls "a common body of knowledge" exists in an industry and is transmitted through media that are available to and used about equally by executives throughout the industry.

None of these possible interpretations can be considered uninteresting. Thus it is argued that testing the upper echelons theory is a no-loss proposition for researchers. The contribution to organizational understanding will be positive whether the results are or not.

It is expected that relatively straightforward demographic data on managers may be potent predictors of strategies and performance levels. This paper, which emphasizes the entire top management team, is intended as a foundation for future empirical research.

References

- Aguilar, F. J. *Scanning the business environment*. New York: Macmillan, 1967.
- Allen, S. A. Understanding reorganization of divisionalized companies. *Academy of Management Journal*, 1979, 22, 641-671.
- Alutto, J. A., & Hrebiniak, L. G., Research on commitment to employing organizations: Preliminary findings on a study of managers graduating from engineering and MBA programs. Paper presented at Academy of Management meetings, New Orleans, 1975.
- Becker, M. H. Sociometric location and innovativeness: Reformulation and extension of the diffusion model. *American Sociological Review*, 1970, 35, 267-304.
- Berle, A. A., Jr., & Means, G. C. *The modern corporation and private property*. New York: Macmillan, 1932.
- Boscarino, J. Alcohol abuse among veterans: The importance of demographic factors. *Addictive Behaviors*, 1979, 4, 323-330.
- Bourgeois, L. J., III. Performance and consensus. *Strategic Management Journal*, 1980, 1, 227-248.
- Buchholz, R. A. The belief structure of managers relative to work concepts measured by a factor analytic model. *Personnel Psychology*, 1977, 30, 567-587.
- Buchholz, R. A. An empirical study of contemporary beliefs about work in American society. *Journal of Applied Psychology*, 1978, 63, 219-227.
- Burck, C. G. A group profile of the *Fortune* 500 chief executives. *Fortune*, May 14, 1976, pp. 173-177, 308, 311-312.
- Carlson, R. O. *School superintendents: Career and performance*. Columbia, Ohio: Merrill, 1972.
- Carlsson, G., & Karlsson, K. Age, cohorts and the generation of generations. *American Sociological Review*, 1970, 35, 710-718.
- Channon, D. Leadership and corporate performance in the service industries. *Journal of Management Studies*, 1979, 16, 185-201.
- Child, J. Organizational structure, environments and performance: The role of strategic choice. *Sociology*, 1972, 6, 1-22.
- Child, J. Managerial and organizational factors associated with company performance. *Journal of Management Studies*, 1974, 11, 13-27.
- Chown, S. M. The Wesley rigidity inventory: A factor-analytic approach. *Journal of Abnormal and Social Psychology*, 1960, 61, 491-494.
- Collins, R. Functional and conflict theories of educational stratification. *American Sociological Review*, 1971, 36, 1002-1019.
- Collins, O., & Moore, D. G. *The organization makers*. New York: Appleton-Century-Crofts, 1970.

- Cyert, R. M., & March, J. G. *A behavioral theory of the firm*. Englewood Cliffs, N. J.: Prentice-Hall, 1963.
- Dearborn, D. C., & Simon, H. A. Selective perceptions: A note on the departmental identification of executives. *Sociometry*, 1958, 21, 140-144.
- Filley, A. C., House, R. J., & Kerr, S. *Managerial process and organizational behavior*. Glenview, Ill.: Scott Foresman, 1976.
- Frank, R. E., & Greenberg, M. G. Interest-based segments of TV audiences. *Journal of Advertising Research*, 1979, 19(5), 43-52.
- Guth, W. D., & Taguiri, R. Personal values and corporate strategies. *Harvard Business Review*, 1965, 43(5), 123-132.
- Hall, R. H. *Organizations, structure and process*. 2nd ed. Englewood Cliffs, N. J.: Prentice-Hall, 1977.
- Hambrick, D. C. Environment, strategy, and power within top management teams. *Administrative Science Quarterly*, 1981a, 26, 253-275.
- Hambrick, D. C. Strategic awareness within top management teams. *Strategic Management Journal*, 1981b, 2, 263-280.
- Hambrick, D. C. Environmental scanning and organizational strategy. *Strategic Management Journal*, 1982, 3, 159-174.
- Hambrick, D. C., MacMillan, I. C., & Day, D. C. Strategic attributes and performance of businesses in the four cells of the BCG matrix—A PIMS-based analysis of industrial-product businesses. *Academy of Management Journal*, 1982, 25, 510-531.
- Hambrick, D. C., & Snow, C. C. A contextual model of strategic decision making in organizations. In R. L. Taylor, M. J. O'Connell, R. A. Zawacki, & D. D. Warrick (Eds.), *Academy of Management Proceedings*, 1977, 109-112.
- Hannan, M. T., & Freeman, J. H. The population ecology of organizations. *American Journal of Sociology*, 1977, 82, 929-964.
- Harrigan, K. R. *Strategies for declining businesses*. Lexington, Mass.: Heath, 1980.
- Harris, R. G. The potential effects of deregulation upon corporate structure, merger behavior, and organizational relations in the rail freight industry. Draft report. Washington, D.C.: Public Interest Economics Center, 1979.
- Hart, P., & Mellons, J. Management youth and company growth: A correlation? *Management Decision*, 1970, 4(2), 50-53.
- Hay, D. A., & Morris, D. J. *Industrial economics: Theory and evidence*. Oxford: Oxford University Press, 1979.
- Hayes, R. H., & Abernathy, W. J. Managing our way to economic decline. *Harvard Business Review*, 1980, 58(4), 67-77.
- Helmich, D. L., & Brown, W. B. Successor type and organizational change in the corporate enterprise. *Administrative Science Quarterly*, 1972, 17, 371-381.
- Hornik, J., & Schlenger, J. J. Allocation of time to mass media. *Journal of Consumer Research*, 1981, 7, 343-355.
- James, D. R., & Soref, M. Profit constraints on managerial autonomy: Managerial theory and the unmaking of the corporation president. *American Sociological Review*, 1981, 46, 1-18.
- Janis, I. L. *Victims of groupthink*. Boston: Houghton Mifflin, 1972.
- Kahalas, H., & Groves, D. L. An exploration of graduate business students' values. *Journal of Industrial Psychology*, 1979, 6, 18-24.
- Kania, J. J., & McKean, J. R. Ownership, control and the contemporary corporation: A general behavior analysis, *Kyklos*, 1976, 29, 272-291.
- Katz, D., & Kahn, R. L. *The social psychology of organizations*. New York: Wiley, 1966.
- Kimberly, J. R., & Evanisko, M. J. Organizational innovation: The influence of individual, organizational and contextual factors on hospital adoption of technological and administrative innovations. *Academy of Management Journal*, 1981, 24, 689-713.
- Kotin, J., & Sharaf, M. Management succession and administrative style. *Psychiatry*, 1976, 30, 237-248.
- Kotter, J. P. *The general managers*. New York: Free Press, 1982.
- Lawrence, P. R., & Lorsch, J. W. *Organization and environment*. Homewood, Ill.: Irwin, 1967.
- Lewellyn, W. Management and ownership in the large firm. *Journal of Finance*, 1969, 24, 299-322.
- Lewellyn, W., & Huntsman, B. Managerial pay and corporate performance. *American Economic Review*, 1970, 60, 710-720.
- Lieberson, S., & O'Connor, J. F. Leadership and organizational performance: A study of large corporations. *American Sociological Review*, 1972, 37, 117-130.
- McNeil, K., & Thompson, J. D. The regeneration of social organizations. *American Sociological Review*, 1971, 36, 624-637.
- March, J. G., & Simon, H. A. *Organizations*. New York: Wiley, 1958.
- Masson, R. Executive motivation, earnings and consequent equity performance. *Journal of Political Economy*, 1971, 79, 1278-1292.
- Miles, R. E., & Snow, C. C. *Organization strategy, structure and process*. New York: McGraw-Hill, 1978.
- Miller, D., Kets de Vries, M. F. R., & Toulouse, J.-M. Top executive locus of control and its relationship to strategy-making, structure, and environment. *Academy of Management Journal*, 1982, 25, 237-253.
- Mills, C. J., & Bohannon, W. E. Character structure and jury behavior: Conceptual and applied implications. *Journal of Personality and Social Psychology*, 1980, 38, 662-667.
- Mintzberg, H., Raisinghani, D., & Théorêt, A. The structure of

- unstructured decision processes. *Administrative Science Quarterly*, 1976, 21, 246-275.
- Newcomer, M. *The big business executive*. New York: Columbia University Press, 1955.
- Pfeffer, J. *Power in organizations*. Marshfield, Mass.: Pitman Publishing Inc., 1981a.
- Pfeffer, J. Some consequences of organizational demography: Potential impacts of an aging work force on formal organizations. In S. B. Kiesler, J. N. Morgan, & V. K. Oppenheimer (Eds.), *Aging: Social change*. New York: Academic Press, 1981b, 291-329.
- Pfeffer, J., & Salancik, G. R. *The external control of organizations*. New York: Harper and Row, 1978.
- Porter, M. E. *Competitive strategy*. New York: Free Press, 1980.
- Ritchie, R. J., & Beardsley, V. D. A market research approach to determining local labor market availability for non-management jobs. *Personnel Psychology*, 1978, 31, 449-459.
- Rogers, E. M., & Shoemaker, P. *Communication of innovations*. New York: Free Press, 1971.
- Salancik, G. R., & Pfeffer, J. Constraints on administrator discretion: The limited influence of mayors on city budgets. *Urban Affairs Quarterly*, 1977, 12(4), 475-496.
- Salancik, G. R., & Pfeffer, J. Effects of ownership and performance on executive tenure in U.S. corporations. *Academy of Management Journal*, 1980, 23, 653-664.
- Schnore, L. F., & Alford, R. R. Forms of government and socioeconomic characteristics of suburbs. *Administrative Science Quarterly*, 1963, 8, 1-17.
- Schram, V. R., & Dunsing, M. M. Influences on married women's volunteer work participation. *Journal of Consumer Research*, 1981, 7, 372-379.
- Scott, W. G., & Mitchell, T. R. *Organization theory: A structural and behavioral analysis*. Homewood, Ill.: Irwin, 1972.
- Sekaran, U., & Mowday, R. T. A cross-cultural analysis of the influence of individual and job characteristics on job involvement. *International Review of Applied Psychology*, 1981, 30, 51-64.
- Stanworth, P., & Giddens, A. An economic elite: A demographic profile of company chairmen. In P. Stanworth & A. Giddens (Eds.), *Elites and power in British society*. Cambridge: Cambridge University Press, 1974, 65-80.
- Stevens, J. M., Beyer, J. M., & Trice, H. M. Assessing personal, role, and organizational predictors of managerial commitment. *Academy of Management Journal*, 1978, 21, 380-396.
- Sturdivant, F. D., & Adler, R. D. Executive origins: Still a gray flannel world? *Harvard Business Review*, 1976, 54(6), 125-132.
- Taylor, R. N. Age and experience as determinants of managerial information processing and decision making performance. *Academy of Management Journal*, 1975, 18, 74-81.
- Weick, K. E. *The social psychology of organizing*. Reading, Mass.: Addison-Wesley, 1969.
- Weiner, N., & Mahoney, T. A. A model of corporate performance as a function of environmental, organizational, and leadership influences. *Academy of Management Journal*, 1981, 24, 453-470.
- Wissema, J. G., Van Der Pol, H. W., & Messer, H. M. Strategic management archetypes. *Strategic Management Journal*, 1980, 1, 37-47.
- Zaleznik, A., & Kets de Vries, M. F. R. *Power and the corporate mind*. Boston: Houghton Mifflin, 1975.

Donald C. Hambrick is Associate Professor of Business Policy in the Graduate School of Business, Columbia University.

Phyllis A. Mason is a Ph.D. candidate in the Graduate School of Business, Columbia University.