

THE RIVER METAPHOR OF STRATEGIC MANAGEMENT

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Abstract

This article introduces a new metaphor for strategic management, namely that of the strategy river. In comparison with the frequently used concept of path dependency, the strategy river emphasizes time and timing, co-evolutionary interplay between strategies and institutional environments, strategic momentum and the systemic nature of decision-making. Based on the scrutiny of its theoretical underpinnings, we argue that the strategy river metaphor is based on an alternative paradigm of organizational evolution. Furthermore, the river metaphor is perceived to respect many realities of managerial decision-making.

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Abstract

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Since the 1980s, evolutionary management theorists have argued for the need to understand path dependency in the strategic management (e.g. (Barnett and Burgelman, 1996, Nelson and Winter, 1982), which has lately resulted in increased attention in issues such as co-evolution (Lewin and Volberda, 1999, Eisenhardt and Galunic, 2000), timing (Albert and Bell, 2002, Brown and Eisenhardt, 1997), and time spacing and patching (Eisenhardt and Brown, 1998, Eisenhardt and Brown, 1999). More specifically, path dependency has been conceptualized to symbolize the dynamic nature of decision-making (see e.g. (Eriksson et al., 2000, Mueller, 1997, Sterman and Wittenberg, 1999).

Lately, however, strategic management researchers have argued for the need for conceptual development towards a more dynamic, systemic, cognitive and holistic theory of strategy (see e.g. (Sanchez and Heene, 1997). In our view, the concept of path dependency adheres only partially to a systemic theory of strategy and thus illuminates only some aspects of organizational life. Moreover, despite its popularity in strategic management research, the concept of path dependency has remained rather abstract and therefore inaccessible to the wider managerial audience. This is partly due to the industrial organization economics background of the concept (Liebowitz and Margolis, 1995, Tirole, 2001).

We attempt to capture the evolutionary, dynamic and systemic nature of strategic decision-making in a new metaphor, namely the *strategy river*. With this complementary metaphor, our aim is to critically enrich our understanding of the evolutionary aspects of strategic management. We see that strategic decisions, like rivers, are constrained not only by the historical decisions made (as in the path dependency metaphor) but also by issues related to timing and co-evolutionary interplay with the environment. On the other hand, we see that strategic decision-making takes place in systemic, network-like settings, which resemble the molecular structure and behavior of water. Much like water, we perceive future

strategic direction of a company to be determined by its current velocity, mass and direction.

Organization theorists and strategy researchers have used many kinds of metaphors during the past two decades. To name a few, jazz (Hatch, 1999), team sports (Keidel, 1987), Chinese elephant (Ming-Sum, 1998), jigsaw puzzle, ice skater, jazz band (Neilson, 1992), house (Pearce and Osmond, 1996), disease (Wyld et al., 1998), food and war (Oliver, 1999), safari (Mintzberg et al., 1998), military (Winsor, 1996) and theater (Terry, 1997) metaphors have been used in a more or less disciplined way. In organizational and management research, metaphors have been traditionally used for pedagogical purposes, namely to simplify otherwise abstract phenomena. (Palmer and Dunford, 1996). In theorizing, metaphorical language has been used partly for the same reasons, to make complex arguments more understandable, but also because metaphors can create new meanings and connections between concepts that have not had any connection previously (Weick, 1989, Letiche and van Uden, 1998). As posited in the constructionist social sciences (Mir and Watson, 2000), metaphors not only help to understand complex phenomena, but they take into account our perspective of the world as well (Weick, 1989). As Gareth Morgan has pointed out, "the use of metaphor implies a way of thinking and a way of seeing that pervade how we understand our world generally" (Morgan, 1986).

Conventionally the use of metaphors has been bipartite. On the one hand, managerially oriented literature has used metaphors lightly as means for convey the essence of strategy to managers (see e.g.(Oliver, 1999, Pearce and Osmond, 1996). On the other hand, the postmodernist research tradition is very keen on the rigorous treatment of metaphors in management research (see e.g. (Hatch and Weick, 1998). There is a certain ontological difference between the two: the prior uses metaphors as illustrations of managerial reality,

whereas the latter sees reality as a projection of human imagination. Even though we attempt to parcel the strategy river metaphor rigorously, this paper does not belong to the postmodernist narrative tradition in management research, but operates on a rather shallow level of social scientific thought. Along Morgan and Smircich's (Morgan and Smircich, 1980) classification, we see "reality as a concrete process".

After this introductory part, the paper is divided into four parts. Before moving on to describing the strategy river metaphor, we iterate the foundations and characteristics of path dependency in order to relate the two. The river metaphor is subsequently introduced with special emphasis on the concepts of *self-organizing systems*, *momentum*, *timing* and *co-evolutionary interplay*. Finally, the potential contributions of the strategy river metaphor to evolutionary management theory and managerial decision-making are explored. Here, attention is paid to the relationship of the river metaphor to its underlying paradigms and its influence on managerial cognition.

What is path dependency?

The idea of path dependency emerged from the so-called new institutional economics tradition founded by the works of for example Coase, Simon, March and Commons (further discussion in (Vromen, 1995) in the 1950-1960s and has continued to evolve around the contributions of Williamson (Williamson, 1975), Coase (Coase, 1937) and North (North, 1990). The initial conceptualization that made the principle of path dependency accessible to the contemporary economics and management research originates from the works of Brian Arthur (Arthur, 1989) and Paul David (David, 1986). Strategy research concentrating on the resources, dynamic capabilities and the evolution of the firm

(e.g. Teece et al., 1997, Barnett and Burgelman, 1996) has adopted path dependency as means to cope with complex organizational contingencies through time.

Some of the more central definitions and treatments can be summarized as follows:

- “The behavior of an organism through a short interval of time is to be accounted for by its (1) internal state at the beginning of the interval, and (2) its environment at the beginning of the interval ... determine ... the behavior ... what the internal state will be at the next moment of time” (March and Simon, 1963)
- A path dependent stochastic process is one whose asymptotic distribution evolves as a consequence of the process’ own history (David, 2001)
- “A firm’s previous investments and its repertoire of routines (its ‘history’) constrains its future behavior” (Teece et al., 1997)
- “The evolutionary perspective ... means developing dynamic, path-dependent models that allow for possibly random variation and selection within and among organizations” (Barnett and Burgelman, 1996)

Arthur and other prominent scholars emphasized the dynamic nature of economic life by arguing that ‘history matters’ (Arthur, 1989, Arthur et al., 1987). In strategic management research, it is equally common that the notion of path dependency is simplified to the ‘history matters’ mantra. “The notion of path dependencies recognizes that ‘history matters’. Bygones are rarely bygones despite the predictions of rational actor theory” (Teece et al., 1997). The notion of path dependency has been reduced to the simple idea of historical contingency, without respect for the systemic and evolutionary nature of strategic decision-making. Many have argued that the idea of path dependency *should* symbolize

both the evolutionary and systemic elements of strategic management (see e.g. (Barnett and Burgelman, 1996, Eriksson et al., 2000), but we only perceive this in the theoretical underpinnings of path dependency and not in the actual concept. The actual concept of path dependency, in the way it is used as a metaphor in strategic management, suffers from oversimplification.

The theoretical foundations are rich in evolutionary and systemic aspects. The economics-flavored theoretical foundation of the idea of path dependency (see e.g. (Lewin, 2001) advocates the principles of non-linearity and self-organizing, systemic behavior (Arthur et al., 1987). Equally, the systemic nature of economic activity, innumerable interactions occurring interdependently simultaneously and sequentially, is one of the basic problems of strategic management (Brown and Eisenhardt, 1997, Sanchez and Heene, 1997, Stacey, 1995). Complexity theorists have argued that such systemic circumstances are ultimately characterized by self-organization (Kauffman, 1995, Holland, 1996; see also Stacey, 1995).

Self-organizing systems are processes whose evaluation cannot be predicted although they follow existing and emerging rule-settings (Arthur, 1989, Holland, 1996). The visualization of this is a non-linear web in which the components can interact in countless probable ways (Holland, 1996). Consequently, a very small change between two components can cause tremors everywhere else. Technological innovation processes are a good example of how the self-organizing principle affects strategic management among other things. Brian Arthur has argued that technologies form and develop as an interactive network: innovations in technology A create new markets in technology B, and these together motivate innovations in C (Arthur, 1989). A real life example is the emergence of the modern automobile that created market opportunities for gas stations, motels, and

restaurants, thus creating a cluster of technologies around the primary innovation. In all, innovations result from new combinations of old technologies.

A consequence of the self-organizing principle is that the number of innovations will grow the more complex and diversified a system is. Furthermore, technological innovation processes are path dependent processes: a dominant innovation such as the automobile or the clock creates a cluster of techniques (and businesses) which may cause these technologies to lock-in. In other words, path dependency means that even accidental, small choices in the past might have enormous consequences. Once in a path, it would be most expensive to abandon the dominant technology cluster and to change to other clusters (David, 2001). Again, the example of the clock is figurative: it would be if not impossible, at least expensive to swap to some other time-measuring system.

Both economics and strategic management researchers agree on the dynamic and evolutionary nature of decision-making. Past and present decisions affect decision-making trajectories in the future (North, 1990). The classic example of path dependent development in economics is the QWERTY keyboard that has dominated typewriting machines even though there are other, economically superior alternatives such as the Dvorak keyboard. The central lesson in the QWERTY story is that the adoption of this system created a lock-in situation that has been impossible to break until recently (voice-activated typing etc.) (overview to the QWERTY discussion in e.g. Lewin, 2001, Liebowitz and Margolis, 1995).

Management literature has emphasized that firm capabilities evolve as a function of the historical pattern of decisions (Teece et al., 1997). Key elements of the evolutionary perspective to strategic management include organizational learning, firm lock-in in e.g.

partnerships and competitive positions, as well as the development of switching costs through investment decisions (Barnett and Burgelman, 1996). A classic example of firm evolution in management research relates to a divestment decision where a divested division from a conglomerate cuts one possible development path from future strategic scenarios but might create new paths or niches via increasing resources in the other divisions.

The idea of evolutionary decision-making is in principle incorporated in the path dependency metaphor. Three important nuances of the theory are, however, not incorporated. These are the notions of lock-in through cumulative momentum, timing and co-evolutionary interplay with the environment. Path dependency, as a metaphor, does not consider the cumulatively growing momentum of a string of strategic decisions as illustrated by the QWERTY example. Neither does it appreciate the significance of timing and the pressure of high-velocity environments (Eisenhardt, 1989, Ilinitch et al., 1996) or the significance of co-evolutionary interplay organizational actors and environments (Lewin and Volberda, 1999) even though these are central to evolutionary management theory. Through the incorporation of such issues, the river metaphor has potential to enrich evolutionary management theory and complement the concept of path dependency.

Simultaneously, the river metaphor is poised to make the entire path dependency ideology more accessible to managerial decision-making. Due to its origin in the industrial organization economics literature, the entire set of concepts around idea of path dependency has remained rather abstract. By incorporating elements of managerial reality, e.g. the feeling that everything is linked with everything, the pressure to make hurried decisions, the helplessness managers feel when they disagree with the general strategic logic that has already gained momentum as well as the perceived impossibility of changing

the rules of the game, we hope to provide a set of metaphors that provides a more complementary view to how strategic management activities occur.

Strategy River

The path as a metaphor of strategic decision-making is merited in the way it highlights the influence of past decisions on the current and future strategic options. It advocates a processual perspective to managing firms by highlighting evolutionary nature of a firm's life and has enriched the strategic management discourse with such key concepts as dependency and sequentiality. However, we perceive that the path metaphor of strategic decision-making is somewhat insufficient and abstract. In the following, we highlight some of the problems relating to the path metaphor and argue that ways in which the strategy river could actually serve as a complementary and more accessible strategy metaphor.

Evolution and dynamics in decision-making

Firstly, the basic problem of the path metaphor is that paths do not force decision-maker to move. Path dependency implies that decision-makers have to follow the chosen path or bear high switching costs (pushing through the dense forest to another parallel path), but metaphorically the dynamics are dependent on the decision-maker's movement. Moving backward would thus be as easy as moving forward. According to the path metaphor, the same decision can also be repeated. Returning to the previous decision-making 'intersection' is possible. A river, on the contrary, flows forward (actually downwards) constantly.

The river metaphor argues that strategic decision-making situations cannot be returned to, even later on in time. It respects managerial reality by highlighting that strategic decisions cannot be undone. A river never flows back to the previous intersection. Strategic decisions have immediate repercussions and even attempting to ‘cancel’ a strategic decision creates bad will and eats into a manager’s credibility. The strategy river also forces the decision-maker to move constantly. A decision-maker cannot stop at an intersection (as in the path metaphor), but is forced to make a decision in a limited window of opportunity. Similarly, managers cannot freeze e.g. the organization, technological development, the development of consumer tastes or competitors and win time to perform a careful analysis to justify a strategic decision.

Time and timing

Thus and secondly, the river metaphor is superior in the way it emphasizes the importance of timing. Not only is timing essential since the decision-maker cannot stop and win time, but the decision-maker also needs to relate the strategic decisions to different timing-contingent phases. Examples of this are e.g. macro-level business cycles and technology life cycles. If we compare water-rich spring to the high phase of a business cycle, it is evident that decision-makers have much less time than in winter (low business cycle) or relatively close to the sea (mature life cycle). Likewise, the decision-maker needs to understand when a breakthrough technology or a technological discontinuity is approaching in order to make full use of it. Much like a rapid or a waterfall, these can be undetectable to the decision-maker until they actually occur. Thus, the river metaphor helps to visualize different decision-making rhythms and emphasizes the relevance of timing.

Co-evolutionary interplay

Thirdly, we feel that the path metaphor overemphasizes the historical contingencies and mitigates the co-evolutionary interplay a firm and its strategy have with the environment. The river metaphor is contingent on the decision-making's environment, or the 'landscape' in which the river flows. The features of the landscape, e.g. the steepness of the slope and the shape and depth of the riverbed, constrain the flow of the river. The speed of the river varies depending on the place and time. On mountains the flow is always more frantic than near the sea. Similarly, deep riverbeds make rivers flow faster and shallow embankments allow for water to flow with different speeds, since water flows slower near shallow embankments than in the middle of the river. This thought is potentially appealing to managerial decision-making. Young companies can and have to make more frequent strategic choices. If the gains from the business are big, companies and strategies tend to move fast. Moreover, some businesses and industries allow for more variety in the ways firms can operate vis-à-vis e.g. how hectically business is conducted or what level of ambition a company demands.

Strategy is not only dependent on the landscape, but strategies also shape landscapes. According to a primer definition, "as the river approaches the base level, downward cutting is replaced by lateral cutting, the river widens its bed and valley, and develops a sinuous course that forms exaggerated loops and bends called meanders...velocity is governed by the volume of water, the slope of the bed, and the shape of the channel (which determines the amount of frictional resistance)" (Encyclopedia, 2001). Despite the slowness of environmental change, firms with significant momentum can have an influence on the

institutions in their environment. Firm strategies exist in co-evolutionary interplay with such institutions as regulation and legislation, industry logic (i.e. ‘the rules of the game’) and societal belief systems (reflected in the ‘public opinion’).

From the river metaphor perspective, it is interesting that the majority of at least European rivers are governed not only by natural reasons, but also by built channels, water volume control-systems, and modified river slopes. In a way, institutions are parallel phenomena with such man-made constructions: they are socially created rules that affect not only the direction of the organization, but the velocity as well. Institutions do not only regulate strategic decision-making. They give directions as well by creating rule-settings and structures thus making strategizing more predictable. For example, many countries represent a hostile environment for businesses because of their unstable rule-settings: it is hard to see the direction of the river if there are no trustworthy guidance systems.

The river, its landscape, i.e. the institutional and non-institutional environments (Lewin and Volberda, 1999) and the timing aspects form a co-evolutionary process that can provide possibilities for new organizational directions. “...escarpments and the differences in the resistance of rocks create irregularities in the bed of a river and can thus cause [for example] rapids and waterfalls.” Similarly, long periods of frost (i.e. depressions that cut down on investment opportunities) or rain that causes flooding (economy-wide transformation periods) can narrow down the strategic alternatives or facilitate crossing rivers or channels. Thus to be able to understand the formation of strategic alternatives, one has to understand the co-evolutionary interplay between the river, the landscape and the various time-related aspects (e.g. various cycle phases and the timing of decisions-making).

Momentum

The product of the co-evolutionary interplay between strategies and landscapes is visualized in the momentum at which the river flows. The path metaphor does not incorporate strategic and organizational momentum to the same extent as the river metaphor. The product of the mass of water and its velocity determines how much the river modifies the topography by deposition and erosion and how changes in the topography change the course of the river. Rivers with high momentum tend to shape their landscape more. Fast flowing rivers have even been witnessed to flow uphill momentarily. Deep and narrow rivers tend to diverge less often.

In this sense, the river metaphor illustrates the importance of momentum and inertia in strategy-making. Strong strategic imperatives either at the industry or firm level tend to reduce the probability and possibility of divergence from the general strategic direction. When a strategic imperative gathers momentum inside an organization, alternative strategies or strategic opportunities are dismissed more easily and only very significant changes in the business environment change the strategic direction. Antagonists are disregarded or dismissed. Moreover, momentum can turn to inertia. Firms with a history of single, strong strategic directions have trouble reacting to emerging opportunities, diversifying with success and adapting to changing landscapes.

Systemic nature of decision-making

The strategy river metaphor helps to visualize the process of strategic events and respects many of the managerial realities of factual strategic-decision making situations. The river metaphor, however, does not tell very much about the decision-making processes as such.

For the purpose of illuminating strategic decision-making processes, we introduce another, partly related, metaphor, namely water. Water represents the systemic nature of a river and thus illustrates the plethora of systemic linkages strategic decision-making processes have.

By definition, water is an “... odorless, tasteless, transparent liquid ... chemically ... compound of hydrogen and oxygen.” (Encyclopedia 2001) From the perspective of organizational metaphor, the most interesting quality of water is its structure. Firstly, the atoms in one molecule are arranged with two H-O bonds in an asymmetric way. It is not necessary to explain the electric qualities of a water molecule in detail, but the most important characteristic is that an electric dipole gives rise to attractions between neighboring opposite ends of water molecules, with each oxygen atom being able to attract two nearby hydrogen atoms of two other water molecules. This hydrogen bonding is strong enough to keep the water liquid at ordinary temperatures (Encyclopedia 2001).

The structure of a molecule and its relation with other molecules, together with the thermal properties of water, make it a relevant metaphor for analyzing the systemic contingencies of decision-making processes. An organization can first be defined as a group of individual actors or different interest groups (atoms and molecules), those interacting with other organizations. Secondly, the interaction between molecules and clusters is a normal phenomenon that might be affected by environmental changes, i.e. ‘changes in thermal properties’ using the water metaphor perspective (Encyclopedia 2001).

To summarize the aforementioned differences between the ‘path’ and ‘river’ strategy metaphors are collected in Table 1.

Table 1: Path vs. river metaphors of strategy

	Path metaphor	River metaphor
Evolution and dynamics in decision-making	<ul style="list-style-type: none"> * Dependency on past decisions * Returning is possible 	<ul style="list-style-type: none"> * Dependency on past decisions * Irreversibility of decisions
Time and timing	<ul style="list-style-type: none"> * Stopping is possible 	<ul style="list-style-type: none"> * The must to move forward constantly limits the time window for decision-making * Time-contingent cycles and phases relevant
Co-evolutionary interplay	<ul style="list-style-type: none"> * Environments determine which strategic paths can be and are created * Strategies push through environments 	<ul style="list-style-type: none"> * Environments govern strategy * Strategies shape environments * Strategies, environments and cycle phases form a co-evolutionary process
Momentum	<ul style="list-style-type: none"> * Momentum defined by the speed and mass of the organization on the path 	<ul style="list-style-type: none"> * River mass and velocity highlight the role of strategic momentum and thereby organizational inertia
Systemic nature of decision-making	<ul style="list-style-type: none"> * Strategic paths converge and diverge 	<ul style="list-style-type: none"> * Complexity and unpredictability of contingencies * Interlinkedness of actors, groups and organizations

Theoretical Discussion

The purpose of this study was to critically evaluate the value of the path dependency metaphor for strategy and organization research. This was done by complementing the concept of path dependency with another ‘strategy river’ metaphor. Theoretically, the concept of path dependency is inherently interdisciplinary. Path dependency has arguably acted as a linking concept between three disciplinary domains, namely those of industrial

organization and economics (e.g. Arthur, 1989, David, 2001, Katz and Shapiro, 1986; see overview in Tirole, 2001), evolutionary and behavioral organization theory and sociology (e.g. Hannan and Freeman, 1977, Hannan and Freeman, 1984, Lewin and Volberda, 1999; overview in Romanelli, 1991) as well as contemporary theory of strategic management (Burgelman, 2002, Teece et al., 1997).

The river metaphor can be perceived to enrich researchers' conceptual understanding. The river metaphor relates to established constructions especially from the competence perspective to strategy research. The high-velocity nature of decision-making (Eisenhardt, 1989) is explicit in the river metaphor. Likewise, the momentum thinking in the river metaphor bears resemblance to the tendency of strategic management to converge to dominant strategic imperatives which characteristic to a particular era. Examples of such imperatives include strategic planning in the 1960s, portfolio management in the 1970s, the industrial organization perspectives of the 1980s and the resource-based view in the 1990s.

However, the strategy river metaphor is also metatheoretical by nature. It gathers theoretical insights from a number of disciplinary streams of thought and presents them in a single conceptual entity. Cursorily viewed, the river metaphor seems to be underpinned by an incoherent group of theories that operate on various different levels of analysis. These include for example *negotiated order* (Strauss, 1963), *emergence of strategic action* (Mintzberg and Waters, 1982) and *social systems* (overview in Romanelli, 1991) and *stakeholder plurality* (see e.g. Donaldson, 1999).

Firstly, the river metaphor reflects the principle of emergence both in the way social systems are created and the way strategic decision-making takes place. One of the key perspectives in evolutionary organization theory research argues for the emergent nature of

social systems (Van de Ven, 1989). As Romanelli (1991: 96) states “This perspective views variations in organizational forms as arising dynamically through the cumulative interactions of entrepreneurs and organizations towards the establishment of a new ... system”. In strategic management theory, emergent strategies are perceived to flow naturally from bottom to top, whereas intended strategies created by top management will be reflected from top to bottom before they can be implemented (Mintzberg, 1992). Strategic innovation networks are examples that reflect both types of emergence. Building on Arthur’s (1989) argumentation, a small strategic decision can move an organization to a position where even random choices creates a whole set of strategic opportunities. A good example is how Finnish conglomerate Nokia realized in the early 1990s that it had a strong competitive advantage over other cellular phone producers primarily because of some almost accidental processes in the 1960—1970s.

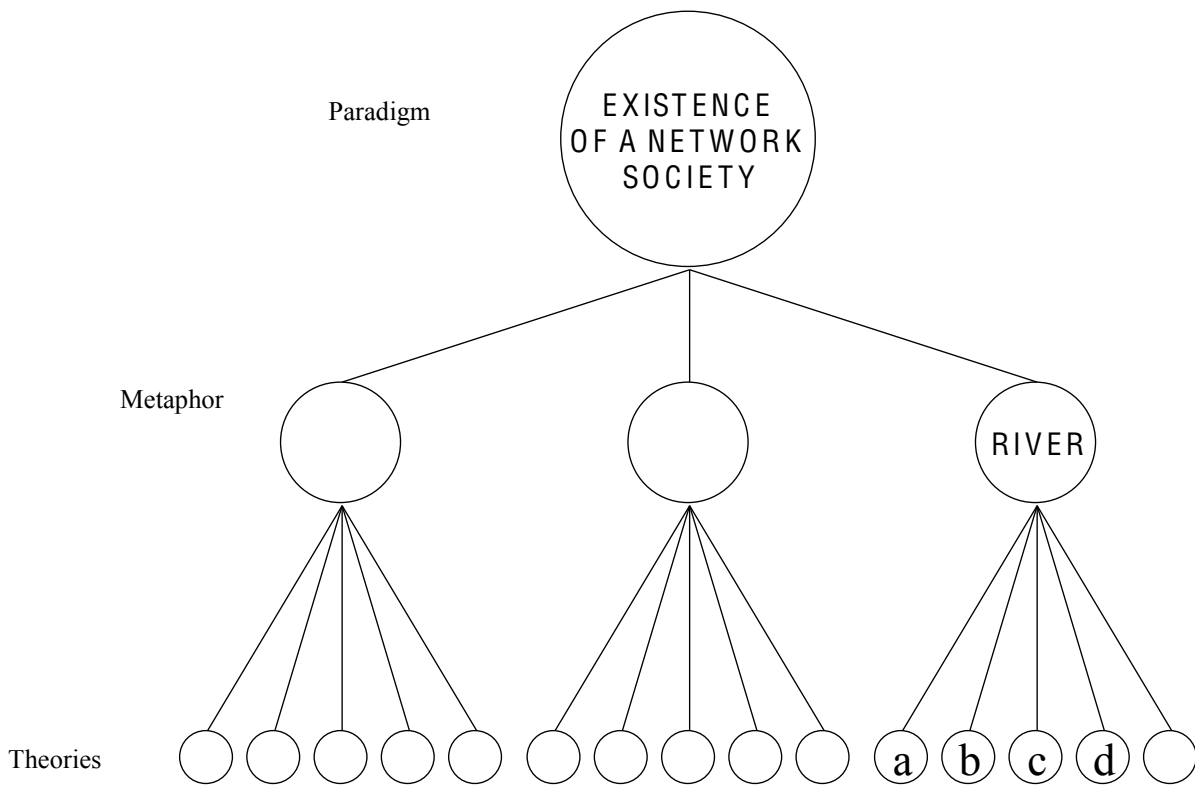
Secondly, the river metaphor reflects negotiated order. The basic concept is the idea of negotiated order that states that individuals and interest groups maintain and re-negotiate continuously implicit and explicit agreements and organizational rule-settings (Strauss 1963). The theory of negotiated order thus explains the mechanisms in which the social systems are constructed and maintained. A vast number of interactions between and inside organizations causes them to function as evolutionary systems and it is crucial for the organizations’ survival that this complex process of interactions emerges around them (Cilliers, 2000).

Finally, the identification and categorization of groups and actors in a real-life environment requires a lower level of abstraction. In this sense, stakeholder management theories are a crucial underpinning. According to stakeholder management frameworks, an organization has to balance the interests of its stakeholders in order to secure the organization’s long-

time survival (Freeman, 1984). From the river metaphor point of view, Freeman's notion that stakeholder relations are actually implicitly or explicitly negotiated agreements (Freeman and Evan, 1990) fits nicely the interactive environment around molecule clusters.

In our view, all of these theories reflect the principle of network-like organization of social and economic activity. Unlike in the path dependency metaphor, the theoretical underpinnings of the river metaphor reflect the principles of spontaneous or accidental selection, repeated interaction, adaptation to systemic changes and spanning of organizational boundaries. Based on this, we perceive the strategy river metaphor to be founded on an entirely different paradigm and theoretically constructed in a different way than the path metaphor. Whereas the path metaphor can be argued to originate from a more hierarchical world-view, the river metaphor emphasizes dynamics, timing, systems and co-evolutionary interplay. We argue that the strategy river metaphor adheres to a paradigm called "the existence of a network society" (Castells, 1996). The network society logic essentially argues that the economy functions as a complex system of interlinked actors, activities and resources, whose interplay resembles spontaneous market ordering on the one hand and large hierarchies on the other. Along the logic of Morgan and Smircich (1980), the river metaphor pulls together a group of specific theoretical principles as well as the influence of "the existence of a network society" paradigm. The theoretical structuring around the river metaphor is illustrated in Figure 1.

Figure 1: The theoretical structuring around the river metaphor (cf. Morgan and Smircich 1980)



Finally, the purpose of this paper was not to campaign for the replacement or even for the re-describement (Hatch, 1999) of the path dependency metaphor, but to enrich the discussion with a metaphor that highlights the evolution of both organizational life as well as strategies in which they are managed. Thus, the river metaphor attempts to introduce a fresh perspective into strategic management that can be seen to enrich the conceptual arsenal of both managers and theoreticians.

Managerial Implications

In addition to scrutinizing the theoretical structuring of the river metaphor, this paper concentrates on addressing the managerial accessibility of the 'path' and 'river' metaphors

of the evolutionary, timing and systemic effects in strategic management. Part of the value of building and enhancing metaphors related to strategic decision-making emerges from the fact that managerial problems very seldom confer to either disciplinary boundaries as they are laid out in academic literature or functional boundaries within organizations.

A further of the managerial implication of the introduction of the river metaphor is that it strengthens managerial cognition about strategy. Actually, there are several mechanisms through which the potential of the river metaphor, as any metaphor, is realized. Firstly, there is the obvious influence on managers' personal decision-making. If the river metaphor succeeds in depicting the reality of managerial decision-making situations, managers can potentially utilize their fuller understanding of the nature of strategic management in their decision-making processes.

Secondly, along the lines of Morgan and Smircich (1980), we feel that a multitude of metaphors is needed to communicate the complexity surrounding the concept of strategy. The river metaphor can become a communication tool, which is used to pass on especially issues related to the timing, phasing, momentum or interplay in a given strategic decision-making situation. Thirdly, we see the river metaphor as a very useful tool in managerial education. For example, the river metaphor helps understand the temporal dimensions of strategic decision-making, e.g. hurry, even when the strategic route is reconstructed with hindsight. This is valuable especially in case based teaching.

As such, the river metaphor further refines the impression of strategy as part of evolutionary organizational life and as means of coping with complexity, uncertainty, change and systemic nature of the business-making environment. It thereby emphasizes earlier attempts to describe and make strategy in a way that reflects a 'messy' managerial

reality, cf. muddling through (Lindblom, 1959) and patching (Eisenhardt and Brown, 1999).

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