Strategic Issue Management - Theory Review

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1 Introduction

1.1 BACKGROUND

Companies have their characteristic ways of identifying and dealing with their most critical strategic questions and issues. This process is typically an emergent one, and, as such, it is not always optimally structured to enable identification of issues, to facilitate allocation of top management attention, and to develop the issue. However, extant literature fails to provide an integrated picture of the strategic issue management concept. To date, there is a lack of studies that present the evolution and systematisation of available research.

1.2 RESEARCH PROBLEM

This paper presents a literature study on strategic issue management. The specific research problem can be formulated as follows: *"What are the underlying theories of the strategic issue management concept, and how the theory has evolved up to date."*

1.3 OBJECTIVES

The purpose of this paper is to present an overview of the literature discussing and surrounding the notion of strategic issue management. The review presents the main premises underlying the concept, looks into key strands of research related to issue management and also introduces some of the more recent advances in the field. In so doing, the paper strives to build a more coherent picture of the current state of strategic issue management.

1.4 SCOPE

This paper comprises the following elements:

- Summary with associated commentary on seminal pieces of literature that have influenced the concept of issue management. The contributions included are:
  - o Simon HA. 1947/1997. *Administrative behavior* (4th ed.), 384 pp. New York, NY: Free Press
  - o March JG, Simon HA. 1958/1993. *Organizations* (2nd ed.), 287 pp. Malden, MA: Blackwell

- o Cyert RM, March JG. 1963/1992. *A behavioral theory of the firm* (2nd ed.), 252 pp. Malden, MA: Blackwell

- o Weick KE. 1969/1979. *The social psychology of organizing* (2nd ed.), 294 pp. New York, NY: Random House

- o Weick KE. 1995. *Sensemaking in organizations*, 235 pp. Thousand Oaks, CA: Sage

- These seminal contributions have been augmented with a broad review of articles published in leading journals, including *Academy of Management Journal, Academy of Management Review, Strategic Management Journal, Administrative Science Quarterly*, and *Organisation Science*.

1.5 STRUCTURE

The paper is structured as follows:

- Chapter 2 presents an overview of organisational information processing, starting with Simon's (1947/1997) early account of administrative behaviour and later Carnegie School contributions, discusses Weick's (1969/1979; 1995) sensemaking perspective, and closes with Ocasio's (1997) attention-based view of the company.

- Chapter 3 discusses the various origins of issue management theory overall, including public affairs and communications theory, rational schools of strategic planning, and cognitive theory.

- Chapter 4 presents some of the processual characteristics of strategic issue management, including scanning, issue interpretation, and responding and learning.

- Chapter 5 highlights some of the recent advances in the strategic issue management literature, and covers the areas of organisational and managerial sensemaking, cognitive perspectives of strategic decision-making and change, and organisational learning.

1.6 DEFINITIONS

Oxford English Dictionary (1989) defines an issue in a general sense as *"a matter the decision of which involves important consequences"*. In relation to issue man-

agement, Dutton and Duncan (1987: 103) define strategic issues as *"developments, events and trends having the potential to impact an organization's strategy"*. A later definition by Dutton and Dukerich (1991: 518) highlights the importance of cognitive mental processes that are present when strategists identify and deal with issues: *"Issues are events, developments, and trends that an organization's members collectively recognise as having some consequence to the organization."* Ansoff (1980) calls the collection of key issues that the company at a given time has as the *key strategic issue list*. Dutton and Duncan (1987) extend the notion by discussing a concept of *strategic issue array*, which is a set of strategic issues that emerge as a result of strategic planning and as input to initiation and implementation of strategic change.

2 Information Processing in Organisations

2.1 NEOCLASSICAL ECONOMIC THEORY AND PERFECT RATIONALITY

Information processing in economies and economic organisations has been traditionally assumed to be perfectly rational. The main theoretical underpinning has been the neo-classical economic theory, founded in the 1870s by Jevons (1871/1970), Menger (1871) and Walras (1874/1954), subsequently synthesised into a coherent theory by Marshall (1890/1961). Marshall's economic theory is an example of a closed equilibrium system, in which the economy is described as static and in equilibrium until an outside force such as a technology shift unsettles the system. Due to the change brought by an exogenous shock, the system must find itself another state, in which it is in equilibrium.

Marshallian economic theory makes three important assumptions (Beinhocker, 1997). First, it assumes that the industry structure is known. Second, it assumes that diminishing returns apply. Third, and most significantly from the point of view information processing and decision-making, it assumes that all economic actors (both individuals and companies) are perfectly rational and have complete information: Mill, for example, defines his economic man *"as a being who desires to possess wealth and who is capable of judging the comparative efficacy of means for obtaining that end"* (1821/1826: 137-8).

Decision-making under perfect rationality occurs with a "given" set of options that correspond to discrete and ranked consequences. Thus, decision-making is a process of optimisation, in which the task is to find, select and implement the one best solution to a problem.

The core concepts of Marshall's economic theory have influenced substantially theories of business strategy. The industrial organisation (IO) view of business strategy that emerged in the first half of the 20th century (Mason, 1939; Bain, 1956) uses Marshallian economic theory as its theoretical underpinning. Indeed, many of the prevalent managerial tools still used today, including the early concept of cost curves (Wright, 1917) as well as the later five-forces framework (Porter, 1980), are grounded on Marshallian thinking.

Decision-making in a Marshallian economy reflects Taylor's (1911) thinking that a "one best way" exists in dealing with managerial issues. Classical IO strategy works (e.g., Chandler, 1962; Ansoff, 1965; Andrews, 1971; Hofer & Schendel, 1978; Porter, 1980)

emphasise concepts such as goals, resource allocations, and plans. Strategy, then, has been thought of as an "integrated plan" (Fredrickson & Mitchell, 1984), and its execution has necessitated well-developed hierarchies and formalised systems of control (Mintzberg & McHugh, 1985), even to the extent of ideal-type, machine-like bureaucracies as described by Weber (1922/1980).

2.2 SIMON'S NEW ADMINISTRATIVE THEORY AND THE 'ADMINISTRATIVE MAN'

2.2.1 Administrative Theory as a Normative Science

Barnard postulates that *"[i]t is the deliberate adoption of means to ends which is the essence of formal organization"* (1938/1954: 186), essentially implying that what the formal organisation does is make decisions. Barnard views organisations from a systems perspective, describing them as *"system[s] of coordinated human efforts"* (p. 77). Building on Barnard's discourse, Simon's (1947/1997) seminal work on administrative theory lays the groundwork for a new perspective on company behaviour. According to Simon, extant principles of administration have been *"only criteria for describing and diagnosing administrative situations"* and *"cannot be more than* 'proverbs' " (pp. 42, 9; emphasis provided).

In his work Simon, hence, aims at further developing the concepts and vocabulary of organisational studies, noting that *"[b]efore we can establish any immutable 'principles' of administration, we must be able to describe, in words, exactly how an administrative organization looks and exactly how it works. (---) I have attempted to construct a vocabulary which will permit such description"* (1947/1997: xi). In so doing, Simon develops public administration towards a normative science, thus facilitating bridging descriptive and empirical studies with "theory".

2.2.2 Theory of Rational Choice in an Organisational Environment

In discussing the correctness dimension of decision-making, Simon makes a distinction between the **value elements and the factual elements in decision-making**, and asserts that every decision involves these two elements. The essence of this distinction is that a decision cannot be evaluated solely factually, that is, considering only the objective aspects. Indeed, while being descriptive of a future state of affairs, decisions possess an imperative quality of selecting one future state of affairs in preference to another –

thus they comprise also ethical content. These ethical statements in decision-making are by their very nature often ambiguous, and, as a consequence, not too operational. The correctness of an administrative decision, then, is a relative matter.

Organisations can be seen as value systems, where various objectives and values associated with them are connected via the value in means-ends relationships. Since most values involved in administrative decisions are seldom "final values", most objectives and activities have their value derived from the desired end to the means in anticipation. Ends themselves are often merely instrumental to more final objectives. Thus, rationality in decision-making necessitates construction of means-ends chains. Hierarchy of ends in an organisation facilitates attainment of behavioural integration and consistency, at least theoretically. However, argues Simon, a high degree of conscious integration is seldom achieved: a *"tangled web or (---) a disconnected collection of elements only weakly and incompletely tied together"* (1947/1997: 74) may be more realistic in practice. Moreover, albeit individuals in organisations are typically oriented towards the organisation's goals, they often exhibit orientation towards their personal goals that are not always mutually consistent.

The fundamental thrust of Simon's argument is that there are **limits to human rationality**, and that this (obviously) has implications for decision-making. First, whereas rationality implies a complete knowledge of consequences attached to each choice, humans are incapable of mastering no more than fragmentary knowledge. Second, since the consequences of current decisions lie in the future, values need to be assessed *ex ante*, which can happen only imperfectly. Third, rationality requires the consideration of all possible behaviours, but, in fact, only a small subset of them ever comes to one's mind. These considerations are at the heart of Simon's concept of an "administrative man", with which he substitutes the certainly omniscient and perhaps even omnipotent "economic man" of the past. As described by Simon, in the introduction to the second edition of his book, human behaviour is *"intendedly rational, but only limitedly so"* (1947/1957: xxiv; original emphases).

Further, Simon asserts that individual behaviour is characterised by docility, that is, capability of observing consequences of behaviour and adjusting them to achieve desired purposes, natural or artificial memory that allows using past experiences to be used in current problem-solving, and habits that allow repetition of behaviour without conscious thought. Stimuli direct attention of individuals to selected aspects of the situation,

and, concurrently, exclude competing aspects that might turn choice in another direction. Hence, the stimuli determine what decisions the administrator is likely to take, but also what conclusions he reaches (cf. Ocasio, 1997). Individual behaviour is also relatively persistent over time, as activities often involve sunk costs, persistence-enhancing stimuli, and switching costs in altering behavioural patterns.

2.2.3 Effects of Organisational Factors on Decision-Making

According to Barnard (1938/1954), **authority** exists and exacts obedience only if it is accepted. This entails that the character of the communication is accepted by the individual as governing the actions he takes within the system. Simon (1947/1997) follows this view by defining authority as the *"power to make decisions which guide the actions of another"* (p. 179). In principle, authority is distinguishable from influence by abdication of choice. However, in reality, even in situations where authority exists, various forms of influence (for example, persuasion and suggestion) are used to induce a desired behaviour. Exercise of authority in a group enables separation of decision-making from actual performance (representing vertical specialisation in decision-making.

Authority as a tool for coordination of group activity has three main functions. First, authority enforces the conformity of the individual to the norms of group, or to those who wield the authority. Second, it facilitates the use of expertise in decision-making through specialisation, in a similar vein as specialisation of tasks improves productivity in a factory – Expertise should facilitate reaching good decisions. Third, authority can be used to secure coordination both in a procedural and a substantive sense. Coordination is aimed at reaching mutually consistent decisions that in combination attain a given goal. To prevent or resolve conflicts of authority, Simon presents four procedures in common use: (i) strict unity of command (i.e., each individual receives orders from only one superior), (ii) unity of command that stipulates a single authority should a conflict emerge, (iii) division of authority, and (iv) a system of rank. These approaches are not necessarily mutually exclusive; especially the second, third, and fourth can be used in combination.

Authority is typically linked to a formal scheme of organisation. According to Simon, the **formal organisation** will always differ from the organisation one can observe in action. In addition to the authority relationships, the formal organisation often establishes procedures and rules of communications. In addition, a variety of interpersonal

relations exist in the organisation that affect the decisions, yet do not exist in or are inconsistent with the formal scheme. However, the informal organisation is the realm of harmful organisation politics. Thus, the role of the formal organisation in relation to the informal one is to encourage the development of the latter along constructive lines.

One of the most potent factors influencing decision-making within organisations is **communications**, which can be defined as *"any process whereby decisional premises are transmitted from one member of an organization to another"* (Simon, 1947/1997: 208). Indeed, the possibility of a given individual to make a decision is often dependent on whether the relevant information can be transmitted to him (in order to make an informed decision), and, whether he, in turn, will be able to transmit his decision to other members in the organisation, whose behaviour it is supposed to influence. It is important to note that communications is not limited to the formal channels of authority. This may, in fact, constitute only a small fraction of total communications in any actual organisation.

The formal system of communications in an organisation is frequently augmented by an equally important informal network of communications. Formal communication relies on oral communication, memoranda and letters, paper-flow, records and reports, and manuals. Informal communication, in contrast, relies on social relations, and comprises information, advice, and even orders (implying an authority relationship, despite the lack of formal authority). Sometimes informal communication is used to advance personal goals, for example, by increasing one's own power and influence in the organisation.

Considering that personal motivations play a certain role in communication, information tends to be transmitted upwards only if (i) it will not have unpleasant consequences for the transmitter, or (ii) the superior will hear of it anyway (through other channels), or (iii) if withholding the information compromises the superior's role upwards. This implies that executives are likely to receive at least a somewhat filtered array of information from lower levels. (Formal records and reports are often used to circumvent this problem.) Of course, conversely, also the superior can withhold information from his subordinate, for example, for maintaining his superiority.

Communication is also highly dependent on the recipient's receptivity to communications. Receptivity is influenced by the source of the communication and the way in which it is presented. Similarly, use of official channels gives the information transmitted a "seal of approval", while unsolicited information or advice may be given little attention.

In companies the **criterion of efficiency** is largely driven by the objective to make a profit. Efficiency in corporate administration, then, follows from selecting, amongst a plethora of choices, the single one that maximises the results with given, limited resources. However, costs and payoffs incurred by the decision may be difficult to determine, for both factual and value elements can be applied in the evaluation.

Organisational decisions can be evaluated for their correctness from two different vantage points, namely those of social and organisational values. The former implies that the decision is correct if it conforms to the broader social values, whereas the latter refers to values pertinent to the organisation in question. Clearly, these two sets of value do not necessarily need to be (completely) congruent. Furthermore, organisational decisions are also regarded as impersonal, that is, made by the organisation at large rather than any individual member of the organisation.

However, a limit exists to the extent that individuals submit to behaving "organisationally". As long as the individual identifies himself with a group, he evaluates his choices in terms of their consequences for the group. Organisational identification is driven by (i) personal interest in organisational success, (ii) transfer of private-management psychology, and (iii) focus of attention. The principal undesirable effect of identification is that it prevents the individual from making correct decisions in the cases where a value conflict between individual and organisational values occurs. Hence, the organisation structure must be designed, and decisions allocated within it, so that the decisional bias can be minimised.

2.2.4 Discussion

Amongst the main contributions of Simon's (1947/1997) work, if not the single most important one, is the notion of limited rationality in human decision-making. Before Simon, decision-making was considered to be almost as a non-issue at least from a procedural standpoint. Substantial decisions were indeed made in all fields of the society, yet the process of reaching the single best decision was not considered problematic. However, enter limited rationality, and all decision-making, be it in public administration, business corporations or any other organisations, was prone to all kinds of problems that can be traced back to characteristics of individuals. In this respect, it is no wonder at all that Simon's work is as pertinent to political science and organisation theory as it is to economics. The notion of limited rationality was, by no means, accepted

lightly, especially amongst the mainstream economists, as Simon (1991) in his autobiography points out.

Interestingly, economists contemporary to Simon discuss similar ideas of unmanageable amounts of information in decision-making. Hayek (1944/1986), as does von Mises (1949), discuss the limits of information available to humans and their abilities to use information in their computations to economics while arguing for the need of decentralisation in economic decision-making. Writes Hayek:

> *It is only as the factors which have to be taken into account become so numerous that it is impossible to gain a synoptic view of them, that decentralisation becomes imperative. (---) As decentralisation has become necessary because nobody can consciously balance all the considerations bearing on the decisions of so many individuals, the co-ordination can clearly not be effected by "conscious control," but only by arrangements which convey to each agent the information he must possess in order effectively to adjust his decisions to those of others.* (1944/1986: 36)

However, Simon's treatise is not restricted to the limited capabilities and characteristics of individuals. Rather, Simon portrays the organisation in the light of a decision process that is affected by decision premises. Behaviour in the organisation is influenced by these decision premises, which can in turn be modified by the behaviour. In addition, organisational structure can influence the decision premises of individuals within it. Specifically, Simon's realist[1] approach assumes a fact-value dichotomy, in which the value statements are regarded as noncognitive and not susceptible to empirical testing.

In sum, Simon's work captures the interplay of individual and organisational elements in decision-making. At the macro level, decision premises can be used to explain why the organisation engages in certain actions. At the micro level, decision premises serve as a tool for understanding the individual's relationship to the company.

Additionally, Simon's (1947/1997) contribution includes portraying the organisation as a series of means-ends chains formed to make decisions. As an indirect contribution, the piece has become the cornerstone for modern organisational theory. For Simon himself

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[1]   Simon's work could also be regarded as positivist (in the sense as suggested by Friedman, 1953). However, Moldoveanu and Baum argue that Friedman's interpretation of positivism as a form of instrumentalism is *"peculiar"*, and that *"economics (---) is definitely not a positivist science"* (2002: 736); in this light, Simon's work could best be described under the label of scientific realism.

the (1947/1997) work provided a starting point, from which his subsequent contributions could expand the underpinnings from political science to economics, organisation theory, and psychology (e.g., Simon, 1956; March & Simon, 1958/1993). Similarly, Simon's work has provided the theoretical foundation for numerous other researchers (e.g., Cyert & March, 1963/1992; Ocasio, 1997), thus allowing organisation theory to emerge as an interdisciplinary science that selectively combines views from economics, politics, law, psychology and sociology.

Nonetheless, despite its substantial contribution, Simon's work has its limitations. Simon links organisational structure and information processing inherently together by discussing at length the nature and form as well as the organisational contingencies of communication in decision-making, yet he rather cursorily dismisses the role of the individual in the process. In fact, Simon quite understandably concludes that *"[i]n every case the state of mind of the recipient, his attitudes and motivations, must be the basic factors in determining the design of communication"* (1947/1997: 217), but fails to provide more insight how one could practically proceed to do so. Another shortcoming is related to Simon's discussion of authority. While offering insights as to how authority affects organisational decision-making, Simon offers little in way of understanding where authority originates and how it can be managed. In fact, Simon contributes little more to the concept of authority than what Barnard (1938/1954) earlier had done, if one discounts the notion of role of authority in organisational context.

Nevertheless, these shortcomings do not materially affect the Simon's contribution overall. It rather reflects the fact Simon has in balancing between depth and width of discussion, had to sacrifice some level of detail. Specifically, Simon's discourse is predominantly limited to the level of organisations, without a great deal of individual-level analysis to support the organisational context.

2.3   BOUNDED-RATIONALITY AND SATISFICING IN DECISION-MAKING

2.3.1   Employee as an Instrument – Critique of the "Classical" Organisation Theory

Building on Simon's (1947/1997) work on administrative behaviour, the work of March and Simon (1958/1993) reflects the information processing capabilities of humans in decision-making. March and Simon describe succinctly on a high-level how their "boundedly rational" individual attends to decision-making:

> *It is a picture of a choosing, decision-making, problem-solving organism that can do only one or a few things at a time, and that can attend to only a small part of the information recorded in its memory and presented by the environment.* (March & Simon, 1958/1993: 30)

In a similar fashion as Simon earlier, March and Simon criticise the "classical" organisation theory developing along the lines of scientific management (Taylor, 1911) and theories of departmentalisation (Fayol, 1930). Essentially, March and Simon argue that these theories represent only a small fraction of actual behaviour encountered in organisations.

The view of the individual as a simple machine to be used as an organisational instrument is limited, and, that under certain circumstances, such a perception of an organisation may produce outcomes unanticipated by the classical theory. The "machine model" of human behaviour tends to ignore the wide range of roles that organisational participants simultaneously perform. Further, it does not deal with the question of coordination of the multiple roles.

### 2.3.2   Attitudes and Motivations in Organisational Behaviour

March and Simon's (1958/1993) influence model comprises stimuli that impinge on the individual, a psychological frame of reference that is evoked by the stimuli, and the response that results. A stimulus, however, may have unanticipated consequences in three ways. First, it may evoke a larger or a different set that was expected. Second, the stimulus itself may include elements that are not intended by the organisation at the time of providing the stimulus. Third, the receiver of the stimulus may mistake it for another or even fail to respond at all. It is these unanticipated consequences that restrict the adaptability of the organisation to the goals from the top of the administrative hierarchy. March and Simon subsequently review three models of bureaucracy,[2] and conclude that all three issues predicted from the influence model arise.

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[2]   Simon and March discuss outline the bureaucracy models of Merton (1940), Selznick (1949), and Gouldner (1954). The Merton model is primarily concerned with dysfunctional organisational learning, in which individuals learn certain stimulus-response patterns under one set of conditions where the response is appropriate, and start to apply them also in other situations, resulting in consequences unanticipated and undesired by the organisation.

The Selznick model emphasises the delegation of authority. As authority is delegated downwards in the hierarchy, the difference between organisational goals and achievement decreases. Concurrently, however, delegation results in bifurcation of interests among the subunits in the organisation.

March and Simon also touch on the concepts of morale, productivity, and turnover in organisations, and their relationship with organisational success. However, they relatively cursorily conclude that these concepts are not predictive, and, hence, focus their treatise on the individual's "**motivation to produce**". March and Simon postulate that the motivation to produce is a function of the character of the evoked set of options,[3] the perceived consequences of evoked options, and the individual goals that are used in valuing the options. Figure 2.1 presents an overview of the factors affecting the motivation to produce.
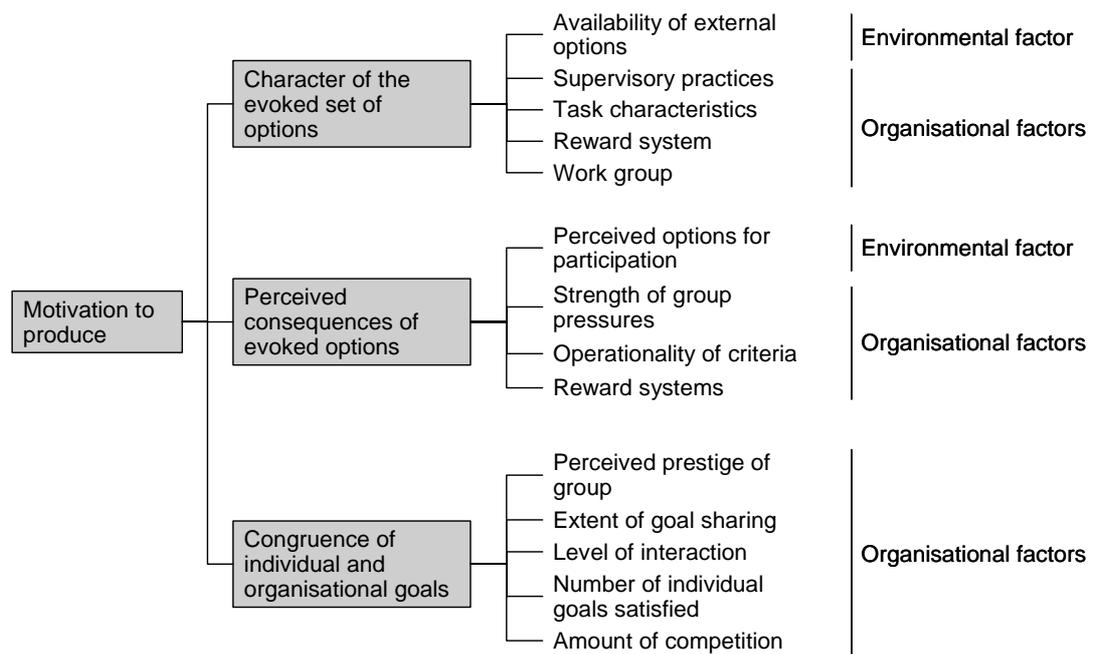
Figure 2.1   Factors affecting motivation to produce (March & Simon, 1958/1993)

The evoked set of options is increased as the availability of external options increases. However, the environment forms only one important source of cues for the participant. Organisational cues emanating from the supervisory practices, the task itself, the reward system, and the work group also influence the character of the evoked set of options.

The Gouldner model is concerned, similarly as Merton's, with the consequences of bureaucratic rules for the maintenance of organisation structure. Gouldner shows how efforts to exert control in a particular part of the system can disturb the larger system, with a subsequent feedback on the subsystem.

[3]   March and Simon (1958/1993) consistently employ the noun *alternative* in their discussion on decision-making. However, in strictest of terms, an *alternative* refers to "either of two courses *which lie open to choose between*" (*Oxford English Dictionary*, 1989; emphasis provided), a restriction surely not intended by March and Simon. The noun *option*, in contrast, does not have a quantitative restriction, since it refers to "*a thing that is or may be chosen*" (*Oxford English Dictionary*, 1989). Hence, this study categorically uses the wording *option*, as a substitute for March and Simon's (1958/1993) *alternative*.

When a set of options is evoked, a network of consequences and evaluations is simultaneously evoked. A significant means of influence happens through the control over the perception of consequences. Individuals' expectations of the consequences of action are influenced by environmental factors (for example, perceived options to participation), group pressures, operationality of criteria, and organisational reward systems. Finally, individual goals affect the valuation of options. Humans evaluate their positions in relation to the value of others and come to accept others' goals as their own. Also, individuals bring (parts of their) prior structure of preferences to their organisations. Individual goals are not entirely "given" to the organisation, and, can thus be at least partly shaped through, for example, recruitment processes and other organisational practices. Identification, the process that facilitates conformation of individual goals to (perceived) group norms, can be directed towards four principal targets: (i) organisations external to the organisation, (ii) the organisation itself, (iii) tasks involved in the job, or (iv) subgroups of the organisation. Goal congruence is likely to be facilitated by the perceived prestige of the group, extent to which goals are perceived as shared, level of interaction between individual and group members, number of individual needs satisfied in the group, and amount of competition.

Another major decision that individuals make within an organisation is whether or not to participate in it, referring to decisions to enter and withdraw from an organisation. The theory is based on the concept of "organisational equilibrium" (Barnard, 1938/1954; Simon, 1947/1997), which refers to the point where the organisation's success in providing its participants with payments is adequate to motivate their continued participation – this is the main thrust of the inducements-contributions model. Straightforwardly enough, typical inducements such as wages and salaries can readily be measured in pecuniary terms. However, inducements can also be of non-monetary type, as is the case with perquisites.[4] Contributions are the "payoffs" that the participants make to the organisation, for example, the work done by the employee.

The **decision to participate** is driven by the individual's inducement-contribution balance: the greater the difference between inducements and contributions (for the latter's benefit), the greater the individual satisfaction is likely to be. At the zero-point, where

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[4] Jensen and Meckling (1976) and Jensen (1986), among others, discuss the agency theory and the role of agency costs from a perspective of corporate finance. Agency costs arise when, for example, managers make value destroying investment decisions to bolster their position, or use company money to secure "perquisites".
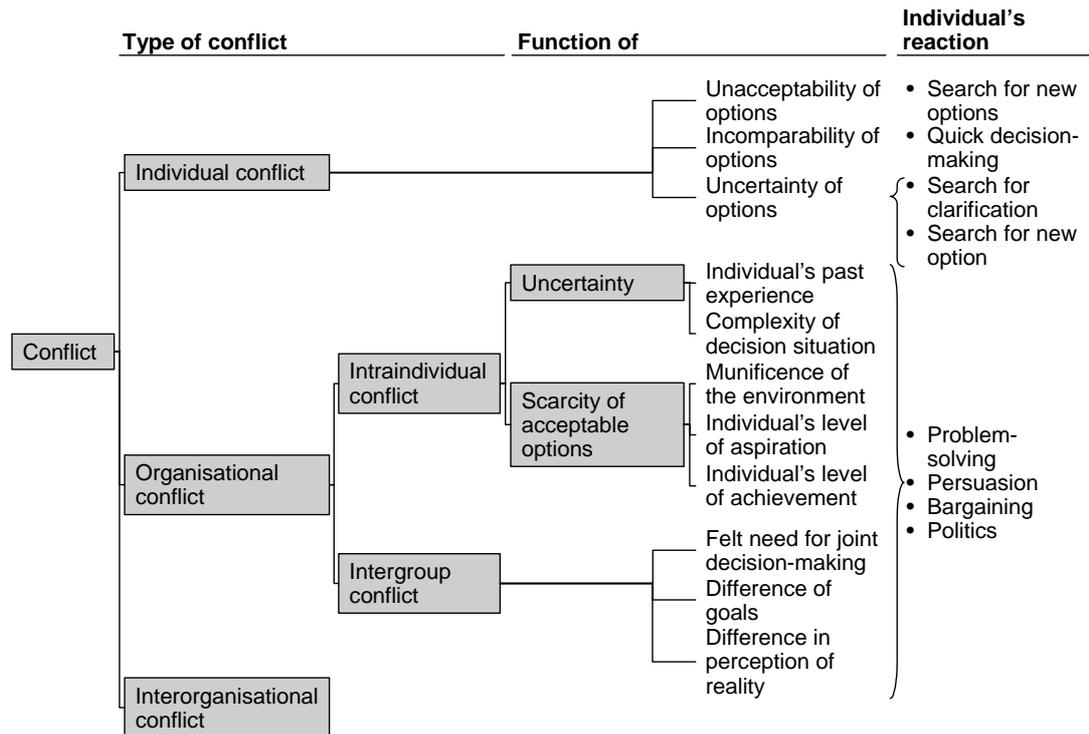
the inducements and contributions are of equal value, satisfaction turns into dissatisfaction, implying an indifference point for the individual. Consequently, dissatisfaction is the cue for search behaviour. Further, March and Simon make the following assumptions regarding the utility functions: they are (i) slow to change, (ii) monotonic, and (iii) generally representative (of broader classes of people).

According to March and Simon, the inducement contribution balance is a function of the perceived desirability of leaving the organisation and the perceived ease of movement from the organisation. The former is driven by the individual's satisfaction with the job, which again is influenced by the conformity of job characteristics to the individual's self-characterisation, predictability of instrumental relationships on the job, and compatibility of work requirements with the requirements of other roles, and the perceived possibility of intraorganisational transfer. The latter is a function of the perceived availability of extraorganisational options, which is further influenced by overall business climate, number of organisations visible, and personal characteristics of the participant. The factors affecting the decision to participate are summarised in Figure 2.2.
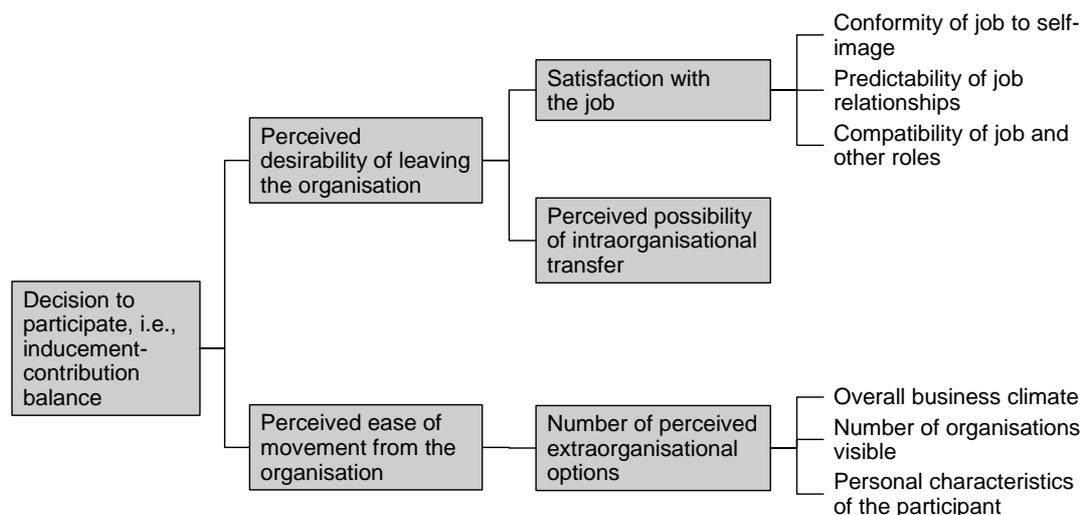
Figure 2.2   Factors affecting the decision to participate (March & Simon, 1958/1993)

March and Simon turn subsequently the discussion to the situations where **conflict** (i.e., a decision problem) exists in organisations, and identify three quite distinct kinds of conflict: (i) individual (i.e., conflict in individual decision-making), (ii) organisational (i.e., individual or group conflict in an organisation), and (iii) interorganisational conflict (i.e., between organisations or groups). Figure 2.3 presents an overview of March and Simon's discussion on conflict.

Type of conflict			Function of	Individual's reaction
	Individual conflict		Unacceptability of options Incomparability of options Uncertainty of options	• Search for new options • Quick decision-making • Search for clarification • Search for new option
Conflict	Organisational conflict	Intraindividual conflict — Uncertainty	Individual's past experience Complexity of decision situation	
		Scarcity of acceptable options	Munificence of the environment Individual's level of aspiration Individual's level of achievement	• Problem-solving • Persuasion • Bargaining • Politics
		Intergroup conflict	Felt need for joint decision-making Difference of goals Difference in perception of reality	
	Interorganisational conflict			

Figure 2.3   Types of conflict, factors affecting conflict, and individual's reaction to conflict (March & Simon, 1958/1993)

Perceived individual conflict is a function of (subjective) unacceptability, incomparability, and uncertainty of options. In the event of a conflict, motivation to reduce it should be generated. The individual's reaction to conflict, then, depends on its source. If the source is unacceptability, the individual will search for new options, depending on availability of bland options and time pressure. If the source is incomparability (and not unacceptability), the decision time is likely to be short. Finally, if the source of conflict is uncertainty, the individual will search for clarification, and, failing that, searches for new options.

According to March and Simon, organisational conflict can be either intraindividual or intergroup conflict. The former is most likely to occur when the conditions surrounding the decision involve uncertainty or scarcity of acceptable options. Uncertainty is a function of the individual's past experience and complexity of the decision situation, whereas unacceptability is dependent on the munificence of the environment and the individual's level of aspiration and achievement.

For intergroup conflict within an organisation, the necessary conditions are a felt need for joint decision-making coupled with difference of goals and/or difference in perceptions of reality. Felt need for joint decision-making reflects a mutual dependence on a

scarce resource or interdependence on timing of activities. Differences of goals can often be regarded as given within an organisation, considering that individual goals are likely to differ. However, organisational participants are induced to conform to common organisational goals through payments. (This is, indeed, one of the key functions of the employment contract between the company and the individual.) Goal conflict is likely to increase as the subjective operationalisation of goals decreases and as organisational slack decreases. Further, goal conflict increases as differentiation of individual perceptions increases through increased number of independent information sources and increased channelling (i.e., control) of information flows.

An organisation reacts to conflict through problem-solving, persuasion, bargaining, and politics. Problem-solving assumes that objectives are shared and that the problem is to identify a satisfactory solution, thus stressing the importance of assembling information, search behaviour, and evoking of new options. In the case of persuasion, goals may be incongruent yet transient, and the stress is on evoking relevant criteria. Bargaining, in contrast, assumes disagreement over goals as fixed and seeking of an agreement without persuasion. In "politics" the basic situation is similar to that in bargaining, but the arena of bargaining is not taken as fixed by the participants.

March and Simon describe the first two processes (problem-solving and persuasion) as attempts to secure both private and public agreement to the decisions, and are called "analytic" in contrast to the latter two (bargaining and politics) referred to as "bargaining". An analytic process to resolve conflicts is likely to be more common the more individual rather than intergroup conflict is present. Moreover, the two types of processes have differing effects on the organisation. Specifically, bargaining is disruptive as it acknowledges and legitimises the heterogeneity of goals within the organisation.

Touching on the question of interorganisational conflict, March and Simon discuss briefly two questions regarding interorganisational conflict. Firstly, they are interested in the conditions under which stable coalitions among players will be formed. Secondly, they underline the significance of the outcome of the bargaining process.

2.3.3 Rational and Intellective Aspects of Organisational Behaviour

March and Simon coin their concept of **rationality** as "subjective" rather than "objective" as seen in the classical decision-making theory of perfect rationality. Subjectivity implies that rationality can be defined only relative to some specified frame of reference.

Moreover, human decision-making is typically aimed at discovering and selecting satisfactory rather than optimal options.[5] Hence, the real decision-making process is more about "satisficing" than of optimising,[6] and involves substituting for the complex reality a model of reality that is limited, approximate, and simplified.

The organisational and social environment in which the decision-maker acts determines what consequences he will anticipate and which ones he will not, as well as what options he is likely to consider and which ones he will ignore. **Cognitive aspects** play a role in formation of subgoals: when task allocation facilitates formation of subgoals, the sub-unit tends to focus its attention on the specific subgoal while ignoring other subgoals and other aspects of the goals of the larger organisation (cf. Ocasio, 1997). Focus of attention, then, can be seen as a function of the differentiation of subgoals, the persistence of subgoals, and the span of attention of the individual, as presented in Figure 2.4.
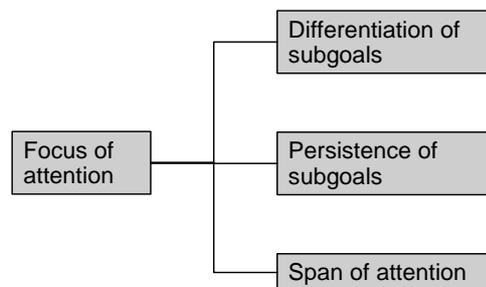
Figure 2.4   Factors affecting the focus of attention (March & Simon, 1958/1993)

The tendency of organisational members to evaluate actions only in terms of subgoals is likely to exist even when the subgoal is in conflict of the goals of the larger organisation. Three cognitive mechanisms reinforce this behaviour. First, on the individual level, selective perception to issues consistent with the established frame of reference as well as rationalisation (i.e., process of removing discrepancies between information and the extant frame of reference) increases the persistence of subgoals by increasing focus of attention. Second, on the organisational level, the content of in-group communication affects the focus of information through filtering, thereby increasing subgoal persis-

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[5]   March and Simon (1958/1993) define an option as *optimal* if (1) a set of criteria that permits all options to be compared exists and (2) the option in question is preferred (based on above criteria) to all other options. In contrast, an option is *satisfactory* if (1) a set of criteria describing minimally satisfactory options exists and (2) the options in question meets or exceeds the said criteria.

[6]   The verb *to satisfice* is formed as a combination of verbs *to satisfy* and *to suffice*, to highlight that *"organisms adapt well enough to 'satisfice'; they do not, in general, 'optimise'"*, and was introduced by Simon (1956: 129). Nonetheless, OED (1989) also recognises *to satisfice* also as an obsolete synonym for *to satisfy*.

tence. Third, on the environmental level, division of labour in the organisation affects the information that various members receive by exposing them to differing environments, thus biasing the perception of the environment already before the information can be filtered by the individual. Finally, the smaller the span of attention is, the narrower is the focus of attention. Span of attention is likely to be influenced substantially by the time pressure involved: in situations with high time pressure, selective perception is likely to proliferate.

Communication facilitates maintaining a complex, highly interdependent pattern of activity that constitutes the organisation. Nevertheless, this capability is limited in part by the capacity of the organisation to handle the communication required for coordination. Under some instances, the volume of coordination can be reduced by replacing coordination by plan with coordination by feedback. Similarly, increasing the efficiency of communication can also be used to increase the organisation's tolerance for communication (for example, by increasing the amount of information transmitted in relatively few symbols). Further, classification schemes allow preprogramming of most of the coordination. However, the language used to communicate inflicts restrictions on communication: Whereas languages are usually well developed for describing and communicating about concrete objects, they often lack the means to describe intangible and non-standardised objects.

In addition to enhancing coordination, classification schemes are used for uncertainty absorption. Uncertainty absorption takes place when inferences are drawn from a body of evidence and the inferences rather than the evidence itself are communicated. Consequently, the recipient of the communication cannot easily judge the correctness of the communication, because the content has been edited in the process. Moreover, as information enters organisations at highly specific points (by virtue of specialisation), direct perception is limited to a small number of individuals. In this case, the person (and his location) who summarises and assesses his own direct perceptions and subsequently transmits them to the rest of the organisation sets on his part premises for organisational action. Uncertainty absorption can, hence, be used either consciously or unconsciously as a technique for acquiring and exercising power.

Communication channels in the organisation are in part deliberately and consciously planned, whereas, in part, they grow up in response to the need for specific kinds of communication. Hence, albeit the structure of communication channels is influenced by

the organisation's task, it will not be completely determined by it (cf. Simon, 1947/1997). Usage of a certain communication channel is likely to increase as a positive function of its efficiency, but will also exhibit self-reinforcing characteristics. Organisation's communication channels affect the existing pattern of communication within in organisation, which will further determine the frequency with which particular members of the organisation encounter particular stimuli.

Overall, **adaptability of an organisation** can be regarded from two perspectives. When the organisation selects action programmes (i.e., routines) it operates in a short-run adaptive fashion. However, when the organisation adds, removes, or modifies the programmes in its repertoire, it aims at longer-run adaptability. Put differently, short-run adaptability is typically referred to as problem-solving, whereas long-run adaptability is usually called learning.

Finally, March and Simon turn to the question of **planning in organisations**. Based on their earlier discourse, March and Simon summarise the characteristics of rational choice as follows: First, the main requirement for decision-making in the organisation is to satisfy certain criteria that change gradually over time. Second, if it is observed that one or more criteria are not being met and nothing is being done to rectify the situation, an action programme will be initiated. Third, changing organisational programmes entails not only a choice process, but also a process of initiation through which new programme possibilities are generated and their consequences examined. Fourth, action programmes are related to each other primarily through their demands on the scarce organisational resources available.

Innovation processes are essential for initiating new programmes in organisations. In these processes, as in all human problem-solving, memory and its use plays a significant role. If problem-solving consists predominantly of searching the memory for (almost) ready solutions, the process is "reproductive" in nature. In contrast, whereas the construction of new solutions relies more on "raw" material, the process is "productive". The choice of problem-solving used depends on both the characteristics of the problem and the past experience of the problem solver. Problem-solving processes generally comprise various search and screening processes, and are characterised by significant randomness, for example, in the sequence of steps taken, and have often a hierarchical structure (cf. Mintzberg *et al.*, 1976).

Attention in the problem-solving process is likely to shift in the following general sequence: First, variables under the control of the problem-solving individual or organisation are considered. Second, if the previous phase does not lead to a satisfactory programme, attention will be directed to changing other variables not in direct control of the problem-solvers. Third, if still no satisfactory programme exists, attention will be redirected to modify the selection criteria so that a satisfactory programme can be found. The search will be sequential: if a satisfactory option is found, the search ends, even if the search has not been exhaustive.

Rate of innovation in the organisation is likely to increase when changes in the organisation make the existing organisational procedures unsatisfactory. As a corollary, one could predict, then, that data indicating, for example, worsening performance would serve as a trigger for innovation. In addition to deliberate innovation, some innovation will result from accidental encounters with opportunities. To facilitate innovation, the organisation must not be tied to existing programmes continuously, implying that planning may not be used in an extent that suffocates innovative behaviour. Innovation is likely to be influenced by the participants' exposure to perceptions of the environment, underlining the role of communication as discussed above.

2.3.4   Discussion

The work by March and Simon (1958/1993) serves as the foundation for modern organisation theory. It can thus be considered to be amongst the most influential books in organisation theory in the post-war era. In a similar vein as Simon's earlier work (1947/1997), March and Simon (1958/1993) continue to argument that instead of being able to act in an objectively rational manner, decision-makers are constrained both by cognitive and external limitations. In essence, March and Simon's most significant scientific contribution is in creating a systematic framework of propositions in organisation theory in a highly rationalistic form. Comprising altogether some 200 variables, the framework, then, allows drawing conclusions about actual events and operations.

Primarily, March and Simon's (1958/1993) contribution serves as a precursor to another seminal piece from the so-called Carnegie school. Cyert and March (1963/1992) develop further March and Simon's organisational theory towards a more comprehensive theory, in particular, of behaviour within the business company (in lieu of describing any organisation in general). In so doing, they directly assume many of the propositions put

forward by March and Simon as the underpinnings of their work, including the concept of bounded rationality.

Albeit March and Simon (1958/1993) usually are accredited for the concept of *bounded rationality*, the notion is deeply rooted in an earlier work by Simon (1947/1997), albeit with a slightly different coining of *limited rationality*. In the same way, the idea about *satisficing* was popularised by March and Simon's (1958/1993) book, yet it was featured for the first time by Simon (1956) in a journal article.

The notion of cognitive limitations in decision-making had begun to gain ground also outside the Carnegie school. Penrose's seminal (1959) work explicitly views limited managerial resources (not only in numbers) as a constraint on company growth. In a similar vein, Rhenman's (1964/1967; Rhenman & Stymne, 1965) work draws heavily on the Carnegie school contributions (Simon, 1947/1997; March & Simon, 1958/1993).

Second, March and Simon (1958/1993), and subsequently Cyert and March (1963/1992), discuss the concept of search in organisations. In broad terms, this can be seen as a somewhat similar concept that Aguilar (1967) proposes by scanning. However, Aguilar's scanning is directed into the exterior of the company (i.e., the business environment), whereas March and Simon's search is a more general term. All these models are, nonetheless, based on the assumption that search or scanning follows given organisational routines.

Third, the work serves as a departure point to a number of later contributions outside the Carnegie school, including the structuralist movement of Lawrence and Lorsch (1967), which assumes that organisational members are interrelated and interdependent with the formal organisation, tasks, personalities of other individuals, and tacit behavioural norms. Further, also transaction cost economics (Coase, 1937; Williamson, 1975, 1981, 1991, 1999) has taken bounded rationality as one of its underlying assumptions: Given bounded rationality in the presence of possible opportunism, incomplete contracting is the best that can be achieved.

Interestingly, Foss (2001) argues that despite the fact that the notion of bounded rationality has become a fundamental proposition in modern organisation theory, it has not been extensively used in theorising in the economics of organisation. Indeed, argues Foss, bounded rationality is *"not used in an essential way in the modern economics of organization"* but as a *"background assumption that is introduced to help explaining other, more central, insights*

and concepts" (p. 1). Ramos-Rodríguez and Ruíz-Navarro (2004), in their bibliometric analysis of the strategic management literature, show that the work of March and Simon (1958/1993), despite unquestionably amongst the seminal pieces in the field of organisation theory, may already have reached and passes its maximum weight of influence. Overall, bounded rationality remains a somewhat elusive concept; intellectually intriguing, yet problematic to operationalise and build upon.

In addition to serving as a cornerstone for the information processing view of the organisation, March and Simon's (1958/1993) work has had a tremendous impact on theories on human resource management. Bowen and Siehl, while discussing March and Simon's legacy, argue that *"the basic challenges of organization have not really changed over the 40 or 50 years since March, Simon, and others first presented them"* (1997: 57). Specifically, Bowen and Siehl refer to the fundamental questions of an individual's "decision to produce" and "decision to participate" as introduced by March and Simon. These two dimensions have direct relevance to contemporary key challenges in human resources management such as managing employee turnover and job rotation.

2.4 FOUNDATIONS OF THE BEHAVIOURAL THEORY OF THE COMPANY

Cyert and March (1963/1992) elaborate on the earlier contributions of Simon (1947/1997) and March and Simon (1958/1993), and formulate a behavioural theory of the company.[7,8] Cyert and March's theory is fundamentally based on three variables of goals, expectations and choice, and four relational concepts of quasi-resolution of conflict, uncertainty avoidance, problemistic search and organisational learning. Cyert and March's contribution to organisation theory is not so much of developing novel prem-

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[7] Cyert and March's (1963/1992) *theory of the company* is conceptually similar to the theory put forward by Coase (1937) and augmented by Williamson (1975; 1981; 1991; 1999), since both theories strive to explain what a business organisation (i.e., the company) is all about, and how it makes (economic) decisions.

However, as far as substance of the theory is concerned, Cyert and March's behavioural theory is substantively different from Coase's transaction cost theory. Transaction cost theory is concerned mainly with market factors, thus treating the insides of the company largely as given. In contrast, Cyert and March's behavioural approach is concerned with, as already the designation implies, with internal factors such as organisation structure and goals, expectations, and execution of choices.

[8] The reader is advised of the following distinction as regards terminology employed. Both lines of research originating from Cyert and March as well as from Coase discuss *theories of the firm*, where the noun *firm* denotes any business organisation. This work, however, treats these theories as *theories of the company*, reserving the word 'firm' to refer to actual business partnerships (1989).

ises of organisational behaviour, but leveraging the extant work[9] in an attempt to develop an *"empirically relevant, process-oriented,* general theory *of economic decision making by a business firm"* (1963/1992: 3; emphasis provided)

2.4.1 Goals, Expectations, and Organisational Choice

Cyert and March view **organisational goals** as a series *"more-or-less independent constraints imposed on the organization"* (1963/1992: 50). The essential problem with collective goals is that a company is a coalition of participants with disparate demands, changing foci of attention, and limited cognitive capacity. Goals emerge through a process of bargaining that fixes the composition and general terms of the coalition. Goals are subsequently stabilised and elaborated by an internal organisational process in response to short-run pressures. Albeit stabilised by internal processes, goals do exhibit gradual change over time brought about by change with experience, aspiration level change as a function of organisation's past goal, the organisation's past performance and past performance of "peer" organisations. Overall, five types of goals can be identified for the company: production, inventory, sales, market share, and profit goals.

To evaluate options in decision-making, individuals generally need to form **expectations** about likely outcomes. Expectations, then, are seen as the result of drawing inferences from available information. This information is, however, frequently hard to obtain and of uncertain reliability. As a result, both conscious and unconscious bias is introduced, for example, through pattern-recognition and hopes in forming expectations. Although biases may not typically be exceptionally great, small biases will be critical in evaluating two reasonably equal options. Hence, selective perception and recall play a substantial role in business decision-making. Intensity and success of search for information are affected by the extent to which goals are achieved and the amount of organisational slack present.

Organisational choice takes place in response to a problem, uses standard operating rules, and involves identifying an option that is acceptable in respect to evoked goals. Standard operating procedures are used to avoid uncertainty, are resistant to change,

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[9] Cyert and March build their work primarily on contributions by Simon (1947/1997) and March and Simon (1958/1993), which provide the overall theoretical underpinnings for their treatise. Furthermore, Cyert and March acknowledge that much of the development of their theory of the company has occurred through articles in *Administrative Science Quarterly, Management Science, American Economic Review, Quarterly Journal of Economics* and *Behavioral Science* (Cyert & March, 1963/1992: x).

and are often quite simple. Standard operating procedures can be characterised into four types: task performance rules directing how certain tasks are carried out; continuing records and reports describing certain aspects of the company's operation; information-handling rules specifying the workings of the company's communication system; and plans that, for example, allocate resources. These rules are the focus for control within the company, and are a result of a long-run adaptive process by which the organisation learns.

2.4.2 Main Relational Concepts of Quasi-Resolution of Conflict, Uncertainty Avoidance, Problemistic Search, and Organisational Learning

As discussed above, the organisation is a coalition of members with differing goals. Hence, some procedure to resolve conflicts must exist. Traditionally this has happened through payments as a way of inducing conformity to organisational goals (March & Simon, 1958/1993). Cyert and March, however, propose a different concept to conflict resolution: Rather than trying to resolve all existing conflicts, *"most organisations most of the time exist and thrive with considerable latent conflict of goals"* (1963/1992: 164), implying that conflicts are only "quasi-resolved" in the company.

Cyert and March's **quasi-resolution of conflict** assumes goals as independent constraints imposed on the organisation. Focussing on essential, continuous, and operative business goals of the organisation, Cyert and March assert that a subset of these goals is likely to pose problems for the organisation in the form of potential conflicts. These conflicts are resolved by using local rationality, acceptable-level decision rules, and sequential attention to goals. Local rationality takes place when organisations have factored their decision-problems into subproblems and assigned them to subunits of the organisation. Local rationality, then, is the tendency of the individual subunits to deal with a limited set of problems and goals (cf. March & Simon, 1958/1993). By delegating and specialisation of decisions and goals, the organisation reduces the complexity of the problem to the individual decision-makers. Eventual conflict resolution depends on whether the decisions are mutually consistent and on the demands of the external environment.

According to the theory of Cyert and March, **organisations avoid uncertainty**. First, they avoid decision situations that require anticipating future events, and, thus, emphasise short-run reaction to short-run feedback. Second, by arranging a negotiated envi-

ronment, companies avoid the need to anticipate future reactions of others in their surroundings. Devising and negotiating an environment can take place through a variety of means, all of which, nonetheless, aim at making the environment controllable by the company. This does not necessarily mean collusive practices, however: "Good business practices", or industry conventions, for example, in effect increase the predictability of the environment.

Problemistic search assumes that search behaviour is triggered by a problem and is directed towards finding a solution to that problem. A problem is recognised when the organisation fails to meet one or more goals, or when such failure is anticipated in the near future. Initiated search will continue until a satisfactory solution is found or goals altered so that an available option is made acceptable (cf. March & Simon, 1958/1993). The implication of motivated search is that regular, planned search is relatively unimportant in inducing changes in existing solutions viewed as adequate.

The search process is typically simple-minded, taking place in the neighbourhood of the problem symptom and in the neighbourhood of the current option. Only if no option is readily found, more "distant" and increasingly complex search is performed, and search can also be directed towards vulnerable areas of the organisation. Moreover, the search process can incorporate search bias of three kinds: (i) bias reflecting training or experience, (ii) bias reflecting the interaction of hopes and expectations, and (iii) communication biases due to unresolved conflict in the organisation.

Organisational learning refers to the organisation's adaptive behaviour over time. First, organisations adapt their goals, and, specifically, the aspiration levels attached to the goals. Adaption of goals takes place over time in reaction to experience, *"either actual or vicarious"* (Cyert & March, 1963/1992: 172). Goals in a given time period can be regarded as a function of organisational goals in the previous time period, organisational experience with respect to that goal in the previous period, and experience of comparable organisations with respect to the goal dimension in the previous time period.

Second, organisational attention rules evolve over time, consequently increasing attention in certain parts of the environment while decreasing it in others. Furthermore, organisations shift their attention as regards measures used in evaluating performance. Typically organisations do not change measures significantly in the short-term, but are likely to shift towards indicators that produce generally satisfactory results.

Third, as a corollary of the assumption that search is problem-oriented, Cyert and March make the assumption that also search rules change over time. Search rules that have historically discovered solutions are likely to become increasingly established, whereas failure to find a solution is likely to trigger a search for an adapted search rule for the future. Similarly, the code (or language) for describing and communicating adapts to experience.

2.4.3 Discussion

In contrast to the previous contributions by Simon (1947/1997) and March and Simon (1958/1993), Cyert and March (1963/1992) place their focus on the processes of organisational decision-making. They set aside the assumption of a single or unified decision-maker, and, instead, develop a concept of a loose and shifting coalition that selects organisational goals. Moreover, Cyert and March emphasise the role of rules, procedures, and routines in response to external shocks. Many of these ideas were, at least in part, indeed foreshadowed by March and Simon (1958/1993), yet were not explicitly developed by them. Nonetheless, whereas March and Simon largely focussed on the individual decision-maker and his limited capabilities, Cyert and March extend the notion of bounded rationality also to the organisational level.

Quite controversially at the time of writing in the early 1960s, Cyert and March propose the idea that an organisation can learn in ways that are independent of the individuals. That is, that the organisation *per se* has a collective capability to select and retain information. In this sense, Cyert and March's work has had a significant impact on subsequent studies on organisational learning (Easterby-Smith & Lyles, 2003).

Cyert and March's piece can be seen to have impacted the development of the theory of teams (Marschak & Radner, 1972), which views teams as organisations where participants share a common interest. The theory of teams is concerned with issues such as decision rules and optimal group sizes under various problems associated with information (including bounded rationality both on the individual and organisational level). Furthermore, the theory of teams, while originally characterising a part of the organisation, can, by extension, be applied to the company as a whole. In this spirit, the theory of teams provides an alternative vantage point to Cyert and March's theory of the company.

Albeit March and Simon (1958/1993) provided some significant input to transaction cost economics (Coase, 1937; Williamson, 1975, 1981) with the concept of limited rationality that underpins that theory, Cyert and March's work further strengthens that connection. In addition to bounded rationality that limits the usefulness of contracts, transaction cost theory assumes opportunism of organisational participants, which, in effect, is related to Cyert and March's concept of multiple, conflicting goals within the company.

Moreover, somewhat related to transaction cost economics, agency theory (Alchian & Demsetz, 1972; Jensen & Meckling, 1976) is built on the assumption of opportunism. In agency theory, informational problems faced by the organisation are the product of wilful misinterpretation by the actors, rather than inherent cognitive limitations as in transaction cost economics. However, Cyert and March themselves note, in an epilogue written to the second edition of their work, that, after both Alchian and Demsetz as well as Jensen and Meckling, *"attention to bounded rationality [in transaction cost theories] has tended to fade into the background, and attention to conflict of interest has become paramount"* (Cyert & March, 1963/1992: 221-2).

In addition, the evolutionary theory developed by Nelson and Winter (1982) shares some concepts of Cyert and March's theory of the company. First, Nelson and Winter posit that organisations develop, stabilise, and follow routines that contain and carry knowledge and experience. Second, in the evolutionary theory, organisations change over time as a result of search for new routines when the existing ones fail. These two factors play a substantial role in also Cyert and March's theory.

Finally, Hoskisson *et al.* (1999) consider it likely that, from a behavioural perspective, Cyert and March (1963/1992) and their predecessors (Simon, 1947/1997; March & Simon, 1958/1993) have provided significant input into the early development of strategic management. Specifically, Hoskisson *et al.* cite Ansoff's (1965) work as a good example of this link. Nonetheless, the bibliometric analysis by Ramos-Rodríguez and Ruíz-Navarro (2004) does not provide particularly strong support for the argument of theoretical proximity of Ansoff with Cyert and March.

Nevertheless, Ramos-Rodríguez and Ruíz-Navarro's affirms the central nature of Cyert and March's (1963/1992) contribution. Specifically, throughout the 21-year research span of Ramos-Rodrígues and Ruíz-Navarro, Cyert and March's work has been among the twenty most-cited documents, albeit with a decreasing influence over time. This

could, then, suggest that one of the key contributions of Cyert and March (1963/1992) was indeed to propose a fundamentally different approach to the study of strategy, which has subsequently been widely adopted by the scientific community.

However important Cyert and March's (1963/1992) work has been for organisation theory and, by implication, to strategic management, their theory is largely one-sided, as it emphasises the inertia of organisations even in the face of change. One can easily argue, as Ansoff (1984) does, that a singular theory of *the* business company is not all too convincing: Not all companies exhibit the same change-denying conservative behaviour. Ansoff goes further on to advocate the contingency theoretical approach to strategy. Nonetheless, even if there are variations between the behaviours across companies, one can posit that Cyert and March's theory gives a broad outline – like an envelope curve – under which the distinct behaviours falls. In this sense, Ansoff's critique appears to be somewhat misguided (which is reflected also in the decreasing importance of contingency theory of strategy).

2.5   ORGANISATIONS AND ENACTED ENVIRONMENTS

Weick sets out his social-psychological discourse by defining organising as a *"consensually validated grammar for reducing equivocality by means of sensible interlocked behaviors"* (1969/1979: 3). By *consensual validation* Weick refers to agreeing upon what is real and illusory, which serves as the foundation for organising. Consensus is needed to build social processes out of behaviours and interpretations so that rules can be established. These rules can subsequently be imposed on the inputs to these processes. Second, *grammar* entails the fact that organising is a systematic collection of rules and conventions that enable a collection of interlocked behaviours to form social processes that are intelligible to actors. In a sense, the grammar works as a recipe for getting things done in a multi-person system. Third, organising is directed initially at inputs that are not self-evident, and, hence, organising serves to *reduce equivocality*. Fourth, *interlocked behaviours* refers to the fact that behaviours in organisational environments exhibit a great deal of interdependence and interaction.

Weick's discussion reviews the *social psychology of organising* from a systems perspective. However, in contrast to received theory, Weick discards with the concepts of unilateral causation, independent and dependent variables, origins, and terminations, which he claims as endemic yet misguided. Indeed, Weick substitutes linear causality with circular

causality, implying that if our behaviour is embedded in causal circuits, then *"whatever we do will come back to haunt and control us"* (1969/1979: 87). Furthermore, deviation-amplifying loops in cause maps tend to reinforce minor deviations.[10]

In Weick's description, organising is accomplished by processes containing individual behaviours that are interlocked among two or more people. Significantly, the behaviours of one person are contingent on the behaviours of one or more other persons; these contingencies Weick denotes as *interacts*. The sets of interacts are assembled into processes that finally constitute an organisation. Hence, organisational structure is indistinguishable from the collection of interlocked behaviours within the organisation. Indeed, the structure that determines how the organisation acts and how it appears is the same structure that is established by regular patterns of interlocked behaviour.

2.5.1 Organising as Natural Selection

Weick portrays the processes involved in organising as resembling the processes associated with natural selection, thus giving an evolutionary account of organisations. The Weick model of "organising as natural selection" comprises four elements: (i) ecological change, (ii) enactment, (iii) selection, and (iv) retention, as presented in Figure 2.5.[11]
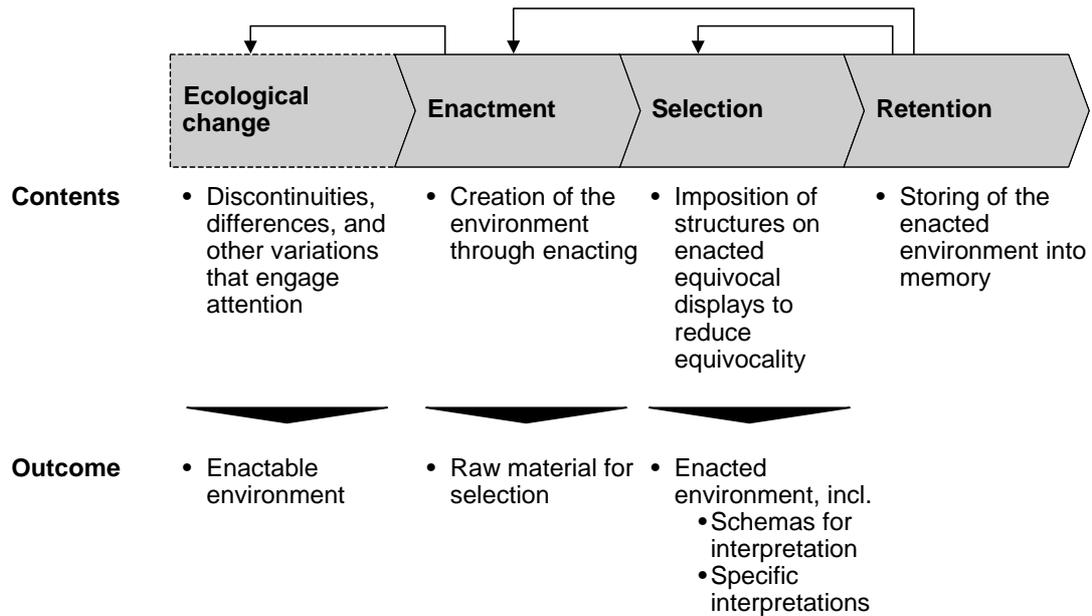
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[10] The concept of *deviation-amplification* has been established also in the economics discourse under the label *positive feedback*. In economics, positive feedbacks are the tendency for that which is ahead to get further ahead, for that which loses advantage to lose further advantage. Positive feedbacks, put differently, reinforce that which gains success or aggravate that which suffers loss (Arthur, 1996).

The notion of positive feedbacks (and resulting increasing returns) is in stark contrast to conventional economic theory that presupposes diminishing returns, implying a single equilibrium point for the economy, where positive feedbacks generate instability and multiple potential equilibrium points. Further, positive feedbacks are characterised by the accumulation of small, "random" events that eventually determine the outcome, non-linearity, and non-ergodicity (Arthur, 1994). Positive feedbacks are idiosyncratic to knowledge-based industries, and are brought about by up-front costs, network externalities and learning curve effects (Shapiro & Varian, 1999).

[11] The classical sociocultural evolution model by Campbell (1970; 1972; 1974) consists of three processes of (i) variation, (ii) selection, and (iii) retention, thus closely resembling models of natural selection. In Campbell's model, sociocultural *variations* can occur between social groups, between members in a single group, or across the different occasions when a single group acts.

In socio-cultural evolution, *selection* can take place by means of six different selective systems: (i) selective survival of complete social organisations, (ii) selective diffusion among groups, (iii) selective perpetuation of temporal variations, (iv) selective imitation of interindividual variations, (v) selective promotion to leadership roles, and (vi) rational selection.

Retention not only acts as a repository for interpretations that have been selected. In addition, they affect subsequent actions, are frequently edited, are protected in ways that may conflict with variation and selection, are coercive only to the degree that members are informed of their contents, and contain items that frequently are opposed to the self-interest of persons who must implement these items.

Ecological change	Enactment	Selection	Retention

Contents	• Discontinuities, differences, and other variations that engage attention	• Creation of the environment through enacting	• Imposition of structures on enacted equivocal displays to reduce equivocality	• Storing of the enacted environment into memory
Outcome	• Enactable environment	• Raw material for selection	• Enacted environment, incl. • Schemas for interpretation • Specific interpretations	

Figure 2.5   Organising as natural selection (Weick, 1969/1979)

First, ecological change serves as the outset for organising processes by providing the *enactable environment* through discontinuities, differences, or other variations that engage attention. Second, enactment, which is intimately bound with ecological change, refers to the process whereby organisational members create the environments that subsequently impose on them. This can be achieved by bracketing (i.e., categorising) the environment, or by inducing an ecological change within the environment itself. Enactment can, in general, be regarded as providing the raw material for the selection process. Third, selection involves the imposition of various structures on enacted equivocal displays in order to reduce their equivocality. Selection involves selecting schemes of interpretation and specific interpretations. Fourth, during retention, the product of successful sensemaking,[12] the enacted environment, is stored in the memory of the organisation in forms such as cause maps summarising covariations between labelled portions of the formerly equivocal display. These cause maps allow the person to interpret situations as well as to express himself in that situation so that also others can understand him.

Weick distils the basic theme for his organising model presented earlier into the following sentence that he calls the *"recipe for sensemaking"*:

> *"How can I know what I think until I see what I say?"* (1969/1979: 133)

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[12]   Weick furthers develops the concept of sensemaking in his (1995) book, which is discussed in detail in section 2.7.

In essence, the "recipe" coordinates with organising as follows: First, in the enactment phase, the organism or group enacts equivocal raw talk ("saying"). Second, the talk is viewed retrospectively and sense is made of it during selection ("seeing what I say"). Third, this sense is then stored as knowledge in the retention phase ("knowledge of what I said").[13]

In the context outlined by Weick, meaningful environments are the outputs of organising rather than inputs to it. Specifically, environments are created by organisations out of *"puzzling surroundings"* (1969/1979: 132). Interestingly enough, Penrose, a decade earlier, forebode the concept of Weick's enacted environment:

> *In the last analysis, the 'environment' rejects or confirms the soundness of the judgements about it, but* the relevant environment is not an objective fact discoverable before the event. (Penrose, 1959: 41; emphasis provided)

2.5.2 Characteristics of Enactment

Weick identifies four characteristics of enactment: (i) enactment as bracketing, (ii) enactment as deviation-amplification, (iii) enactment as self-fulfilling prophecies, and (iv) enactment as social construction of reality. First, *bracketing* involves using schemata that constrain seeing and, thus, serve to bracket portions of experience. A schema directs the exploration of objects, this exploration samples portions of an object, and these samples may modify the schema. In actual organisations, bracketing takes place, for example, in standard operating procedures. Second, many instances of enactment exhibit what Weick calls *"deviation-amplifying causal structure[s] that contain(s) an even number of negative signs"* (p. 157), or, put differently, positive feedbacks.[14] This means that minor disturbances can grow into major happenings with major consequences, and, that the origins of consequential enactments may have been rather modest. Third, Weick describes enactment as *"efferent sensemaking"* (1969/1979: 159) that flows outward from the individual: the person's idea is extend outward, implanted, and then rediscovered as knowledge. In this sense, action, perception, and sensemaking are circular and tightly coupled, and can cre-

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[13] Weick's (1969/1979) recipe for sensemaking almost forces one to an ontological and epistemological discussion between scientific realism and constructivism. Albeit likely relevant in respect to sensemaking, such a discussion is clearly outside of the scope of the present study.

[14] See footnote 10 for introduction on *deviation-amplification* and *positive feedbacks*.

ate a self-fulfilling prophecy.[15] Fourth, as the final characteristic, an enacted environment can be seen as a *social construction of reality*, which is selectively perceived, cognitively rearranged, and interpersonally negotiated.

2.5.3 Characteristics of Selection

Selection in an organisational environment can be called as *"artificial selection"* (Weick, 1969/1979: 176), in contrast to "natural selection" in the Darwinian sense. Natural selection is unguided and essentially random, whereas organisational selection is (at least) intendedly methodological, deliberate, and plausible. Nonetheless, bounded rationality (March & Simon, 1958/1993) occasionally punctuates this strive for rationality, and produces *"the same haphazard quality that is associated with natural selection"* (Weick, 1969/1979: 176). The enacted environment is artificial because it is laced with preferences, purposes, idiosyncratic punctuations, desires, selective perceptions, and designs. Further, individuals often impose cause maps of previously enacted environments in selection. These prior enactments filter current equivocalities, and some cues go unnoticed, whereas others are labelled as familiar, relevant, strange, etc. As a result, current actions are mere extrapolations of previous actions. This explains why organisations exhibit inertia and resistance to change.

Moreover, the **inputs to selection** consist of equivocal enactments and cause maps of varying equivocality. First, selection is partially constrained by enactment, given that enactment can produce variable raw material for selection to process. Second, the retained enacted environment serves as an input to subsequent selection, where it serves as a "stand-in" for the physical environment in the process of sensemaking. Hence, selection works retrospectively.

For selection to operate, the principle of *requisite variety* (Ashby, 1956) must hold: the equivocality of processes used must match the equivocality of inputs. Or, put differently, to make sense of fine-grained inputs, one has to employ a sufficiently high-resolution process so as to distinguish all the nuances. When faced with the need for requisite variety, the organisation has three options. First, it can establish a one-to-one correspondence between variety in the controller and variety in the controlled, which is

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15 A vivid case exemplifying self-fulfilling prophecies is offered by Weick (1969/1979): Should a company assume that its competitors are highly competitive, the company is likely to behave so that it minimises the effect of eventual competitive actions. Thereby it exhibits itself competitive behaviour, which induces its competitors to act more aggressively (even despite their initial inclinations).

unfortunately, in most cases, prohibitively expensive. Second, the organisation can reduce the amount of variety through interorganisational networks or collusion, for example, yet this option is open to only the most powerful of organisations (cf. Cyert & March, 1963/1992). Third, the organisation can complicate the controlled to match the variety of the environment – this is the option that Weick is recommending for use in practice.

Further, selection operates as **retrospective sensemaking**, since selection is based on prior enacted environments and, hence, operates "backwards". In a way, sensemaking resembles writing plausible accounts, histories, and sequences for enactments. Equivocality is removed when an enactment is supplied with a history that could have generated it – indeed, *could* have generated it, as sensemaking is all about subjectivity. Given this backward nature of sensemaking, Weick advises managers to think in the future perfect tense, which supposedly helps in overcoming the inherent inertia in human thinking.

2.5.4 Characteristics of Retention

The retention process stores the enacted environment into the organisation's memory. However, as retention processes reorganise their inputs, retention gives back something different than was originally intended. In organising, the imperfections that distort inputs to retention are supplied by previously enacted environments. In retention, existing patterns are reinforced by new inputs, tend to assimilate incoming small variations, are resistance to change, exhibit complex interlinkages, and are bound to specific time sequences. Retention processes also depend on the equivocality present in inputs from selection.

Sensemaking in organisations as a process is somewhat paradoxical in nature. On one hand, sensemaking needs to be flexible enough to allow the organisation to renew itself, as change is bound to happen over time. On the other hand, to maintain continuity, sensemaking must be stable enough, for chronic flexibility destroys identity. Weick posits that of the options for reconciling between flexibility and stability, only solutions by alternation or simultaneity make sense – a compromise response typically accomplishes neither flexibility nor stability. For an organisation to survive, it must split its use of retained content: in either enactment or selection, individuals must act as if memory can be trusted, and in the other process they must act as if it cannot. Total discrediting, as

does total crediting, creates either an ultraflexible or an ultrastable organisation, respectively. Finally, Weick reminds that discrediting is inherently linked to the concept of doubt: individuals should be inclined to question (rather than disbelieve) the content retained in the organisation.

2.5.5 Discussion

Weick's (1969/1979) work can be regarded as the beginning of a new era in organisation theory. Gioia and Mehra (1996) quite rightly describe Weick's *Social Psychology of Organizing* as a *"wide-ranging, playful, and powerful manifesto that sought to revolutionalize how we thought about organizations, organizing, and even the process of theorizing about organizations"* (p. 1227). The role of enacted environments in organising is obviously striking. Due to the reciprocity of ecological change and enactment in Weick's organising model, organisational realities can be regarded as being of subjective origin. Indeed, people invent rather than discover part of what they think they see. In practical terms, enactment implies that organisations should be self-conscious about and reflect their actions, and, that organisations need to discover ways to partial out the effects of its own interventions from effects that would have happened anyway.

In contrast to the Carnegie school (Simon, 1947/1997; March & Simon, 1958/1993; Cyert & March, 1963/1992) that views organisations as decision-making systems that guide the behaviours of members through decision premises and performance programmes, Weick's model portrays organisations as "loosely coupled" systems. In these loosely coupled systems, individual participants have great latitude in interpreting and implementing directions.

Weick also introduces a novel research approach to organisations, as he disregards the realist epistemology of the Carnegie school. In contrast, Weick's account is decidedly constructivist in nature, given that it stems from social psychological discourse. Moreover, whereas the Carnegie school contributions can be regarded as prescriptive, Weick's musings can be described as more descriptive in nature.

In addition to a new philosophical perspective, Weick significantly advances the theory on organisational information processing. Rather than directed at problem-solving or decision-making, organisational information processing is directed at reducing equivocality of information about the external environment. This view proposed by Weick

(1969/1979) is subsequently elaborated on by Daft and Weick (1984), who introduce a model of organisations as interpretation systems.

Weick (1969/1979), with the later (1995) contribution, has also played a part in the attempt to develop an attention-based view of the company by Ocasio (1997). Ocasio's view amalgamates features from the realist Carnegie tradition of March and his associates (Simon, 1947/1997; March & Simon, 1958/1993; Cyert & March, 1963/1992) with the constructivist, social psychological proposed by Weick.

Similarly to Cyert and March's (1963/1992) volume, Weick's (1969/1979) piece has been amongst the most influential contributions in the area of organisational learning. Nonetheless, Weick applies quite a different perspective than do Cyert and March. Albeit Weick acknowledges, in a similar vein as the proponents of the Carnegie school, the role of cognition in organisations, he focuses on interpreting and creation of meaning rather than information processing as such.

Ramos-Rodríguez and Ruíz-Navarro (2004) unquestionably found Weick's (1969/1979) contribution amongst the seminal pieces in strategic management literature. In fact, Weick's (1969/1979) work precedes March and Simon's (1958/1993) classic, albeit only by a slim margin. Ramos-Rodríguez and Ruíz-Navarro's bibliometric study also suggests that the significance of Weick's (1969/1979) is declining. Van Maanen (1995) has expressed similar views while criticising Weick's (1969/1979) work as difficult to build upon.

One of the peculiarities of Weick's (1969/1979) piece is the way he develops his arguments. The work is not very well organised, and the main thrusts are developed in parallel. This makes the work rather strenuous to follow, and difficult to make sense of the arguments. However, this does not imply that the work would make a boring read. Indeed, Weick's distinguishing, even essayistic literary style is quite captivating. Also fascinating is the way how Weick's language becomes an essential part of the theory (Van Maanen, 1995), as is also pertinent for a constructivist piece.

2.6 ORGANISATIONS AS INTERPRETATION SYSTEMS

One of the early references to organisations as interpretive systems was made by Burns and Stalker (1961/1968). In their discussion on management of innovation, Burns and Stalker describe companies they studied not only as *"receiving"* and *"acting on"* informa-

tion, but as well *"altering, rearranging, or recomposing information"* (1961/1968: 78). They even introduce the notion of organisations as *interpretive systems.*

Ansoff (1965) and Ansoff and Brandenburg (1969) provide a rather similar account a few years later to that of Burns and Stalker's. While predicting the characteristics of the corporation towards the end of the 20th century, they underline the new competence base for general managers necessitated due to the changing business environment. In so doing, they draw implications for management of the corporation, and portray the general manager of the future as one *"whose skills are in perceiving and interpreting the broader environment"* (Ansoff & Brandenburg, 1969: 66).

2.6.1 Organisational Interpretation Model

Daft and Weick argue that interpretation is a central function of both individuals and organisations: *"People are trying to interpret what they have done, define what they have learned, solve the problem of what they should do next. Building up interpretations about the environment is a basic requirement of individuals and organisations. (---) Interpretation is a critical element that distinguishes human organisations from lower level systems."* (1984: 284-5). Hence, organisations can be conceptualised as interpretation systems that act as highly specialised information receptors interacting with the environment.

Daft and Weick's model of organisations as interpretation systems rests on four assumptions. First, organisations are assumed to be open social systems that process information from the environment (cf. Weick, 1969/1979). Second, organisational interpretation, although it takes place by means of individual interpretation, is *"something more than what occurs by individuals"* (1984: 285) (cf. Cyert & March, 1963/1992; Weick, 1969/1979). Third, only a limited group of "strategic-level" managers formulate the organisation's interpretation (Aguilar, 1967). Fourth, systematic differences exist between companies in the ways that they interpret the environment.[16]

Daft and Weick define interpretation as the *"process of translating events and developing shared understanding and conceptual schemas among members of upper management"* (1984: 286). Resembling Weick's (1969/1979) enactment-selection-retention model, Daft and Weick propose a model comprising (i) scanning (data collection), (ii) interpretation (data given

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[16]   The ontological assumption underpinning Daft and Weick's organisational interpretation model is that issues exist separate from organisations and the epistemological assumption is that organisations interpret those issues (Bansal, 2003).

meaning), and (iii) learning (action taken). Feedback from organisational action may provide new collective insights for coalition members, and thus influence future scanning-interpretation-learning cycles. Figure 2.6 presents a graphical representation of the organisational interpretation model.
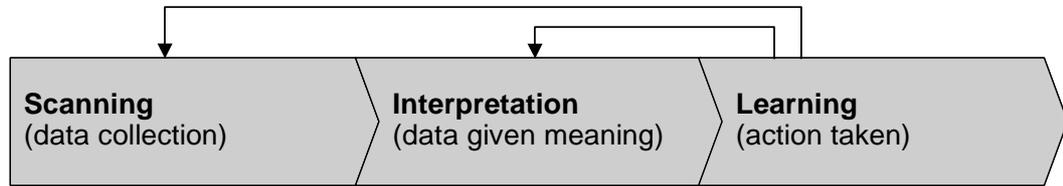
Figure 2.6   Organisational interpretation model (Daft & Weick, 1984)

Against this background, organisational differences in interpretation can be seen as stemming from (i) management's beliefs about the analysability of the external environment (Daft & Macintosh, 1981) and (ii) the extent to which the organisation intrudes into the environment to understand it. In environments that are characterised as, for example, concrete and measurable, managers will see the environment as analysable, and will aim at discovery through meticulous intelligence gathering and rational analysis. In contrast, in environments that are seen as unanalysable, the organisation may to some extent create the external environment by constructing, coercing, or enacting a reasonable interpretation (cf. Weick, 1969/1979). Moreover, organisations are likely to differ in their extent of intrusiveness, yet Daft and Weick (1984) find less conclusive evidence of the factual reasons for the differentials.

2.6.2 Interpretation Modes of Organisations

Based on the notion that organisations vary in their beliefs about the environment and in their intrusiveness into the it, four categories to characterise various interpretation modes of organisations can be derived: (i) enacting, (ii) discovering, (iii) conditioned viewing, and (iv) undirected viewing (see Figure 2.7). The *enacting* mode closely resembles the picture of organisations presented by Weick (1969/1979), as it entails an active and intrusive strategy combined with the assumption about an unanalysable environment. The *discovering* mode also represents an intrusive approach, but it emphasises detecting the correct answers in the analysable environment rather than shaping the answer. Organisations under *conditioned viewing* assume an analysable environment and are not intrusive, and, thus, rely on established data collection procedures and interpretations within traditional boundaries. Similarly, *undirected viewing* represents a passive ap-

proach, yet assumes an unanalysable environment, and, hence, these companies act on limited, soft information to create their perceived environment.

	Passive	Active
Unanalysable	Undirected viewing	Enacting
Analysable	Conditioned viewing	Discovering

Assumptions about environment

Organisational intrusiveness

Figure 2.7   Interpretation modes of organisations (Daft & Weick, 1984)

In addition to the interpretation modes, Daft and Weick discuss also other organisational characteristics. First, they posit that the less analysable the perceived external environment is, the greater the tendency for managers to use external information gained from personal contact with other managers (cf. Geletkanycz & Hambrick, 1997). Further, in unanalysable environments, data acquisition will be irregular and casual. Second, in unanalysable environments the interpretation process will exhibit less equivocality reduction and include relatively few assembly rules yet more processing cycles. Third, the interpretation mode is related to the strategy applied in the organisation.[17] Also, the decision-making process tends to be more analytical and programmed in analysable environments, whereas companies in unanalysable environments are likely to use more incremental, trial-and-error –type processes. Table 2.1 summarises this previous discussion with the various interpretation roles.

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[17]   Daft and Weick (1984) use the strategic typology of Miles and Snow (see Miles *et al.*, 1978) that encompasses *defenders, prospectors, analysers,* and *reactors.* According to Miles *et al., defenders* deliberately enact and maintain an environment of stability, whereas *prospectors* enact an environment that is more dynamic than those of other types of organisations within the same industry. *Analysers* fall between the two extremes of defenders and prospectors in attempting to minimise risk while maximising the opportunity for profit. *Reactors,* in contrast to the proactive types of defenders, prospectors, and analysers, lack adequate response mechanisms with which to respond to a changing environment. Hence, reactors tend to adjust to their environments in inconsistent and unstable manners.

Table 2.1   Summary of interpretation modes and organisational processes (Daft & Weick, 1984)

Interpretation mode	Organisational processes		
	Scanning characteristics	Interpretation process	Strategy and decision-making
Enacting (unanalysable environment, actively intrusive)	• External and personal data sources • Irregular reports, feedback from environment, selective information	• Some equivocality reduction • Moderate rules and cycles	• Prospector strategy • Incremental trial and error in decision-making
Discovering (analysable environment, actively intrusive)	• Internal and impersonal data sources • Separate departments, extensive information	• Little equivocality reduction • Many rules, moderate cycles	• Analyser strategy • Systems analysis, computation in decision-making
Conditioned viewing (analysable environment, passively intrusive)	• Internal and impersonal data sources • Regular record keeping and information systems, routine information	• Little equivocality reduction • Many rules, few cycles	• Defender strategy • Programmed, problemistic search
Undirected viewing (unanalysable environment, passively intrusive)	• External and personal data sources • Irregular, casual information	• Much equivocality reduction • Few rules, many cycles	• Reactor strategy • Coalition building in decision-making

Walsh and Fahey (1986), however, criticise the theories based on the information-processing perspective (e.g., Weick, 1969/1979; Daft & Weick, 1984) as one-sided. Hence, they introduce the political perspective (e.g., Burns, 1961; Pettigrew, 1977; Narayanan & Fahey, 1982) into the discussion, and arrive at the concept of *negotiated belief structures*. They are the juxtaposition of beliefs and self-interests of organisational participants, representing the configuration of power and beliefs establishing the decision premise within the strategy-making group.

Extending Daft and Weick's (1984) discourse, Daft and Lengel (1986) present a model that ties together organisational information processing requirements and structural mechanisms that fulfil them. Essentially, Daft and Lengel argue that the former is affected by uncertainty and equivocality, whereas the latter depends on meetings, integrators, planning and the likes.

2.6.3   "Automatic" Interpretations

Daft and Weick's interpretation model presupposes that managers *"actively try to make sense of [events]"* (1984: 286). In a similar vein, also other models of strategic decision-

making (e.g., Dutton *et al.*, 1983; Dutton & Duncan, 1987) have assumed that diagnostic processes operating in organisations involve the active, conscious, and intentional efforts of decision-makers. However, Dutton (1993) argues that this does not necessarily need to be the case, and, that an automatic mode of interpretation would, in fact, be the dominant form.

Dutton highlights three sets of conditions that tentatively have an effect on the use of automatic interpretations in organisations: (i) decision-makers' connections to the issue, (ii) issue context factors, and (iii) organisational characteristics. First, decision-makers interpret issues differently based on their level of experience with an issue type, the self-relevance of the issue, and their issue evaluation. Specifically, the more connected decision-makers are to the issues, the more likely they are to interpret them "on automatic". Second, increasing time pressure and information overload increases inclination towards automatic interpretation. Third, specialisation and routinisation of issue management activities, the dominance of norms for consistency, and past performance success all contribute to the prevalence of automatic interpretations.

Automatic interpretation, according to Dutton, relies extensively on the schema that individuals have in memory and the issue categories embedded in organisational routines and procedures (cf. March & Simon, 1958/1993; Weick, 1969/1979; Normann, 1975). These, then, serve as important predictors of how decision-makers will interpret and respond to newly detected issues. Moreover, Dutton hypothesises that an automatic issue interpretation mode leads to faster diagnosis of issues and more rapid responses to issues on one hand, but to less resilient issue diagnosis on the other.

2.7 SENSEMAKING IN ORGANISATIONS

Weick's (1969/1979; esp. 1995) concept of sensemaking literally refers to making of sense, that is, to creating or constructing meanings (*Oxford English Dictionary*, 1989). Stated more elaborately, sensemaking is about *"placement of items into frameworks, comprehending, redressing surprise, constructing meaning, interacting in pursuit of mutual understanding, and patterning"* (Weick, 1995: 6). Seen this way, sensemaking is creation as much as it is discovery, and it is grounded in both individual and social activity.

Weick presents also an elaborate description of what sensemaking is not. He argues strenuously that sensemaking is fundamentally different from interpretation, although

sensemaking can, and often indeed does, include acts of interpretation. In the words of Weick:

> *The key distinction is that* sensemaking is about the ways people generate what they interpret. *(---) The concept of sensemaking highlights the action, activity, and creating that lays down the traces that are interpreted and then reinterpreted. (---) [I]nterpretation can be a process but is just as likely to describe a product. (---)*

> *Even when interpretation is treated as a process, the implied nature of the process is different. The act of interpreting implies that something is there, a text in the world, waiting to be discovered or approximated.* Sensemaking, however, is less about discovery than it is about invention. To engage in sensemaking is to construct, filter, frame, crate facticity, and render the subjective into something more tangible. *(---)*

> *Thus, the* concept of sensemaking is valuable because it highlights the invention that precedes interpretation. *It is also valuable because it implies a higher level of engagement by the actor. Interpretation connotes an activity that is more detached and passive than the activity of sensemaking, (---)*

> *It is also important to separate sensemaking from interpretation because* sensemaking seems to address incipient puzzles at an earlier, more tentative stage than does interpretation. (1995: 13-4; emphases provided)

As is apparent from Weick's argument, explanatory processes such as understanding, interpretation, and attribution are closely associated with sensemaking. According to Weick, however, sensemaking is uniquely characterised by the general properties, namely that sensemaking is:

- grounded in identity construction;
- retrospective;
- enactive of sensible environments;
- social in nature;
- ongoing;
- focussed on and by extracted cues; and
- driven by plausibility rather than accuracy.

2.7.1 Properties of Sensemaking

Weick states that sensemaking is **based on identity construction**. However, a sense-maker's identity is not singular and atomistic, but rather a dynamic construction driven by one's need for (i) self-enhancement in seeking and maintaining a positive cognitive and affective state about the self, (ii) self-efficacy, and (iii) self-consistency. Controlled, intentional sensemaking is triggered by a failure to confirm one's self. Further, sense-making occurs in the service of maintaining a consistent, positive self-conception.

Importantly, people learn about their identities by projecting them into an environment and observing the consequences of this projection. This is not to suggest that people accept the reactions of the environment as given, however. Indeed, they make an active effort to influence the environment (cf. Weick, 1969/1979).

Individual's self-concepts and personal identities are closely linked to the organisation's image. The individual frequently projects his needs for his identity to his organisation's identity. Also, it would seem that individuals do not easily tolerate threats to images and identities: If negative images threaten the representation of self, people may alter the sense they make of those images, even if this means redefining the organisational identity (cf. Dutton & Dukerich, 1991; Dutton *et al.*, 1994; Gioia & Thomas, 1996).

Sensemaking is **retrospective**. For Weick, and for sensemaking, time exists in two distinct forms: as pure duration and as discrete segments. An experience, in its singular form, implies distinct, separate episodes, in contrast to pure duration. In the words of Mead, people are *"conscious of what [they] have done, never of doing it"* (1956: 136) – this is what experience is about. Sensemaking, which is based on experiences, is, hence, always retrospective in nature. Moreover, Weick connects the notion of retrospect to Mintzberg's (1978) concept of "emergent strategy", which are realised strategies that were never intended, and, hence, can only be examined in retrospect.

In organisational life, people often produce part of the environment they face: a some kind of a monolithic, singular, fixed environment that exists detached from and external to these people is nonexistent in practice. Thus, sensemaking is **enactive** (cf. Weick, 1969/1979). Enacting is about action in the world, and not about conceptual pictures of the world. Enacting is, then, about creating reality by interacting with the environment. The enacted world is subjective, punctuated, and bracketed, because its origins are in

mental models that help to make sense of the environment. Enactment constructs sensible environments by labelling reality with concepts with meaning.

Weick stresses that sensemaking is a **social** process, occurring in an organisation characterised by *"a network of intersubjectively shared meanings that are sustained through the development and use of a common language and everyday social interactions"* (Walsh & Ungson, 1991: 60). As one's conduct is contingent on the conduct of others (be they imagined or physically present), social processes constantly shape interpretations and interpreting. Similarly, as Wittgenstein (1951) points out, the meaning of a concept is its use in language, and language is used in social contexts.

Sensemaking is also an **ongoing** process: it never starts and it never stops, since *"[p]eople are always in the middle of things, which become things, only when those same people focus on the past from some point beyond it"* (Weick, 1995: 43). The ongoing flow of actions and words in an organisation is punctuated by events (such as product launches) that "crystallise meanings".

Weick describes the flow of events by referring to projects that people are in. These projects become interrupted, causing emotional responses in individuals. Emotion is what happens between the time at which an organised sequence is interrupted and the time at which the interruption is removed, or a substitute response is found allowing the sequence to be completed. These interruptions cause arousal, which narrows the context in which sensemaking takes place.
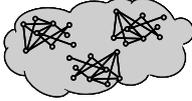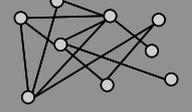
Sensemaking relies on **extracted cues** that are simple, familiar structures that are seeds from which to develop a larger sense of what may be occurring. Cues serve as a point of references for the organisation in search of meaning, and they direct people's attention to certain issues in a consequential way. Sensemaking of cues is dependent on both culture and context, affecting both the extraction of cues (which cues will be identified) as well as what eventually will become of the cues.

Almost surprisingly, Weick asserts that almost any cue will suffice for sensemaking. Almost any point of reference will do, because it stimulates a cognitive structure that then leads people to act with more intensity, which then creates a material order in place of a presumed order – a sequence that closely resembles a self-fulfilling prophecy (Weick, 1969/1979).

As the final property, Weick posits that sensemaking is **driven by plausibility rather than accuracy**. According to Weick, *"accuracy is nice, but not necessary"* (1995: 56), as well as often unattainable (due to human limitations; March & Simon, 1958/1993). However, sensemaking is about plausibility, pragmatics, coherence, reasonableness, creation, invention, and instrumentality. A good story holds disparate elements together long enough to energise and guide action, even enough to allow people to make retrospective sense of what happens. Hence, sensemaking can benefit from the use of myths, metaphors, platitudes, fables, epics, and paradigms. Moreover, as sensemaking by definition is subjective, it is adequate that accounts are socially acceptable and credible.

2.7.2 Sensemaking in Organisations

At the very outset, Weick acknowledges that a *"theory of organizations that is characteristic of the sensemaking paradigm"* (Weick, 1995: 69) does not exist thus far. However, Weick sets out to characterise organisational sensemaking by using Wiley's (1988) classification stating that there are three levels of sensemaking "above" the individual level (Figure 2.8). First, on the intersubjective level, individual thoughts, feelings, and intentions are merged or synthesised into conversations during which the self gets transformed from "I" to "we", thus differentiating intersubjective from intrasubjective meaning. Second, on the level of generic subjectivity, the social structure implies a generic self instead of a collection of individual selves. In so doing, generic subjectivity creates controlling structures in which people can substitute for one another. Third, on the extrasubjective level, the generic self is replaced by "pure meanings" without a knowing subject. This is the level of symbolic reality, conceptualised as an abstract idealised framework derived from prior interaction.

Figure 2.8 **Levels of sensemaking (Weick, 1995)**

Organisations would be involved in intersubjective and generic subjective sensemaking, albeit Wiley does not explicate that. Organisations are likely to exhibit varying degrees of intersubjective and generic subjective sensemaking, depending on, for example, environmental contingencies. Organising involves creating intersubjective meanings, and allowing further people to pick up, perpetuate, and enlarge that understanding on the generic subjective level. Put differently, organisational forms are the bridging operations that link the intersubjective with the generically subjective.

2.7.3 Occasions for Sensemaking

Two types of sensemaking occasions common to organisations are ambiguity and uncertainty. In the case of ambiguity, people engage in sensemaking because they are confused by too many interpretations, whereas in the case of uncertainty, they do so because they are ignorant of any interpretations.

Ambiguity refers to an ongoing stream that supports different interpretations at the same time, caused by literary ambiguity (Levine, 1985), or high complexity, paradoxicalness or lack of clarity (Martin, 1992). Ambiguity means that the assumptions for rational

decision-making are not met, not that the environment is imperfectly understood due to, for example, lack of information.[18]

Uncertainty is as common an occasion for sensemaking as is ambiguity. However, whereas ambiguity is associated with confusion, uncertainty is associated with ignorance. Uncertainty is about *"an individual's perceived inability to predict something accurately"* (Milliken, 1987: 136). People lack understanding of how components of the environment are changing (state uncertainty), of how the impact of environmental changes affect the organisation (effect uncertainty), as well as of what response options are open to them (response uncertainty).

Under a crisis, argues Weick (1988), commitment, capacity, and expectations affect sensemaking during crisis, and, consequently, the severity of the crisis itself. Hence, Weick posits, the concepts of enactment could perhaps also be used in order to reduce the likelihood of crises.

2.7.4 Substance of Sensemaking

Sense is made in language, from language, and by using language, because meaning and communication are inherently linked to use of language. Indeed, points Weick, *"to change a group, one must change what it says and what its words mean"* (1995: 108). The content of sensemaking is to be found in the frames and categories that summarise past experience, in the cues and labels that embody aspects of present experience, and in the ways these two settings of experience are connected. Diverse vocabularies are at work in sensemaking, affecting both the process and its results.

Ideologies are *"shared, relatively coherently interrelated set[s] of emotionally charged beliefs, values, and norms that bind some people together and help them to make sense of their worlds"* (Trice & Beyer, 1993: 33). Ideologies combine beliefs about cause-effect relations, preferences for certain outcomes, and expectations of appropriate behaviours. Ideologies can be seen to make social situations comprehensible and meaningful, serving as a vocabulary of society. Ideologies are important, since they exert strong forces guiding organisational adaptation (Meyer, 1982).

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[18] Weick (1995: 95) emphasises the distinction between *ambiguity* and *equivocality*. Writes Weick: *"I think it is important to retain the word* equivocal *because it explicitly points to the presence of two or more interpretations as a trigger to sensemaking. Although* ambiguity *also means the presence of two or more interpretations, it can also mean something quite different, namely, a lack of clarity, which (---) makes it quite similar to uncertainty"* (original emphases).

Third-order controls are assumptions and definitions that are taken by people as given, and, hence, provide control in organisations. Third-order controls are "premise controls", because they influence the premises people use when they diagnose situations and make decisions.[19] Premises are the suppositions or propositions on which some argument or conclusion rests, and include both factual and value content (Simon, 1947/1997). Premises play a significant role in sensemaking, as they provide influence early in the process by limiting the flow and content of information, limiting the search for options, focussing the definition of what is dangerous, and constraining expectations.

Paradigms are like ideologies and premises in the sense that all are simplifying heuristics (Martin & Meyerson, 1998), yet paradigms are more self-contained systems capable of serving as alternate realities. For purposes of sensemaking, paradigms can be defined as sets of recurrent and quasi-standard illustrations that show how theories of action are applied conceptually, observationally, and instrumentally to representative organisational problems. Weick describes paradigms as "vocabularies of work".

Theories of action are organisational counterparts for what cognition is for individuals. They build on the stimulus-response paradigm, and allow people in organisations to build knowledge as they respond to situations they encounter. Theories of action are collections of maps of environments with causal relationships, and can be used to identify stimuli properly and to select adequate responses. Weick calls them as "vocabularies of coping". Figure 2.9 presents how the organisation interacts with its environment in a stimulus-response model.

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[19] In addition to third-order control, Perrow (1986) identifies two other forms of control: first-order control by direct supervision and second-order control by programmes and routines.
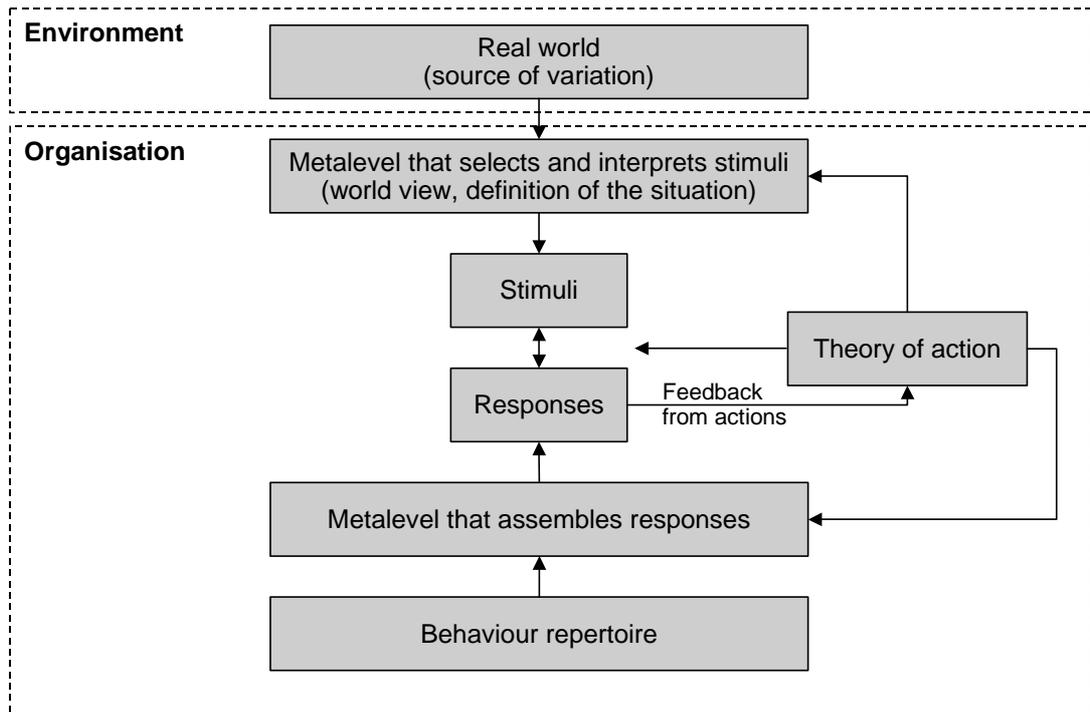
Figure 2.9   Stimulus-response model of organisation-environment interaction (Weick, 1995)

Similarly, Goold *at al.* (1994), in their treatise on corporate strategy in a multibusiness setting, point out that one of the key sources of "parenting" advantage are the parent's mental maps. They are the rules of thumb or mental models that help the corporate parent to interpret and synthesise information and that shape the parent's description of the different business improvement opportunities.

Traditions are all kinds of images, objects, and beliefs that can be transmitted to subsequent organisational generations. What cannot be transmitted, however, is action. Rather, only images of action and beliefs requiring or recommending that these images are re-enacted can be transmitted. For concrete human action to be transmitted, it has to become symbolic. According to Weick, traditions are the "vocabularies of predecessors".

Stories, referred to as "vocabularies of sequencing and experience", facilitate diagnosis and reduce the disruption produced when projects are interrupted. Narratives filter experience, and allow clarity through means of sequencing. Stories integrate known and conjectural elements, suggest causal order, facilitate reconstruction of events, enable discussion about absent things, guide action and enrich routines, facilitate building of experience, and transmit and reinforce third-order controls.

2.7.5 Processes of Sensemaking

At least four ways exist for people to impose frames on ongoing flows and link frames with cues in the interest of meaning. On the belief-driven side, sensemaking can take the form of *arguing* and *expecting*, whereas on the action-driven side, sensemaking can take the form of *committing* or *manipulating*. Processes of arguing, expecting, committing, and manipulating develop generic subjectivity. Both two elements, belief and action, are related by the sensemaking process, the outcome of which is beliefs and actions tied together by socially acceptable implications. Precisely because beliefs and actions are interrelated, sensemaking can start at any point.

Arguing is a significant form of belief-driven sensemaking. The concept of argument refers, in part, to any piece of reasoned discourse, and, in part, to a dispute between people. Individual reasoning is embedded in social controversy, and the unfolding of this controversy is what arguing in sensemaking is all about. In the process of developing and criticising explanation, people often discover new explanations, producing concurrently opportunities for adaptive sensemaking.

Expectations are more directive than arguments. They serve as strong filters, and, hence, their formation and activation is crucial for sensemaking. Expectations are self-fulfilling prophecies that can also be self-correcting. That is, when events seem to diverge from expectations, both the expectation and the event itself can be adjusted. The prevalence of expectations as form of sensemaking emphasises Weick's earlier premise that sensemaking is driven by plausibility rather than accuracy.

Of action-driven forms of sensemaking, **committing** focuses sensemaking on binding actions. It highlights the importance of action, visibility, volition, and irrevocability in the formation and persistence of meanings. People try to build meaning around those actions to which their commitment is strongest; sense is made when beliefs justify taking irrevocable action. Levels of commitment also affect the organisation's possibilities to accommodate to the environment: weak commitments should make accommodation easier, and vice versa.

Sensemaking by means of **manipulation** involves acting in ways that create an environment that people can then comprehend and manage (cf. Weick, 1969/1979; Daft & Weick, 1984). In essence, manipulation creates certainty in an uncertain environment.

2.7.6 Managerial Implications of Sensemaking

Finally Weick introduces seven tentative maxims for practitioners:

1. *Talk the walk.* As meaningful words are found through action, Weick reminds managers to search for words that make sense of current walking that is adaptive for reasons that are not yet clear.

2. *Every manager an author.* "Talking the walk" may not be enough for success. Use of rich vocabularies is needed in constructing the meaning of action.

3. *Every manager an historian.* Decision-making in Weick's model is retrospective: it consists of locating, articulating, and ratifying an earlier choice, bringing it forward to present, and claiming it as the decision that has just been made. Hence, any decision-maker is only as good as his memory.

4. *Meetings make sense.* Given that sensemaking is a social phenomenon, meetings can work as a setting to argue and to construct fresh frameworks.

5. *Stamp in verbs.* As sensemaking is an ongoing process, managers are encouraged to use verbs (for actions) rather than nouns.

6. *Encourage shared experience.* Albeit difficult to attain, shared experiences help people construct shared meaning.

7. *Expectations are real.* Expectations are powerful realities in sensemaking. Hence, people need craft them with care.

2.7.7 Discussion

Weick's (1995) piece continues the work initiated by his earlier (1969/1979) work. However, whereas the latter represents a novel strand of organisational theories, the former elaborates on the concepts proposed earlier. Specifically, Weick (1995) further develops the concept of organisational sensemaking. At the heart of Weick's conceptualisation of sensemaking are ethnomethodology (Garfinkel, 1967) and cognitive dissonance theory (Festinger, 1957). Garfinkel's contribution emphasises the role of retrospective accounts of decisions, whereas Festinger's theory emphasises post-decisional efforts to revise meanings of decisions. Albeit both of these already underpinned Weick's earlier, yet somewhat cursory, treatise on sensemaking, it is really in his later contribution that he develops the concept of sensemaking further.

Sensemaking in Organizations also further develops the organisations as interpretation systems approach introduced by Daft and Weick (1984), whose scanning-interpretation-learning model is, in its turn, built on Weick's earlier (1969/1979) enactment-selection-retention model. In essence, Weick (1995) upgrades Daft and Weick's previous representation of organisational interpretation by focussing on the wider concept of organisational sensemaking.

Whereas Weick's *Social Psychology of Organizing* (1969/1979) was a revolutionary endeavour to change the view of the organisational world, *Sensemaking in Organizations* is much more about offering a deeper treatment of the definition and conceptualisation of sensemaking. Gioia and Mehra, in their review of *Sensemaking in Organizations*, describe the book as *"not a third edition of* Social Psychology of Organizing*"* but as an *"exposition, explanation, and integrative elaboration of the key themes in [Weick's] work"* (1996: 1227).

Weick's definition of sensemaking, albeit interesting, may be construed somewhat too narrowly. According to Weick, sensemaking is a purely conscious, controlled process, in which automatic, unconscious cognitive processes are relegated to the margins. For ambiguous situations involving novelty, surprise and unprecedented experience, sensemaking quite understandably is a conscious effort. However, much of organisational life is filled with situations that are quite the opposite, that is, neither novel nor surprising. These common situations do, however, require sensemaking, which is likely to take place in an unconscious manner in the background (cf. Dutton, 1993; Ocasio, 1997). If one were to take Weick's point to the letter, routine organisational life would be devoid of any meaning whatsoever!

Second, Weick views sensemaking as purely retrospective by implicitly dismissing forward-looking prospective sensemaking. Instead, for Weick, all sensemaking processes are involved with some variation of retrospection, either real or artificially imposed. The latter takes place in what Weick calls "future perfect thinking" – imagining that future events have already occurred, and then infusing this "elapsed" experience with meaning. Gioia and Mehra underline this point by noting that organisational experience involves making sense of the past, but *"it also involves speculating on possible futures"* (1996: 1229).

In *Sensemaking in Organizations*, Weick retains his distinctive literary style as already demonstrated in his earlier (1969/1979) account. Indeed, this was already distinguished by Van Maanen (1995) as a key component of Weick's work. In a similar vein, Gioia and Mehra note in their review that Weick, again, *"loves to capture central ideas in memorable*

phrases and aphorisms, and he employs that penchant well to make his points" (1996: 1227). Consequently, as is the case with *Social Psychology of Organizing*, the work is poorly organised with main arguments developed in parallel, impeding making sense of his arguments.

2.8 ATTENTION-BASED VIEW OF THE COMPANY

2.8.1 Organisations as Systems of Distributed Attention

> *Everyone knows what attention is. It is the taking possession by the mind, in clear and vivid form, of one out of what seem several simultaneously possible objects or trains of thought. Focalization, concentration, of consciousness are of its essence. It implies withdrawal from some things in order to deal effectively with others, and is a condition which has a real opposite in the confused, dazed, scatterbrained state which in French is called* distraction, *and* Zerstreutheit *in German.* (James, 1890/1907: 403-4)

Ocasio's (1997) treatise discusses organisations as systems of structurally distributed attention in which the cognition and action of individuals are not predictable from the knowledge of individual characteristics. Rather, they are derived from the specific organisational context and situations that individual decision-makers find themselves in. In so doing, Ocasio links structure and cognition, and facilitates convergence of the research stream of satisficing and bounded rationality (Simon, 1947/1997; March & Simon, 1958/1993; Cyert & March, 1963/1992) with that of loose coupling and enacted environments (Weick, 1969/1979, 1995).

Ocasio defines attention to encompass *"the noticing, encoding, interpreting, and focusing of time and effort by organizational decision-makers on both issues (---) and answers"* (1997: 189).[20] Ocasio's definition can be seen as extending James's (1890/1907) definition into the organisational context. Nonetheless, it is not Ocasio who has brought the notion of organisational attention into the discourse of decision-making. In fact, already Simon in his seminal work underscores that attentional processes guide organisational decision-making:

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[20] Ocasio (1997: 189) defines *issues* as the *"available repertoire of categories for making sense of the environment: problems, opportunities, and threats"* and *answers* as the *"available repertoire of action alternatives: proposals, routines, projects, programs, and procedures"*.

Organizations and institutions provide the general stimuli and attention-directors that channel-ize the behaviors of the members of the group, and that provide the members with the interme-diate objectives that stimulate actions. (Simon, 1947/1997: 110)

However, Ocasio modifies and extends Simon's original formulation by treating atten-tional processing explicitly as a multilevel process shaped by individuals, organisations, and the environment. The key characteristic of Ocasio's systems view of organisations is the relationship between individual and organisational information processing. This con-trasts to the earlier perspectives of organisational cognition that emphasise the shared cognitions of organisational members or its top management team.

Ocasio discusses three interrelated metatheoretical premises for information processing that underlie the perspective on how companies distribute and regulate the attention of its decision-makers. First, at the level of individual cognition, the *principle of focus of atten-tion* links attentional processing to individual cognition and behaviour. Second, at the level of social cognition, the *principle of situated attention* highlights the importance of the situational context in explaining what decision-makers attend to. Third, at the organisa-tional level, the *principle of structural distribution of attention* explains how the company's economic and social structures regulate and channel issues, answers, and decision-makers into the activities, communications, and procedures that constitute the situ-ational context of decision-making.

The **principle of focus of attention** indicates, first, that decision-makers will be selec-tive in the issues and answers they attend to at any given time, and, second, that what decision-makers do depends on what issues and answers they focus their attention on. At the level of individual cognition, attentional processes focus the energy, effort, and mindfulness of organisational decision-makers on a limited set of elements that enter into consciousness at any given time. Hence, focussed attention facilitates perception and action towards those issues and activities being attended to, as well as inhibits per-ception and action towards those that are not.

At the individual level, two modes of processing can be distinguished: controlled and automatic processing. In the latter, actions are routinised and habitual. In the former, the action of decision-makers is triggered by those issues and answers they are mindful of. However, given their selective focus of attention, decision-makers are limited in the number of issues and answers they can attend to in any particular situation.

The **principle of situated attention** indicates that what decision-makers focus on and what they do depends on the particular context they are located in. The focus of attention of individual decision-makers is triggered by the characteristics of the situations they confront. Consequently, individual decision-makers vary their focus of attention depending on the situational context.

The principle of situated attention operates at the level of social cognition. Furthermore, it provides a link between how individuals think and decide in a given situation, and how the organisation and its environment shape the situations that individuals find themselves in.

The **principle of structural distribution of attention** indicates that the particular context decision-makers find themselves in and how they attend to it depends on how the organisation distributes and controls the allocation of issues, answers, and decision-makers. According to Ocasio, attentional processes of individual and group decision-makers are distributed throughout the multiple functions that take place in organisations, with different foci of attention in each local procedure, communication, or activity (cf. Simon, 1947/1997).

2.8.2 Model of Situated Attention and Company Behaviour

Figure 2.10 presents Ocasio's model of situated attention and company behaviour. According to Ocasio, the model is *"not a full-fledged theory of [company] behavior, but a set of constructs and a set of mechanisms (---) that outline how attentional processing at the individual, social cognitive, and organizational levels interact to shape [company] behavior"* (1997: 192).
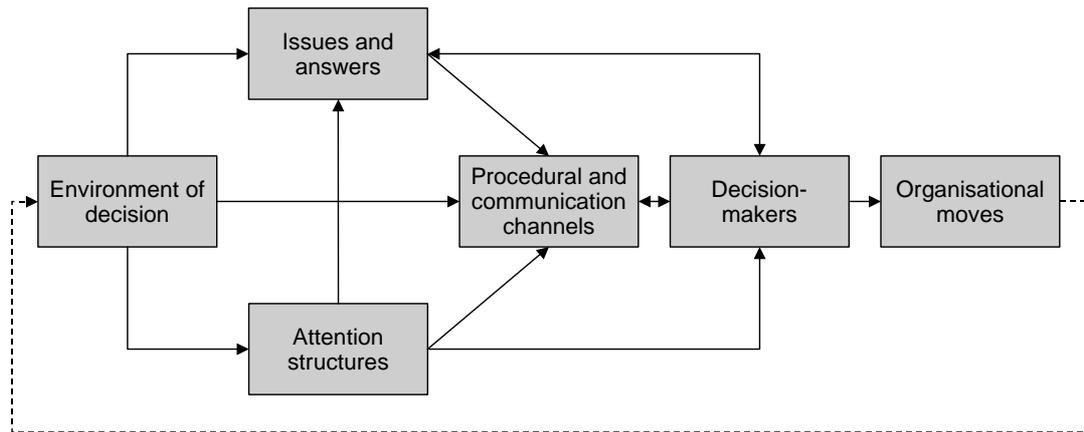
Figure 2.10   Model of situated attention and company behaviour (Ocasio, 1997)

The **environment of decision** consists of the multiple material, social, and cultural factors, both internal and external to the company, that impinge upon the environment of decision and provide a set of stimuli for decision-making (cf. Weick, 1969/1979). Also, cultural and institutional processes at varying levels of the environment provide decision-makers with a repertoire of issues and answers from which to construct actions. Moreover, the company's rules, resources, and social relationships are embedded in, and shaped by, its economic, social, and institutional environment.

Issues and answers are the cultural and cognitive repertoire of schemata available to decision-makers in the company to make sense of and to respond to environmental stimuli (i.e., issues and answers, respectively). Issues and answers are embodied in the cultural products and artefacts used to construct the company's activities and communications.

Procedural and communication channels are the formal and informal concrete activities, interactions, and communications set up by the company to induce organisational decision-makers to act on a selected set of issues. This is the situational context in which attention and action takes place. By focussing the attention of decision-makers, procedural and communication channels serve a significant function in allocating attention and serving as conduits for processing of issues and answers. The procedural and communication channels have an impact when, whether, and how decision-makers focus their attention, and how the attention of various decision-makers interacts within the channel. Put differently, the spatial, temporal, and procedural dimensions of the company's communication and procedural channels affect the availability and saliency of issues and answers that decision-makers will attend to.

Attention structures are the social, economic, and cultural structures that govern the allocation of time, effort, and attentional focus of organisational decision-makers in their decision-making activities. Attention structures exist in four forms: (i) rules of the game (i.e., formal and informal principles of action, interaction, and interpretation), (ii) players, (iii) structural positions (i.e., roles and social identifications that specify the functions and orientations of decision-makers and their interrelationships with other structural positions internal and external to the company), and (iv) resources (i.e., human, physical, technological, and financial capital available).

Attention structures work through three separate mechanisms. First, they govern the valuation and legitimisation of the repertoire of issues and answers available to decision-makers. These values are not uniform throughout the company (cf. Simon, 1947/1997; March & Simon, 1958/1993; Cyert & March, 1963/1992), but are differentiated according to the division of labour inherent in the company's rules, positions, players, and resources. Second, attention structures channel and distribute the decision-making activities of the company into a set of procedural and communication channels. Third, they provide decision-makers with a structured system of interest and identities to motivate their action and to structure their decision premises. Child and Smith (1987), for example, show an instructive case of attention structures influencing organisational transformation.

Decision-makers are the concrete individuals who jointly participate, within any specific procedural and communication channel, in the enactment of the environment and the social construction of organisational moves (cf. Weick, 1969/1979). Decision-making, then, will be the product of interactions amongst participants in the company's procedural and communication channels. The structuring of participation is, in turn, conditional on the time, energy, interests, and identities of organisational decision-makers, and on the demands placed on decision-makers by other channels. Moreover, decision-makers will enact the environment of decisions by focussing their attention on a limited number of issues and answers. This attentional focus is shaped by the characteristics of the situation as well as by the structural determinant of attention.

Organisational moves are the myriad of actions undertaken by the company and its decision-makers in response to or in anticipation of changes in its external and internal environment. Further, organisational moves include both the plans for actions implied in an organisational decision and the actions themselves. Moves do not necessarily,

however, get implemented and lead to strategic change. Moreover, decision-makers will select among a choice of organisational moves depending on which issues and answers they attend to. The attention to issues and answers results both from passive response to environmental stimuli and preparatory attention and effort, and will vary depending on the procedural and communication channel where decision-making is situated. Finally, organisational moves, once enacted, become part of the company's environment of decision and are inputs to the construction of subsequent organisational moves.

2.8.3 Implications

An attention-based view of the company highlights a number of characteristics that differentiate it from other explanations of company adaptation and behaviour. First, small contingencies in the company's procedural and communication channels may significantly change organisational adaptation and behaviour. Second, inertia, inappropriate change, or successful adaptation may result from situated attentional processes. Third, both structural regularities and cognitive repertoires of issues and answers underlie attentional processes in organisations. Fourth, selective focus of attention facilitates the company's strategic actions.

3 Foundations of Strategic Issue management Theory

3.1 PUBLIC AFFAIRS AND CORPORATE COMMUNICATIONS THEORY

The first signs of academic interest towards issue management can be traced back at least to 1972, and, specifically, to Downs's article on issue attention cycles and the political economy (Heugens, 2001). Downs's (1972) work explains how societal problems suddenly emerge, exist over a limited life span, and then gradually give way to new issues. Whereas the initial concern of issue management research was on corporate communications and public affairs, some studies started raising questions of strategic implications of public policies for organisations (e.g., Mahon & Murray, 1981; Baysinger & Woodman, 1982; Dickie, 1984). This stream of issue management takes an outside-in approach for explaining interactions between the organisation and its external environment, or, put differently, takes the external environment as the driver for organisational behaviour. Among the public affairs activities are issue identification and management, environment assessment, and corporate policy and strategy development (Bergner, 1983). This stream provided some useful insights to issue management, and continued to develop autonomously while a second stream of research on strategic issue management originated in the 1980s.

Issue management and corporate strategy became intertwined during the 1980s, as strategic management scholars found the existing rational approaches as increasingly inadequate to explain corporate behaviour. Indeed, these theories failed to explain why in economically equal conditions managers arrive at different conclusions, and, consequently, make different decisions. This stream of issue management research, which Heugens (2001) appropriately labels as the "organisational behaviour cluster", explores the social-psychological foundations of issues management. In contrast to the former stream that has focussed on macro-level functions of issue management in organisations, the latter stream has worked primarily on the micro-level of organisational issue management.

3.2 RATIONAL SCHOOLS OF STRATEGIC PLANNING

Well into the 1980s the dominant school of thought for strategy-making processes was the well-known rational model (Hart, 1992), which calls for comprehensive and exhaustive analysis prior to decision (Fredrickson & Mitchell, 1984). The introduction of the resource-based view (e.g., Wernerfelt, 1984; Dierickx & Cool, 1989; Barney, 1991; Wernerfelt, 1995; Teece *et al.*, 1997) to complement the IO view (e.g., Chandler, 1962; Ansoff, 1965; Andrews, 1971; Hofer & Schendel, 1978; Porter, 1980) has not reduced the requirement for thorough analysis. In these views, the main actor in the strategy-making process is the company in its entirety. Rationality in decision-making implies (i) consideration of all available options, (ii) identification and evaluation of all of the consequences that would follow from the adoption of each option, and (iii) selection of the option that would be preferable in terms of the most valued ends (Hart, 1992). In equal conditions, companies should make the same strategic decisions, and the process of strategic management is both rational and formal (Mintzberg, 1998).

However, empirical observations often failed to correspond with these received theories. The assumptions of rationality were being challenged by the emerging behavioural theory (Cyert & March, 1963/1992). This theory posits that individuals and organisations can achieve, at best, only bounded rationality (Simon, 1947/1957). In essence, cognitive limits cause decision-makers to adopt simplified models of the world, to limit search behaviour, and to accept the first satisfactory outcome. Consequently, behavioural theory has forced scholars of strategic management to rethink some of their theories and concepts. By challenging the cognitive and motivational assumptions inherent in the rational model of strategy-making and underlining the role played by organisational members (Mintzberg, 1978), the behavioural model has, in part, paved the way for research on strategic issue management.

3.3 COGNITIVE THEORY

In addition to its indirect influence through the behavioural theory of business companies (Cyert & March, 1963/1992), cognitive psychology has given strong (direct) stimuli for establishment of concepts in strategic issue management. Albeit interest in managerial and organisational cognition grew into prominence during the 1980s and 1990s (Walsh, 1995), it is deeply rooted in the clinical neurology research in the early years of the 20th century. Indeed, the central concept of knowledge structure or schema has been

taken in from clinical neurology (e.g., Head, 1920; Bartlett, 1932; Woodworth, 1938; Oldfield & Zangwill, 1942).

The significance of cognitive theory for strategic issue management lies in its relationship to information processing by individuals. According to Walsh (1995), individuals can approach information processing in two dominant ways: Either they use a "top-down" (Abelson & Black, 1986) or "theory-driven" (Nisbett & Ross, 1980) approach, or, alternatively, they use a "bottom-up" or "data-driven" approach. In the former case, the cognitive structures generated from experience affect individuals' abilities to attend to, encode, and make inferences about new information, whereas in the latter case, the information itself shapes individuals' response to it. Hence, knowledge structures can be seen as mental templates that individuals impose on an information environment to give it form and meaning, and that they affect information processing in predictable ways (Walsh, 1995).

Moreover, after inclusions from the clinical neurology research, social psychology during the 1940s, 1950s and 1960s focussed largely on stimulus-response psychology (e.g., Skinner, 1953). Interest in the mediating effects of cognitions to the stimulus-response relationship was raised in the late 1960s (e.g., Neisser, 1967), followed by substantial interest in information theory (published already a while earlier by Shannon & Weaver, 1949) that led to introduction of social cognition (as complement of individual cognition) (Fiske & Taylor, 1984). For research of strategic issue management, specifically the notions of social cognition and knowledge structures have provided a significant impetus.

4 Strategic Issue Management Process

Mintzberg *et al.* (1976) define a *decision* as a specific commitment to action that usually, but not necessarily, involves a commitment of resources (cf. Bower, 1970; Noda & Bower, 1996). Consequently, a *decision process* is a set of actions and dynamic factors that begins with the identification of a stimulus for action and ends with the specific commitment in action. However, as Ocasio points out, decisions (or "moves", as Ocasio calls them), *"may or may not be implemented and lead to strategic change"* (1997: 201).

Mintzberg *et al.*'s (1976) study introduces an underlying structure for decision processes characterised as "unstructured" in extant research. Albeit the processes that Mintzberg *et al.* study are not predetermined and explicit, a basic structure or logic nonetheless exists and guides the decision-making process. Strategic decision-making often takes place under considerable ambiguity, where almost nothing is given or easily determined. Hence, according to Mintzberg *et al.*, strategic decision processes usually begin with little understanding of the decision situation or the route to its solution, and only a vague idea about the solution and its eventual evaluation. Mintzberg *et al.* portray decision-making process as comprising the central phases of *identification*, *development*, and *selection*, supported with supporting routines of decision control, decision communications, and political routines. Strategic decision-processes do not progress, however, perfectly linearly or undisturbed. Rather, dynamic factors brought about by environmental forces (e.g., interrupts), by decision-maker (e.g., scheduling delays, timing delays, and speedups), and by factors inherent in the decision process itself (e.g., feedback delays, comprehension cycles, and failure recycles).

In a similar vein, Daft and Weick's (1984) organisational interpretation model consists of three phases of *scanning*, *interpretation*, and *learning*.[21] However, instead of proposing the framework for strategic issue management, they offer it a general model of organisations as interpretation systems. In fact, Daft and Weick discuss of interpreting events rather than strategic issues, but the connotation is essentially the same. Moreover, Dutton and Ottensmeyer's (1987) strategic issue management systems comprise the phases of *perceiving*, *analysing*, and *responding* to strategic issues. Thomas *et al.* (1993) labelled the phases as *scanning*, *interpretation*, *action*, and *performance*, where the last phase underlines the fact that

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[21] The organisational interpretation model is discussed in depth in Section 2.6.

the organisational moves (Ocasio, 1997) resulting from strategic issue management have implications on organisational performance.
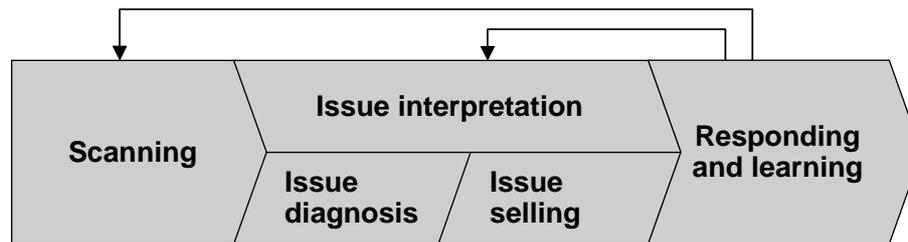
Figure 4.1   Strategic issue management process framework

Figure 4.1 presents the framework used in this study to describe the strategic issue management process. The framework draws on Daft and Weick's (1984) organizational interpretation model, assuming the phases *scanning* and *issue interpretation* thereof. However, the present framework divides the issue interpretation phase analytically into separate processes of *issue diagnosis* (Dutton & Duncan, 1987) and *issue selling* (Dutton & Ashford, 1993) to allow for more depth to the discussion of various organisational processes undergoing during strategic issue interpretation.[22] The last phase of the present process, *responding and learning*, extends Daft and Weick's model by incorporating various organisational moves (Ocasio, 1997) rather than only learning. Finally, the feedback loops underline the cyclical nature of the strategic issue management process, in which current actions influence subsequent scanning and interpretation activities (e.g., Walsh, 1995; Weick, 1995; Ocasio, 1997).

4.1   SCANNING

Aguilar, in one of the first accounts on environmental scanning as part of corporate planning., defines scanning as the activity of acquiring information *"about events and relationships in a company's outside environment, the knowledge of which would assist top management in its task of charting the company's future course of action"* (1967: 1). Aguilar differentiates between four styles of scanning: undirected viewing, conditioned viewing, informal search, and formal search. In *undirected viewing*, the manager is exposed to information with no specific purpose in mind, and is unaware as to what issues might be raised. Undirected is often vague and tentative, and merely alarms the manager that "something" has happened and that further scanning is needed. In *conditioned viewing*, the manager is exposed

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22   It should be noted, however, that although issue diagnosis and issue selling have been analytically separated in this discussion, they are in practice often parallel and intertwined.

to information about selected areas or certain types of information. It often serves as a signal or cue that more intensive scanning is needed. In *informal search*, the manager engages in a relatively limited and unstructured effort to obtain specific information, or information for a specific purpose. Informal search differs from conditioned viewing primarily in that the information wanted is actively sought. Finally, *formal search* refers to a deliberate effort, often following a plan, procedure or a methodology, to obtain specific information relating to a specific issue.

According to Aguilar's framework, the choice of the scanning mode is made by using a collection of *scanning rules* pertaining to, for example, how information can be acquired and what the issue characteristics are. As long as "right" information is being acquired, scanning behaviour remains unchanged. However, if the scanning fails, *change rules* dictate changes to (i) the scanning rules and (ii) scanning procedures followed under each mode. It is important to note that the concept of *scanning* has already been discussed before Aguilar, albeit with different terms and emphases. March and Simon (1958/1993: esp. ch. 6, 7) and Cyert and March (1963/1992: esp. ch. 4, 5), in their treatises on information processing in organisations, discuss the notion of *search* extensively. Whereas both accounts are in correspondence with Aguilar on the routines that guide search behaviour, they make no distinction between the diverse modes of scanning, as Aguilar's contribution does.

Fahey and King (1977) argue that despite the potential to impact business planning, scanning has been poorly integrated into planning in practical business organisations. Also Kiesler and Sproull emphasise the role of scanning: *"A crucial component of managerial behavior in rapidly changing environments is problem sensing, the cognitive processes of noticing and constructing meaning about environmental change so that organizations can take action."* (1982: 548). (One should note, however, that the comment of Kiesler and Sproull extends also to the issue interpretation phase, rather than discussing merely scanning.)

Fahey and King's work highlights three scanning models. The *irregular* scanning model represents a process of *ad hoc* environmental study that is likely to be triggered by a contingency in the environment. The irregular model is purely reactive in nature, and its scanning focus is directed towards the past. The *regular* model is more systematic and comprehensive: is entails a regular (perhaps annual) review of the environment (or at least parts of it that are deemed significant). This approach is likely to be decision or issue oriented. The regular model of scanning is, nonetheless, largely retrospective, as

the conclusions of the scanning are based on current state analysis and its extrapolation. Fahey and King's third model represents a different kind of approach. The *continuous* model emphasises, as already the label implies, the continuous monitoring of various environmental systems rather than specific events. The key characteristic of the continuous model is that the scanning is organisationally structured. In other words, the responsibility for scanning is clearly allocated, channels for information sharing are established, and an explicit linkage between scanning and planning has been created. In this model, scanning supports the *"variety of choices inherent in strategic planning"* (1977: 63), rather than supporting specific choices *per se*.

The process of scanning depends both on individuals' perceptions as well as on organisational activities influencing organisational perception. On the individual level, according to Heugens (2001), *"the process of perceptual selection determines to which issues in their environment top-level decision-makers will devote their scarce cognitive processing capabilities"*. On the organisational level, various characteristics of the strategic planning process systematically influence characteristics of the strategic issues that decision-makers attend to (Dutton & Duncan, 1987). In Dutton and Duncan's terms, the company's collection of strategic issues is called the *strategic issue array*, which can be described along the dimensions of array size (number of issues), array variety (diversity of issues at one time), array turnover (frequency of issue replacement), and issue scope. Each one of the four main planning process attributes has its distinctive impact on the contents of the strategic issue array, as presented in Table 4.1. Overall, both the notions of Heugens as well as Dutton and Duncan appear to be quite in congruence with Ocasio's (1997) attention-based view.

Table 4.1 Characteristics of strategic planning process and links with strategic issue array (Dutton & Duncan, 1987)

Process characteristic	Strategic issue array			
	Issue scope	**Array size**	**Array variety**	**Array turnover**
1. Planning focus • Top-down • Bottom-up	Broad Narrow		Limited Greater	
2. Planning formality		Greater		Low
3. Planning diversity	Broad	Greater	Greater	
4. Planning intensity	Broad	Greater		High

Heugens (2001) identifies two possible scanning modes, namely prospective and passive scanning.[23] Prospective scanning aims at identifying issues when they still are inchoate, thus giving the organisation warnings about potential issues. The alternative scanning mode is passive in nature, in which issues come to the attention of the organisation when they are already mature. Organisations choose either scanning mode depending on managerial perception about the organisation's position in the environment. However, as Milliken (1987: 139) notes, *"[i]t is likely that organizational administrators who are uncertain about the state of their environment will spend a greater amount of time and resources on environmental scanning and forecasting than administrators who are more confident that they understand their environment"*.

Hambrick (1982) provides an empirical account on the relationship between the environmental scanning by executives and the organisation's strategy. Using the Miles and Snow typology, Hambrick studies the scanning behaviour exhibited by "prospectors" and "defenders".[24] It appears that the link between strategy and scanning is less pervasive than Hambrick initially presumed. First, amount of scanning seems to be equal for both prospectors and defenders. Second, prospectors and defenders do not consistently scan more entrepreneurial and engineering information, respectively, than their counterparts. Hence, Hambrick concludes that the strategic differences between prospectors and defenders occur primarily through internal analysis and political processes, rather than through the level of scanning and consequent unequal possession of information. This leads to the conclusion that scanning itself is no basis for competitive advantage, but success follows from the propensity and ability to act upon certain environmental information. Hambrick also finds that scanning behaviour is not used by executives to reinforce their organisational strategies.

Similarly, Daft *et al.* (1988) study the relationship between environmental characteristics and the frequency and mode of scanning used. The findings of Daft *et al.* suggest that customer, economic and competitor sectors generate greater strategic uncertainty than do technological, regulatory and sociocultural sectors. In sectors of high (perceived) uncertainty, executives' scanning frequency is higher, as is also the use of personal and ex-

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[23]   Heugens's (2001) prospective and passive scanning seems to be closely related to Daft and Weick's (1984) concept of *organisational intrusiveness,* which describes how actively the organisation performs searches in its environment.

[24]   See footnote 17 for overview of the Miles and Snow strategic typology.

ternal sources. However, perceived uncertainty has no effect on the use of internal sources. Moreover, Daft *et al.* find a positive relationship between company profitability and scanning behaviour. This suggests that executives in high-performing companies tailor scanning to perceived uncertainty.

Garg *et al.* (2003) study the scanning emphases of chief executives under varying environmental dynamism in 105 manufacturing companies. Their results suggest that high-performing CEOs vary their relative scanning emphases on different domains according to the perceived level of dynamism in the external environments. In particular, for dynamic external environments, relatively more CEO attention to the task sectors of the external environment and to innovation-related internal functions is associated with high performance. Conversely, in stable external environments, increased scanning of general sectors of the environment coupled with internal focus on efficiency-related functions results in higher performance.

Table 4.2   Empirical findings on scanning

Dependent variable	Independent variable	Author	Effect	Comment
Amount of scanning	Type of strategy	Hambrick, 1982	Not found	
Scanning focus	Type of strategy	Hambrick, 1982	Not found	
Scanning frequency	Perceived strategic uncertainty	Daft *et al.*, 1988	Positive	
Use of personal sources about the environment	Perceived strategic uncertainty	Daft *et al.*, 1988	Positive	
Use of external sources	Perceived strategic uncertainty	Daft *et al.*, 1988	Positive	
Use of internal sources	Perceived strategic uncertainty	Daft *et al.*, 1988	No relationship	
Company performance	Frequency and broadness of scanning	Daft *et al.*, 1988	Positive	Performance as ROA
	CEO scanning emphasis on external task environment under: • higher perceived environmental dynamism; and • higher scanning emphasis on internal functions dealing with innovation	Garg *et al.*, 2003	Positive	Subjective evaluation of company performance

	CEO scanning emphasis on external general environment under: • lower perceived environmental dynamism; and • higher scanning emphasis on internal functions dealing with efficiency	Garg *et al.*, 2003	Positive	

4.2   ISSUE INTERPRETATION

Issue interpretation refers to the process (within the strategic decision-making process) in which issues are recognised and isolated for further consideration (Mintzberg *et al.*, 1976). Interpretation of issues is not entirely straightforward, for, as Dutton and Duncan (1987: 280) express it, *"[s]trategic issues do not activate decisionmakers' attention in packaged form"*. Rather, the process is one of social construction (cf. Weick, 1995), in which contextual influences shape the outcomes of the interpretation process. Interpretation can be defined as the process *"of translating (---) events, of developing models for understanding, of bringing out meaning, and of assembling conceptual schemes among key managers"* (Daft & Weick, 1984: 286). From a slightly different perspective, Dutton and Duncan define that *"[t]he triggering and interpretation of strategic issues is called strategic issue diagnosis"* (Dutton & Duncan, 1987: 280).

Issue interpretation is a critical phase in the strategic issue management process, since it establishes the issue as legitimate both on the individual and organisational level. As Dutton and Ashford (1993: 397) note, *"[n]o issue is inherently strategic. Rather, an issue becomes strategic when top management believes that it has relevance for organizational performance"*. Consequently, the managerial sensemaking process (Weick, 1995) shapes the set of issues that top management sees as strategic (cf. Ocasio, 1997). This process comprises not only *issue diagnosis* (Dutton & Duncan, 1987), but also *issue selling* (Dutton & Ashford, 1993). The former refers to the general process of making sense of the issue, whereas the latter refers to individuals' behaviours that are directed toward affecting others' attention to and understanding of issues. These two processes, albeit analytically separate, are in real life often quite intertwined and parallel.

4.2.1   Issue Diagnosis

Ansoff's (1980) early framework for strategic issue management states that issues can be identified from information on (i) the external environment, (ii) internal trends of the

company, and (iii) performance trends. (Ansoff also presents an overwhelming list of exemplary trends that is supposed to serve as a starting point for the company.) The issues are evaluated based on their (perceived) impact and urgency, and those issues that rank high on both dimensions form the key issues for the company. In all, Ansoff's model is clearly a highly formalised effort to identify and diagnose issues and to develop them if needed.

Eadie and Steinbacher (1985) provide an interesting account from the perspective of public administration. While introducing strategic planning to a public administrative organisation, they collected the organisation's list of strategic issues over a two-day workshop with the senior management. To facilitate the identification process, an environmental scan had been prepared beforehand. Unfortunately, however, Eadie and Steinbach omit most of the further details of the issue identification process.

In limited capacity models of information processing (Lord & Maher, 1990), people have scanty information-processing capabilities, and, thus, tend to simplify their information processing and generate adequate yet suboptimal behaviours (cf. Cyert & March, 1963/1992; Weick, 1969/1979, 1995; Ocasio, 1997). Indeed, top managers *"selectively ignore certain issues while focusing attention on others"* (Abrahamson & Fombrun, 1994: 733). Consequently, not all issues receive the attention of managers. Moreover, the meaning that the strategist gives to an issue depends on their knowledge structures and categories that they use to describe the issue: *"[C]ognitive categories are used by strategic decisions makers because they help to store information more efficiently and aid communication with others about ambiguous strategic issues"* (Dutton & Jackson, 1987: 77-8). The concept of cognitive categories is assumed to strategic issue management from categorisation theory (Rosch, 1975; Rosch & Mervis, 1975; Rosch, 1978; Mervis & Rosch, 1981) of cognitive psychology.

Framing shapes and directs subsequent issue-relevant activity. Dutton and Jackson (1987), for example, suggest that categorisation of issues and subsequent actions are related. Specifically, they propose that managers most frequently use two main categories (of threat and opportunity) for issue labelling, each of which has its own distinctive characteristics and subsequent implications. Typically, posit Dutton and Jackson, *opportunities* generally refer to positive situations, in which gain is likely and which one can (at least to certain extent) control. In contrast, *threats* carry a negative connotation, being associated with negative situations, in which loss is likely and over which one has relatively little control. Indeed, argue Dutton and Jackson (1987: 85), *"[t]he simple labeling of*

issues not only determines decision makers' affective responses to issues, but also it sets into place predictable, cognitive, and motivational processes that move decisions and organizations in predictable directions".

These hypotheses were subsequently validated by Jackson and Dutton (1988) in their empirical study of opportunity-threat labelling. The study not only confirmed that categorisation influences organisational actions, but it also revealed the presence of a threat bias. This implies that individuals are more sensitive to threat-consistent information, and consequently identify issues as threats more easily than as opportunities. In a similar way, Dutton's (1986) research found that issues perceived (and consequently labelled) as crisis and non-crisis issues are processed differently in organisations. Crisis issues are likely to be allocated more resources, and handled under increased centralisation of authority coupled with more argumentation or explanation.

Dutton *et al.* extend the concept of issue identification, and introduce the idea of *issue diagnosis.* In their words, *"diagnosis emphasizes the roles of interpretation and judgment which are an unavoidable part of decision makers' endeavours to comprehend an issue"* (1983: 308) (cf. Daft & Weick, 1984; Weick, 1995). The framework of Dutton *et al.* portrays three elements involved in issue diagnosis: inputs, process characteristics and outputs. First, individuals need to use existing interpretive schemes or to formulate new ones to transform input data into information. *Cognitive maps* provide an interpretive lens that selects certain aspects of an issue as important, ignores others, and links them to certain actions and consequences. In a similar vein, Jackson and Dutton (1988) assume issue identification to be a probabilistic process of matching current perceptions to stored schemas. Identification of the specific instance, then, depends on the degree of overlap between the issue characteristics associated with the schema and the salient characteristics of the specific instance (Tversky, 1977).

In addition to cognitive factors, *political processes* influence diagnosis processes and outputs, determining the participants' degree of interest and stakes. *Issue-specific factors* also have an influence: the issue context acts as the arena in which individuals' cognitive maps and political interests come to life, serving to motivate participants in different directions (Dutton *et al.*, 1983).

Second, the dynamic nature of the diagnosis process can be captured by three process characteristics. The diagnosis is *recursive* in nature, entailing that the judgements will be revised a number of times over the course of the diagnosis. These revisions are likely to

be intermittently divergent and convergent, reflecting the fluidity of participants and data available. It is the influx of data and participants that stimulates the revision of judgements. Further, the process is likely to be characterised by *retroductivity*, that is, the coexistence and interplay of deductive and inductive thinking. On the collective level, diagnosis outputs emerge from the interaction of multiple organisational actors with differing cognitive maps, political interests, and issue-related data. The process is analogous to an array of recursive procedures cyclically calling on each other, yet rarely having a single highest level – this is what Dutton *et al.* refer to as *heterarchy*.

Third, the processes involved in the diagnosis are not ends in themselves; they result in specifiable outputs. Dutton *et al.* identify four types of issue-specific outputs, three of which are instrumental, whereas the fourth one is symbolic in nature – these outputs occur at both the individual and collective levels. On the content-related side of outputs, due to data insufficiency and ambiguity and the absence of interpretive schemes, a number of *assumptions* are typically formed during issue diagnosis. These assumptions may be implicitly or explicitly formed, yet regardless of their formation they can affect the range of options considered and developed through their impact on information collection and interpretation. Further, in the course of issue resolution, individuals generate understandings that relate various events or concepts together in a causal manner. These *cause-effect understandings* allows participants to impose a logic for understanding an issue and a logic for resolving it if necessary, in effect framing an issue in a particular way thus affecting subsequent interpretations and actions (cf. Weick, 1969/1979, 1995). Assumptions and cause-effect understandings are then crystallised into *predictive judgements* that involve assessments about future events surrounding an issue. The occurrence of divergent predictive judgements may at least partly account for the heterarchic nature of the diagnosis process. Finally, on the symbolic side, the output of the diagnosis process is *language and labels* that reflect the understanding of a strategic issue from the perspective of the process participants, as well as serve to communicate understandings to the rest of the organisations. Consequently, the labelling of an issue is likely to affect subsequent considerations of the issue by influencing involvement, commitment, divergent or convergent thinking, and risk-taking behaviour.

Dutton and Duncan (1987) present a more thorough discussion of issue diagnosis as a process than their predecessors. Specifically, Dutton and Duncan introduce a model with discrete events in the issue diagnosis process that eventually lead to creation of

momentum for change in the company. Dutton and Duncan's model begins with the activation of diagnosis. *Triggering* is pivotal for subsequent issue diagnosis activity, as it serves to focus attention upon an issue that demands further scrutiny. Triggering can be seen to involve an "action threshold" that represents the magnitude of stimuli that triggers subsequent action (Mintzberg *et al.*, 1976). It is important to note that the system that generates a strategic issue may be formal or informal. In general, a perceived (real or potential) performance gap can often serve as a trigger, as can various stakeholder demands.

After the diagnosis has been activated by any kind of triggering mechanism, decision-makers engage in attempts to assess the urgency and feasibility of the issue. First, *issue urgency* indicates the perceived cost of not taking action with respect to an issue (Miller, 1982). Urgency, hence, captures the perceived importance of taking action on an issue. The urgency of an issue derives from a number of salient dimensions of an issue, including time pressures arising from deadlines, visibility of the issue to important internal and external constituents, and how responsible management believes it is for the issue's occurrence (attribution of responsibility). Second, *issue feasibility* involves making gross judgements about the possibility of resolving an issue. These judgements systematically affect how an issue is interpreted. Two dimensions are particularly important in forming an assessment of issue feasibility: perceived issue understanding and perceived issue capability. Issue understanding refers to the perception that decision-makers could identify the means for resolving the issue, whereas issue capability describes the perception that the means for resolving the issue are available and accessible. Depending on the relative scores on these two dimensions, the decision-maker may feel, according to Dutton and Duncan, anything from being powerless to being propelled (see Figure 4.2). The significance of the interpretation of issue feasibility is that it affects the definition of an issue and the adaptive responses of the organisation.
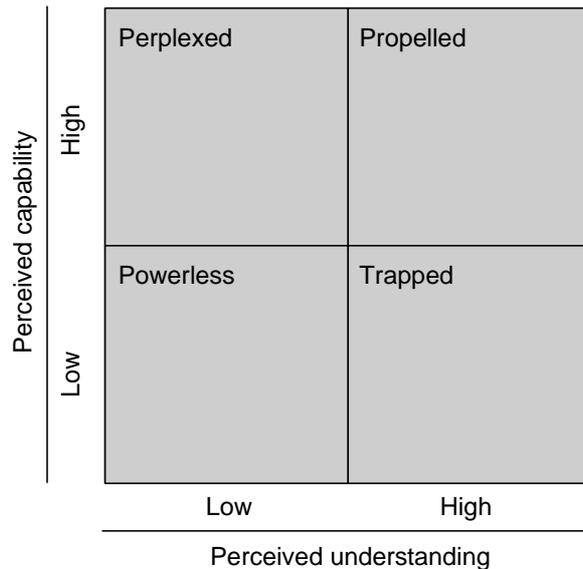
Figure 4.2   Judgements in the assessment of issue feasibility (Dutton & Duncan, 1987)

Dutton and Duncan's preceding analysis has assumed that issue diagnosis takes place in a sterile and objective environment. However, such an environment is an unlikely one in real-life organisations, as also Dutton and Duncan do admit. Indeed, organisational characteristics have a significant and systematic effect on the diagnosis process. Specifically, organisational beliefs shape issue interpretation (cf. Simon, 1947/1997; March & Simon, 1958/1993; Cyert & March, 1963/1992; Weick, 1969/1979, 1995; Ocasio, 1997). Dutton and Duncan propose that the more differentiated the organisational belief structure is in terms of degree of consensus and complexity, the more frequently issue diagnosis will be triggered. Further, they propose that under a more differentiated belief structure, the perceived feasibility of change and the perceived momentum for change will be greater.

Dutton and Duncan posit that organisational resources affect issue diagnosis. On one hand, slack organisational resources decrease the perceived degree of urgency, consequently reducing the perceived need to change and the momentum for change (cf. March & Simon, 1958/1993; Cyert & March, 1963/1992). On the other hand, increased slack is likely to increase the perceived feasibility of resolving an issue, hence increasing the momentum for change.

Dutton and Webster (1988) study how varying levels of perceived uncertainty and feasibility affect the organisation's response to issues (cf. Dutton & Duncan, 1987). Their results suggest that both certainty in an issue's context and perceptions of an issue's fea-

sibility in part determine how decision-makers attend to it. Specifically, they find that uncertainty may repel rather than encourage broad and varied interest in issues. Also, they find that issues whose resolution is perceived as feasible also attract wider interest or a greater number of decision-makers than in infeasible issues. Furthermore, they suggest that people gravitate towards issues that they perceive to have a high probability of resolution, and that people are likely to pursue issues more readily in certain contexts rather than in uncertain contexts.

Thomas and McDaniel (1990) demonstrate that both strategy and information-processing structures are related to how managers label strategic situations and the range of variables they consider in their interpretation efforts. Their research provides further evidence to hypotheses and results of Dutton and Jackson (Dutton, 1986; Dutton & Jackson, 1987; Jackson & Dutton, 1988).

Table 4.3   Empirical findings on issue diagnosis

Dependent variable	Independent variable	Author	Effect	Comment
Resource allocation	Perceived level of crisis of issue	Dutton, 1986	Positive	Singe organisation as data source
Centralisation of authority	Perceived level of crisis of issue	Dutton, 1986	Positive	
Incidence of argumentation or explanation	Perceived level of crisis of issue	Dutton, 1986	Positive	
Sensitivity to information	Threat-consistency (vs. opportunity-consistency) of information	Jackson & Dutton, 1988	Positive	Threat-opportunity dichotomy
Broadness and variety of interest in issue	Perceived uncertainty	Dutton & Webster, 1988	Negative	
Broadness of interest in issue	Perceived issue feasibility	Dutton & Webster, 1988	Positive	
Capacity of top management team's information processing structure	Extent of variable usage in interpretation	Thomas & McDaniel, 1990	Positive	
	Issue labelled as positive	Thomas & McDaniel, 1990	Positive	
	Issue labelled as potential gain	Thomas & McDaniel, 1990	Positive	
	Issue labelled as controllable	Thomas & McDaniel, 1990	Positive	
Extent of variable usage in interpretation	Orientation toward domain offence	Thomas & McDaniel, 1990	Positive	Domain offensive-defensive

Perceived extent of controllability of issue	Orientation toward domain offence	Thomas & McDaniel, 1990	Positive	dichotomy

4.2.2 Issue Selling

Once an issue has been identified and diagnosed, the proponents of the particular issue need to gain buy-in from other organisational participants, so as to gain momentum for the issue and ensure that it gets progressed. This is the process of issue selling, and it is directed toward affecting others' attention to and understanding of issues. Issue selling can be seen as a central in explaining how and where top management allocates its time and attention (Dutton & Ashford, 1993).

According to Dutton and Ashford (1993), issue selling is significant to both individuals and organisations from both instrumental and symbolic point of view. From an *organisational-instrumental* perspective, issue selling acts as a mechanism that prompts top management to attend to issues that they might otherwise not attend to. Hence, issue selling facilitates setting up an organisation's strategic agenda (Dutton & Duncan, 1987), as well as initiating organisational action. To gain substantial advantage from issue selling, top management needs to channel the (sometimes) politically motivated selling behaviours of middle management in ways that are useful the company.

From an *organisational-symbolic* perspective, issues allow the carrying of collective meaning for organisational members (as Dutton and Dukerich (1991) demonstrate) as well as outside constituents. Issues that are successfully sold to top management help to form a particular organisational identity for the members of the organisation and an organisational reputation to outsiders.

Issue selling has also *individual-instrumental* meaning. For individuals, issues are *"part of the currency through which their careers are made or broken"* (Dutton & Ashford, 1993: 402), implying that the successfulness of promoting strategic issues can have dire implications to one's career. Successful selling of an issue may open new arenas or forums in which individuals have an opportunity to interact and communicate, providing individuals with increased visibility and potential interpersonal influence. Also, by securing the attention of top management for an issue, middle managers move one step closer to securing effective action on the issue.

Finally, also an *individual-symbolic* role exists for issue selling, Issues often carry positive or negative valences that are generalised to the individuals promoting them. The symbolic link between an organisation's external image and members' self-concepts compels individuals to try to influence what issues receive attention in organisations.

Dutton and Ashford (1993) base their model of the issue selling process on social problem theory (e.g., Spector & Kitsuse, 1977), impression management theory (e.g., Schenkler, 1980; Tedeschi, 1981), and upward influence theory (e.g., Hovland *et al.*, 1953). Social problem theory describes how the organisational and institutional contexts shape what issues claim top management's attention. Impression management theory discusses the constraints that direct how and when a seller promotes an issue. The upward influence theory introduces social persuasion ideas focussing on persuasion attempts by lower to higher authority individuals and groups.

Individuals decide whether or not to initiate issue selling efforts based on the value that the individual attaches to an issue as well as the individual's beliefs of the eventual successfulness of the effort. In sum, issue selling will be more likely when individuals believe that selling attempts will be successful or when the issue is so important personally that the value of securing attention for the issue is worth the extra effort of selling. Initiation of issue selling is more likely when sellers are general managers (who are usually centrally-located), or that the issues match their functional orientation in the organisation. Especially important for initiation of issue selling is the supportiveness and openness of senior management, which is likely to decrease the risk involved and increase the probability of success, hence encouraging middle managers to initiate issue selling. Furthermore, Dutton and Ashford postulate that initiation of issue selling is more frequent when a solution attached to the issue can be identified.[25]

After initiation of issue selling, the seller can make choices about issue packaging. The framing of an issue is significant, because by attempting to influence an issue's frame by deliberately presenting it in a particular way, the seller attempts to influence how others frame the issue. Dutton and Ashford (1993) postulate that the more issue framing conveys that an issue will have higher payoff or that management can resolve the issue, the

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[25] This situation is akin to the so-called garbage can model of organisational choice, in which the organisation can be seen as *"a collection of choices looking for problems, issues and feelings looking for decision situations in which they might be aired, solutions looking for issues to which they might be the answer, and decision makers looking for work"* (Cohen *et al.*, 1972: 2).

more attention top management will invest in an issue. Similarly, framing an issue in a way that management feels a greater sense of control about resolving an issue is likely to increase the probability of success in issue selling (cf. Dutton & Duncan, 1987, on initiation of issue selling).

Moreover, based on Dutton and Duncan's (1987) argument, Dutton and Ashford (1993) propose that the more differentiated the belief structure of the top management team, the higher the likelihood of success for issue selling. Similarly, if the top management team has expertise in the domain of the issue, the more likely it is that the issue seller can capture the top management team's attention. Furthermore, Dutton and Ashford propose that the more an issue can be framed so that it highlights top management's responsibility for action, the higher the likelihood for gaining top management's attention is. However, the more an issue seller frames an issue in a manner that implies top management's responsibility, the more likely it is that the seller will lose credibility for future selling attempts. Also, Dutton and Ashford postulate that management attention is easier to secure if the issue is packaged in emotional terms with novel information, supported with facts, succinctly presented, and two-sidedly presented. Finally, issue bundling allows for more top management attention and mitigates risk of credibility loss, yet is dilutes the succinctness of the issue.

Finally, Dutton and Ashford (1993) highlight three procedural options in issue selling. First, by selling an issue with others (instead of going solo), the issue is likely to gain more top management attention and concurrently mitigate the risk on the seller's credibility. Second, by selling through public channels (rather than private ones), the top management is likely to invest more attention to the issue, but there is an increased risk imposed on credibility of the seller. Third, by tailoring the selling attempts to match the formality to the selling effort and organisation's cultural norms, the greater the top management's attention to the issue is, and less likely is an adverse impact on seller's credibility.

Dutton *et al.* (1997) present empirical findings on middle managers' perceptions of the context for selling issues to top managers. Dutton *et al.* find that middle managers perceive the context for issue selling to be favourable when top managers are willing to listen and the overall culture is supportive. In contrast, fear of negative consequences, downsizing conditions, and uncertainty are characteristics of an unfavourable context. Also, Dutton *et al.* discuss the image risk of the issue seller, and conclude that violating

norms for issue selling, selling in a politically vulnerable way, and having a distant relationship with top management positively contribute to perceived image risk.

Elsbach and Elofson (2000) study how the packaging of decision explanations affects the perceptions of trustworthiness. In so doing, they provide evidence of the relationship of labelling and trustworthiness, and help to validate Dutton and Ashford's hypotheses. Specifically, Elsbach and Elofson find that trustworthiness is assessed higher when easy-to-understand language or legitimating labels are used.

Albeit from a different perspective, Snow *et al.*'s (1986) study on participation in social movement organisations offers some insight into how organisational schemata affects whether or not individuals support a given idea. They conclude that frame alignment is a necessary condition for participation. They also describe four frame alignment processes: frame bridging, frame amplification, frame extension, and frame transformation. In the context of strategic issue management, the results of Snow *et al.* would imply that frame alignment can be an important prerequisite for participation in promoting an issue.

Table 4.4   Empirical findings on issue selling

Dependent variable	Independent variable	Author	Effect	Comment
Context favourability	Top management's willingness to listen	Dutton *et al.*, 1997	Positive	
	Supportiveness of the culture	Dutton *et al.*, 1997	Positive	
	Competitive and economic pressures	Dutton *et al.*, 1997	Positive	
	Change in organisation	Dutton *et al.*, 1997	Positive	
	Fear of negative consequences	Dutton *et al.*, 1997	Negative	
	Downsizing conditions	Dutton *et al.*, 1997	Negative	
	Perceived uncertainty	Dutton *et al.*, 1997	Negative	
	Conservativeness of the culture	Dutton *et al.*, 1997	Negative	
Perceived risk to own image in organisation	Violation of norms for issue selling	Dutton *et al.*, 1997	Positive	
	Perceived political vulnerability	Dutton *et al.*, 1997	Positive	
	Distance from top management	Dutton *et al.*, 1997	Positive	
Perceived trustworthiness	Use of easy-to-understand language	Elsbach & Elofson, 2000	Positive	Studied decision explanations in general, not specifically strategic issues
	Communication of the use of legitimate decision processes	Elsbach & Elofson, 2000	Not found	
	Use of packaging with either a legitimating label or easy-to-understand language	Elsbach & Elofson, 2000	Positive	

4.2.3   Role of Middle Management

Dutton and Ashford (1993) underline the role of middle managers in issue selling, and, consequently, as change agents within the organisation. In addition to strategic issue management, the role played by middle management in strategy making has received considerable attention over the last couple of decades (e.g., Bower, 1970; Burgelman, 1983). Kanter (1982: 96) suggests that middle managers' potential in strategy making is based on their organisational location; specifically they can make a great contribution *"because middle managers have their fingers on the pulse of operations, they can also conceive, suggest, and set in motion new ideas that top managers may not have thought of."*

Wooldridge and Floyd (1990) provide interesting results from their study on strategic involvement of middle managers. In their study comprising 20 organisations, Wooldridge and Floyd's results suggest that middle manager involvement in strategy formation is indeed associated with improved organisational performance. Moreover, they conclude that consensus amongst middle managers is related to strategic involvement, but not to organisational performance.

Floyd and Wooldridge (1992) develop a model that describes the roles middle managers can take in strategy formulation. Based on the notion of dynamic capabilities,[26] Floyd and Wooldridge's typology has two principle dimensions that underlie the roles, as presented in Figure 4.3.

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[26]   According to Teece (1998), dynamic capabilities refer to the ability both to sense, and then to seize, new opportunities emerging in the competitive landscape. These entail reconfiguring and protecting knowledge assets, competencies, and complementary assets and technologies. Put differently, dynamic capabilities are the ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments (Teece *et al.*, 1997). They consist of specific organisational and strategic processes, such as product innovation, strategic decision-making, and alliance formation, through which companies alter their resource base (Eisenhardt & Martin, 2000).

Figure 4.3   Middle management roles in strategy (Floyd & Wooldridge, 1992)

Floyd and Wooldridge's (1992) typology contains four middle management roles. First, middle management can be valuable in *championing strategic alternatives* by bringing entrepreneurial and innovative proposals to top management's attention. Second, a typical role for middle management is *synthesising information* to top management. They are not, however, passive transmission channels, but saturate information with meaning through personal evaluation and explicit advice. Indeed, because of middle management upward influence, strategy often unfolds or emerges differently than originally conceived (Floyd & Wooldridge, 1997). Third, middle managers can *facilitate adaptability* by acting as "buffers" between employees and top management. Fourth, the most commonly recognised strategic role of middle management is *implementing the deliberate strategy*, which is about deploying existing resources efficiently and effectively (Floyd & Wooldridge, 1992). Moreover, they link their typology to that of Miles and Snow.[27]

Floyd and Wooldridge (1997) further investigate the link between middle management influence and organisational performance. Their findings suggest that middle managers' strategic influence arises from their ability to mediate between internal and external selection environments. In particular, they find that boundary-spanning middle managers exhibit more strategic influence behaviour than those in nonboundary-spanning positions. In addition, they find that shifting network centrality in response to changing strategic issues is positively associated with organisational performance, as is maintaining an

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[27]   See footnote 17 for overview of the Miles and Snow strategic typology.

appropriate balance of control and flexibility in the execution of strategy (cf. Floyd & Wooldridge, 1992).

Table 4.5   Empirical findings on middle management influence

Dependent variable	Independent variable	Author	Effect	Comment
Organisational performance	Middle management involvement in strategy formulation	Wooldridge & Floyd, 1990	Positive	Subjective evaluation of organisation's performance
	Middle management's level of consensus on strategy	Wooldridge & Floyd, 1990	Not found	
	Variety in upward influence patterns	Floyd & Wooldridge, 1997	Positive	
	Consistency in downward influence patterns	Floyd & Wooldridge, 1997	Positive	
Middle management's level of consensus on strategy	Middle management involvement in strategy formulation	Wooldridge & Floyd, 1990	Positive	
Middle management strategic influence/ involvement	Strategic type	Floyd & Wooldridge, 1992	Supported	Miles & Snow typology
	Formal boundary-spanning position	Floyd & Wooldridge, 1997	Positive	
Variability to middle management involvement	Strategic type (esp. analysers)	Floyd & Wooldridge, 1992	Supported	Miles & Snow typology
Middle management implementation activity	Strategic type	Floyd & Wooldridge, 1992	Supported	

4.3   RESPONDING AND LEARNING

The final stage of the strategic issue management process has been varyingly described as responding (e.g., Dutton & Ottensmeyer, 1987) and learning (e.g., Daft & Weick, 1984). However, both senses can be regarded as equally relevant. The former refers to various organisational moves (Ocasio, 1997), and can be defined to *"[involve a new response or action based on interpretation"* (Daft & Weick, 1984: 286). In contrast, the latter refers to transforming the extant knowledge structures based on the observed consequences (Walsh, 1995), and can be defined as *"the process by which knowledge about action outcome relationships between the organization and the environment is developed"* (Daft & Weick, 1984: 286).

The main question in this stage is *"how can organisational decision-makers learn to deal effectively with (---) changed environments"* (Dutton & Duncan, 1987: 279). Meanings that issues ob-

tained in the interpretation phase create "momentum for change" in the organisation. Dutton and Duncan define momentum for change as *"the level of effort and commitment that top-level decision-makers are willing to devote to action designed to resolve an issue"* (1987: 286). Furthermore, Dutton and Duncan suggest that momentum for change increases when (i) decision-makers perceive that they understand the issue and perceive the organisation as capable to deal with it, (ii) diagnose the issue as urgent and feasible to resolve, and (iii) when the organisation has a differentiated belief structure. Assessments of urgency and feasibility act in concert to create the momentum for change in response to a particular strategic issue. Based on these two dimensions, Dutton and Duncan arrive at four distinct categories of organisational response (Figure 4.4).

Figure 4.4 Interaction of urgency and feasibility assessment and their relationship to organisational responses (Dutton & Duncan, 1987)

For issues that are assessed low both in terms of feasibility and urgency, the organisation elicits no response. The issue is inactive, and decision-makers are unconcerned with its resolution. For issues that are deemed as feasible yet not urgent, incremental change is likely to take place. If the issue is viewed as urgent, but infeasible to solve, the organisation can ignore or minimise the issue, adjust scanning or control mechanisms, engage in further search, prepare to defend against upcoming change, or oust the decision-makers. The actions are likely to represent coping than radical response or change. These situations are perilous for companies, as the persistence of crisis-like situation without resolution begins to erode the base of legitimacy upon which decision-makers' authority

rests. Finally, issues assessed as both urgent and feasible are likely to create the greatest momentum for change.

Meanings that issues obtain in the interpretation phase create varying amounts of "momentum for change" in the organisation (Dutton & Duncan, 1987). In a similar way as the context shapes the issue diagnosis process, it also influences the momentum for change in the organisation. Specifically, Dutton and Duncan propose that the momentum for change is greater when (i) decision-makers perceive that they understand th eissue and perceive the organisation as capable to deal with it, (ii) decision-makers diagnose the issue as urgent and feasible to resolve, (ii) the organisation has a differentiated belief structure. Similarly, organisational resource level influences the momentum for change: On one hand, the greater the supply of organisational resources, the less the issue is perceived as urgent, the less there is a perceived need for change, and the less the momentum for change. On the other hand, the greater the supply of organisational resources, the greater is the perceived feasibility of resolving an issue, and the greater the momentum for change.

Dutton and Duncan (1987) link the content and form of the issue array with strategic change in the organisation. In so doing, they depict strategic change comprising two main phases – initiation and implementation – that exhibit certain political and informational dynamics. During initiation, political dynamics is all about building sufficient interest in the issue (i.e., issue selling; e.g., Dutton & Dukerich, 1991; Dutton & Ashford, 1993), whereas the informational dynamics are mostly concerned of gathering sufficient information to assess the issue (i.e., search and issue identification/diagnosis; e.g., Cyert & March, 1963/1992; Daft & Weick, 1984; Dutton & Duncan, 1987). During implementation phase, political interest and personal commitment are needed to make the implementation, in fact, happen, whereas information on the change is needed so that necessary modification can be made as appropriate. Figure 4.5 summarises Dutton and Duncan's (1987) hypotheses of the links between the attributes of the issue array and strategic change in both phases of strategic change.

| | Positive effect |
| | Negative effect |

Phase of strategic change

	Initiation		Implementation	
	Political dynamics	**Informational dynamics**	**Political dynamics**	**Informational dynamics**
Broad issue scope	• Broad base of interested constituents • Difficulties gaining consensus ⬇	• Difficulties getting necessary information ⬇	• Broader base of commitment ⬆	• More sources for information feedback ⬆
Large array size	• Multiple issues vie for interest ⬇	• Potential for information overload ⬇	• Frustration from too many change initiatives ⬇	• Excessive informational demands possible ⬇
Large array variety	• Interest diffuse and fragmented ⬇	• Diverse information requirements ⬇	• Difficult to gain commitment ⬇	• Feedback difficult to interpret • High learning requirements ⬇
Rapid array turnover	• Issue interest intensified by perception that action will be taken ⬆		• Lacking time to build commitment ⬇	

Figure 4.5   Characteristics of the strategic issue array and links with strategic change (Dutton & Duncan, 1987)

5 Recent Advances in Strategic Issue Management Theory

5.1 ORGANISATIONAL AND MANAGERIAL SENSEMAKING

In the initial research on strategic issue management during the 1980s and the early 1990s, much focus was placed on the early stages of the issue management process, that is, on scanning and interpretation. Contributions that are more recent focus increasingly on the relationships between organisational performance and perceptions of the environment. For example, Lant *et al.* (1992) discuss the role of past performance and its impact on organisational strategic reorientation. Specifically, they find that managers of organisations with a history of good performance are more proactive in their scanning behaviour. Lant *et al.* attribute this relationship to organizational slack that allows the better-performing companies to devote more resources to scanning.

The empirical work by Thomas *et al.* (1993) proposes links between the cognitive tasks of scanning and interpreting, and organisational actions and performance. The research, albeit limited in scope, makes interesting suggestions. First, the results imply that high information use strongly influences strategic issue interpretation: attention to a wide array of information tends to influence the interpretation of strategic issues positively (in terms of potential gains and controllability). Second, the study suggests that despite the inherently risky nature of strategic changes, managers can improve their product and service offering (in quantitative terms) when they perceive the issue as controllable. Third, this improvement in product and service offering is subsequently positively related to performance measures, implying that the associations between external scanning behaviours and interpretations of controllability serve as sensemaking antecedents to strategic actions, which are in turn associated with effective organisational performance. Moreover, Thomas *et al.*'s results further underline the nonlinear nature of the sensemaking process, as already suggested by Weick (1969/1979; 1995).

May *et al.* (2000) examine the effects of perceived strategic uncertainty on scanning behaviour amongst Russian executives. The purpose of May *et al.*'s study is to test occidental environmental scanning theory in a transitional economy (in comparison to more stable Western economies). The results suggest that the scanning behaviour of the Russian executives differed from that of their Western counterparts. Specifically, for Rus-

sian executives, importance of the environmental sector alone, moderated by perceptions of source accessibility, appeared to be the superior predictor of scanning frequency. This finding is in marked contrast to that of Daft *et al.* (1988), which suggests that perceived strategic uncertainty positively influences scanning frequency. Alas, as also May *et al.* point out, *"a theoretical basis for explaining the differences is somewhat limited"* (2000: 419).

One explanation to the discrepancies described by May *et al.* may lie in cultural variations. Sallivan and Nonaka (1988) and Schneider and De Mayer (1991) prove empirically that there are cultural differences in strategic issue interpretation. Specifically, in addition to supporting the strategic issue categorisation theory (Dutton & Jackson, 1987), Sallivan and Nonaka find that cultural values are a significant influence on Japanese managers' tendency to label issues as problems. However, for American executives the source of labels was not quite so clear, implying that for them labelling may depend on where the issue information originated and how it was initially described. In a similar vein, Schneider and De Meyer conclude that culture influences interpretation and responses, and that Latin Europeans are more likely to interpret the issue as a crisis and as a threat (as compared with other Europeans) and are more likely to recommend proactive behaviour.

Barr and Glynn (2004) investigate cultural variations in the strategic issue labels of threats and opportunities. Their survey of 276 American and international respondents shows how perceptions of controllability in discriminating threat and opportunity exhibit cultural variations in accord with the value the culture places on uncertainty avoidance. Since uncertainty avoidance reflects a culture's concern with predictability, it is associated with the attribute of controllability in threat and opportunity discrimination. However, Barr and Glynn did not find similar effects for other cultural value dimensions such as individualism, masculinity, and power distance. Moreover, Barr and Glynn's results are consistent with, and hence support, the existence of a threat bias (Jackson & Dutton, 1988). Furthermore, given that cultural variations influence issue categorisation, one can posit that also individual propensities play a role, an area that has been largely overlooked in issue management research.

Martins and Kambil (1999) study how prior success of managers affects their interpretation of new strategic issues. As Milliken and Lant (1991: 139) note, *"[o]rganizational success may result in a kind of psychological slack such that managers may believe that they are capable of over-*

coming almost any obstacle that presents itself". Martins and Kambil concur with that notion, and based on their research suggest that such performance bias indeed exists. The results suggest that managers' interpretations of an issue are not independent but rather are influenced by their prior issue-related experiences such as success. This bias can, nonetheless, be mitigated by proactive scanning that should result in issues being assessed in a more mindful manner rather than by merely applying extant cognitive frames based on past successes.

Sharma's (2000) work tests the relationship between the framing of environmental issues as opportunities rather than threats and the choice of proactive rather than reactive environmental strategies. The research identifies the following managerial and organisational factors to affect the interpretation of environmental issues and the choice of environmental strategies: (i) degree of managers' interpretation of issues as opportunities, (ii) extent to which managers perceive environmental concerns as central to their company, and (iii) degree of discretionary slack that allows managers to manage the business/natural environment interface (cf. Dutton & Duncan, 1987). Moreover, the results also imply that institutional pressures have an impact on the strategic choices of companies.

5.2 COGNITIVE PERSPECTIVES OF STRATEGIC DECISION-MAKING AND CHANGE

Sitkin and Pablo (1992) point out a contradiction between the influential prospect theory of Kahneman and Tversky (1979) and observed risk behaviour (e.g., Osborn & Jackson, 1988; Thaler & Johnson, 1990). Whereas the former predicts that individuals who are protecting prior gains are risk averse, the latter stream of research found that past success leads to a willingness to take risks. To reconcile this discrepancy, Sitkin and Pablo propose a more integrated model of determinants of risk behaviour that focuses on the role of risk propensities and risk perceptions as mediating influences on risk behaviour. In the model, risk propensity is influenced by risk preferences, inertia and outcome history, and risk perception by problem framing, top management team heterogeneity, social influence, problem domain familiarity and organisational control systems.

Chattopadhyay *et al.* (2001) present an alternative resolution to this contradiction by analysing the dimensions of controllability and gain. The results suggest that event categorisation appears to influence the direction of organisational actions, particularly when the

events are categorised as threats. The results show that control-reducing threats lead to more conservative internally directed actions and that likely losses lead to riskier externally directed actions. In this respect, the results concur with the threat-rigidity hypothesis (Staw *et al.*, 1981) and prospect theory (Kahneman & Tversky, 1979). However, no corresponding effects were found for opportunities.

Moreover, another discrepancy in the extant research has emerged. On one hand, prior success has been found to lead to a positive bias in managerial interpretation, causing managers to label issues more easily as opportunities rather than threats (Martins & Kambil, 1999). On the other hand, greater past success has been observed to lead to greater strategic persistence after a radical environmental change (Audia *et al.*, 2000). Taken together, these findings may imply that even with a positively biased interpretation of an issue (as opportunity), the organisation is still unlikely to undertake actions to change its current strategy, albeit the changed environment could warrant such change (cf. Prahalad & Bettis, 1986; Bettis & Prahalad, 1995).

Lant *et al.* (1992) study predictors of strategic persistence and reorientation. They identify and test empirically factors that increase the likelihood of reorientation. Overall, the results indicate that poor past performance, managerial environmental awareness, top management team heterogeneity, and CEO turnover increase the likelihood of reorientation. However, the effect of these variables is moderated by the perceived environmental stability. Specifically, poor past performance appears to be more strongly associated with reorientation in a stable (as opposed to a turbulent) environment. Moreover, the tendency to make external attributions of poor performance outcomes was found to decrease the likelihood of reorientation in a turbulent environment, but not in a stable one.

Past organisational performance does not influence only interpretation of strategic issues, but it also has an effect on decisions and action triggering. For example, Bateman and Zeithaml (1989) found that prior decisions, the psychological context, and the strategic decision are interrelated. Specifically, present conditions (level of perceived organisational slack), past events (success and failure feedback), and future outlook (positive or negative decision frame) shape the strategic decision. Moreover, the study of Audia *et al.* (2000) reveals that past success makes organisations confident in their current strategies, and, hence, reluctant to change even when confronted with environmental changes. Audia *et al.* found that (i) greater past success, (ii) greater satisfaction with past

performance, (iii) more confidence in the correctness of current strategies, (iv) higher goals, (v) higher self-efficacy, and (vi) less seeking of critical information were found to be associated with greater strategic persistence. This persistence was also found to lead to subsequent performance declines.

Wiersema and Bantel (1992) study the relationship between the demography of the top management team and corporate strategic change. Their research found that the company is more likely to undergo changes in corporate strategy if (i) the average age of the top management team is lower, (ii) organisational tenure is shorter, (iii) team tenure is longer, (iv) educational level is higher, (v) educational specialisation heterogeneity is higher, and (vi) the team has higher academic training in the sciences. These results clearly support the view that top management teams have an important influence on the direction of companies through their strategic decisions (Child, 1972) and the upper echelons perspective that underlines the predictive power of managerial background characteristics to decision-making (Hambrick & Mason, 1984). Indeed, demographic characteristics appear to be an important way to measure individuals' cognitive bases, which in turn combine to create certain team abilities and tendencies, which are finally reflected in the decision outcomes.

Reger *et al.* (1994) address the reasons to failures of planned organisational change efforts. Their perspective suggests that change efforts presented as radical departures from the organisation's past fail because the cognitive structures of members, whose cooperation is necessary for successful implementation, constrain their understanding and support of new initiatives (cf. Dutton & Dukerich, 1991). Thus, Reger *et al.* suggest that change should proceed through mid-range modifications *"that are large enough to overcome cognitive inertia and relieve organisational stress, but not so large that members believe the proposed change is unobtainable or undesirable"* (p. 565).

Bansal's (2003) study provides a model that tries to explain why some strategic issues lead to organisational actions while others do not. Bansal's emerging framework begins with issue identification, where disparate issues are recognised and labelled, but not evaluated and analysed. The second phase, issue selling, involves analysis at both the individual and organisational level, during which both organisational as well as individual values and concerns influence the process. The more the individual and organisational dimensions are commensurate, the more probable is an action taken in response to the issue and the higher the speed of response (cf. Dutton & Dukerich, 1991). Response,

the model's third and final stage, also applies to the individual and organisational level of analysis.[28]

On the information processing side, developments in cognitive theory have provided new insights into how managers interpret the company's environment. For example, Porac and Thomas (1990) discuss how decision-makers use cognitive processes to simplify the competitive environment. Through cognitive taxonomies, organisations make sense of the environmental diversity and define, among others, competition. This research on competitor analysis in cognitive terms is subsequently adopted to Chen's (1996) study on competitor analysis and intercompany rivalry.

5.3 ORGANISATIONAL LEARNING

Lant *et al.* describe the process of strategy-making as *"fundamentally a* process of managerial learning *that is affected by an organization's performance history, the nature of an organization's context, and managers' interpretive or sense-making processes"* (1992: 600; emphasis provided). This definition underlines the role of managerial (and organisational) learning in strategy process research. Hence, strategic issue management research is not only concerned with understanding why managers select one action over others, but also with identifying what processes occur after the actions have been undertaken. In this light, Gioia and Chittipeddi define strategic change to involve *"an attempt to change current modes of cognition and action to enable the organization to take advantage of important opportunities or to cope with consequential environmental threats"* (1991: 433). Similarly, Barr *et al.* closely associate organisational learning with update of knowledge structures: *"[O]rganizational renewal hinges on learning – a process that necessarily requires additions to or changes in mental models"* (1992: 17).

Despite its relevance to strategic issue management, organisational learning has not been extensively studied as a separate stage. The essential part of the issue management literature appears to be preoccupied with the analysis of determinants for making strategic decisions, but only implicitly deals with the question of organisational learning. As Thomas *et al.* note, *"the cyclical link between performance outcomes and scanning activities has been, with some exceptions (---), ignored in the literature"* (1993: 262).

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[28] Bansal's (2003) labels for the three stages of the issue flow framework correspond to the terminology employed in this study as follows: First, Bansal's *issue identification* stage is approximately similar to *scanning*. Second, Bansal's *issue selling* is roughly the equivalent of *issue interpretation* in this study, since Bansal's characterisation includes both analysis and selling activities. Third, Bansal's *response* stage corresponds to *responding and learning*.

Barr *et al.* (1992) discuss the importance of cognitive change (that is, organisational learning), strategic action, and organisational renewal. Specifically, they investigate the link between changes in mental models and changes in organisational actions. Nonetheless, strategic action represents only an intermediate outcome for Barr *et al.*, as the research ultimately focuses on organisational renewal. These three domains are essentially intertwined, as *"[o]rganizational renewal requires that (---) top managers make timely adjustments in their mental models following significant changes in the environment"* (p. 15). The fundamental problem with mental models is that may be erroneous and inaccurate, or become such over time. Given cognitive limitations, mental maps will at best be incomplete. However, managers often fail to adjust their mental maps in response to changing environments, which eventually leads to flawed strategic decisions. As Barr *et al.* note, *"[m]ental models that can no longer accommodate or explain occurrences in the environment must be altered and new understanding of the environment must be developed"* (p. 17).

Fiol (1994) elaborates on the concept of organisational learning by examining the role of consensus and diversity, which have traditionally been regarded as mutually exclusive in the organisational learning process. By breaking the notion of consensus into two component parts, Fiol demonstrates how simultaneous agreement and disagreement is not only possible but also advantageous in organisational learning. Specifically, Fiol distinguishes between consensus around interpretations embedded in the content and in the framing of communications. Whereas both the content and framing of communications reflect "meaning", they are not equivalent constructs. Consequently, group consensus around one does not necessarily imply consensus around the other. For organisations, the implications of this "learning paradox" are quite clear: managers must actively encourage the development of different and conflicting views of what is thought to be true, while striving for a shared framing of the issues that is broad enough to encompass those differences.

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