

Reflecting on the Strategy Process

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Strategy has long had its historical distinctions; fortunately, it is experiencing a newfound eclecticism.

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We are the blind people and strategy formation is our elephant. Each of us, in trying to cope with the mysteries of the beast, grabs hold of some part or other, and, in the words of John Godfrey Saxe's poem of the last century:

*Rail on in utter ignorance
of what each other mean,
And prate about an Elephant
Not one of [us] has seen!*

Consultants have been like big game hunters embarking on their safaris for tusks and trophies, while academics have preferred photo safaris — keeping a safe distance from the animals they pretend to observe.

Managers take one narrow perspective or another — the glories of planning or the wonders of learning, the demands of external competitive analyses or the imperatives of an internal “resource-based” view. Much of this writing and advising has been decidedly dysfunctional, simply because managers have no choice but to cope with the entire beast.

In the first part of this article, we review briefly the evolution of the field in terms of ten “schools.”¹ We ask whether these perspectives represent fundamentally different processes of strategy making or different *parts* of the same process. In both cases, our answer is yes. We seek to show

The entrepreneurial school shifted strategies from precise designs, plans, or positions to vague visions or broad perspectives.

how some recent work tends to cut across these historical perspectives — in a sense, how cross-fertilization has occurred. To academics, this represents confusion and disorder, whereas to others — including ourselves — it expresses a certain welcome eclecticism, a broadening of perspectives. We discuss this in terms of another metaphor that is also popular in strategic management: the tree with its roots and branches.

Ten Schools of Strategy Formation

In his article “The Magic Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information,” psychologist George Miller suggested in 1956 that the popularity of typologies using the number seven implies the number of “chunks” of information people can comfortably retain in their short-term memory.² We hope that people interested in strategy can function at the upper limit of this range and, indeed, a bit beyond, because our historical survey of strategy literature suggests that it has been characterized by ten major schools since its inception in the 1960s — three *prescriptive* (or “ought”) and seven *descriptive* (or “is”).

We assume that the reader is familiar with the literature and practice of strategic management, if not necessarily with this particular characterization of them. Accordingly, we briefly summarize the schools (*see also Table 1*).

Design School: A Process of Conception

The original perspective — dating back to Selznick, followed by Chandler, and given sharper definition by Andrews — sees strategy formation as achieving the essential fit between internal strengths and weaknesses and external threats and opportunities.³ Senior management formulates clear, simple, and unique strategies in a deliberate process of conscious thought — which is neither formally analytical nor informally intuitive — so that everyone can implement the strategies. This was the dominant view of the strategy process, at least into the 1970s, and, some might

argue, to the present day, given its implicit influence on most teaching and practice. The design school did not develop, however, in the sense of giving rise to variants within its own context. Rather, it combined with other views in rather different contexts.

Planning School: A Formal Process

The planning school grew in parallel with the design school — indeed H. Igor Ansoff’s book appeared in 1965, as did the initial Andrews text.⁴ But, in sheer volume of publication, the planning school predominated by the mid-1970s, faltered in the 1980s, yet continues to be an important branch of the literature today. Ansoff’s book reflects most of the design school’s assumptions except a rather significant one: that the process is not just cerebral but formal, decomposable into distinct steps, delineated by checklists, and supported by techniques (especially with regard to objectives, budgets, programs, and operating plans). This means that staff planners replaced senior managers, de facto, as the key players in the process.

Positioning School: An Analytical Process

The third of the prescriptive schools, commonly labeled positioning, was the dominant view of strategy formation in the 1980s. It was given impetus especially by Michael Porter in 1980, following earlier work on strategic positioning in academe (notably by Hatten and Schendel) and in consulting by the Boston Consulting Group and the PIMS project — all preceded by a long literature on military strategy, dating back to Sun Tzu in 400 B.C.⁵ In this view, strategy reduces to generic positions selected through formalized analyses of industry situations. Hence, the planners become analysts. This proved especially lucrative to consultants and academics alike, who could sink their teeth into hard data and promote their “scientific truths” to journals and companies. This literature grew in all directions to include strategic groups, value chains, game theories, and other ideas — but always with this analytical bent.

Entrepreneurial School: A Visionary Process

Meanwhile, on other fronts, mostly in trickles and streams rather than waves, wholly different approaches to strategy formation arose. Much like the design school, the entrepreneurial school centered the process on the chief executive; but unlike the design school and opposite from the planning school, it rooted that process in the mysteries of intuition. That shifted strategies from precise designs, plans, or positions to vague *visions* or broad perspectives, to be seen, in a

sense, often through metaphor. This focused the process on particular contexts — start-up, niche, or private ownership, as well as “turnaround” by the forceful leader — although the case was certainly put forth that every organization needs the vision of a creative leader. In this view, however, the leader maintains such close control over *implementing* his or her *formulated* vision that the distinction central to the three prescriptive schools begins to break down.

Cognitive School: A Mental Process

On the academic front, the origin of strategies generated considerable interest. If strategies developed in people’s minds as frames, models, maps, concepts, or schemas, what could be understood about those mental processes? Particularly in the 1980s and continuing today, research has grown steadily on cognitive biases in strategy making and on cognition as information processing, knowledge structure map-

Table 1

Dimensions of the Ten Schools, Part A

	Design	Planning	Positioning	Entrepreneurial	Cognitive
Sources	P. Selznick (and perhaps earlier work, for example, by W.H. Newman), then K.R. Andrews. ^a	H.I. Ansoff. ^b	Purdue University work (D.E. Schendel, K.J. Hatten), then notably M.E. Porter. ^c	J.A. Schumpeter, A.H. Cole, and others in economics. ^d	H.A. Simon and J.G. March. ^e
Base Discipline	None (architecture as metaphor).	Some links to urban planning, systems theory, and cybernetics.	Economics (industrial organization) and military history.	None (although early writings come from economists).	Psychology (cognitive).
Champions	Case study teachers (especially at or from Harvard University), leadership aficionados — especially in the United States.	“Professional” managers, MBAs, staff experts (especially in finance), consultants, and government controllers — especially in France and the United States.	As in planning school, particularly analytical staff types, consulting “boutiques,” and military writers — especially in the United States.	Popular business press, individualists, small business people everywhere, but most decidedly in Latin America and among overseas Chinese.	Those with a psychological bent — pessimists in one wing, optimists in the other.
Intended Message	Fit.	Formalize.	Analyze.	Envision.	Cope or create.
Realized Message	Think (strategy making as case study).	Program (rather than formulate).	Calculate (rather than create or commit).	Centralize (then hope).	Worry (being unable to cope in either case).
School Category	Prescriptive.	Prescriptive.	Prescriptive.	Descriptive (some prescriptive).	Descriptive.
Associated Homily	“Look before you leap.”	“A stitch in time saves nine.”	“Nothin’ but the facts, ma’am.”	“Take us to your leader.”	“I’ll see it when I believe it.”

^a P. Selznick, *Leadership in Administration: A Sociological Interpretation* (Evanston, Illinois: Row, Peterson, 1957);

W.H. Newman, *Administrative Action. The Techniques of Organization and Management* (Englewood Cliffs, New Jersey: Prentice-Hall, 1951); and E.P. Learned, C.R. Christensen, K.R. Andrews, and W.D. Guth, *Business Policy: Text and Cases* (Homewood, Illinois: Irwin, 1965).

^b H.I. Ansoff, *Corporate Strategy* (New York: McGraw-Hill, 1965)

^c K.J. Hatten and D.E. Schendel, “Heterogeneity within an Industry: Firm Conduct in the U.S. Brewing Industry, 1952-1971,” *Journal of Industrial Economics*, volume 26, December 1977, pp. 97-113;

M.E. Porter, *Competitive Strategy* (New York: Free Press, 1980); and

M.E. Porter, *Competitive Advantage. Creating and Sustaining Superior Performance* (New York: Free Press, 1985).

^d J.A. Schumpeter, *The Theory of Economic Development* (Cambridge, Massachusetts: Harvard University Press, 1934); and A.H. Cole, *Business Enterprise in Its Social Setting* (Cambridge, Massachusetts: Harvard University Press, 1959).

^e H.A. Simon, *Administrative Behavior* (New York: Macmillan, 1947); and

J.G. March and H.A. Simon, *Organizations* (New York: Wiley, 1958).

Table 1

Dimensions of the Ten Schools, Part B

	Learning	Power	Cultural	Environmental	Configuration
Sources	C.E. Lindblom, R.M. Cyert and J.G. March, K.E. Weick, J.B. Quinn, and C.K. Prahalad and G. Hamel. ^f	G.T. Allison (micro), J. Pfeffer and G.R. Salancik, and W.G. Astley (macro). ^g	E. Rhenman and R. Normann in Sweden. No obvious source elsewhere. ^h	M.T. Hannan and J. Freeman. Contingency theorists (e.g., D.S. Pugh et al.). ⁱ	A.D. Chandler, McGill University group (H. Mintzberg, D. Miller, and others), R.E. Miles and C.C. Snow. ^j
Base Discipline	None (perhaps some peripheral links to learning theory in psychology and education). Chaos theory in mathematics.	Political science.	Anthropology.	Biology.	History.
Champions	People inclined to experimentation, ambiguity, adaptability — especially in Japan and Scandinavia.	People who like power, politics, and conspiracy — especially in France.	People who like the social, the spiritual, the collective — especially in Scandinavia and Japan.	Population ecologists, some organization theorists, splitters, and positivists in general — especially in the Anglo-Saxon countries.	Lumpers and integrators in general, as well as change agents. Configuration perhaps most popular in the Netherlands. Transformation most popular in the United States.
Intended Message	Learn.	Promote.	Coalesce.	React.	Integrate, transform.
Realized Message	Play (rather than pursue).	Hoard (rather than share).	Perpetuate (rather than change).	Capitulate (rather than confront).	Lump (rather than split, adapt).
School Category	Descriptive.	Descriptive.	Descriptive.	Descriptive.	Descriptive and prescriptive.
Associated Homily	"If at first you don't succeed, try, try again."	"Look out for number one."	"An apple never falls far from the tree."	"It all depends."	"To everything there is a season. . . ."

^f D. Braybrooke and C.E. Lindblom, *A Strategy of Decision* (New York: Free Press, 1963);

R.M. Cyert and J.G. March, *A Behavioral Theory of the Firm* (Englewood Cliffs, New Jersey: Prentice-Hall, 1963);

K.E. Weick, *The Social Psychology of Organizing* (Reading, Massachusetts: Addison-Wesley, first edition 1969, second edition 1979);

J.B. Quinn, *Strategies for Change: Logical Incrementalism* (Homewood, Illinois: Irwin, 1980); and

G. Hamel and C.K. Prahalad, *Competing for the Future* (Boston: Harvard Business School Press, 1994).

^g G.T. Allison, *Essence of Decision: Explaining the Cuban Missile Crisis* (Boston: Little, Brown, 1971);

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^h E. Rhenman, *Organization Theory for Long-Range Planning* (London: Wiley, 1973); and

R. Normann, *Management for Growth* (New York: Wiley, 1977).

ⁱ M.T. Hannan and J. Freeman, "The Population Ecology of Organizations," *American Journal of Sociology*, volume 82, March 1977, pp. 929-964; and

D.S. Pugh, D.J. Hickson, C.R. Hinings, and C. Turner, "Dimensions of Organizational Structure," *Administrative Science Quarterly*, volume 13, June 1968, pp. 65-105.

^j A.D. Chandler, *Strategy and Structure: Chapters in the History of the Industrial Enterprise* (Cambridge, Massachusetts: MIT Press, 1962);

H. Mintzberg, *The Structuring of Organizations* (Englewood Cliffs, New Jersey: Prentice-Hall, 1979);

D. Miller and P.H. Friesen, *Organizations: A Quantum View* (Englewood Cliffs, New Jersey: Prentice-Hall, 1984); and

R.E. Miles and C.C. Snow, *Organizational Strategy, Structure, and Process* (New York: McGraw-Hill, 1978).

ping, and concept attainment — the latter important for strategy formation, yet on which progress has been minimal. Meanwhile, another, newer branch of this school adopted a more subjective *interpretative* or *constructivist* view of the strategy process: that cognition is used to construct strategies as creative interpretations, rather than simply to map reality in some more or less objective way, however distorted.

Learning School: An Emergent Process

Of all the *descriptive* schools, the learning school grew into a veritable wave and challenged the always dominant prescriptive schools. Dating back to Lindblom's early work on disjointed incrementalism and running through Quinn's logical incrementalism, Bower's and Burgelman's notions of venturing, Mintzberg et al.'s ideas about emergent strategy, and Weick's notion of retrospective sense making, a model of strategy making as learning developed that differed from the earlier schools.⁶ In this view, strategies are emergent, strategists can be found throughout the organization, and so-called formulation and implementation intertwine.

Power School: A Process of Negotiation

A thin, but quite different stream in the literature has focused on strategy making rooted in power. Two separate orientations seem to exist. *Micro* power sees the development of strategies *within* the organization as essentially political — a process involving bargaining, persuasion, and confrontation among actors who divide the power. *Macro* power views the organization as an entity that uses its power over others and among its partners in alliances, joint ventures, and other network relationships to negotiate "collective" strategies in its interest.

Cultural School: A Social Process

Hold power up to a mirror and its reverse image is culture. Whereas the former focuses on self-interest and fragmentation, the latter focuses on common interest and integration — strategy formation as a social process rooted in culture. Again, we find a thin stream of literature, focused particularly on the influence of culture in discouraging significant strategic change. Culture became a big issue in the U.S. literature after the impact of Japanese management was fully realized in the 1980s; later, some attention to the implications for strategy formation followed. However, interesting research developed in Sweden in the 1970s with culture as a central, although hardly exclusive, theme, stimulated by the early work of

Rhenman and Normann, and carried out by people such as Hedberg and Jonsson, and others.⁷

Environmental School: A Reactive Process

Perhaps not strictly strategic management, if one defines the term as being concerned with how organizations use degrees of freedom to maneuver through their environments, the environmental school nevertheless deserves some attention for illuminating the demands of environment. In this category, we include so-called "contingency theory" that considers which responses are expected of organizations facing particular environmental conditions and "population ecology" writings that claim severe limits to strategic choice. "Institutional theory," which is concerned with the institutional pressures faced by organizations, is perhaps a hybrid of the power and cognitive schools.

Configuration School: A Process of Transformation

Finally, we come to a more extensive and integrative literature and practice. One side of this school, more academic and descriptive, sees organization as configuration — coherent clusters of characteristics and behaviors — and integrates the claims of the other schools — each configuration, in effect, in its own place. Planning, for example, prevails in machine-type organizations under conditions of relative stability, while entrepreneurship can be found under more dynamic configurations of start-up and turnaround. But if organizations can be described by such *states*, change must be described as rather dramatic *transformation* — the leap from one state to another. And so, a literature and practice of transformation — more prescriptive and practitioner oriented (and consultant promoted) — developed. These two different literatures and practices nevertheless complement one another and so, in our opinion, belong to the same school.

Prating about Strategic Management

During the nineteenth century, numerous explorers went in search of the source of the Nile. In time, it became increasingly evident that the source was not definitive. This was not something the expedition backers or the public wanted to hear. After some debate, the explorers announced their discovery: the source of the Nile was Lake Victoria! This is a verdict generally rejected by contemporary geographers, who believe the headstreams of the Kagera River in the highland of Burundi is a better answer. Different views may prevail in the future: the source of a river, after all, is a matter of interpretation, not a fact waiting to be discovered.

Strategic management has suffered from the problem that bedeviled the Victorian explorers. We, too, are a community of explorers, competing for discoveries, with backers eager for results and a public that demands answers.

Some explorers searching for the source of strategy have found “first principles” that explain the nature of the process. These have usually been rooted in basic disciplines, such as economics, sociology, or biology. Others have invoked a central concept, such as organization culture, to explain why some strategies succeed and others do not. The consequence has been to grasp one part of the strategic management elephant and prate about it as though none other exists. Or to acknowledge that other parts exist, but dismiss them as irrelevant. Consider Michael Porter’s article “What Is Strategy?” which depicts the strategy process as deliberate and deductive.⁶ Porter does not dismiss strategic learning so much as deny its very existence:

“If strategy is stretched to include employees and organizational arrangements, it becomes virtually everything a company does or consists of. Not only does this complicate matters, but it obscures the chain of causality that runs from competitive environment to position to activities to employee skills and organization.”⁷

But why can’t strategy be “everything a company does or consists of”? Is that not strategy as perspective — in contrast to position? And why must there be such a chain of causality, let alone one that runs in a single direction?

Porter’s view of the strategy process leads him to the surprising conclusion that Japanese companies “rarely have strategies” and that they “will have to learn strategy.”¹⁰ Were this true, and given the performance of so many Japanese companies, strategy would hardly seem to be a necessary condition for corporate success. In our opinion, however, this is not the case. (Bear in mind that current problems in the Japanese economy or in its banking systems have not rendered many Japanese companies any less effective in their managerial practices.) Rather than having to learn about strategy, the Japanese might better teach Michael Porter about strategic learning.

Of course, in the affairs of writing and consulting, to succeed and to sell, champions must defend their positions, erecting borders around their views while dismissing or denying others. Or, to return to our metaphor, like butchers (we include ourselves in this

group), they chop up reality for their own convenience, just as poachers grab the tusks of the elephant and leave the carcass to rot.

To repeat a key issue, such behavior ultimately does not serve the practicing manager. These people, as noted, have to deal with the entire beast of strategy formation, not only to keep it alive but to help sustain some real life energy. True, they can use it in various ways — just as an elephant can be a beast of burden or a symbol of ceremony — but only if it remains intact as a living being. The greatest failings of strategic management have occurred when managers took one point of view too seriously. This field had its obsession with planning, then generic positions based on careful calculations, and now learning.

Opening Up the Schools

Hence, we take pleasure in noting that some of the more recent approaches to strategy formation cut across these ten schools in eclectic and interesting ways. This suggests a broadening of the literature. (See Table 2, for a list of these across-school approaches.) For example, research on stakeholder analysis links the planning and positioning schools, whereas the work of Porter and others on what can be called strategic maneuvering (first-mover advantage, use of feints, etc.) connect the positioning to the power school.

Particularly popular are recent variants that blend the learning school with insights from other schools. Chaos theory, as applied to strategic management, might be seen as a hybrid of the learning and envi-

Table 2

Blending of the Strategy Formation Schools

Approach	Schools
Dynamic capabilities	Design, Learning
Resource-based theory	Cultural, Learning
Soft techniques (e.g., scenario analysis and stakeholder analysis)	Planning, Learning or Power
Constructionism	Cognitive, Cultural
Chaos and evolutionary theory	Learning, Environmental
Institutional theory	Environmental, Power or Cognitive
Intrapreneurship (venturing)	Environmental, Entrepreneurial
Revolutionary change	Configuration, Entrepreneurial
Negotiated strategy	Power, Positioning
Strategic maneuvering	Positioning, Power

ronmental schools. Perhaps best known is the “dynamic capabilities” approach of Prahalad and Hamel. We see their notions of core competence, strategic intent, and stretch — reminiscent of Itami’s earlier work — as a hybrid of the learning and design schools: strong leadership to encourage continuous strategic learning.¹¹ “Resource-based theory,” which seems similar, in fact, appears more like a hybrid of the learning and cultural schools. These two new views differ in orientation, if not content — the former more prescriptive and practitioner-focused, the latter more descriptive and research-focused. Leadership (as favored in the design school) is not a central concern to resource-based theorists. Instead they focus on competencies rooted in the essence of an organization (namely, its culture).¹²

One Process or Different Approaches

As distinct as the schools may be, one issue about them is not clear. Do they represent different processes, that is, different approaches to strategy formation, or different parts of the same process? We have been ambiguous on this point, and we prefer to remain so, because we find either answer too constraining.

Some of the schools clearly are stages or aspects of the strategy formation process (see Figure 1):

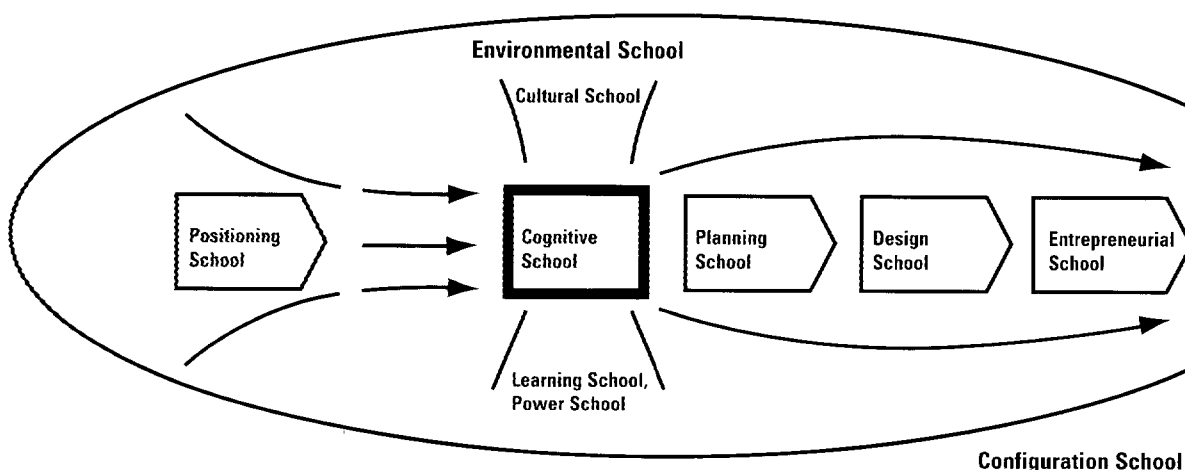
- The cognitive school resides in the mind of the strategist located at the *center*.
- The positioning school looks *behind* at established data that is analyzed and fed into the black box of strategy making.
- The planning school looks slightly *ahead*, to program the strategies created in other ways.

- The design school looks farther *ahead* to a strategic perspective.
- The entrepreneurial school looks *beyond* to a unique vision of the future.
- The learning and power schools look *below*, enmeshed in details. Learning looks into the grass roots, whereas power looks under the rocks — to places that organizations may not want to expose.
- The cultural school looks *down*, enshrouded in clouds of beliefs.
- Above the cultural school, the environmental school looks *on*, so to speak.
- The configuration school, looks *at* the process, or, we might say, *all around* it, in contrast to the cognitive school that tries to look *inside* the process.

Dealing with all this complexity in one process may seem overwhelming. But that is the nature of the beast, for the fault lies neither in the stars nor in ourselves, but in the process itself. Strategy formation is judgmental designing, intuitive visioning, and emergent learning: it is about transformation as well as perpetuation; it must involve individual cognition and social interaction, cooperative as well as conflictive; it has to include analyzing before and programming after as well as negotiating during; and all this must be in response to what may be a demanding environment. Try to omit any of this, and watch what happens!

Yet, just as clearly, the process can tilt toward the attributes of one school or another: toward the entrepreneurial school during start-up or when there is the need for a dramatic turnaround, toward the learning school under dynamic conditions when prediction is

Figure 1
Strategy Formation as a Single Process



well nigh impossible, and so on. Sometimes the process has to be more individually cognitive than socially interactive (in small business, for example). Some strategies seem to be more rationally deliberate (especially in mature mass-production industries and government), whereas others tend to be more adaptively emergent (as in dynamic, high-technology industries). The environment can sometimes be highly demanding (during social upheaval), yet at other times (or even at the same times) entrepreneurial leaders are able to maneuver through it with ease. There are, after all, identifiable stages and periods in strategy making, not in any absolute sense but as recognizable tendencies.

The inclination has been to favor the interpretation that the schools represent fundamentally different processes. (Figure 2 plots the schools along two dimensions: states of the internal process and states of the external world. The schools scatter across the plot, implying that they represent different processes.) This may not be so bad if practitioners can at least pick and choose among the various processes (or combine them when appropriate) — as long as any one is not pushed to its illogical extreme (see Table 3).

Evolution of Strategy?

Safari may be a single idea, but it is many experiences. As noted at the outset, there are safaris at ground level, whether of big game hunters or of tourists snapping pictures. There are also safaris from the air, which take a bird's eye view of different species as they hunt and rest. All reveal important truths. The problem for the thoughtful observer is to balance and

combine these short- and long-term views. One way is to take an evolutionary perspective: strategy evolves, not passively but creatively, and so unpredictably, simply because organizations seek to be unique. The ingenuity of those who practice strategy should, therefore, constantly surprise those who study it.

Chandler and others observed that there is a cycle of innovation in strategy: spurts of innovation followed by imitation and consolidation.¹³ Yet researchers often fail to look beyond their current contexts. Some studied periods characterized by consolidation, such as the 1970s and early 1980s, and then developed theories of generic strategies. Others observe today's ferment unleashed by information technologies and declare chaos theory the source of truth. For researchers to observe what some organizations do and systematically make sense of it is one thing, but to turn a generality into an object of reverence is quite another.

Hence, the field of strategy management should seek an understanding of its own evolution. But it must do so without adopting a pseudoscientific theory of change. It may be that the development of strategic management is at odds with the assumed development in evolutionary biology. This presumes a succession of species, with one often replacing another — the zebra and the horse, for example, descending from some extinct animal. The schools of strategy represent a line of descent through the history of the field, but this may not be a descent by replacement. The design school may be an ancestor of the positioning school, but it is not extinct. Older schools

Figure 2
Strategy Formation as Many Processes

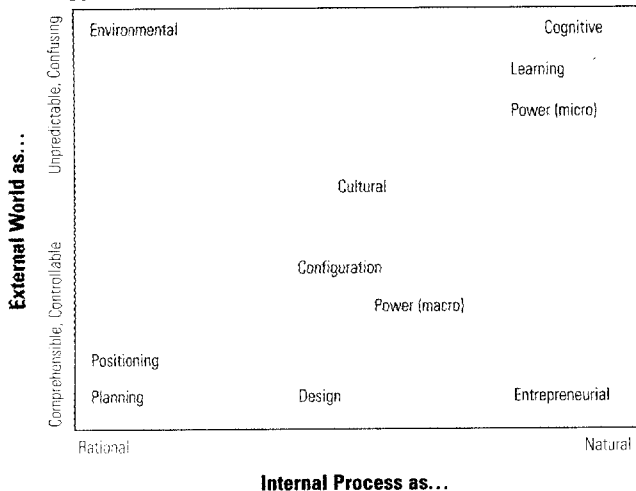


Table 3
Going Over the Edge in Strategy Formation

School	Illogical Extreme
Design	Fixation
Planning	Ritual
Positioning	Fortification
Entrepreneurial	Idolatry
Cognitive	Fantasy
Learning	Drift
Power	Intrigue
Cultural	Eccentricity
Environmental	Conformity
Configuration	Degeneration

Strategy is pushed along by the sheer creativity of managers, because they explore new ways of doing things.

contribute to newer ones in complicated and often subterranean ways. They continue to live in practice, infiltrating newer frameworks under various guises.

The evolution of strategic management obeys different principles because it is driven by ideas and practices that originate from qualitatively different sources. We note four:

- New kinds of strategies emerge from *collaborative contacts* between organizations. Firms cannot avoid learning and borrowing when they trade and work together.
- The evolution of strategy is also pushed along by *competition and confrontation*. In strategy, as in other areas, necessity is the mother of invention, and, as elsewhere, new ideas and practices arise when managers try to outwit or beat back powerful rivals.
- New strategies are often a *recasting of the old*. In a sense, old strategic ideas never disappear entirely. They go underground and infiltrate new practices covertly. Not so much old wines in new bottles, but more like the blending of old and new malt whiskies.
- Finally, strategy is pushed along by the *sheer creativity* of managers, because they explore new ways of doing things.

Biologists often use the tree as a device for illustrating the relationship between species. Here, for us, the roots are the basic disciplines — economics, psychology, sociology, anthropology, political science, biology, and so on — that nourish and so exert a powerful influence over growth. The branches are our two types of schools. On the right side are the prescriptive schools: design, planning, positioning, and (partly perhaps) entrepreneurial. These are relatively well defined — carefully trimmed, if you like. On the left are the more descriptive schools, especially cultural, learning, cognitive, power, and environmental. These schools may have grown as relatively distinct and coherent, but they have become intertwined. In fact, as noted earlier, we find a general blurring of the boundaries here — or, if you like, tangling of the branches. The descriptive schools

stray into each other's space, over time increasingly borrowing from each other.

The contrast between the prescriptive and descriptive schools is to some extent due to a fundamentally different attitude toward how research and knowledge should be developed. The proponents of the prescriptive schools tend to adopt a "managed growth" approach to knowledge: they fertilize and trim carefully to curb disruptive influence. In contrast, the descriptive schools prefer a more "natural growth," although they do graft to see what results.

There are obvious advantages and dangers to both approaches. The prescriptive schools are clear and consistent. This makes discussion and transmission of ideas easier, but it can also foster sterility in thinking and application. The descriptive schools tend to be fuller and richer, allowing for more experimentation and innovation. At the same time, they can end up in tangled confusion, generating many contingencies and multiple perspectives that stymie application.

In the end, the tree may be a more suitable image for the growth and development of strategy formation than Darwinian evolution because it does not favor a progression of what is newer and more elaborate. In a tree, the branches are no more or less important than the roots, and the branches on either side cannot be cut off without putting the tree out of balance. The structure seems untidy, but it is actually quite attractive. And it has and will continue to bear fruit!

In Search of Strategic Management

Scholars and consultants should certainly continue to probe the important elements of each school. But, more importantly, we have to get beyond the narrowness of each school: we need to know how strategy formation, which combines all these schools and more, really works.

We need to ask better questions and generate fewer hypotheses — to allow ourselves to be pulled by real-life concerns rather than being pushed by reified concepts. We need better practice, not neater theory. So we must concern ourselves with process and content, statics and dynamics, constraint and inspiration, the cognitive and the collective, the planned and the learned, the economic and the political. In other words, we must give more attention to the entire elephant — to strategy formation as a whole. We may never see it fully, but we can certainly see it better.

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