



# **Unplugged - My Own Book Review**

Robert A. BURGELMAN & Leonard R. SAYLES (1986), Inside Corporate Innovation: Strategy, Structure and Managerial Skills Paperback: 240 pages Publisher: Free Press (1986)

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The "unplugged" section seeks to experience new forms of book reviews. We regularly grant a wild card to a world-class scholar to review his/her own Classic. In "My own book review", authors will tell us the story of "what I was trying to do" with sometimes some auto-ethnographic considerations. By recounting the building process of one seminal research with a contemporary lens, they may give some insights for the current craft of research and also share with us renunciations, doubts and joys in their intimate writing experience.

#### INTRODUCTION: BACK TO THE FUTURE?

"The challenge for established firms, we believe, is not either to be well organized and act in unison or to be creative and entrepreneurial. The real challenge, it would seem, is to be able to live with the tensions generated by both modes of action. This will require top management's **exploitation** of existing opportunities to the fullest (because only relatively few will be available), the **generation** of entirely new opportunities (because today's success is no guarantee for tomorrow), and **the balancing of exploitation and generation** over time (because resources are limited). Strategic management approaches will have to accomplish all three concerns simultaneously and virtually continuously." (Inside Corporate Innovation, 1986: 191, emphasis added)

This quote from the Epilogue of Inside Corporate Innovation, formulated 30 years ago, unwittingly anticipated large streams of important academic research that has built on James March's distinction between "exploitation" and "exploration" in organizational learning (1991) and on the revival and elaboration of the idea of "ambidextrous" organizations (1976) by Michael Tushman and Charles O'Reilly (1997).

This paper retrospectively reviews the book's presentation of a grounded substantive theory of internal corporate venturing (ICV) and a grounded formal theory of corporate entrepreneurship. It also provides a brief discussion of how these theoretical contributions can be linked to several other prominent concepts in the strategic management and organization theory literatures. It concludes with some reflections on its continued relevance for further theory development and managerial practice.



# SUBSTANTIVE GROUNDED THEORY OF INTERNAL CORPORATE VENTURING

The genesis of Inside Corporate Innovation was my doctoral dissertation research at Columbia Business School in the mid-to-late 1970s (Burgelman, 1980). Len Sayles was my extremely supportive thesis advisor (and co-author of Inside Corporate Innovation), and Mike Tushman a very helpful dissertation committee member. The dissertation research used quasi-longitudinal field research and the method of grounded theorizing (Glaser and Strauss, 1967) to study the internal corporate venturing process in a large diversified major firm.

The ICV research involved studying multiple cases of succeeding and failing internal corporate ventures in different stages of development. It traced the history of each of these ventures and followed their further development in real time over a period of almost a year. This part of the research used Sayles's (1964) applied anthropological research approach to study the evolving dynamic working relationships between corporate R&D, Business Research and Business Development managers throughout the entire ICV process, from an idea in exploratory R&D to a multi-product new business. This produced a descriptive model of the "Stages in ICV Development:" Conceptualization (Stage 1), Pre-Venture (Stage 2), Entrepreneurial (Stage 3) and Organizational (Stage 4), and how these stages transformed into each other.

Having decided, after the first interviews, to focus the research on strategy-making in the ICV process, I used Bower's (1970) process model approach to document how the simultaneous as well as sequential strategic activities of actors situated at multiple levels in a complex organizational system - a new venture division (NVD) in a large corporation - helped shape ICV strategy-making and the dynamics of the NVD over time.

The combination of the process model and applied anthropological research method produced insight in patterns of "success breeding success" and "failure breeding failure," and resulted in the creation of a new set of categories of interlocking key leadership activities ("technical and need linking," "product championing," "strategic forcing," "strategic building," "organizational championing," "delineating," "retroactive rationalizing," "selecting," "structuring") of executives of different levels in the organization that became building blocks in my attempt to construct a process model of ICV in the tradition of the process model of Bower and his doctoral students at the Harvard Business School (Bower and Doz, 1977).

Constructing the process model of ICV, however, required resolving the anomaly that all the newly found categories of key activities associated with ICV could not be mapped onto Bower's process model of strategic capital investment. Resolving this anomaly required extending the received process model to encompass "strategic context determination." Strategic context determination was the part of the corporate strategy-making process that became activated by senior executives overseeing ICV project-level initiatives (through strategic building, organizational championing, and delineating) that were trying to convince top management to change the existing corporate strategy (through retroactive rationalization) going forward (Burgelman, 1983b).

The ICV study also developed additional insights into the use of the New Venture Division (NVD) as an organization design for corporate entrepreneurship. It examined strategic leadership challenges in the relations between Corporate R&D management and Business Research and Business Development management within the NVD. It also studied the causes of frictions in the upward relationships of the NVD with corporate-level management and in the lateral relations with mainstream division-level management (Burgelman, 1995).

# FORMAL GROUNDED THEORY OF THE STRATEGY-MAKING PROCESS

In the course of finishing the doctoral dissertation, I began to realize that the ICV research findings also produced an anomaly in relation to Chandler's (1962) proposition that "structure follows strategy:" I had found that the creation of a New Venture Division was, at least in part, a corporate-level structural response to the company having a number of new venture initiatives dispersed in different divisions before top management had articulated a deliberate corporatelevel diversification strategy. This finding led to postulating the existence of autonomous strategic initiatives (not driven by the existing corporate strategy) in parallel with induced strategic initiatives (driven by the existing corporate strategy) and resulted in developing an evolutionary framework of the strategymaking process (Burgelman, 1983a) in terms of variation-selection-retention processes (Campbell, 1969; Weick, 1979). This framework offered the possibility to integrate Chandler's (1962) insights into the role of top management in the relationship between strategy and structure (consistent with the induced strategy process) with Penrose's (1959) insights into the role of entrepreneurial action in the growth of the firm (consistent with the autonomous strategy process). It also offered the opportunity to integrate corporate entrepreneurship with strategic management (Burgelman, 1983c).

# RELATED CONCEPTS IN STRATEGIC MANAGEMENT AND ORGANIZATION THEORY

# **EMERGENT AND DELIBERATE STRATEGY**

The induced/autonomous strategy processes framework can be linked to Mintzberg's (1978) landmark framework of deliberate, realized, emergent and unrealized strategies. Induced and deliberate strategies are similar, but the induced strategy process provides more detail on what is involved in getting the organization to actually implement deliberate strategy. The relationship between autonomous strategic initiatives and emergent strategy is more complicated. Autonomous strategic behavior usually involves deliberate actions taken by leaders below top management. The deliberate actions taken by these leaders help develop new competencies and help create a new strategic position that may open up a new business opportunity for the corporation. A strategy which is emergent at the level of the corporation thus often has its roots in autonomous strategic actions on the part of leaders at lower levels in the corporation. However, at the time an autonomous strategic initiative "emerges," its relationship to the company-level strategy is indeterminate; that is, it is not clear whether top management should integrate the autonomous initiative into the company-level strategy going forward. Strategic context determination serves as a discovery process involving senior executives to resolve the indeterminacy (one way or the other) of the relationship between autonomous strategic behavior and companylevel emergent strategy.

Interestingly, more than thirty years after the introduction of the induced/ autonomous strategy processes, Mirabeau and Maguire (2014) in their field study of a large telecommunications company have succeeded in showing how successful autonomous strategic behavior forms the basis for emergent strategy, and they also identify "ephemeral" (non-successful and disappearing) autonomous strategic behavior as a parallel concept to unrealized strategy.

#### EXPLORATION AND EXPLOITATION IN ORGANIZATIONAL LEARNING

The induced/autonomous strategy processes framework can also be linked to March's (1991) seminal paper on exploration and exploitation in organizational learning. The autonomous strategy process dissects exploration into autonomous strategic initiatives and the process of strategic context determination. The latter serves to select viable autonomous initiatives and link them to the corporate strategy thereby amending it. The autonomous strategy process thus goes beyond exploration. It is also concerned with turning the results of exploration into new exploitation opportunities.

#### AMBIDEXTROUS ORGANIZATIONS

Tushman and O'Reilly (1997) propose that ambidextrous organizations are designed to handle both incremental and revolutionary innovation. The idea is closely related to the three strategic management challenges derived from the framework of induced and autonomous strategy processes, mentioned earlier, that are highlighted in the Epilogue of Inside Corporate Innovation. Yet there are two important differences. First, induced and autonomous initiatives do not necessarily map onto incremental and radical technological change. Change in the induced strategy process, while "incremental," can be very large. For instance, developing a new microprocessor is incremental for Intel but involves hundreds of millions of dollars in development costs and billions in manufacturing investments. In the induced strategy process, incremental simply means change that is well understood - doing more of what the company knows to do well. Change through the autonomous process, on the other hand, while "radical" is initially usually rather small. However, it always involves doing things that are not familiar to the company - doing what it is not sure it can do well. Second, change through the autonomous strategy process usually comes about fortuitously and unexpectedly, and senior and top management have initially no clear understanding of its strategic importance for the company and how it relates to the company's distinctive competencies.

The ICV research indicated that resolving this indeterminacy is the most difficult challenge facing autonomous strategic initiatives, and by implication also facing radical innovation in established companies. This highlights again the importance of the strategic context determination process. Also, how to balance strategic investment in incremental innovation (through the induced strategy process) and radical innovation (through the autonomous strategy process) over time remains a key top management task that all established companies that aspire to be ambidextrous unavoidably face.

# ORGANIZATIONAL ECOLOGY AND EVOLUTION

The induced-autonomous strategy processes framework suggested that a large, complex organization can be viewed as an ecological system within which induced and autonomous strategic initiatives compete for the organization's resources in patterned ways that are consistent with the variation-selection-retention paradigm of evolutionary organization theory (Campbell, 1960; Weick, 1979). While not pursued, it provided the basis for suggesting in later work (Burgelman, 1991) that the intraorganizational ecology of strategy-making could be fruitfully viewed as an additional level in a nested hierarchy of ecological systems (Hannan and Freeman, 1977; 1984).

#### DYNAMIC CAPABILITIES

Post-dissertation work that examined the links between strategy-making and evolutionary theory also anticipated the development of a capabilitiesbased perspective in strategic management (Burgelman, 1986). This is also briefly elaborated in the Epilogue of Inside Corporate Innovation, by suggesting that the further development of the theory of corporate entrepreneurship "(...) will be grounded in increased understanding of the evolutionary processes of organizational learning." And, that in these processes entrepreneurial individuals at the operational and middle levels will play an important role because "(...) such individuals elaborate the organization's capabilities and enact the new opportunities that are associated with the elaboration efforts." (1986: 190).

#### STRATEGY-MAKING AND COMPLEXITY THEORY

Ideas from complexity theory have become viewed as providing a useful perspective in organization theory and strategic management. Ideas of deterministic chaos concern organizations that experience counteracting forces that produce nonlinear dynamics. Some forces push the organization toward stability and order; other forces push the system toward instability and disorder. In 1981, I stumbled onto Belgian Chemistry Nobel Prize winner Ilya Prigogine's book (1980) that argued for moving research in the physical sciences from "being" to phenomena related to "becoming" and phenomena related to highlighted the importance of innovations and mutations that appear stochastically and get incorporated into a system's deterministic relations and thereby secure its continued evolution. It seemed immediately clear to me that the induced/autonomous strategy processes framework that views strategy making as the adaptive organizational capability that balances variation-reduction (induced) and variation-increasing (autonomous) processes at any given time and over time could be related to Prigogine's perspective. I briefly incorporated this parallel view in the paper that links corporate entrepreneurship and strategic management into one conceptual framework (Burgelman, 1983c).

### PUNCTUATED EQUILIBRIUM

The punctuated equilibrium view of company evolution posits that organizations evolve through long periods of incremental change punctuated by discontinuous, frame-breaking change. While there are many examples of sudden radical changes, punctuated equilibrium views beg the question of where these sudden radical changes come from. Truly exogenous shocks such as large meteorites hitting the earth and destroying existing ecosystems are always a possibility but fortunately a remote one. Many radical changes - technological or otherwise - are the cumulative result of continuous small changes over a long period of time. Sometimes these changes originate in the company's autonomous strategy process and sometimes outside of the company altogether. Often they happen inside and outside simultaneously. Companies always want to spot such changes sooner rather than later. The introduction of intra-company variation, selection, retention and competition processes to study strategy making provides a tool for identifying the underlying, more continuous and finer grained strategic leadership activities that eventually, through sheer accumulation, cause lumpy radical strategic change.

### **IMPLICATIONS AND CONCLUSIONS**

The substantive grounded theory of ICV and the formal grounded theory of the strategy-making process and the role of corporate entrepreneurship presented in an integrated fashion in Inside Corporate Innovation have suggested a new way to think about the role of strategy-making in firm evolution. For instance, the Bower-Burgelman process model of strategic resource allocation has become part of received knowledge in the strategy field (Mintzberg, Ahslstrand and Lampel, 1998). Looking forward, the recent research by Mirabeau and Maguire (2014) has provided perhaps a first step in further examining the different types of strategic behavior in large, complex organizations that drives the four strategy categories identified by Mintzberg (1978). Further research on how the types of leadership behaviors and dynamic managerial relationships in the Sayles/Mintzberg tradition, and exemplified in the ICV study, give shape to what is called "dynamic capabilities" (e.g., Teece, 2013) would also seem to be potentially fruitful, both for theory development and for managerial practice.

With respect to managerial practice, Inside Corporate Innovation has also provided insights into a new approach for strategically managing the ICV process (Burgelman, 1984a) and for examining the appropriateness and effectiveness of various alternative designs for corporate entrepreneurship as a function of "strategic importance" and "operational relatedness" (Burgelman, 1984b). This made it possible to derive the three key strategic leadership challenges – exploitation of existing opportunities, generating new opportunities, and balancing exploitation and generation over time – listed in the quote from the Epilogue that opens this retrospective review of Inside Corporate Innovation.

More than thirty years later, I believe that the extensive literatures about exploitation/exploration and ambidexterity clearly support the proposition that the three strategic leadership challenges derived from the substantive and formal grounded theory presented in Inside Corporate Innovation remain as salient for established companies as they were then. The strategic process and organization design tools provided for augmenting established companies' corporate entrepreneurial capability also remain highly relevant.

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