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The Mind of the Strategist(s)

Henry Mintzberg
James A. Waters

Trying to understand the functioning of the executive mind strikes us as a tall order. Our more cynical side doubts that anyone understands the functioning of any mind. But that is the problem of the psychologist, and we, at least in the context of this paper, are organization theorists. That is to say, we study the behavior of collections of people called organizations. More specifically, for a number of years now we have been tracking the strategies of organizations to understand how these collections of people end up in certain positions in their environments and how they go about changing those positions. Among the conceptual themes we have been focusing on is one about the role of leadership in strategy formation, or, more exactly, the interplay of the three forces of environment, leadership, and

organization in the development of strategies. Since this is the closest we come to the functioning of the executive mind, we shall focus our attention on this theme in our chapter.

A preliminary word on our research and its data base is in order. First, what is strategy? Let us suggest four definitions:
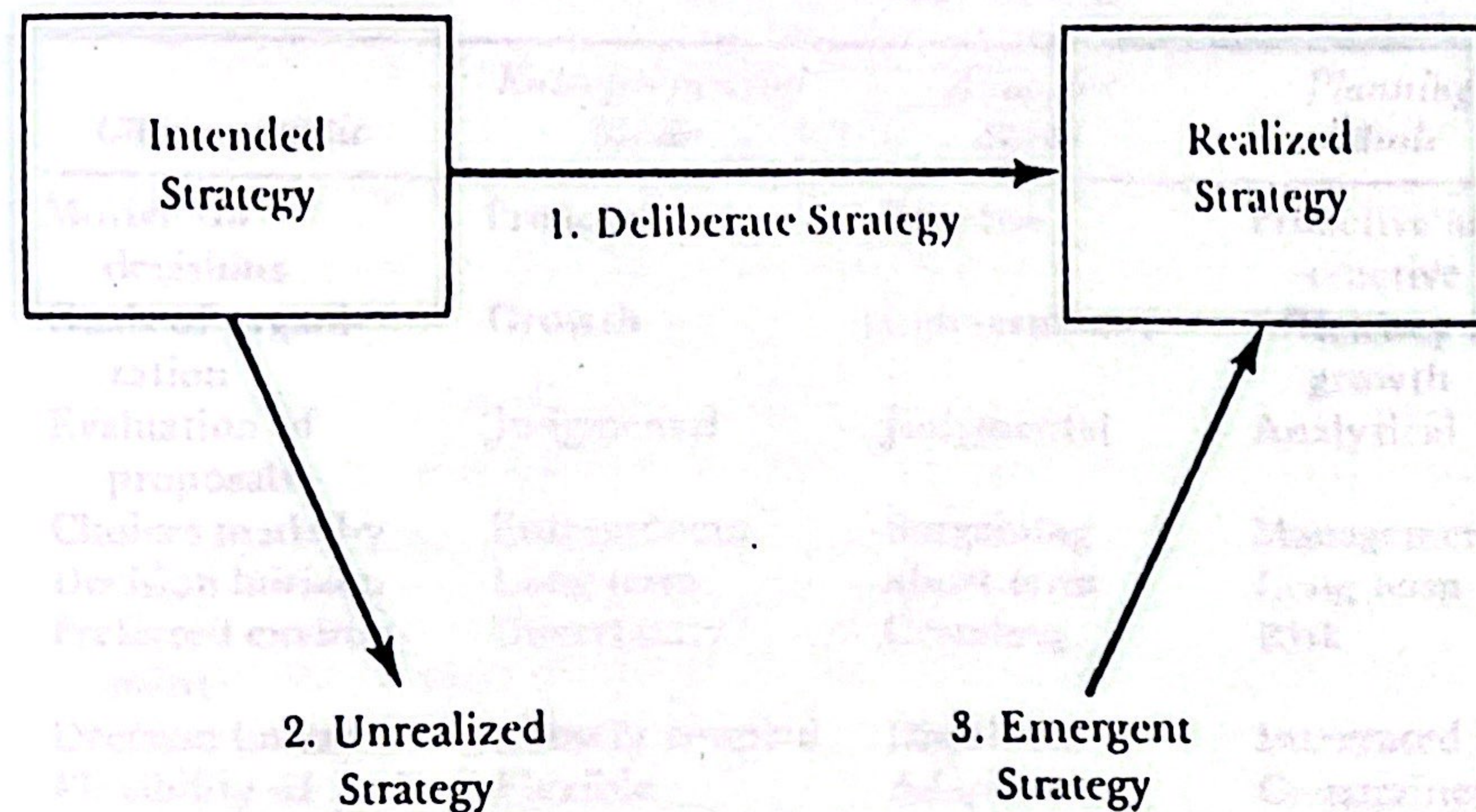
1. *Strategy is a plan.* To most people, not just laypersons but writers of dictionaries, military theorists, management practitioners, and even most management theorists, a strategy is a plan, a set of guidelines intended to influence behavior in the future. Chandler's definition is typical: "... the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals" (1962, p. 13). Most people, we maintain, *define* strategy this way, although many, as we shall discuss below, do not necessarily so *use* the term.

2. *Strategy is a position.* Not inconsistent with the first definition (although not supportive of it, either) is the definition of strategy as a position—for example, a niche in a particular market. Under this definition strategy is the means to define or at least to identify an organization in an environment.

3. *Strategy is a perception.* The Germans say *Weltanschauung* ("world view"), behavioral scientists who have read Kuhn (1970) say "paradigm," we prefer to say "perception" or "concept." Under this definition an organizational strategy is, therefore, how the members of an organization view their world.

4. *Strategy is a pattern.* Although most people, as noted earlier, define strategy as a plan, many of them often use the term in reference to a pattern, specifically a pattern in a stream of organizational decisions or actions. The press infers the U.S. President's strategy by finding a pattern in his behavior. Competitors do the same thing, as do subordinates, to try to understand the strategies of senior executives in a company. Strategy by this definition is synonymous with consistency. Of course, this definition of strategy relates not to intention but to realization, or enactment—what actually happens in the organization. Hence, we can combine our first definition with our fourth to generate three other definitions, as shown in Figure 1—

Figure 1. Types of Strategies.

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┌──────────┐                              ┌──────────┐
│ Intended │ ────────────────────────────▶│ Realized │
│ Strategy │      1. Deliberate Strategy  │ Strategy │
└──────────┘                              └──────────┘
       │                              ▲
       ▼                              │
  2. Unrealized              3. Emergent
     Strategy                   Strategy
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namely, *deliberate* strategies (intended and then realized), *unrealized* strategies (intended but not realized), and *emergent* strategies (patterns realized although never specifically intended).

There is the comment in the Introduction to *Winnie-the-Pooh* that "there are some people who begin the Zoo at the beginning, called WAYIN, and walk as quickly as they can past every cage until they get to the one called WAYOUT, but the nicest people go straight to the animal they love the most, and stay there." We are not sure that we are the nicest people, but we do know which definition we love the most, and we went straight to it to design our research methodology and have stayed there for some years.

Defining strategy as a pattern in a stream of decisions or actions almost dictates a research methodology to study strategy formation in organizations: (1) isolate streams of organizational decisions or actions in various critical areas, (2) infer strategies as consistencies in three streams, (3) infer periods in the history of the organization by considering stabilities and changes in the various strategies, (4) investigate the critical turning points from one period to another, and (5) then brainstorm with the findings around some key theoretical issues. Chief among these issues are the pattern of strategic change; the interplay of environment, leadership, and organization; and the relationship between deliberate and emergent strategies.

This methodology demands a good deal of time in each organization in order to trace its strategies across very long periods, with the result that the size of the research sample must be severely restricted. In fact, since 1971 we have conducted eleven intensive studies (aside from a number of others that have been carried out by students writing theses). These covered U.S. strategy in Vietnam, 1950–1973; Volkswagenwerk, 1934–1974; Steinberg (a retail chain), 1917–1974; Canadelle (a women's undergarment manufacturer), 1939–1976; the *Sherbrooke Record* (a newspaper), 1946–1976; Arcop (an architectural firm), 1953–1978; the National Film Board of Canada, 1939–1976; Air Canada, 1937–1976; *Saturday Night* magazine, 1928–1971; Asbestos Corporation, 1912–1975; and McGill University, 1921–1981. The first three of these studies have been published (Mintzberg, 1978; Mintzberg and Waters, 1982), the fourth is in press (Mintzberg and Waters, 1983), and by the time of this publication most of the others should be in press. Our specific intention in this chapter is to draw together some of the conclusions about the interplay of environment, leadership, and organization in a number of these studies.

In "Strategy Making in Three Modes" (Mintzberg, 1973b), an article first written just as this research was getting underway, three approaches to the making of strategy were described as depicted in the conceptual—not the empirical—literature. Table 1 summarizes the dimensions of each. In another publication (Mintzberg, 1979), written several years later, a typology of five "configurations" of structure and situation was proposed, in this case based on a reading of largely empirical literature. These were labeled simple structure, machine bureaucracy, divisionalized form, professional bureaucracy, and adhocracy. As a rough guide, the entrepreneurial mode would seem to fit with simple structure, the planning mode with machine bureaucracy, and the adaptive mode with adhocracy. A number of the organizations we have studied seem to fall rather close in characteristics to these three configurations (at least during certain periods in their histories), and each of these three groupings of organizations appears to exhibit its own distinct interplay of the forces of environment, leadership, and organization. Notably, a different one of these forces tends to take the lead in

Table 1. Characteristics and Conditions of the Three Modes of Strategy Making.

Characteristic	Entrepreneurial Mode	Adaptive Mode	Planning Mode
Motive for decisions	Proactive	Reactive	Proactive and reactive
Goals of organization	Growth	Indeterminate	Efficiency and growth
Evaluation of proposals	Judgmental	Judgmental	Analytical
Choices made by	Entrepreneur	Bargaining	Management
Decision horizon	Long term	Short term	Long term
Preferred environment	Uncertainty	Certainty	Risk
Decision linkages	Loosely coupled	Disjointed	Integrated
Flexibility of mode	Flexible	Adaptive	Constrained
Size of moves	Bold decisions	Incremental steps	Global strategies
Vision of direction	General	None	Specific

Condition for Use			
Source of power	Entrepreneur	Divided	Management
Objectives of organization	Operational	Nonoperational	Operational
Organizational environment	Yielding	Complex, dynamic	Predictable, stable
Status of organization	Young, small, or strong leadership	Established	Large

From Mintzberg (1973b, p. 49).

each grouping. The body of this chapter discusses these various relationships.

Leadership Taking the Lead: Entrepreneurship in the Simple Structure

Steinberg and Canadelle, at least for a good part of their histories, exhibited strong characteristics of the simple structure. By this we mean that their structures tended to be simple and fluid, with relatively little hierarchy, minimal reliance on

technocratic staff groups or the formalization of behavior, and above all, the lodging of power firmly in the hands of the chief executive officer, who exercised it in a personal way—one typically described as entrepreneurial.

The entrepreneurial mode was characterized as follows in the article cited earlier: power centralized in the hands of the chief executive, whose behavior is dominated by the active search for opportunities, by the pursuit of the goal of growth above all, and by the taking of dramatic leaps forward in the face of uncertainty. That, as noted, is the view in the conceptual literature. What about entrepreneurship in our empirical studies?

Steinberg is a Canadian retail chain that began with a tiny food store in Montreal in 1917 and grew to a sales volume of over $1 billion by the end of our study period in 1974. Most of that growth came from supermarket operations, although the firm did diversify (primarily into other retailing activities) after 1960. In many ways, Steinberg fits the entrepreneurial mode rather well. Sam Steinberg, who joined his mother in the first store at the age of eleven and personally made a quick decision to expand it two years later, maintained complete formal control of the firm (that is, every single voting share; public stock was never voting) to the day of his death in 1978. He also exercised close managerial control over all major decisions, at least until the firm began to diversify.

As for the "bold stroke" of the entrepreneur (Cole, 1959), we certainly saw evidence of some rather dramatic changes in the company—for example, a plunge into self-service in the 1930s or into the shopping center business in the 1950s. But for the most part, Sam Steinberg did not plunge until he had tested the water. The story of the move into self-service is indicative. To paraphrase from our report (Mintzberg and Waters, 1982), in 1933 one of the company's eight stores "struck it bad," in the chief executive's words, incurring "unacceptable" losses ($125/week). Sam Steinberg closed the store one Friday night, changed its name from "Steinberg's Service Stores" to "Wholesale Groceteria," slashed prices by 15–20 percent, instituted a form of self-service, printed handbills, stuffed

them into neighborhood mailboxes, and reopened on Monday morning! From that point on, after turning that store around and converting the others, in his words, "We grew like Topsy."

This anecdote tells us something about the bold stroke of the entrepreneur; the term we use in the article is *controlled boldness*. And it also tells us something about the proaction of the entrepreneur. Sam Steinberg was solving a problem, not searching out an opportunity. Indeed, he viewed it more as a crisis than as a problem. It was this kind of perception that distinguished his treatment of problems: getting more excited about them than other people. Most others would have viewed this situation as a problem to be solved, likely by doing the obvious—closing the store. By making it into a crisis, Sam Steinberg turned it into an opportunity. That was his way of getting energy behind action and of keeping ahead of his competition. He "oversolved" the problem and remade his company. We refer to this behavior as the "proactive reaction."

Another point about the entrepreneurial mode that came out in this study is that strategy, for the entrepreneur, is not a formal, detailed plan on paper. It is a personal vision in a brain, a concept of the business. That vision may sometimes get partially articulated, but for the most part it remains locked inside the brain. So long as the entrepreneur is able to make the key decisions for the organization, this poses no problem. Indeed, the great advantage of strategy as personal vision is that it can be changed rather easily. A formal plan, in contrast, tends to get widely disseminated in an organization and so cannot easily be changed.

A further point that emerged clearly in this study is that the key to generating such a vision, and to changing it at the right time, is intimate, detailed knowledge of the business. In discussing his firm's competitive advantage, Sam Steinberg told us: "Nobody knew the grocery business like we did. Everything has to do with your knowledge." He added, "I knew merchandise, I knew cost, I knew selling, I knew customers, I knew everything . . . and I passed on all my knowledge; I kept teaching my people. That's the advantage we had. They couldn't touch us."

This study indicates how effective such knowledge can be when it is concentrated in one person who is fully in charge (having no need to sell others with different views and different levels of knowledge, neither subordinates below nor superiors at some distant headquarters) and who retains a strong, long-term commitment to the organization. So long as the business is simple and concentrated enough to be comprehended in one brain —and this one was before it diversified—the entrepreneurial mode is powerful; indeed, unexcelled. No other mode of strategy making can provide the same degree of deliberateness and of integration of strategies with one another and with the environment. None can provide so clear and complete a vision of direction, yet also allow the flexibility to elaborate and rework that vision. The conception of a novel strategy is an exercise in synthesis, which is typically best carried out in a single, informed brain. That is why the entrepreneurial mode is at the center of the most glorious corporate successes.

The genius of Sam Steinberg, in our view, was that he could pursue one vision for twenty years (from the change to self-service in 1933 until the early 1950s) and then change it when he had to. After spending years in the 1930s and 1940s worrying about fluorescent lighting and new ways to use cellophane to package meat for self-service, he was able to shift his thoughts in the 1950s to the impact of shopping centers on overall retailing habits, realizing that he had to redefine the nature of his business. We believe such a Gestalt shift—from cellophane to shopping centers—requires a high degree of sophistication. How does the executive mind function when such a shift becomes necessary?

Let us turn to our study of Canadelle for some hints at the answer. Canadelle produces women's undergarments. It too was a highly successful organization, though hardly on the same scale as Steinberg. Things were going very well for the company in the late 1960s, under the personal leadership of the son of its founder. Suddenly everything changed. To draw from our report (Mintzberg and Waters, 1983): A sexual revolution of sorts was brewing. In contrast to the pointed look that had been so popular for a decade, women wished to appear more natural.

"Bra burning" was a major symbol of the social upheaval of the times, and for a manufacturer of brassières, the threat was obvious. The miniskirt dominated the fashion scene, making the girdle obsolete and leading to the development of pantyhose. Moreover, the girdle itself was threatened by the same social trend that was demanding increased freedom, comfort, and naturalness. As the executives of Canadelle put it, "The bottom fell out of the girdle business." Sales dropped by 30 percent per year, eventually stabilizing at about 5 percent of the firm's total business. Essentially, it appeared that the whole environment, long so receptive to the company's strategies, had suddenly turned rejective.

We had the good fortune to be able not only to interview the chief executive at length on his response to these changes but also to include him on our brainstorming team that dealt with these issues in a conceptual way. Let us first describe the events as we saw them in our report and then present our conceptual interpretation of them.

At the time, a French company was promoting a light, sexy, molded garment called "Huit" with the theme "Just like not wearing a bra." Their target market was 15–20-year-olds. Though expensive when it landed in Quebec, and not well fitting, the product sold well. The chief executive flew to France in an attempt to license the product for manufacture in Canada. The French firm refused, but he claimed that what he learned in "that one hour in their offices made the trip worthwhile." He learned that the ostensibly no-bra movement was going to manifest itself primarily as a less-bra movement. What women seemed to want was a more natural look. He also found that the product was being target-marketed to younger women.

The second event, shortly after, was a trip to a sister firm in the United States. There the CEO realized the importance of market segmentation by age and life-style. The company then sponsored market research to better understand what women wanted from a brassière. The results indicated that, for the more mature customer, the brassière was a cosmetic, which she wore to look and feel more attractive. The product had an important sex-appeal dimension for these customers. Moreover, it

was found that the company's brand had high recognition among these consumers. In contrast, the younger customer wanted to look and feel natural; the sex-appeal dimension was considerably less important. Also, in the minds of these consumers, Canadelle's brand name was associated with older women. On the basis of these distinctions, the CEO became convinced that some major product-line differentiation was required.

These two events led to a major shift in strategy. The CEO described it as a kind of revelation—the confluence of different ideas to create a new mental set. In his words, "All of a sudden the idea forms." His groping had led to two new major concepts in the firm's strategy. On the marketing side was market segmentation—specifically, the division of market into older and younger customers. And on the technology and manufacturing side was the use of molding to produce seamless brassière cups.

Canadelle initiated an intensive technology development program to produce its own molded brassière, stimulated by the recent introduction of new fabrics. The firm introduced a molded garment made of tricot under its existing brand name for older customers and a stretch garment of Lycra for the younger market.

On a conceptual level we can draw on Lewin's (1951) notion of unfreezing, changing, and refreezing to explain this Gestalt shift in vision. The process of unfreezing is essentially one of overcoming the natural defense mechanisms to realize that the environment has in fact changed. Effective managers are supposed to scan their environments continually; indeed, effective *strategic* managers are supposed to be especially in touch with changing trends. One danger of strategic management is that it may encourage managers to be *too* in touch. Managers may be so busy managing strategic change—the big issues—that they may fail to do well what usually matters, namely, to function effectively with a given, viable strategy. Or, equally dangerous (and perhaps more likely), they may give so much attention to strategic monitoring when nothing important is changing that when something finally does change, they do not even notice it. The trick, of course, is to pick out the discontinuities

that count. Many changes are temporary or simply unimportant. Some are consequential and a few revolutionary. For Canadelle, the changes in the late 1960s were of the latter category.

A second step in unfreezing is to be willing to step into the void, so to speak: The leader must shed his or her conventional notions of how the business is supposed to function (the industry recipe, as Grinyer and Spender, 1979, have termed it) and really open his or her mind to what is happening. It is critical to avoid premature closure—not to seize on a new thrust before it is clear what the signals really mean. This takes a special kind of management, one able to live with a good deal of uncertainty and discomfort. The president of Canadelle was able to articulate his feelings at the time: "There is a period of confusion before you know what to do about it. . . . You sleep on it . . . start looking for patterns . . . become an information hound, searching for [explanations] everywhere." This stage may be painful, but in our view it is critical to successful resolution.

Strategic change of this magnitude seems to involve mindset before strategy and seems to be essentially conceptual in nature. In other words, the concepts of the strategist—his or her *Weltanschauung*—must change before anything else can change. If this study gives any indication, then although problems and threats in the environment may provoke the unfreezing, it is opportunities that stimulate the process of change. With some idea of what *can* be done, the strategist begins to converge on a new concept of the business—a new strategic thrust. Our guess is that the experience here—of one or two basic driving ideas—is typical: In the final analysis, change in mind set is stimulated by a small number of key events, probably one critical incident in most cases. Continuous bombardment of facts, opinions, problems, and so on may have had to prepare the mind for the change, but one simple insight likely creates the synthesis—brings all the disparate data together in one sudden "Eureka!"-type flash.

Once the mind is set, assuming it has read the new environment correctly and has not seized prematurely on trends

that have not themselves stabilized, then the refreezing stage begins. Here the object is not to read the environment, at least not in a global sense, but in effect to block it out. This is not time for the monitoring precepts of strategic management. It is time to work out the consequences of a new strategic thrust. It has been claimed that obsession is an ingredient in effective organizations (Peters, 1980). For the period of refreezing (not unfreezing or changing), we would agree. This is not the time for questioning but for pursuing the new orientation—the new mind set—with full vigor. When we asked the president how the post-1970 period differed from that of the two previous years, he commented: "Any idea is acceptable so long as it's. . . ." And he motioned with his hands in two parallel lines to indicate: so long as it is strictly within the bounds of the new concept. A management that was open and divergent in its thinking must now become closed and convergent. We wonder how many executives fail in one or the other—remaining convergent when divergence becomes necessary or failing to settle down to a convergent pattern after a period of divergence.

Whereas unfreezing was a time of great discomfort, refreezing must be one of great excitement (at least for those who accept the reorientation). The organization now knows where it is going; the object of the exercise is to use all the skills at its command to get there. This is not to say that all is creative. Refreezing is characterized by an analytic mode of behavior, with heavy emphasis on formal evaluation, perhaps closer to the planning mode. Of course, some members will not accept the reorientation; for them, the discomfort now begins, and this can spill over to the strategist if considerable resistance arises.

To conclude, leadership in the simple structure—what we are calling the entrepreneurial mode—is very much tied up with the creation of vision, essentially with *concept attainment*. Since the vision is personal, the overall form of the strategy may be described as deliberate. But in the absence of specific plans the details are likely to emerge. And the vision can change, too. In other words, the leader is able to adapt en route —he or she can learn. We describe this form of strategy making in Figure 2. The focus is on the leader, the organization is mal-

Figure 2. Leadership Taking the Lead in Simple Structure.
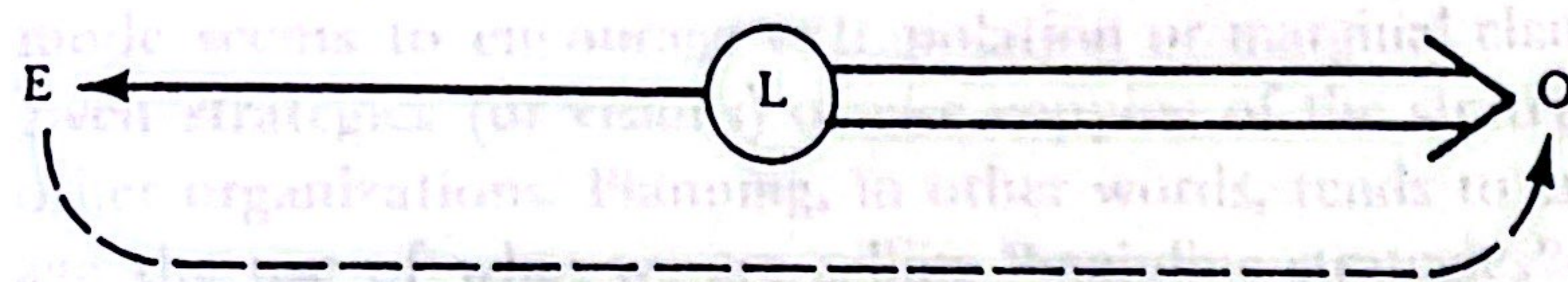
E, environment; L, leader; O, organization.

leable and responsive to the leader's initiatives, and the environment for the most part remains benign, the result of the leader's selecting (or enacting) the correct niche for his or her organization. The environment can, of course, flare up occasionally to challenge the organization, forcing the leader to seek out a new and more appropriate niche.

Organization Taking the Lead:
Planning in the Machine Bureaucracy

Volkswagenwerk and Air Canada, after their formative years, and the U.S. government with respect to strategy in Vietnam seem closest to the configuration we call machine bureaucracy. What we mean by this is the classic view of formal organization: clear division of labor and subunit differentiation, extensive hierarchy, a large contingent of staff personnel, rather centralized decision making due to the need for tight coordination, and highly standardized behavior patterns. Like everything else, the process of strategy making is supposed to be formalized, presumably through planning. The planning mode was depicted in the "Three Modes" article as follows: an emphasis on analysis, especially assessment of the costs and benefits of competing proposals; a major role for staff personnel; and above all, an attempt to formally integrate decisions and strategies.

In fact, our best hint of what this might really mean comes from the later years of the Steinberg study, when we felt that Sam Steinberg's entrepreneurship began to be captured by planning. The company needed to plan more extensively and

more formally as it became large and its operations more dispersed—in other words, as the need for coordination became paramount and less likely to be effected successfully in one mind. One particular event really encouraged the start of the planning mode: the company's entry into capital markets. Months before Steinberg floated its first bond issue (nonvoting stock was to come later), Sam Steinberg boasted to a newspaper reporter that "not a cent of any money outside the family is invested in the company." And asked about future plans, he replied: "Who knows? There is so much to do right ahead that it would sound like a wild dream to talk about ten years from now.... We will try to go everywhere there seems to be a need for us." A few months later he announced a $15 million five-year expansion program, one new store every sixty days for a total of thirty stores, the doubling of sales, new stores to average double the size of existing ones, with parking lots, children's playrooms, and so on. What happened in these few months was the realization in Sam Steinberg's mind that he needed to enter the shopping center business and that he could not do so with the company's traditional methods of short-term and internal financing. And no company goes to capital markets without a plan.

But what exactly was that plan? It did not formulate a strategy. Rather, it justified, elaborated, and articulated the strategy—in other words, the vision—that Sam Steinberg already had. Planning operationalized the strategy, programmed it. It gave order to vision, putting form on it to comply with the needs of the organization and its environment. Thus, planning followed the strategy-making process, which was essentially entrepreneurial. But its effect on that process was not incidental. By specifying and articulating the vision, planning constrained it, rendered it less flexible.

Is there, then, such a thing as a planning mode of strategy making? We suspect not; at least, we have not found it yet. To be more explicit, we do not find dramatic new strategies formulated through any kind of formal procedure. (Of course, not everyone equates planning with formalized procedure; to some people, planning is simply future thinking—see Mintzberg, 1981.

But as Wildavsky, 1973, notes in the title of a paper, "If planning is everything, maybe it's nothing.") Rather, the planning mode seems to encourage extrapolation or marginal change in given strategies (or visions) or else copying of the strategies of other organizations. Planning, in other words, tends to encourage the use of what we are calling "mainline strategies"—standard, accepted ones in the industry. The formulation of a dramatic new strategy is essentially the attainment of a new concept, a new *Weltanschauung*. It derives from synthesis, whereas planning tends to be oriented to analysis. Thus, planning seems to be a mode for operationalizing strategy, not for creating it—indeed, a mode that may discourage the creative side of strategy making.

This seems to come out most clearly in our study of Air Canada. Once the airline was established, around the middle 1950s, particularly once it had developed its basic route structure and established itself as a distinct organization, a number of factors drove it strongly to the planning mode. Above all was the paramount need for coordination on two levels. On the operational level, the airline had to coordinate its flight schedules with its aircraft, its crews, and its maintenance. And on the capital level, it had to coordinate the purchase of expensive aircraft with the introduction of new routes or the servicing of existing ones. (Imagine someone calling out in a hangar: "Hey, Fred, this guy says he has two 747s for us. Do you know who ordered them?") Safety is another factor: The intense need for it in the air breeds a mentality of being very careful about what the organization does on the ground, too. Other factors include the lead times inherent in key decisions such as ordering new airplanes or introducing new routes, the sheer cost of the capital equipment, the size of the organization, the airline's status as a government-owned corporation, and the airline's strong influence in its home markets. In any event, what we find in Air Canada—which we believe is largely a result of the planning orientation—is the absence of major reorientation of strategy for a good part of the study, especially the last two decades of it (to 1976). Aircraft certainly changed—they became larger and

faster—but routes did not, nor did markets. Air Canada gave only marginal attention, for example, to cargo, charter, and shuttle operations.

How, then, does the planning-oriented machine bureaucracy change its strategy when it has to? Our best indication comes from the study of an organization that had to—Volkswagenwerk (Mintzberg, 1978). We interpret the history of Volkswagenwerk from 1934 to 1974 as one long strategy life cycle. The original concept of the "people's car" was conceived by Porsche; the factory to produce it was built just before the war but never went into civilian automobile production; a man named Nordhoff was given control of the organization in 1948, and he developed the other necessary components of the strategy, notably those related to service, internal expansion, and so on; the company enjoyed dramatic success through the 1950s; when problems began to appear, it grafted new pieces onto its existing strategy (the Variant models) without changing its essential concept; then, when the problems became serious, it reacted almost frantically, introducing, under a new leader from outside the industry, all kinds of new models with very little sense of its own direction; finally, under another leader (named Leiding) who developed within the industry, it consolidated a new strategy around one of its new models.

What does all this suggest? First, we see the effect of bureaucratic momentum. Even if we leave aside the influence of planning, the effort of setting up assembly lines and creating sales and service networks for a given automobile locked the company into a certain posture. But bureaucratic momentum here was psychological no less than material. Nordhoff, who had been the driving force behind the development and success of the organization, became a chief impediment to change when the environment demanded it. Leadership had been co-opted by bureaucratic momentum. (The capture of leadership by bureaucratic momentum was even more dramatically illustrated in our study of U.S. strategy in Vietnam, notably in 1965 when the forces for escalation overwhelmed Lyndon Johnson.) Moreover, in Volkswagenwerk, the uniqueness and

tight integration of the strategy—we called it a "gestalt strategy"—impeded strategic change. Change an element of a tightly integrated Gestalt, and it *disintegrates*. Thus success can breed failure.

Strategic change in this configuration is also impeded by the very nature of the structure. In machine bureaucracy the leadership is removed from the operations by an extensive hierarchy. This means that there is a sharp dichotomy between the formulation of strategy and its implementation. The leadership has to impose its strategies through the hierarchy, which it does first by specifying detailed plans and then by monitoring performance through impersonal controls to ensure that these plans are carried out. But that puts leadership out of touch with the details of the operations—in other words, the development of real knowledge of the business is impeded—and that, together with the specificity of the plans, discourages the kind of adaptation found in simple structure, where the formulator *is* the implementer.

To return to our original question, how, then, does the strategy change? Using Miller and Friesen's (1980) term, we believe by "revolution": A new, strong leader comes in with a new vision (perhaps because he or she has been closer to the operations, as with Leiding, who turned Volkswagen around), suspends established procedures, ignores staff planners, and consolidates power around himself or herself personally—and then does what is necessary. In other words, the machine bureaucracy reverts to simple structure temporarily, the planning mode to an entrepreneurial mode, in order to realize necessary change. But the large, established organization typically cannot tolerate such personalized control for long and is as likely as not to spit out its entrepreneur once he or she has rendered the necessary changes (which is exactly what Volkswagen did in 1974). Thus, the process of strategic change can be described in quantum terms (Miller and Friesen, 1980)—long periods of stability of strategy interrupted occasionally by short periods of revolutionary change.

To conclude, as shown in Figure 3, in machine bureaucracy it is the organization that takes the lead, with its systems

Figure 3. Organization Taking the Lead in Machine Bureaucracy.
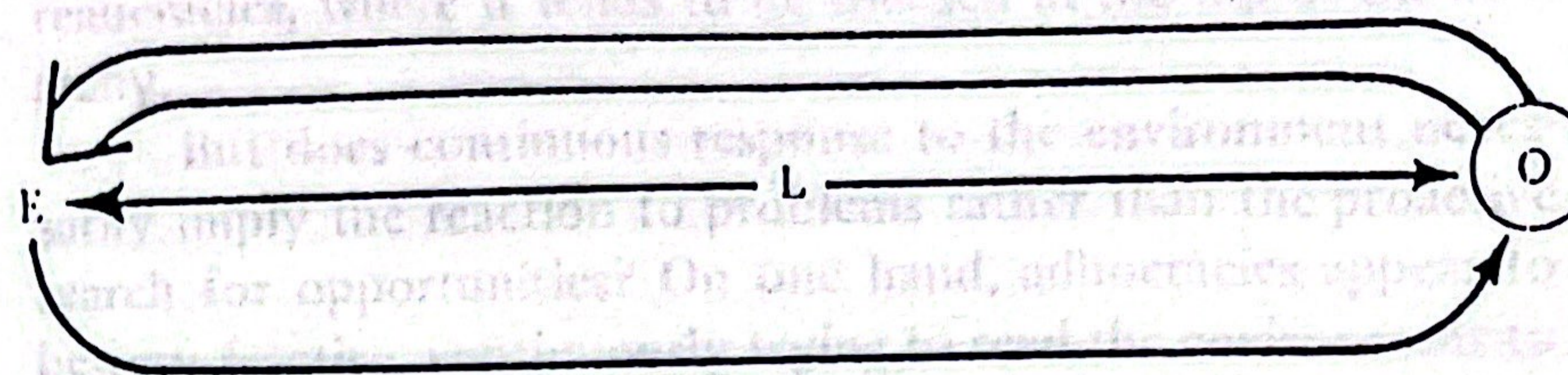
and procedures, its methods of planning, and its own bureaucratic momentum. Of course, an organization cannot undertake on a piecemeal basis massive commitments of resources, such as producing a new-model automobile or flying wide-body jets, testing before plunging. Detailed plans and a carefully structured organization are required before anything can be done. But the price of these is high. The environment may demand change, especially after the strategy has had some years of success, but the organization inevitably resists. Indeed, particularly when it is large and powerful, as many machine bureaucracies are, it is the organization that seeks to impose itself on the environment—for example, by trying to stabilize markets so that they will accept its products. Pfeffer and Salancik (1978) describe all kinds of methods that organizations use to do so—vertical integration to control suppliers and customers, the establishment of cartels, the development of arrangements with governments, and so on. Leadership in the machine bureaucracy may try to mediate, encouraging the organization to respond to environmental change while seeking to buffer it from the forces of the environment in recognition of its need to maintain stability. But time encourages momentum, and often the leadership gets captured by the organization, too, so that reversion to simple structure and the entrepreneurial mode (under a new leader) becomes necessary for change.

If the strategist of the simple structure is a concept attainer, then that of the machine bureaucracy is a planner, or perhaps a pigeonholer who slots generic strategies into well-defined conditions and then hangs onto them for dear life.

Environment Taking the Lead: Adaptation in the Adhocracy

The National Film Board of Canada, a government-owned company that makes mostly short and many highly innovative films, and Arcop, a small architectural firm well known in Canada for its innovative work, closely fit the characteristics of what we are calling adhocracy. By *adhocracy* we mean essentially project structure, more specifically structure in which various experts combine their talents on teams or task forces to innovate. In the National Film Board, the teams create novel films; in Arcop, they design unique buildings. Such organizations tend to decentralize rather extensively but selectively (that is, decision by decision according to expertise) and to rely heavily on devices to encourage mutual adjustment (such as integrating managers and matrix structure) but to discourage the more conventional parameters of structure (common in machine bureaucracy) in order to avoid standardization and formalization. The mode of strategy making labeled "adaptive," characterized by the writings of Lindblom (1959, 1968; Braybrooke and Lindblom, 1963) and Cyert and March (1963), would appear to fit best in adhocracy. The adaptive mode was described as appropriate for the organization that has no clear goals but instead divides its power among members of a complex coalition; organizations using this mode were characterized as reacting to existing problems rather than searching for new opportunities and were characterized by decisions that are disjointed and made in serial, incremental steps.

Our study of the two adhocracies would appear to confirm the flavor of this description, although not some of its specific details. Because the adhocracy must respond continuously to a complex environment that it cannot predict, it is unable to rely on deliberate strategies. In other words, it cannot predetermine patterns in its streams of activities. Rather, its decisions or actions must be made one at a time, largely according to the needs of the moment. And these must be under the control of whoever has the expertise to deal with the issue in question. The result is that power over strategy making in adhocracy is dif-

fused in ways unheard of in simple structures or machine bureaucracies, where it tends to be focused at the top of the hierarchy.

But does continuous response to the environment necessarily imply the reaction to problems rather than the proactive search for opportunities? On one hand, adhocracies appear to be very reactive, continuously trying to read the environment to know which way to go next. On the other hand, they do so to innovate, to create new outputs to serve that environment. So perhaps strategy making in adhocracy is best described as opportunistic reaction.

That decisions are serial and incremental seems to be true in the sense that adhocracies are reluctant to make grand decisions that commit resources for long periods of time. In the words of Lindblom, they prefer "continual nibbling" to "a good bite" (1968, p. 25). But that such decisions are disjointed —distinct from one another—is one assumption that proved overly simple. What happened in our studies was most interesting. At times decisions and actions showed a curious propensity to converge—that is, to exhibit patterning. In other words, we do find strategies in adhocracies, even though these are typically emergent.

Most surprising in our study of the National Film Board were the ways in which the content of films tended to converge on certain themes periodically and then to diverge, despite an almost complete absence of direction on film content from the central management. We classified almost 3,000 films made at the National Film Board from 1939 to 1976 into thirty-nine categories of content (for example, experimental, mental health, defense, native people). We then distinguished what we called "focused strategies"—situations in which a content category received some sustained attention (essentially five or more films per year for more than two years)—from "trickles" (streams with fewer than five films per year) and "blips" (five or more films but for only one or two years). Figure 4 is a plot of the percentage of films categorized in focused strategies (and the inverse, trickles plus blips) by year. Here we can see the tendency to converge and diverge periodically, or as we put it in the

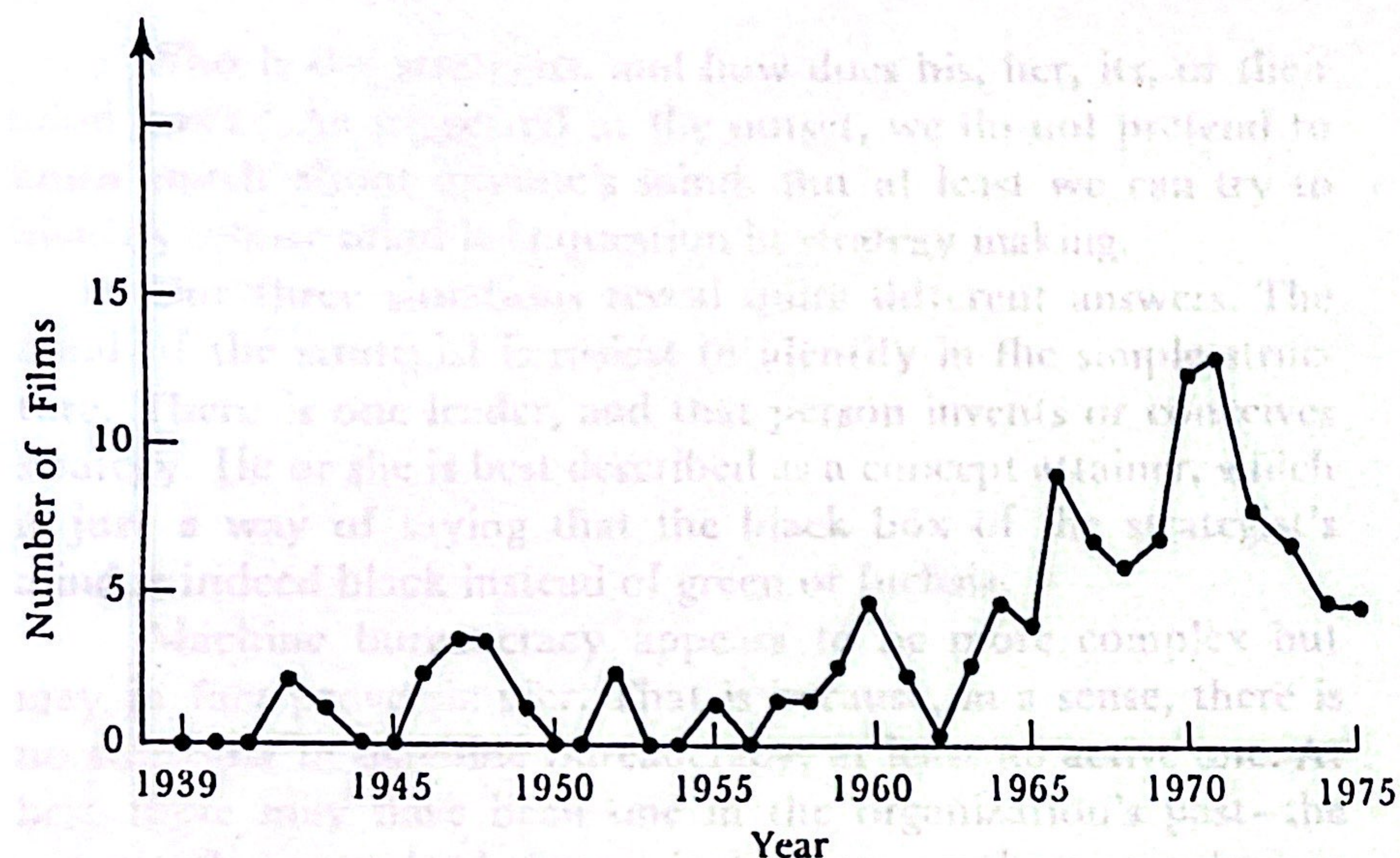Figure 4. Percentage of Focused Films at the National Film Board of Canada, by Year.
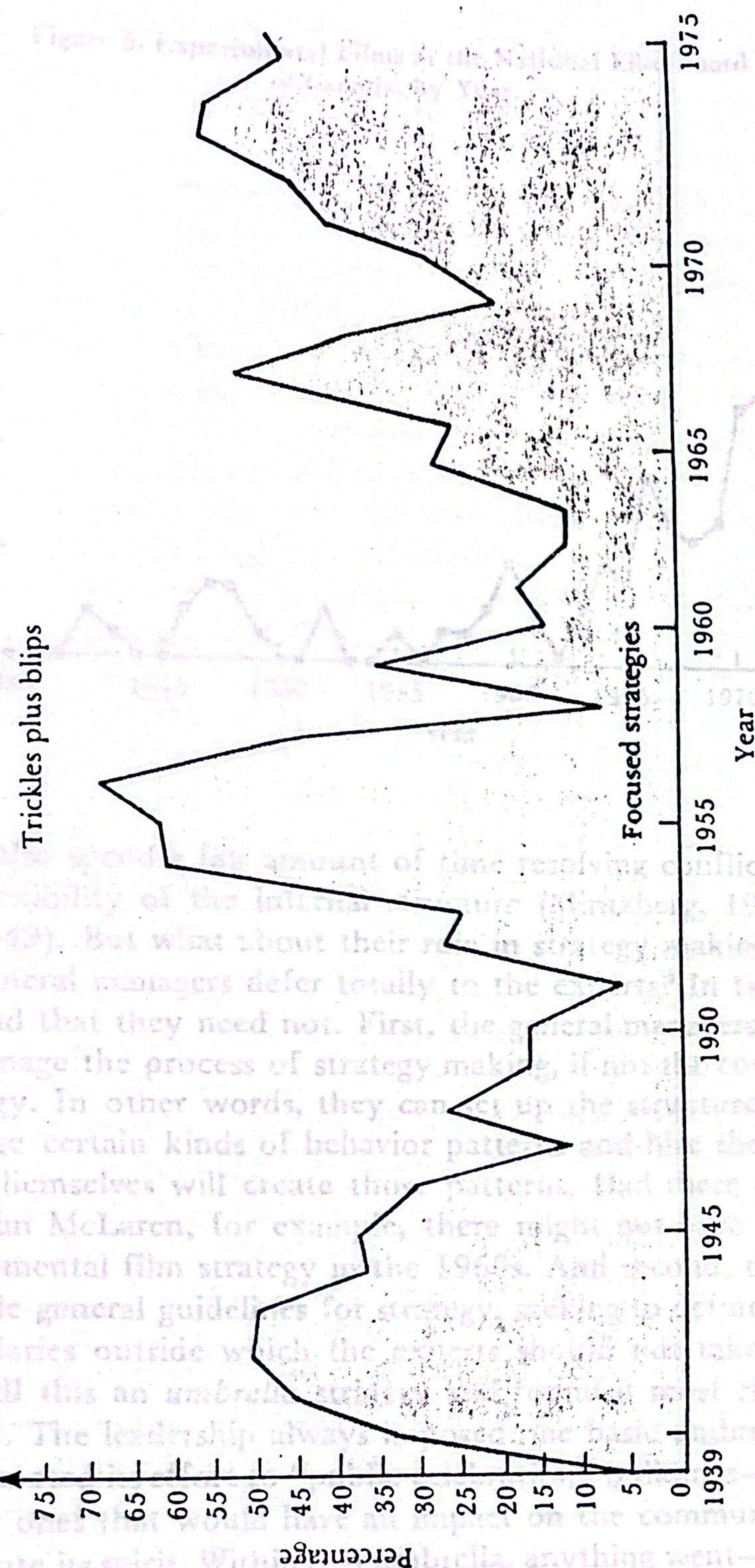
report (if we can be forgiven for this reference to a film company), the cycling into and out of focus. The first convergence was largely around defense and related films to support the war effort. Then until the early 1950s there was a great deal of diversity with little focus. The advent of television in Canada captured the Film Board for a few years in the 1950s as no theme ever did before or since. But that focus ended just as quickly as it began and was followed by another period of divergence. Then, in the middle 1960s, there was a brief period of convergence around the themes of experimentation and social commentary, which was interrupted briefly and then renewed in somewhat modified form in the late 1960s and 1970s around social issues.

What role does leadership play in the adhocracy? Implied in the description above is a possible role for *informal* leadership. One filmmaker can make a new type of film, which can serve as a model for other filmmakers and so lead to a focused strategy. That, in fact, is how the television focus of the 1950s came about—one filmmaker took the plunge, and many of the others quickly followed suit, converging on the theme. Figure 5, a plot of all the films that we categorized as experimental, shows another example, except that this convergence was far less sudden or pervasive. What is of interest here is that every film on this chart until 1960, with one exception, was made by Norman McLaren, the Board's most celebrated filmmaker. What we have, in effect, from the organization's point of view, is a trickle, although from the individual's point of view it can be labeled the personal strategy of Norman McLaren. Then in the 1960s others finally followed McLaren's lead and began to experiment too, so that the personal strategy became an organizational one (although not dominant).

Where does all this leave the formal leadership, the people who do not make films but sit in executive offices? Clearly, to use the formal language of organization theory, they must spend a good deal of time managing the boundary conditions. The managerial roles of liaison, monitor (external), spokesman, and negotiator assume great importance in organizations that face unpredictable environments. And the general managers

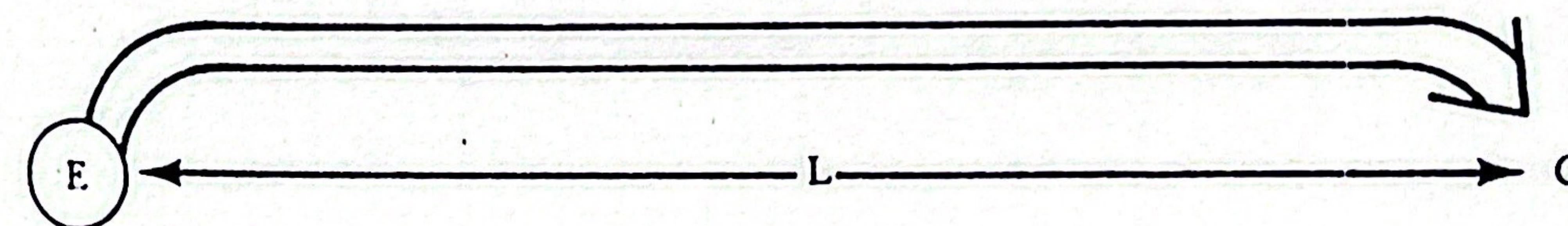Figure 5. Experimental Films at the National Film Board of Canada, by Year.

centers, hotels, office buildings, churches, and so on. Periodically, there was in fact convergence, as there was in the National Film Board. At one point, for example, the firm was repeatedly contracted to design performing arts centers. But that convergence was largely emergent—the architects were open to a wide variety of work and happened to be successful in one particular sphere. In other words, in some sense the environment imposed the strategy (that is, the pattern). Only the umbrella—the broad set of guidelines—was clearly deliberate.

To conclude, as shown in Figure 6, in adhocracy it is the

Figure 6. Environment Taking the Lead in Adhocracy.

must also spend a fair amount of time resolving conflict, given the flexibility of the internal structure (Mintzberg, 1979, pp. 447-449). But what about their role in strategy making? Must the general managers defer totally to the experts? In two ways we find that they need not. First, the general managers can try to manage the process of strategy making, if not the content of strategy. In other words, they can set up the structures to encourage certain kinds of behavior patterns and hire the people who themselves will create those patterns. Had there been no Norman McLaren, for example, there might not have been an experimental film strategy in the 1960s. And second, they can provide general guidelines for strategy, seeking to define certain boundaries outside which the experts should not take action. We call this an *umbrella* strategy and found it most clearly in Arcop. The leadership always imposed one basic umbrella: Arcop devoted its effort to "public celebration" buildings—unique, visible ones that would have an impact on the community and celebrate its spirit. Within that umbrella, anything went—cultural

environment that takes the lead. It drives the organization, which responds continuously and eclectically, nevertheless periodically achieving convergence for a time. (We have wondered what *organizational intuition* might mean; perhaps the convergence in strategic theme as a result of spontaneous mutual adjustments is one place to apply the term appropriately.) The formal leadership seeks somehow to influence both sides in this relationship, negotiating with the environment for support and trying to impose some broad general guidelines (an umbrella) on the organization. If the strategist of the simple structure is a concept attainer and that of the machine bureaucracy is a planner, then the strategist of the adhocracy is a *pattern recognizer*, seeking to detect emerging patterns (inside and outside the umbrella). That way the appropriate ones can be encouraged through more conscious attention and concentration of resources (narrowing the umbrella or moving it over), while others deemed inappropriate can be discouraged. In the former case we may find the paradoxical situation of a leadership changing its

intentions to fit the realizations of its organization. But that can be a key to successful learning in the adhocracy.

The Strategists' Mind

Who is the strategist, and how does his, her, its, or their mind work? As suggested at the outset, we do not pretend to know much about anyone's mind. But at least we can try to identify whose mind is in question in strategy making.

Our three situations reveal quite different answers. The mind of the strategist is easiest to identify in the simple structure. There is one leader, and that person invents or conceives strategy. He or she is best described as a concept attainer, which is just a way of saying that the black box of the strategist's mind is indeed black instead of green or fuchsia.

Machine bureaucracy appears to be more complex but may in fact prove simpler. That is because, in a sense, there is no strategist in machine bureaucracy, at least no active one. At best there may have been one in the organization's past—the person who conceived the original vision—or there may be one in another organization whose ideas are copied. And there may, of course, be dormant ones in the organization itself, people with vision waiting for the chance to impose their intentions or people who already had their chance and have since run dry. In any event, those who call themselves strategists in machine bureaucracy tend to be planners of sorts, protecting, extrapolating, and marginally modifying—in effect, programming or implementing—the strategies the organization already pursues.

It is really in adhocracy that the complexity appears. "Every man a strategist" would not be an unfair characterization of strategy making in adhocracy, except to its women. Yet the fact that convergence does periodically occur raises an interesting point—namely, that there can be an "organizational mind." We can talk of the strategists' mind (as opposed to the strategist's mind or the strategists' minds) and even begin to talk of "organizational intuition." Again, we can say little about how the mind functions except that pattern recognition seems to be one of its important capabilities. In other words, this box

is not black but multicolored, and marbled. And because this mind comprises behaviors more than neurons (at least at our level of analysis), we may be able to learn a good deal about it. Perhaps organization theorists who study collective minds may ultimately make greater headway in understanding the functioning of the executive mind than psychologists who study single ones!