

Three Models of Strategy¹

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Three models of strategy that are implicit in the literature are described – linear, adaptive, and interpretive. Their similarity to Boulding's (1956) hierarchical levels of system complexity is noted. The strategy construct is multifaceted, and it has evolved to a level of complexity almost matching that of organizations themselves.

Researchers and practitioners have used the term *strategy* freely – researchers have even measured it – for over two decades. Those who refer to strategy generally believe that they are all working with the same mental model. No controversy surrounds the question of its existence; no debate has arisen regarding the nature of its anchoring concept.

Yet virtually everyone writing on strategy agrees that no consensus on its definition exists (Bourgeois, 1980; Gluck, Kaufman, & Walleck, 1982; Glueck, 1980; Hatten, 1979; Hofer & Schendel, 1978; Lenz, 1980b; Rumelt, 1979; Spender, 1979; Steiner, 1979). Hambrick (1983) suggested that this lack of consistency is due to two factors. First, he pointed out, strategy is multidimensional. Second, strategy must be situational and, accordingly, it will vary by industry.

The literature affirms Hambrick's assessment that strategy is not only multidimensional and situational but that such characteristics are likely to make any consensus on definition difficult. Strategy also suffers from another, more fundamental problem; that is, the term strategy has been referring to three distinguishable mental models, rather than the single model that most discussions assume. Beyond reflecting various authors' semantic preferences, the multiple definitions reflect three distinct, and in some ways conflicting, views on strategy. This paper seeks to analyze the ways strategy has been defined and operationalized in previous

treatises and studies. It highlights those aspects of strategy on which authors in the field appear to agree and suggests three strategy models that are implicit in the literature.

Strategy: Areas of Agreement

A basic premise of thinking about strategy concerns the inseparability of organization and environment (Biggadike, 1981; Lenz, 1980a). The organization uses strategy to deal with changing environments. Because change brings novel combinations of circumstances to the organization, the substance of strategy remains unstructured, unprogrammed, nonroutine, and nonrepetitive (Mason & Mitroff, 1981; Mazzolini, 1981; Miles & Cameron, 1982; Narayanan & Fahey, 1982; Van Cauwenbergh & Cool, 1982). Not only are strategic decisions related to the environment and nonroutine, but they also are considered to be important enough to affect the overall welfare of the organization (Hambrick, 1980).

Theorists who segment the strategy construct implicitly agree that the study of strategy includes both the actions taken, or the content of strategy, and the processes by which actions are decided and implemented. They agree that intended, emergent, and realized strategies may differ from one another. Moreover, they agree that firms may have both corporate strategy ("What businesses shall we be in?") and business strategy ("How shall we compete in each business?"). Finally, they concur that the making of strategy involves conceptual as well as analytical exercises. Some authors stress the analytical dimension more than others, but most affirm that the heart of

¹The research reported here was supported by a contract (#400-83-0009) from the National Institute of Education. An abbreviated version was presented at the annual meeting of the Academy of Management, Boston, 1984, and appears in the *Proceedings* of the meeting. The author is grateful to Jane Dutton for several excellent suggestions.

strategy making is the conceptual work done by leaders of the organization.

Beyond these general factors, agreement breaks down. Yet the differences in point of view are rarely analyzed. Only the existence of multiple definitions of strategy is noted and, as in Mintzberg (1973), definitions are sometimes grouped by type. Analysis reveals that the strategy definitions in the literature cluster into three distinct groups.

Three Models of Strategy

The name assigned to each model of strategy represents its primary focus. Although these descriptions represent a collective version of similar views, each model also includes many variations of its central theme. Moreover, as will be shown later, the three models are not independent. However, for present purposes, the three models will be treated according to their independent descriptions in the literature.

Model I: Linear Strategy

The first model to be widely adopted is linear and focuses on planning. The term linear was chosen because it connotes the methodical, directed, sequential action involved in planning. This model is inherent in Chandler's definition of strategy.

Strategy is the determination of the basic long-term goals of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals (1962, p.13).

According to the linear view, strategy consists of integrated decisions, actions, or plans that will set and achieve viable organizational goals. Both goals and the means of achieving them are results of strategic decision. To reach these goals, organizations vary their links with the environment by changing their products or markets or by performing other entrepreneurial actions. Terms associated with the linear model include strategic planning, strategy formulation, and strategy implementation.

The linear model portrays top managers as having considerable capacity to change the organization. The environment is, implicitly, a necessary nuisance "out there" that is composed mainly of competitors. Top managers go through a prototypical rational decision making process. They identify their goals, generate alternative methods of achieving them, weigh the likelihood that alternative methods will succeed, and then decide which ones to implement. In the course of this process, managers capitalize on those future trends and events that are favorable and avoid or counteract

those that are not. Because this model was developed primarily for profit-seeking businesses, two of its important measures of results are profit and productivity.

Several assumptions that underlie the linear model are not made explicit in most discussions, but they nonetheless follow from the authors' tendency to emphasize planning and forecasting. For example:

Conceptually, the process [of strategic planning] is simple: managers at every level of a hierarchy must ultimately agree on a detailed, integrated plan of action for the coming year; they [start] with the delineation of corporate objectives and [conclude] with the preparation of a one- or two-year profit plan (Lorange & Vancil, 1976, p. 75).

If a sequential planning process is to succeed, the organization needs to be tightly coupled, so that all decisions made at the top can be implemented throughout the organization. This tight coupling assumption enables intentions to become actions. A second assumption arises from the time-consuming and forward-looking nature of planning. In other words, though decisions made today are based on beliefs about future conditions, they may not be implemented until months, even years, from now. In order to believe that making such decisions is not a waste of time, one must assume either that the environment is relatively predictable or else that the organization is well-insulated from the environment. Also, most authors explicitly assume that organizations have goals and that accomplishing goals is the most important outcome of strategy.

Major characteristics of the linear model and the names of several authors whose definitions of strategy are consistent with this model are listed in Table 1. Note that though the authors' definitions of strategy constitute grounds for classifying them in the model, nearly all authors extend their discussions of strategy into areas that are relevant to more than one model.

As the dates in these citations suggest, interest in the linear model waned in the mid-1970s. Ansoff and Hayes (1976) suggested that the emphasis moved away from the linear model as the strategic problem came to be seen as much more complex. Not only does it involve several dimensions of the managerial problem and the process, but also technical, economic, informational, psychological, and political variables as well. The model that arose next is labeled here the adaptive model of strategy.

Table 1
Summary of Linear Strategy

<i>Variable</i>	<i>Linear Strategy</i>
Sample definition	<i>"...determination of the basic long-term goals of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals"</i> (Chandler, 1962, p. 13, italics added).
Nature of strategy	Decisions, actions, plans Integrated
Focus of strategy	Means, ends
Aim of strategy	Goal achievement
Strategic behaviors	Change markets, products
Associated terms	Strategic planning, strategy formulation and implementation
Associated measures	Formal planning, new products, configuration of products or businesses, market segmentation and focus, market share, merger/acquisition, product diversity
Associated authors ^a	Chandler, 1962 Cannon, 1968 Learned, Christensen, Andrews, & Guth, 1969 Gilmore, 1970 Andrews, 1971 Child, 1972 Drucker, 1974 Paine & Naumes, 1974 Glueck, 1976 Lorange & Vancil, 1976 Steiner & Miner, 1977

^aClassified by their definitions of strategy. Classification is not intended to imply that authors omit discussion of topics relevant to other models.

Model II: Adaptive Strategy

Hofer's definition typifies the adaptive model of strategy, characterizing it as

concerned with the development of a viable match between the opportunities and risks present in the external environment and the organization's capabilities and resources for exploiting these opportunities (1973, p. 3).

The organization is expected continually to assess external and internal conditions. Assessment then leads to adjustments in the organization or in its relevant environment that will create "satisfactory alignments of environmental opportunities and risks, on the one hand, and organizational capabilities and resources, on the other" (Miles & Cameron, 1982, p. 14).

The adaptive model differs from the linear model in several ways. First, monitoring the environment and making changes are simultaneous and continuous functions in the adaptive model. The time lag for planning that is implicit in the linear model is not present. For example, Miles and Snow (1978) portray strategic adaptation as recurring and overlapping cycles with three phases: the entrepreneurial phase (choice of domain), the engineering phase (choice of technology),

and the administrative phase (rationalizing structure and process, and identifying areas for future innovation).

Second, the adaptive model does not deal as emphatically as the linear model with decisions about goals. Instead, it tends to focus the manager's attention on means, and the "goal" is represented by coalignment of the organization with its environment. Third, the adaptive model's definition of strategic behaviors goes beyond that of the linear model to incorporate not only major changes in products and markets, but also subtle changes in style, marketing, quality, and other nuances (Hofer, 1976a; Shirley, 1982).

A fourth difference follows from the relative unimportance of advance planning in the adaptive model. Thus, as might be expected, strategy is less centralized in top management, more multifaceted, and generally less integrated than in the linear model. However, top managers in the adaptive model still assume overall responsibility for guiding strategy development.

Finally, in the adaptive model the environment is considered to be a complex organizational life support system, consisting of trends, events, competitors, and stakeholders. The boundary between the organization and its environment is highly permeable, and the environment is a major focus of attention in determining organizational action. Whether taken proactively or reactively, action is responsive to the nature and magnitude of perceived or anticipated environmental pressures.

In sum, the adaptive model relies heavily on an evolutionary biological model of organizations. The analogy is made explicit in the following passage:

As a descriptive tool, strategy is the analog of the biologist's method of "explaining" the structure and the behavior of organisms by pointing out the functionality of each attribute in a total system (or strategy) designed to cope with or inhabit a particular niche. The normative use of strategy has no counterpart in biology (as yet!), but might be thought of as the problem of designing a living creature... to exist within some environment... (Rumelt, 1979, pp. 197-198).

As interest in strategy as adaptation increased so, too, did attention to the processes by which strategy arises and is carried out. Beginning with Mintzberg's (1973) modes of strategy making, a number of discussions have been presented to deal with the social, political, and interactive components of strategy (Fahey, 1981; Ginter & White, 1982; Greenwood & Thomas, 1981; Guth, 1976; Hofer, 1976b; E. Murray, 1978; J. Murray, 1978-79; Narayanan & Fahey, 1982; Tabatoni & Jarniou, 1976). Each of the authors dealt with organizational processes in the adaptive strategy model.

Adaptive strategy rests on several assumptions. The organization and its environment are assumed to be more open to each other than is implied in the linear model. The environment is more dynamic and less susceptible to prediction in the adaptive model. It

consists of competitors, trends, and—of increasing importance—stake-holders. Rather than assuming that the organization must deal with the environment, the adaptive model assumes that the organization must change with the environment

The adaptive model attempts to take more variables and more propensity for change into account than does the linear model. Table 2 lists terms that reflect this complexity, along with those authors whose strategy definitions fit the adaptive model. It also outlines the characteristics of the model. A number of authors using the adaptive model suggest that it can successfully handle greater complexity and more variables than the linear model. However, opinion is mounting that the situation is complex in other ways.

Table 2
Summary of Adaptive Strategy

<i>Variable</i>	<i>Linear Strategy</i>
Sample definition	<i>"...concerned with the development of a viable match between the opportunities and risks present in the external environment and the organization's capabilities and resources for exploiting those opportunities"</i> (Hofer, 1973, p. 3).
Nature of strategy	Achieving a "match" Multifaceted
Focus of strategy	Means
Aim of strategy	Coalignment with the environment
Strategic behaviors	Change style, marketing, quality
Associated terms	Strategic management, strategic choice, strategic predisposition, strategic design, strategic fit, strategic thrust, niche
Associated measures	Price, distribution policy, marketing expenditure and intensity, product differentiation, authority changes, proactiveness, risk taking, multiplexity, integration, futurity, adaptiveness, uniqueness
Associated authors ^a	Hofer, 1973 Guth, 1976 Hofer & Schendel, 1978 Litschert & Bonham, 1978 Miles, Snow, Meyer, & Coleman, 1978 Miller & Friesen, 1978 Mintzberg, 1978 Dill, 1979 Steiner, 1979 Rumelt, 1979 Hambrick, 1980 Bourgeois, 1980 Snow & Hambrick, 1980 Quinn, 1980 Jemison, 1981 Kotler & Murphy, 1981 Green & Jones, 1981 Hayman, 1981 Jauch & Osborn, 1981 Gluck et al., 1982 Chakravarthy, 1982 Hatten, 1982 Shirley, 1982 Camillus, 1982 Miles & Cameron, 1982 Galbraith & Schendel, 1983

^aClassified by their definitions of strategy. Classification is not intended to imply that authors omit discussion of topics relevant to other models.

To meet this need, a third model of strategy is emerging.

Model III: Interpretive Strategy

Development of interpretive strategy parallels recent interest in corporate culture and symbolic management outside the strategy literature (Dandridge, Mitroff, & Joyce, 1980; Deal & Kennedy, 1982; Feldman & March, 1981; Meyer & Rowan, 1977; Peters, 1978; Peters & Waterman, 1982; Pfeffer, 1981; Smircich & Morgan, 1982; Weick & Daft, 1983). The parameters of the emerging interpretive model of strategy are still unclear. However, a recurring theme suggests that the model is based on a social contract, rather than an organismic or biological view of the organization (Keeley, 1980) that fits well with the adaptive model. The social contract view portrays the organization as a collection of cooperative agreements entered into by individuals with free will. The organization's existence relies on its ability to attract enough individuals to cooperate in mutually beneficial exchange.

The interpretive model of strategy further assumes that reality is socially constructed (Berger & Luckmann, 1966). That is, reality is not something objective or external to the perceiver that can be apprehended correctly or incorrectly. Rather, reality is defined through a process of social interchange in which perceptions are affirmed, modified, or replaced according to their apparent congruence with the perceptions of others.

Strategy in the interpretive model might be defined as orienting metaphors or frames of reference that allow the organization and its environment to be understood by organizational stakeholders. On this basis, stakeholders are motivated to believe and to act in ways that are expected to produce favorable results for the organization. "Metaphors" is plural in this definition because the maintenance of social ties in the organization precludes enforcing agreement on a single interpretation (Weick & Daft, 1983).

Pettigrew (1977) provided an early example of the interpretive model by defining strategy as the emerging product of the partial resolution of environmental and intraorganizational dilemmas. Although his emphasis on the political and processual nature of strategy might be considered compatible with the adaptive model, he offered several innovative contributions. Among them are: (1) his interest in the management of meaning and symbol construction as central components of strategy and (2) his emphasis on legitimacy, rather than profit, productivity, or other typical goals of strategy.

Van Cauwenbergh and Cool (1982) defined strategy broadly as calculated behavior in nonprogrammed situations. They went on to posit middle management's central position in the strategy formulation process, as well as to point out that managing the organizational culture is a powerful tool in the hands of top management. The authors concluded by suggesting that their views differed from the traditional strategy literature in three ways: (1) organizational reality is

incoherent in nature, not coherent; (2) strategy is an organization-wide activity, not just a top management concern; and (3) motivation, not information, is the critical factor in achieving adequate strategic behavior. Congruent with these authors' interest in organizational culture, Dirsmith and Covalski dealt with what they called strategic norms, or

institutional level action postures... that serve to guide acceptable behavior. [S]trategic norms involve the establishment of maps of reality or images held of organizations and environments (1983, p. 137).

The new themes in these writings suggest a strategy model that depends heavily on symbols and norms. Hatten (1979) saw this change as moving from the goal orientation of the linear model to a focus on desired relationships, such as those involving sources of inputs or customers. He envisaged a new theory of strategy that was oriented toward managerial perceptions, conflict and consensus, as well as the importance of language. The relatively few entries in Table 3 indicate that the model is too new to have become well-developed.

Rather than emphasizing *changing with* the environment, as is true of the adaptive model, interpretive strategy mimics linear strategy in its emphasis on *dealing with* the environment. There is, however, an important difference. The linear strategist deals with the environment by means of organizational actions that are intended to affect relations

Table 3
Summary of Interpretive Strategy

<i>Variable</i>	<i>Linear Strategy</i>
Sample definition	Orienting metaphors constructed for the purpose of conceptualizing and guiding individual attitudes or organizational participants
Nature of strategy	Metaphor Interpretive
Focus of strategy	Participants and potential participants in the organization
Aim of strategy	Legitimacy
Strategic behaviors	Develop symbols, improve interactions and relationships
Associated terms	Strategic norms
Associated measures	Measures must be derived from context, may require qualitative assessment
Associated authors ^a	Pettigrew, 1977 Van Cauwenbergh & Cool, 1982 Dirsmith & Covalski, 1983 Chaffee, 1984

^aClassified by their definitions of strategy. Classification is not intended to imply that authors omit discussion of topics relevant to other models.

instrumentally, but the interpretive strategist deals with the environment through symbolic actions and communication.

Interpretive strategy, like adaptive strategy, assumes that the organization and its environment constitute an open system. But in interpretive strategy the organization's leaders shape the attitudes of participants and potential participants toward the organization and its outputs; they do not make physical changes in the outputs. This attitude change seeks to increase credibility for the organization or its output. In this regard, interpretive strategy overlaps with the adaptive model. For example, when an adaptive strategist focuses on marketing to enhance product credibility, the strategist's behavior could be classified as interpretive. Because strategy is multifaceted, however, examining marketing in combination with other strategic moves permits surer classification into either the adaptive or interpretive model.

A final noteworthy distinction between the adaptive and interpretive models relates to the ways in which each conceptualizes complexity. Adaptive strategy arose from and attempts to deal with structural complexity, notably conflicting and changing demands for organizational output. Interpretive strategy emphasizes attitudinal and cognitive complexity among diverse stakeholders in the organization.

Each of the three models may be summarized briefly. In linear strategy, leaders of the organization plan how they will deal with competitors to achieve their organization's goals. In adaptive strategy, the organization and its parts change, proactively or reactively, in order to be aligned with consumer preferences. In interpretive strategy, organizational representatives convey meanings that are intended to motivate stakeholders in ways that favor the organization. Each model provides a way of describing a certain aspect of organizational functioning to which the term strategy has been applied. By analogy, one would have three descriptions of a single phenomenon if a geologist, a climatologist, and a poet were to model the Grand Canyon.

One value of diverse models, whether they relate to strategy or the Grand Canyon, is that they provide options. In future development of strategy, one might delineate the circumstances under which one model of strategy is more appropriate than the others. However, before such delineation is warranted, the models and their interrelationships require further theoretical attention.

As noted earlier, the three strategy models may not be independent of one another, although so far they have been treated separately in both the literature cited and this discussion. The basis for suggesting that the models are interrelated is that they show some similarity to a well-known hierarchy of systems in which each level incorporates the less complex levels that precede it (Boulding, 1956). If the strategy models were analogous to the systems hierarchy, the relationships among the models would also be hierarchical. The systems hierarchy has certain

similarities to the three strategy models. Certain characteristics at each set of system levels match those of one of the strategy models. Furthermore, similarities between each level of systems and one of the strategy models suggest that an organization that functions at a given level in the systems hierarchy will benefit from using the corresponding model of strategy.

Therefore, relating the strategy models to the systems hierarchy makes three contributions toward elaborating on the strategy construct. First, it suggests a means of ordering and interrelating the disparate, more narrowly focused definitions of strategy in the existing literature. Second, discrepancies between system levels and strategy models suggest areas in which the models could profitably be developed. Third, the analogy provides a bridge for moving from a survey of theoretical literature to its implications for practice.

The Hierarchy of Strategy Models

Boulding (1956) developed a nine-level hierarchical framework that was keyed to all classes of systems, including human systems. At the most basic level were three classes that Pondy and Mitroff (1979) grouped together under the metaphor of a machine. In the highest of the three machine classes, a control mechanism regulates system behavior according to an externally prescribed target or criterion. Information flows between the regulator and the system operator. Linear strategy shows similar properties in that the executive is expected to control the organization according to predetermined goals and to change the goals when circumstances warrant.

The three intermediate classes constitute the biological set, the highest of which is the internal image system. At this level, because the system has differentiated receptors, it is imbued with detailed awareness of its environment. Awareness is organized into an image, but the system is not self-conscious. Other characteristics of the biological set include its having the same internal differentiation as the environment, as well as its having a generating mechanism that produces behavior. Adaptive strategy corresponds to the biological level, in that the model calls for the organization to scan, anticipate, and respond to various elements in its environment.

Boulding's most complex set of system levels is the cultural set. It consists of the symbol processing level, in which the system is a self-conscious user of language, and the multicephalous level, a collection of individuals acting in concert and using elaborate systems of shared meaning. Boulding's third level in the cultural set is transcendental, not fully specified. The cultural set is analogous to interpretive strategy. Weick and Daft (1983) place interpretation at level 6, the highest biological level, but they identify interpretation as a cultural phenomenon. Wherever it is placed, interpretive strategy, like the cultural level of systems, emphasizes the importance of symbol manipulation, shared meaning, and cooperative actions of individuals. Although the emphases are the same, interpretive

strategy is not as fully developed as its correspondence to the cultural level might imply.

Each level in Boulding's hierarchy subsumes those that preceded it. If the same were true of the strategy models, then adaptive strategy would incorporate linear strategy, and interpretive strategy would incorporate both adaptive and linear strategies. Although the evolution of the strategy construct proceeded sequentially through the hierarchy, beginning at the machine level and recently reaching the cultural level, the shift from each level to the next abandoned, rather than incorporated, the preceding level(s). Boulding's cultural level is more complex than his biological level precisely because it builds on the base of the machine and biological levels. Interpretive strategy ignores linear and adaptive strategy. Dealing with stakeholder attitudes is not inherently more complex than dealing with consumer preferences, nor is conveying productive interpretations necessarily more complex than achieving coalignment with the environment. No interpretive strategist has evaluated the extent to which linear and adaptive strategy are subsumed in the "higher" model. Moreover, the adaptive strategists have largely ignored the linear model.

Some hints at relating the three models have appeared in the literature. For example, Weick and Daft (1983) suggested that one criterion of effective interpretation is detailed knowledge of the particulars of the environment (adaptive model) so that the phenomenon to be interpreted may be seen in context. Another paper implied that the models constitute a series of stages through which the organization itself moves over time as it becomes more sophisticated and adept at strategic management (Gluck et al., 1982). The authors stated that organizations start with financial and forecast-based planning (linear model), then shift to strategic analysis (adaptive model), and finally achieve strategic management (interpretive model). Cummings (1983) outlined two major themes in the literature: management by information (linear/adaptive) and management by ideology (interpretive). Cummings argued that both themes must be integrated to achieve an instrumental organization that serves the purposes of its participants. But he did not explain in operational terms how integration occurs. In the only empirical study that relates directly to the strategy models, Chaffee (1984) found that organizations recovering from decline used adaptive strategy, but it was their use of interpretive strategy that differentiated them from organizations unable to recover. However, like Cummings and like Gluck and his colleagues, Chaffee did not deal with how or why the two models were integrated in organizational functioning.

It is important to integrate each lower level model with models that represent more complex systems because organizations exhibit properties of all levels of system complexity. Adaptive and interpretive strategies that ignore less complex strategy models ignore the foundations on which they must be built if they are to reflect organizational reality. Furthermore, a comprehensive interpretive strategy probably requires

some planning as would fit with a linear strategy and some organizational change as would fit with an adaptive strategy; and a viable adaptive strategy may well require some linear planning. But rather than building toward a sophisticated construct that equals the complexities for which it is intended, strategists have selected three key themes and treated them separately. Each may have value as far as it goes, but none integrates all levels of complexity and options for action that are inherent in an organization.

Finding three models of strategy holds implications for organizations, for managers, and for future development of the strategy construct. Even at this point, without deepening the adaptive and interpretive models to include lower levels of complexity, the analysis specifies three diverse ways of viewing the organizational problem and three classes of potential solutions. The models may be used conceptually to examine an organizational situation and consider alternatives for coping with it. For example, a manager might consider whether predictions about the declining demand for a product are: (a) based on firm evidence that will provide sufficient lead time for a planning task force to convene and generate alternatives to deal with the decline, (b) fundamental shifts in consumer preferences that could be addressed by modifying the product or replacing it with another, or (c) symptomatic of a loss of confidence among the buying public that could be remedied by better marketing to build legitimacy.

Furthermore, strategic decision making may profit from an analysis of a given situation's level of complexity. If an organization or a problem exhibits characteristics that are predominantly mechanistic, a linear strategy is called for. Adaptive strategies can be applied when issues of supply and demand are especially salient. Complex interpretive strategies may be reserved for situations in which modifying the attitudes of organizational stakeholders is the primary key to success.

The full value of strategy cannot be realized in practical terms, however, until theorists expand the construct to reflect the real complexities of organizations. Each successive level of strategy should incorporate those that are less complex. Then researchers can examine the ways this construct behaves in real organizations. Ultimately, the construct may emerge as a unitary merger of the three models, such as an interpretive model that incorporates adaptive and linear strategy. Or it may emerge as a hierarchy of three models: a mechanistic linear model; a biological adaptive model incorporating linear strategy; and a cultural interpretive model, incorporating both linear and adaptive strategy. Theoreticians also may find value in still greater model differentiation. Perhaps this can be done by specifying a hierarchy that contains a model of strategy for each of Boulding's nine levels of system complexity.

Whatever the end products maybe – and whether or not they finally relate to Boulding's hierarchy – it is time for strategy theoreticians and researchers to begin

putting the pieces together. During the past 20 years, the strategy literature has greatly evolved. Today, in fact, it has almost arrived at the point at which it is capable of reflecting the actual level of complexity at which organizations operate. The way is now open to capitalize, both theoretically and empirically, on the richness of that complexity.

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