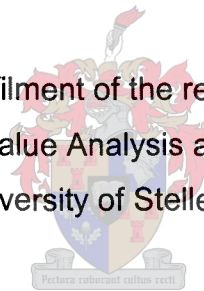# ORGANISATIONAL DECISION MAKING

A COMPARATIVE STUDY

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Thesis presented in partial fulfilment of the requirements for the degree of
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at the University of Stellenbosch.

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Declaration

I, the undersigned, hereby declare that the work contained in this thesis is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree.

Signature:

Date:

Abstract

This thesis is a study in the field of organisational decision making. The focus is on decision making where the organisation is the unit of analysis (as opposed to the individual). It is a systemic approach rather than a behavioural or personal approach. The methodology employed is a conceptual study, which comprises the description and discussion of four models of decision making. Each model is discussed individually. The models date from the late 1940's to the middle 1970's and are known as the 'rational', 'procedural', 'political' and 'anarchic' models of organisational decision making. In conclusion, a major problem in the understanding of organisational decision making is discussed. This problem relates to how generic organisational decision making activity can be understood, without having to consider the behavioural features of decision making.

Abstrak

Hierdie tesis is 'n studie op die gebied van besluitneming in organisasies. Die fokus is op besluitneming, waar die organisasie die eenheid van ontleding is (en nie die individu nie). Die benadering is sistemies eerder as 'n gedragsbenadering of persoonlike benadering. Die metodologie is 'n konseptuele studie en behels die verduideliking en bespreking van vier modelle van besluitneming. Elke model word individueel bespreek. Die modelle dateer vanaf die laat 1940's tot die middel 1970's en staan onderskeidelik bekend as die 'rasionele', 'prosedurale', 'politieke' en 'anargiese' modelle van organisatoriese besluitneming. Ten slotte word 'n beduidende probleem rakende die verstaan van besluitneming in organisasies bespreek. Hierdie probleem hou verband met hoe generiese organisatoriese besluitnemingsaktiwiteit verstaan kan word, sonder om te hoef verwys na die gedragsaspekte van besluitneming.

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Acknowledgments

I would like to express my sincere thanks to Professor Johann Kinghorn for his constant guidance and support. I would also like to thank my father, Johannes, for the time, encouragement and support that he has so willingly given me. Lastly, I would like to thank my family and friends, who have always been there to provide some good humour and encouragement in what has been a very challenging task.

I am indebted to you all and dedicate this thesis to you!

List of Figures and Tables

CHAPTER 1

INTRODUCTION

Focus

The focus of this thesis is on *decision making in organisations*. The level of analysis will be that of the organisation. The intention is to understand decision making within organisations as a product of the organisation and not as a resultant of the behaviour of individuals.

This approach may sound strange and may not necessarily be self-evident. Ostensibly, individuals or groups of individuals in organisations make decisions. The organisation as an abstraction does not make decisions. However, analysing decision making at an organisational level allows for insight into the *systemic* nature of decision making in organisations. An inquiry at a behavioural level, would allow for greater insight into how humans make decisions. Such an approach, however, is the domain of the psychological sciences. Our purpose is to focus on decision making as a generic organisational activity.

The complexity faced by organisations today (both in their environment and in themselves), makes an understanding of decision making all the more important. Decision making is the means by which organisations negotiate their environments. In the context of complexity the organisational decision making process becomes likewise complex and deserves specialist attention.

A decision is the outcome of an organisational process in which choices are made between alternatives. This study will focus on the dynamic process of decision *making* that precedes the actual decision. Put differently, this study asks the question, how an organisation arrives at a particular decision.

In contradistinction to the usually neatly formalised and logically formulated policy and operational decisions, the preceding decision *making* process is in many ways rather nebulous. In the days when the world did not seem to be as complicated as today, it was normally sufficient to understand the decision making process with reference to custom, tradition and procedural rules. In today's world, these could increasingly become routes into disaster. A more sustained and sophisticated

understanding of organisational decision *making* is therefore called for. Decision making itself needs to become an object of decision making!

Over the last few decades a number of theoretical models for understanding the decision making process have been advanced. The models are representative of the spectrum of approaches to decision making, and each one has attracted a significant following. They are the rational, procedural, political and anarchic models of decision making and have been chosen because each model attempts to deal with decision making processes in organisations in such a way that the *organisation is the unit of analysis*. Thus they focus on *systemic*, rather than behavioural or personal decision making. In general, the models do not try to account for individual decision making practices and habits in organisational contexts, but rather strive to transcend the individual by adopting a generic and systemic understanding of decision making in organisations.

This study will consist of a description and conceptual analysis of each of the four models. Thereafter, a significant meta-problem relating to the understanding of decision making in organisations shall be discussed.

The first model is known as the *rational model*. It has its roots in the late 1940's and is originally credited to Herbert Simon[1]. It suggests that the organisation is a rational entity in as much as it exercises reason in a systematic manner throughout all its decision making processes. The idea of rationality itself was subsequently subjected to debate and a series of authors have offered comments and variations.

The second model views decision making as the resultant of an *iterative organisational process*. Organisations become cognisant of the occasion for making a decision but neither the problem nor the solution is entirely clear. The organisation embarks on a discovery process of how it would solve the problem. This form of discovery and decision resolution has been found to be a predictable organisational process. Furthermore, the process facilitates the tailoring and execution of an appropriate solution. The model dates from the mid 1970's and was published by Mintzberg, Raisinghani and Théorêt[2].

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[1] 1947

[2] 1976

The third model views decision making in organisations as largely the product of *political-type interaction*. Decision making in some organisations takes the form of heated contests, where various groups of participants compete for scarce organisational resources. Each grouping or coalition lobbies its cause and interacts in a manner common to the arena of politics. This model, attributed to Graham Allison[3], dates from the early 1970's and has its origin in the extensive analysis of the decision making processes involved in defusing the Cuban Missile Crisis.

The last model views organisations as *entities in anarchic environments* (internally and externally). In this model, organisations are viewed as spheres in which streams of problems, solutions, decision makers and choice opportunities interact. The occasions for decision making are determined by the mixing and intermeshing of the various streams of organisational 'artefacts'. This model was published in the early 1970's under the title of *'the garbage can'* by Michael Cohen, James March and John Olsen[4].

Examining decision making in organisations requires a clear understanding of the notion *organisation*. In the following section, we shall define the notion of organisation that is to be used throughout this thesis.

Organisations as the Context of Organisational Decision Making

For the purposes of this study, it is useful to define the notion of organisation with the help of analyses by Karel Weick[5] and Peter Drucker[6].

Weick's definition of an organisation allows for the discussion of organisations in the most general and generic sense possible. Such an approach removes the finer and obstructing details of organisations. It helps in getting around the problematic nature of different organisational types. Drucker, on the other hand, gives content to what an organisation is. He assists in differentiating between types of collectives, of which an organisation is but one. Thus an organisation is but one form of a collective activity next to families, societies, communities and the like.

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[3] 1971

[4] 1972

[5] 1995

[6] 1994

Weick's formulation of an organisation draws on a number of authors. For our purposes, we shall synthesise the various formulations and meta-conceptions of organisations. Speaking about organisations in the most generic or general sense possible, one such formulation is that of Smircich and Stubbart as enhanced by Weick. For them, organisation "…'is a set of people who share many beliefs, values, and assumptions that encourage them to make mutually-reinforcing interpretations of their own acts and acts of others' and that encourages them to act in ways that have mutual relevance"[7].

Weick also uses the terminology of vocabularies[8]. Vocabularies are used to describe the common languages and premises that organisations use to regulate the conduct of their members. For example, organisations that function well, according to whatever measure of success that may be appropriate, do not explicitly state in minute detail that which is expected of each and every member of the organisation, in each and every situation. Members, by some way or another, learn the 'vocabulary' of the organisation to such an extent that they are guided thereby. Such a vocabulary provides a set of premises to the member so that their actions contribute to the overall success of the organisation. In other words, there is a latent stock of knowledge in each member of the organisation that ensures that actions are mutually reinforcing towards the realisation of the organisation's goals.

Bearing in mind the definitions and conceptions of organisations in Weick one could construct a definition where an organisation is conceived of as a 'shared vocabulary'. Such a general definition allows one to get around the limitations of 'values', 'assumptions', 'shared premises' and any other common organisational artefacts that may be considered to be central to the understanding of an organisation, but may in themselves be subject to criticism. The use of 'vocabularies' allows one to say that organisational members all share 'something', which makes them part of the organisation. What the content of that 'something' is, is not always clear. The content of the shared 'something' is not easily definable. However, what one can be certain of is that the shared 'something' is the glue, which binds people to the type of collective that we call an organisation. An organisation only exists when its members share the vocabulary of the organisation. In notional terms, an organisation is not the buildings,

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[7] 1985 in Weick 1995: 73

[8] 1995: 113 – 132

or the computer networks, or the supply chains. It only comes into being provided that it is populated by persons who share a common vocabulary. Stated in another way, if the potential members of an organisation do not share that common idea or purpose or set of values that commit them to a purpose, then the *organisation* ceases to exist. For our purposes, we shall understand organisations as collectives that share a common vocabulary.

'Organisation', defined in this way, is of course an abstraction and not outwardly visible. It is a notional construct to describe a type of collective activity. Speaking about organisations in a manner that combines Weick's various organisational abstractions, we are able to get around comparative problems. For example, on the surface of it businesses, government institutions and social welfare organisations are three fundamentally different forms of organisation and hence would not be comparable on an organisational level. However, using Weick we are able to speak about and compare them in a meaningful manner, which would transcend otherwise incompatible organisational differences. Speaking about organisations in such a manner still does not tell us what the characteristics of organisation are, but does help us to understand when the instance of an organisation comes into being.

To give content to the construct of collective activity let us consider the characteristics of an organisation. For Drucker organisations are "purposefully designed and grounded neither in the psychological nature of man nor in biological necessity"[9]. Such an understanding of an organisation indicates why, for example, families, communities and societies could not be considered organisations. Organisations do not exist to perform a biological or psychological function for the self-preservation of man and society, but are rather motivated by a different set of concerns. The purpose for their existence, according to Drucker, is based on the following six characteristics.

Firstly, organisations "concentrate on one task"[10]. Organisations have a purpose or goal, which they pursue. In the pursuit of their goal there may be a number of other sub goals. For example, public companies pursue the goal of creating wealth for their shareholders, sometimes through a variety of businesses, with each business

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[9] 1994: 43

[10] Drucker 1994: 47

principally being a wealth generating goal in itself. In contrast, families, for example, do not have an underlying and enduring goal, but rather have variable purposes from one time to another, typically aimed at self-preservation.

Secondly, for an organisation to achieve its goal, it needs to be a tool[11]. The characteristic of a tool reveals the functional nature of the organisation. This tool is the mechanism whereby a particular goal is achieved. For the achievement of such a goal, the organisation needs to have a mission, which is clearly articulated to its members such that they are able to pursue the goal in a single-minded[12] manner.

A third and very important feature of an organisation is that key results thereof are always external to or on the outside of the organisation[13]. For example, universities produce graduates so that they may apply what they have learnt in the organisations that they work for[14]. The results of the university are external to the institution. Businesses only enjoy profit provided that they are able to draw paying customers[15]. In contrast, communities strive to protect their culture and normative orientations. Their actions have an inward focus, with the aim of achieving the internal results of self-preservation.

Fourthly, members participating in an organisation associate on a voluntary basis[16]. In other words, a person is required to make a choice whether he or she would like to be in a particular organisation. Whether that choice is explicit or is rather a function of circumstance shall be dealt with shortly. In collectives such as families, communities or societies, people are associated by virtue of birth, geographic proximity or culture on an involuntary basis. A person did not choose to be part of a family, but was rather born into it. This property explains why families, societies and so on cannot be organisations, because their members are not free to join or leave the collective. Drucker mentions that, in some cases, the choice of association may in practice not actually exist[17]. In the case of a religious organisation, a person may be associated

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[11] Drucker 1994: 48

[12] Drucker 1994: 48

[13] Drucker 1994: 49

[14] Drucker 1994: 49

[15] Drucker 1994: 49

[16] Drucker 1994: 50

[17] 1994: 50

with a religious organisation by virtue of an obligation towards peers or parents. Typically, a child would become part of a religious organisation by virtue of his / her parents' participation. If organisations are collectives of people who voluntarily join them, then organisations are required to advertise or market themselves, so that they may attract the correct profile of person[18].

Fifthly, organisations are always managed[19]. If an organisation exists to pursue a specific goal, then realising external results that would satisfy the goal requires a system of accountability[20]. Accountability in an organisation is one way in which managing can take place. Persons are assigned to positions, with the responsibility to perform certain tasks. In doing so, organisations are actively going about the management of their own internal environment as well as negotiating change in the external environment. In contrast, very rarely does one hear of a community or family being managed. Such forms of association are typically not managed, but rather tend to take on a life of their own.

Lastly, organisations are autonomous entities[21]. This is a necessary condition for an organisation. By being autonomous, an organisation is able to pursue in a single-minded manner its specified goal. This goal is achieved by executing a task or a number of tasks. The autonomy of an organisation creates one of the necessary conditions, within which task execution can take place. Autonomy becomes an enabler for the pursuit of a goal.

To summarise the two key ideas that need to be borne in mind throughout the rest of this thesis: firstly, an organisation is a form of collective, which only exists provided that its members share certain ideas or vocabularies. Secondly, an organisation is different to other forms of collectives on the basis of Drucker's six characteristics. This definition of an organisation will guide us through our analysis of the decision making models. This however still does not explain why an inquiry into decision making in organisations is called for. In the following section, the motivation for an organisational approach is discussed.

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[18] Drucker 1994: 50

[19] Drucker 1994: 50

[20] Drucker 1994: 51

[21] Drucker 1994: 51

The Society of Organisations

Above it was stated that 'organisation' is an abstraction. This, however, does not mean that 'organisation' is devoid of reality or is just a figment of the imagination. In fact it is clear from Drucker's analysis that the notion of organisation describes a fundamental reality of our contemporary world. Although it is an abstraction, 'organisation' denotes sets of relationships that are very real and distinctive. As such organisations have lives of their own and must be distinguished from the lives of the individuals who participate in such organisations.

To develop this point further it is useful to once more look at Drucker, in particular his concept of a "society of organizations"[22]. Modern society is populated by a broad spectrum of organisations, each performing a specific social task. The population of organisations is virtually infinite in tasks and number. Organisations are merely the abstractions of various collectives organised around specific tasks. These collectives can be constituted in virtually an endless number of combinations and permutations. This is, in fact, the predominant means of inter-personal interface in the contemporary world. *Organisations form the front for the execution of social tasks.*

Typically, an organisation would decide X, Y, Z or act in manner A, B, C. Very rarely would it be a case of person D, in an organisation E, deciding K. The decision making process that takes place in an organisation takes place on behalf of the entire organisation. The decision making process is meant to serve the pursuit of the *organisational* goal. Furthermore, organisations as autonomous entities deal with one another on an organisational level. For example, a business organisation may buy another similar business. It buys the brand, buildings, people, capital and so on, but most importantly it buys the 'shared vocabulary' of the people[23], which gives the business its single-minded focus and commonality with the buying organisation. To illustrate, one would often come across reports in the media, where an announcement would state that organisation X has refused to extend further credit to country Z or organisation Y has declared a dividend to its shareholders. In the society of organisations, organisations form the front for task orientated social activities.

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[22] Drucker 1994: 43 – 44

[23] The 'shared vocabulary' is inseparable from the people who possess it.

If the organisation is the dominant form of collective activity, then it would be meaningful to investigate the mechanisms that organisations use to go about their decision making. In fact, improving the generic forms of decision making in organisations will not only improve the life of the organisation, but could impact significantly on the functioning of contemporary society, i.e. as a society of organisations.

CHAPTER 2

THE RATIONAL MODEL

This chapter is concerned with the description and discussion of the rational model of organisational decision making. In this chapter, the nature of rational decision making shall be investigated by asking the following questions: Where does rational decision making come from? What is it and what are the underlying assumptions that underpin both the notion 'rationality' and the model of the rational decision making process? How do organisations, in practice, maintain rational decision making? And lastly, the development of the model of rational decision making shall be investigated.

Rational decision making has its origin in economic decision making. Before, examining economic decision making in greater detail, an introductory remark as to what constitutes rational decision making is necessary. Rational decision making, as understood today, is concerned with an iterative decision making process that allows organisations or individuals[1] to systematically negotiate the uncertainty in their environment, by gathering the necessary information and then acting thereupon. The information is evaluated against a set of fixed criteria, whereupon the best alternative is selected[2]. The outcome thereof is measured against the criteria and if unsuccessful, the process is repeated as necessary. The model "utilizes a logical, sequential

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[1] Rational decision making can be undertaken by both the individual as well as the organisation. In terms of the focus of the thesis this may present a problem. If rationality is to be studied on a behavioural level, and not on systemic level, then the relevance of this model to the rest of the thesis may be questionable. Historically, the study of rationality has taken place largely on a behavioural level, in the context of the omniscient utility–maximising economic decision maker, i.e. individual decision making. However, rational decision making is not concerned with the nature of the decision maker, but with the process. The decision making entity, whether organisation or individual, is not overtly relevant to the discussion of rationality. The rules and conditions that govern that which is understood as 'rational' are the same for both organisations as well as individuals. In both cases, individuals and organisations act in such a manner that they maximise the achievement of their goals in a systematic and accountable manner. Whether individual or organisation, the process for both remains the same. For rationality to be rational by its own criteria, it has to constitute the same premises and processes in all contexts.

[2] Choo 2001: 199

approach. Decisions are made deductively... and ... the model assumes that there are no intrinsic biases to the decision making process"[3].

Economic Decision Making

The notion of economic[4] decision making was originally formulated by Oskar Morgenstern and John von Neumann in 1944. According to Morgenstern and Von Neumann, the decision maker, whether organisation or individual, always strives to maximise his / her utility[5]. Prior to the publications on rationality by Herbert Simon[6], rational decision making was understood in strictly economic terms where "the economists attribute to economic man a preposterously omniscient rationality. Economic man has a complete and consistent system of preferences that allows him always to choose among the alternatives open to him; he is always completely aware of what these alternatives are; there are no limits on the complexity of the computations he can perform in order to determine which alternatives are best; probability calculations are neither frightening nor mysterious to him"[7] [8]. In addition, the study of economic decision making was investigated in a vacuum. In this vacuum only ideal market conditions exist[9]. [10] Practically, this meant that an ideal world existed in which persons could go about their decision making on the basis that it was possible to gather all the information relevant to a problem, compute the probable outcomes of all the different courses of action and then select the best suited alternative on the basis of a particular preference function. The economic decision

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[3] Lathi 1996: 3

[4] At the time, economic and rational decision making were synonymous concepts and were used interchangeably.

[5] Reported by Shapira 1998 in Halpern & Stern 1998: 21

[6] 1947

[7] Simon 1947, 1976: xxvi – xxvii

[8] Simon goes further to say "...Within the past generation...this body of theory has reached Thomistic refinement having great intellectual and aesthetic appeal but little discernible relation to the actual or possible behavior of flesh-and-blood human beings" (1947, 1976: xxvii).

[9] Halpern and Stern 1998: 9

[10] The following hypothetical example should illustrate the point. In a purely economic setting, a person would want to buy a collection of goods, which offers the best possible combination of utilities that maximise the satisfaction of his / her self-interest. Economic rationality assumes that action is per definition guided by utility maximisation. This may not always be the case. Other considerations may also influence decision making.

making theorists believed that this was realistically also achievable. This decision making environment, however, is extricated from a social setting. Rationality, as a study, was not rooted in reality, but was rather posited in the world of abstractions. From these assumptions about economic man, a model of decision making was devised. The model outlined a process that was to be undertaken, before a decision could be labelled as rational.

The following process-diagram (Figure 1) graphically illustrates the typical process that organisations undertake. In the course of organisational experience, problematic situations are encountered. A particular problem would be addressed with reference to the objective or purpose of the organisation. Once the problem is understood, the organisational environment is scanned or searched in a comprehensive manner for possible solutions. All information relevant to the problem is gathered. The possible solutions are evaluated extensively and the best suited solution is then selected. The selection is done on the basis of a set of enduring criteria, which would ensure the

The Process of Rational Decision Making

Problem Identification

Identification of Objectives with Respect to Problem

Comprehensive Search for Alternative Courses of Action

Objective Evaluation of Alternatives

Selection of Alternative Most Likely to Achieve Objectives

Implementation of Chosen Course of Action

Monitoring of Consequences with Respect to Objectives

If Unsatisfactory, Repeat Process as Necessary

Figure 1

Adapted from Heracleous 1994

satisfaction of the particular organisational objective. The solution is then executed and monitored. If, however, the actual outcome varies significantly from the intended outcome then the process is repeated. It must be borne in mind that in the spirit of ideal economic decision making, the decision makers possess the ability to gather all information and are able to calculate all probable outcomes, so much so that they would always be able to select the appropriate solution, and would thus not be burdened by a further iteration of the decision making process.

Arguably, a number of questions could be asked about such economic decision making. What would happen, if it were not possible to gather all the relevant information? What would happen in cases where the criteria, against which solutions

were evaluated, were limited or incorrect?[11] What would happen in cases where an error of thought or judgement was made in the application of the decision criteria to a decision alternative, i.e. the criteria were correct, but not entirely understood and hence incorrectly applied to the decision situation?[12] What would happen in cases where organisations become indifferent to a series of solutions? Does this indicate that their ability to discriminate amongst alternatives is not sufficiently attuned? The foregoing questions suggest that the rational style of decision making is bracketed in some way or another by human cognitive ability.

In the general examination of organisational life one ought to ask whether organisations really go about their decision making in the manner suggested by the theorists of economic decision making. The answer seems to be 'no'. Such a conclusion can be supported on a number of grounds. Firstly, the existence of other models of decision making suggests that decisions could also be made in other ways. Secondly, the process of economic decision is far removed from reality. Organisations and their constituent individuals are not able to gather all information and anticipate all consequences in a probabilistic manner[13]. The ability to know in specific detail the full consequences of different solutions, would border on organisational prophecy. Lastly, a category of problems exists to which one cannot ascribe an order of preferences or optimality[14]. Experience suggests that economic decision making or rationality does not exist in its idealised state. The artificial environment within which rationality functions, is thus untenable. Herbert Simon was the first person to address the problem that rational decision making did not describe what happened in real life. The resolution of this dilemma lay in linking economic or rational decision making with the behaviour of man.

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[11] This would also be a case of not being able to gather all information regarding the problem and possible solutions.

[12] The model of economic decision making of course assumes that the decision maker is able to calculate and comprehend the information completely, and thus one would be inclined to think that errors of thought should not be a concern for the study of rational decision making.

[13] Simon 1976: xxvi - xxvii

[14] The models of political or anarchic decision making (described in Chapter 4 and 5) shall illustrate this form of decision making.

Bounded Rationality

In order to resolve the dilemma presented by economic decision making, Herbert Simon, in his seminal work 'Administrative Behaviour'[15], introduced the concept of 'bounded rationality'. His notion of bounded rationality has had profound implications for the understanding of the rational decision process. Organisations recognise and man in particular "…recognizes that the world he perceives is a drastically simplified model of the buzzing, blooming confusion that constitutes the real world. He is content with this simplification because he believes the real world is mostly empty – that most of the facts of the real world have no great relevance to any particular situation he is facing and that most significant chains of cause and consequences are short and simple…"[16].

Cognitively, the experience of life (and of organisational life in particular) requires people to simplify the world. The ambiguity and confusion in what is perceived by the decision making entity is factored out through the use of simplifying models[17]. These models are the tools by which we render the world understandable. In an arbitrary manner, organisations may select the facts and considerations, which they believe are crucial to their decision processes. This presents a problem: there may be no clear basis on which an organisation chooses one form of understanding over another. This sets the background against which Simon levels his criticism of rational decision making. Firstly, "[r]ationality requires complete knowledge and anticipation of the consequences that will follow on each choice. In fact knowledge of consequences is fragmentary." Secondly, "[s]ince the consequences lie in the future, imagination must supply the lack of experienced feeling in attaching value to them. But values can be only imperfectly anticipated." Thirdly, "[r]ationality requires a choice amongst all possible alternative behaviors. In actual behavior, only a very few of all these possible alternatives come to mind"[18].

Addressing the first limitation, complete knowledge is used to form expectations of what consequences organisational actions may deliver. Simon describes this as, "a sort of reverse causality…future consequences would be determinants of present

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[15] 1947

[16] Simon 1976: xxix – xxx

[17] Simon 1976: xxix – xxx

[18] Simon 1976: 81

behaviour"[19]. Fragmented knowledge presents a problem to the decision maker: the future in its entirety cannot be correctly inferred from probabilistic assumptions based on the expected consequences of present and past events. Doing so would border on organisational prophecy. In the absence of the accurate determination of the future consequences, organisations and individuals approximate anticipated consequences through expectations[20]. The process of expectation is imperfect. Organisations and man do not possess the capacity to accurately anticipate on a consistent and enduring basis the consequences of their decisions[21]. Organisations and individuals are not able to comprehend all the possible courses of action and the commensurate decisions that could be pursued. Organisations suffer from the malaise of incomplete knowledge. The only manner in which organisations can come closer to garnering the essential fragments from a broader body of knowledge is when a "limited set of factors... corresponds, in nature, to a closed system of variables – that is to the extent that significant indirect effects are absent"[22]. Before organisations can begin to engage in a systematic decision making process they have to grossly reduce the elements of the real world into a simplified yet understandable microcosm. The variables and number of interpretative occurrences in their environment need to be simplified and reduced. Conversely, the level of knowledge complexity may become too high for organisations to fully anticipate the consequences of their proposed actions and decisions. "[B]eyond a certain complicatedness, our logical apparatus ceases to cope – our rationality is bounded"[23].

March and Simon outline the process that organisations go through before they are able to go about rational decision making in a simplified manner. Firstly, the attainment of objectives is rather the result of finding a satisfactory alternative than an optimal one. Secondly, the search process for the discovery of alternatives needs to be sequential. Thirdly, programmes or procedures are developed to deal with recurring search situations. This allows for easier identification of alternatives in similar future situations. Fourthly, the programmes are limited to a specific set of situations and

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[19] 1976: 68

[20] Simon 1976: 81

[21] Simon 1976: 81

[22] Simon 1976: 83

[23] Arthur 1994: 406

consequences. Lastly, the programmes are all ostensibly independent of one another, but are nevertheless loosely bound[24].

This process outlined by March and Simon[25] creates the capacity for organisations and individuals to simplify and reduce the elements in their environments. Firstly, organisations strive not to find the best solution, but one which is adequate. We shall return to this idea at a later stage of the discussion. Secondly, options and alternatives are identified in a sequential manner, allowing for the process to be systematic. March and Simon refer to it as being the "one-thing-at-a-time" or the "ceteris paribus" approach[26]. Such an approach allows the organisation to consider in isolation the effects of a particular alternative, with all other things being held constant. This creates the controlled laboratory environment. This however, does not necessarily hold true for the real world. Thirdly and fourthly, 'search' programmes are established to discover appropriate alternatives. These search programmes are designed to vastly simplify the search activity, limiting the searcher to discrete areas, which may in all likelihood deliver the appropriate alternative. Furthermore, these programmes are designed to facilitate the search of repetitive type situations. Specific procedures are designed to deal with specific types of problems. Lastly, and in keeping with the controlled laboratory experiment approach, these programmes are executable in a reasonably independent manner. This allows for the compartmentalisation of problems. We shall return to the idea of programmes as a means for solving problems in a rational manner in organisations[27].

The realism of this model is seriously undermined by the limits to knowledge. All individuals and organisations are bound thereby. Simon aptly points out that "the human being striving for rationality and restricted within the limits of his knowledge has developed some working procedures that partially overcome this difficulty. These procedures consist in assuming that he can isolate from the rest of the world a closed

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[24] 1958: 169

[25] 1958

[26] 1958: 169

[27] This problem is addressed in the section below on 'Implementing Rational Decision Making in Organisations'.

system containing only a limited number of variables and a limited range of consequences."[28].

The limits to knowledge not only influence the organisation's ability to calculate and comprehend consequences, but also determine to a large extent the criteria against which a rational decision is evaluated. The assigning of criteria or value judgements to a number of possible courses of action suffers from the same shortcoming that plagues the determination of what those courses of action ought to be. Once more, the absence of complete knowledge has to be confronted when deciding on measurement criteria. The basis upon which rationality is conferred on to the process and the results is lost. The evaluation criteria create the framework or decision space within which the undertaking takes place. Stated in another way, the criteria create the lenses through which interpretation takes place. Thus, if you were to inadvertently construct faulty or inappropriate criteria, your decision process would be flawed. In rational decision making, the assumptions of your model determine to a large extent the results of your decision making process. These assumptions need to be applied correctly, before the decision making model will deliver the desired outcome. [29]

This has the following implications for rational decision making: Is it possible that, given the incomplete state of knowledge, an organisation will ever know whether it has selected the correct criteria by which to evaluate its decisions and consequences? Does this suggest that there are certain ultimate criteria for rationality, which are independent of human intuition or comprehension? If this is so, the discussion of rationality will lead us back to the profound issues of epistemology addressed by Hume and Kant[30], which go well beyond our modest framework of organisational theory. We cannot answer them, but need to be cognisant of them. Time and again, we face the hurdle of limited knowledge. Criticism of the rational decision making

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[28] 1976: 82

[29] An analogy can be taken from physics. If you were to predict the path of light, with the use of Newtonian physics prior to Einstein's 'Theory of Relativity', then you would arrive at the incorrect answer. The scientific models used for the measurement of the path of light prior to Einstein rest upon different assumptions than those that he assumed (Russell 1925, 1997: 91 – 92). For an interesting and understandable discussion of the 'Theory of Relativity' it is worth reading Russell's (1925) 'ABC of Relativity'.

[30] For a very accessible overview of Hume and Kant it is worth reading Russell 1961: 634 – 647 & 675 – 690 respectively.

model keeps on returning the discussion to the metaphysical and ontological predicament about 'what we can know'.

The rational model of decision making has enjoyed much attention, despite Herbert Simon's objections thereto. The ideas that complete knowledge and optimal decisions were not possible were accepted, and the debate surrounding rational decision making moved on to ascertaining whether it was still possible to make rational decisions in real world situations. It was recognised that there is often a mismatch in the rational decision making situation between what organisations would like to believe they know and what they actually needed to know. [31] In real life the intended outcome would very rarely match the actual outcome. Typically, organisational participants would search for information for as long as they thought necessary or until they felt that they had covered the relevant ground. Thereafter, alternatives were generated and outcomes calculated, whereupon a decision was made which would with reasonable certainty deliver the best consequences. This being an imperfect process, organisations typically search for satisfactory alternatives, not optimal ones. "…[D]ecision making, whether individual or organizational, is concerned with the discovery and selection of satisfactory alternatives; only in exceptional cases is it concerned with the discovery and selection of optimal alternatives"[32]. "In actual organisational practice, no one attempts to find an optimal solution for the whole problem. Instead, various particular decisions, or groups of decisions, within the whole complex are made by specialized members or units of the organization. In making these particular decisions, the specialized units do not solve the whole problem but find a satisfactory solution for one or more subproblems, where some of the effects of the solution on other parts of the system are incorporated in the definition of 'satisfactory'"[33]. This manner of problem solving relies on solving the minor subsets of a larger problem in an adequate manner. Having done so the resolution of minor problems would, hopefully, have contributed to the resolution of the major or overarching problem in a coherent and adequate manner.

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[31] A series of authors endorsed this point of view and began to further the debate of rationality on more realistic grounds. Of the most notable include Michael Cohen, James March, Johan Olsen and Herbert Simon himself.

[32] March and Simon 1993, 1958: 191 in Choo 1998: 165

[33] Simon 1958: 272

A further complication arises when rational organisations interact with entities that do not behave in a rational manner. Rational entities have no way of accounting for non-rational behaviour. In order for rational entities to interact they would have to guess rather than predict the behaviour of the non-rational entities. The consequence of such a predicament lands organisations " … in a world of subjective beliefs, and subjective beliefs about subjective beliefs. Objective, well-defined, shared assumptions then cease to apply. In turn rational, deductive reasoning – deriving a conclusion by perfectly logical processes from well-defined premises – itself cannot apply. The problem becomes ill defined"[34]. The model of perfect rationality breaks down under conditions where perfect knowledge is not possible or where other actors within the larger environment of the rational organisation do not act in a rational manner

If organisations do function in the absence of perfect knowledge, we may continue in this line of reasoning and ask whether organisations are at all able to make the 'optimal' decision? [35] There does not seem to be a basis on which such an assertion can be made. Rationality as an executable process is bound to the circumstance and the situations wherein it is posited. Thus, the rationality is relative to the context. Furthermore, bounded rationality is aimed at adequate results; i.e. results, which chiefly solve problems but which are not necessarily optimal. [36] When dealing with the determination of satisfactory alternatives in decision making, the yardstick by which each alternative is measured determines which alternatives meet the minimum requirements, and not which alternatives set the highest standard. A search for satisfactory alternatives, within a given criteria framework, precludes the possibility of knowing with certainty what an optimal alternative may be. [37]

The core criticisms of rational decision making can now be summarised as follows. Human and organisational capacity is limited in the extent of its ability to gather and

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[34] Arthur 1994: 406

[35] Rational decision making in the mould of economic decision making at least suggests that 'optimal' decisions are possible.

[36] For example, rational decision making can be likened to running a hurdles race; to win the athlete only needs to clear the hurdles and finish the race first. Success is not necessarily dependent on jumping the highest and running a record time, it is merely about getting over the hurdles and crossing the line first.

[37] A search for a satisfactory alternative may of course incidentally deliver an optimal alternative, that is to say by chance.

comprehend the information in its environment. Organisations and humans thus make decisions where the criteria for evaluation and the decision itself are based on incomplete information. This necessarily binds the decision and its consequence to the environment within which it takes place. Hence, decision making which is thought to be rational is in actual fact always limited by a particular set of circumstances. This being so all decisions made in a rational manner are actually cases of bounded rationality[38]. In a climate of incomplete knowledge, rational decision making, understood as economic decision making, is not tenable. Rather, it would seem that when rational decision making is spoken of in the organisational context, then 'systematic' decision making is actually being referred to.

The difference between the two is significant. The former assumes a perfect world in which the decision maker has control and comprehension of the entire decision making process. The latter suggests that a decision making process is standardised and can be repeated in the same manner in future. This gives consistency to the process and allows for comparison and evaluation. Systematic decision making does not make any claims as to the information requirements or computational abilities of the decision maker. It merely allows the decision maker to undertake an iterative decision making process, which can be accounted for and justified on certain organisational grounds.

If perfect rational decision making is an unattainable end, how would organisations, at least, make decisions, which are boundedly rational?

Implementing Rational Decision Making in Organisations[39]

Organisations that intend to go about their decision making in a rational manner, practically face the prospect of failing to do so. What measures should be employed to regulate the behavioural conduct of the decision makers, such that it contributes to the overarching rational intentions of the organisation?

One of the simplest (and probably least practical) yet most intuitive solutions to this problem would be to ensure that every decision making centre in the organisation goes through the actual rational decision making process. This, however, is laborious

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[38] Simon 1997: 29

[39] This section takes a behavioural approach, because we are considering the actual executor of the decision. In most cases, that would be a human being.

and requires all organisational participants to have the required level of intelligence, so that they can go through the process and arrive at the appropriate decision by evaluating the outcomes against the desired outcomes. This is not practical, especially in large organisations, where many routine decisions need to be made. Thus rule-based decision making came into being.

James March has made significant contributions to the study of what organisations do, when they intend to regulate decision making. His thesis is that organisations make use of rule-based decision making processes that regulate the processes and produces predictable outcomes[40]. Organisations develop certain rules and regulations that control or perhaps dictate decision making procedures. These rules are thought to integrate and internalise past experience, and are designed such that the following thereof would ensure a continued maximisation of the organisation's preferences and objectives. However, March, reporting on the ideas of Burns & Flam[41], March & Olsen[42] and March & Simon[43] says that the "…conception of decision making as resulting from consequential, preference-driven choice is not always accepted as axiomatic. In particular, it has been argued that theories of rational, anticipatory, calculated, consequential action underestimate both the pervasiveness and intelligence of an alternative decision logic – the logic of appropriateness, obligation, duty and rules"[44]. This presents a problem for rational decision making.

If March's supposition is, in actual fact correct, then the decision making that organisations engage in is not necessarily rational. Following rules in a decision making process is not a sign of rationality, but merely one of conformity of behaviour and consistent action[45]. Rationality requires the constant evaluation of outcomes versus objectives in an iterative manner that ultimately brings the organisation closer to achieving its intended goal. However, the case seems to be that "[m]uch of behaviour in organisations is specified by standard operating procedures, professional standards, cultural norms, and institutional structures linked to conceptions of

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[40] March 1997 in Shapira 1997: 17

[41] 1987

[42] 1989

[43] 1993

[44] March 1997 in Shapira 1997: 17

[45] March 1997 in Shapira 1997: 17

identity"[46]. De facto decision making practice in organisations (i.e. rule-based decision making) is concerned with the perpetuation of and reflection of an organisation's identity and culture, and is not necessarily concerned with maximising the organisation's objectives.

To use an analogy, organisations are comparable to families. Not every decision that is made in a family is aimed at maximising some tangible goal, but is rather aimed at maintaining an aspect of cultural and emotional familial meaning. These decisions perpetuate aspects of a family's identity and social practice. In the same way, March suggests that organisations do not necessarily engage in rational decision making, but merely use a decision process that has internalised aspects of the organisation's culture, traditions and appropriate responses. There seems to be very little rational logic therein.

What does this mean for the organisation? In principle, a situation may exist where an organisation's current rule-based decision making practices are concurrent with the rational outcomes that the organisation wishes to achieve. It would be naïve to say that an organisation's decision rules and the actual desired rational outcomes are coincidental to one another. Organisations, after all, exist to pursue a goal or maximise a particular social function. An organisation's decision making apparatus, structures or approaches are geared towards that. Conceivably, there are cases where, over time, an organisation internalises so much of its experience and culture into its decision processes that the outcomes of such a decision process start to diverge from the desired goals of the organisation. This illustrates, in effect, that organisations are able to approximate their rational objectives with rule-based decision making, however, such decision making is bound by it own logic and is not necessarily enduring, and cannot necessarily ensure, in the long-term, the preservation of rational objectives.

Rule-based decision making can of course in practice be executed in a successful manner. This, however, requires a process of identity construction and matching. The decision maker is required to recognise an occurrence and match it to the appropriate decision rule. The process can be briefly outlined as follows: "Decision makers classify situations into distinct categories that are associated with identities or rules.

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[46] March 1997 in Shapira 1997: 17

...Decision makers have a conception of their personal, professional, and official identities and evoke particular identities in particular situations. ...Decision makers do what they see as appropriate to their identity in the situation in which they find themselves"[47]. The process of rule-based decision making is concerned with what is appropriate to a particular situation. The logic of appropriateness may be derived from prior experience, from what has previously worked or what may be socially acceptable in such a situation. This approach is not without problems. Cases may exist where more than one rule is appropriate to a particular situation, which then in itself provides a decision dilemma. In such cases, the organisation needs to have an alternative deciding mechanism as to what rule should govern the problem. Another problematic possibility exists when an organisation is not able to clearly define the situation, i.e. it is not able to make coherent sense of its environment. Does rule-based decision making then present the solution that would best serve the maximisation of the organisation's rational objectives?

Despite certain shortcomings, rule-based decision making does offer an advantage in so far as it is consistent and systematic, i.e. it is done in a repetitive manner and has a particular logic behind it. It does not require of the decision maker to engage every time in the explicit calculation of a particular decision situation, but rather offers a simple manner in which the decision situation can be resolved, upon the basis of prior anticipation[48]. In general, rule-based decision making, designed for that purpose, furthers the rational objectives of an organisation. However, such decision making becomes problematic when the organisation exercises rule-based decision making that does not consistently serve the rational intentions of the organisation.

Rational decision making can also be undertaken by developing and instituting programmes and standard operating procedures (SOP's)[49]. "Programmed activity generally involves a great deal of problem-solving of a rather routine and reproductive sort"[50]. Programmed activity is a set of preconditioned responses, which are set off in

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[47] March 1997 in Shapira 1997: 17

[48] Shapira 1998 in Halpern & Stern 1998: 34

[49] SOP's are also a form of rule-based decision making. A SOP is simply a collection of rules, which dictate a certain pattern of behaviour.

[50] March & Simon 1958: 177

response to environmental cues[51]. These programmes may be highly complex in nature and execution. March & Simon use the illustration of a partly constructed motor vehicle appearing in front of an assembly line worker[52]. The assembly line worker receives the cue to enact a program, which has as the outcome a contribution to the completion of the car. SOP's can be subject to the same criticism as rule-based decision making. However, as far as SOP's are concerned, they are designed to maximise the organisation's objective in the most rational manner possible. Thus an assembly line worker would contribute to the maximisation of the organisation's objective, by executing the SOP that he or she is responsible for. Such a procedure would be a form of institutionalised rational decision making. In the short term, SOP's are able to maximise an organisation's objectives. However, over a longer time horizon, SOP's will need to be adjusted such that they stay consistent with the changes in the external and internal environment of the organisation and are commensurate with the objectives of the organisation.

In cases where the decision dilemma presented by rule-based and SOP-type decision making is not resolved, decision making would be undertaken by evaluating each problem in an isolated manner according to the method of calculative rationality[53]. Situations, which are either new to the organisation or to which a number of rules can be applied, require a methodology or mechanism that will resolve problematic situations. One of the ways in which organisations can resolve such situations, is by referring the predicament to a decision centre that is capable of resolving such problems. An expert, group of experts or an expert system would be able to fulfil such a function. Experts, in particular fields, are called so, due to their ability to internalise and comprehend all or most of the information that pertains to a particular area. "Experts possess more categories, and more linkages among categories than do novices…The large set of associations that provides for flexible category construction also allows a given problem, choice or other situation to be represented in multiple ways"[54]. Experts are ideally suited to resolve non-routine problems. They possess the

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[51] March & Simon 1958: 141

[52] 1958: 141

[53] Calculative rationality will be discussed shortly.

[54] Feldman & Lindell 1989 in Horowitz 1989: 97

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necessary sense making abilities and breadth of knowledge to deal with situations that do not fit into the parameters for which the decision rules were designed.

Expert systems, in this context, largely refers to computer-based systems, which offer decision support. These systems are instrumental in generating the possibilities and scenarios that a decision situation may require. Feigenbaum defines an expert system as "…an intelligent computer program that uses knowledge and inference procedures to solve problems that are difficult enough to require significant human expertise for their solution. The knowledge necessary to perform at such a level, plus the inference procedures used, can be thought of as a model of the expertise of the best practitioners of the field"[55]. It must, however, be borne in mind, that expert systems have a built-in limitation, being the assumptions upon which the system is built. Such a system would only be useful in particular contexts. In addition, expert systems may be used to describe groups of people who are genuinely experts within a particular field and who possess the appropriate understanding and insights to deal with particular types of problems. Experts and expert systems provide a way in which organisations can go about arriving at their desired end in a rational manner. The knowledge component which experts possess (with regards to a particular problem) allows them to bridge situations of incomplete knowledge and understanding. Experts are able to satisfy the informational requirement of rational decision making.

Additional Developments

We may now ask how the model of rational decision making developed further or what variations thereof were subsequently offered? Continuing with Herbert Simon's contributions to the study of rationality, a number of definitional distinctions of rational decision making have been made. The different conceptions of rational decision making belong to the body of knowledge on bounded rationality.

Individuals and organisations are only 'intendedly rational'[56]. Despite endless endeavours, humans and organisations will never be able to make perfectly rational decisions as understood in the abstract and theoretical sense. Cognition and organisational abilities are limited. Thus, being intendedly rational describes the individual or organisation striving to engage in rational decision making, however not

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[55] In Barr, Cohen and Feigenbaum 1982 reported by Dankel 1989 in Horowitz 1989: 256

[56] 1976: xxviii

entirely succeeding due to being limited and subjected to particular environmental and human constraints[57].

Simon makes use of the definitions of 'subjective' and 'objective' rationality. Subjective rationality can be defined as the attainment of a goal, by an individual, that is relative to what is known about a situation or is subjectively perceived[58]. Objective rationality can be defined as the attainment of a goal, which is in actual fact consistent with the goals of an organisation or a larger system[59]. At a behavioural level, the following example illustrates the distinction quite well: "When a subjective test is applied, it is rational for an individual to take medicine for a disease if he believes the medicine will cure the disease. When an objective test is applied, the behavior is rational only if the medicine is in fact efficacious"[60].

This distinction deals with the position of the observer / decision maker and the completeness of knowledge that the observer / decision maker has about the rational decision making process. If an individual is the judge and executor of the decision process, and the decision, given his or her limited knowledge and insight, is believed to be consistent with the realisation of his or her goal, then it is subjectively rational. The decision is rational on the basis of the subject's own judgement thereof, regardless of whether it has the intended result or not. However, the same decision viewed from the perspective of a group, organisation or as a product of a larger system may not necessarily be considered rational. The decision is only objectively rational provided the outcomes of the subjectively rational decision are consistent with the criteria and desired outcomes of the group, organisation or larger system[61]. Evidently, the knowledge content for the different observers of the decision making process (the subjective and the objective) differ. For the individual, it is rational by his / her own standards, for the group, organisation or system the decision of the individual is only rational provided it serves the group, organisation or system. The implication for organisations is quite important – what is rational for the individual is not necessarily rational for the organisation. This once more points to the inherent

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[57] 1976: xxviii

[58] Simon 1976: 243

[59] Simon 1976: 76

[60] Simon 1976: 76

[61] Simon 1976: 243

relativity of the model of rational decision making. The position of the observer determines for whom the conditions of rationality are met.

Simon makes the distinction between 'organisational' and 'personal' rationality. For our purposes, we are only interested in the former. The former denotes that a process or the outcome of a decision is organisationally rational, provided that it serves the ends or goals of an organisation. Personal rationality is at the other extreme and pertains to the maximisation of individual goals within the organisation[62]. In a similar way, organisational and personal rationality may to subjective and objective rationality. Arguably, on a behavioural level, they may even be the same.

Lastly, Simon defines 'conscious' rationality. Conscious rationality is the result of the decision making entity consciously making adjustments to the process of arriving at a particular goal. The decision maker (whether an organisation or individual) is cognisant of all factors and influences. Accordingly, adjustments are made to the process or means in order to achieve a desired end. Closely related is 'deliberate' rationality[63]. Deliberate rationality is an operationalisation of conscious rationality, i.e. the organisation goes about, in a deliberate manner, to manipulate the means-end process for the attainment of the organisational objective[64]. Both these variations of rational decision making are meant to show that the process for rational decision making can be deliberately manipulated in such a manner that the intended outcome can be achieved.

Rationality can also be understood as the result of calculation, i.e. an intended outcome is the product of the understanding, calculation and manipulation of a particular set of variables. This form of rational decision making is actually economic decision making and is referred to as calculative rationality. Various types of calculative rationality exist.

Cyert and March identified 'adaptive' rationality[65]. This type of calculative rationality is part of the evolution of the model of bounded rationality. Its central tenet is that organisations adapt themselves over time to satisfy their preferences. Thus, an

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[62] Simon 1976: 77

[63] Simon 1976: 76

[64] Simon 1976: 76

[65] 1965: 99

organisation will continue to make similar decisions in future that are consistent with its set of preference. Conversely, decisions which negate its system of preferences are avoided[66]. The model of adaptive rationality is rational in so far as experience guides organisational learning and preferences are equated with the criteria against which organisations measure the success of their selected courses of action. Thus, each experience refines the organisation's ability to discern those factors that contribute to the realisation of its preferences and those that do not. In a systematic manner, the organisation becomes better and better at the iterative process of decision making. Organisations learn from previous experiences and then adapt the process that they engage in to further the objectives of their organisation, without repeating previous mistakes. Organisations internalise the information and experiential learning from the previous mistakes into the rational process[67]. Stated slightly differently, organisations over time gain greater clarity as to what they want to achieve and how they ought to go about it. Such an approach, however, assumes a predictable, stable and slow changing environment. This process takes place in an incremental manner as the learning experiences are internalised into the organisational decision making model.

This form of adaptive rationality also ties in very neatly with Lindblom's 'disjointed incrementalism'[68]. Disjointed incrementalism is a case where the organisation keeps on making decisions in an incremental manner. Each time new information becomes available and has an influence on prior decisions, those decisions are modified accordingly. This is evidently a case of bounded rationality, in so far as the previous decision was a product of its circumstance. However, as soon as new material information becomes available, it is realised that the previous decision was not necessarily optimal and hence requires modification. Caution needs to be exercised, in processes that are clearly disjointedly incremental. Decisions and their subsequent results often seem disconnected from the prior decisional situations[69]. However, over a longer time horizon, such changes may indeed be connected and may divert the organisation's attention away from achieving the goal it is actually pursuing. Put differently, organisations become so caught up in the detail of what they are busy with

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[66] Cyert and March 1965: 99

[67] Shapira 1998 in Halpern & Stern 1998: 25

[68] Reporting on Lindblom 1959, Sofer 1973: 166 – 167

[69] Choo 1998: 167

and their horizon of comparison is so short, that they fail to recognise the larger trend. In such cases, rational treatment of the micro issues results in the unintended attrition of the macro objective. Hence, the field of policy exists to guide the overall decision making process. However, even policy processes in organisations can take place in an incremental manner. "Policy is not made once and for all, it is made and re-made endlessly. Policy making is a process of successive approximations to some desired objective in which what is desired itself continues to change under reconsideration"[70].

Remaining within the confines of calculative rationality, March[71] has made reference to 'limited' rationality, 'contextual' rationality and 'process' rationality[72]. Limited rationality conceives rational decision making as a process that vastly simplifies and reduces the problem environment. This is an enactment of the awareness of the limitations of human and organisational capacity to scan the environment in an exhaustive manner.

Contextual rationality is concerned with understanding the impact that the social environment, wherein the decision making process is to take place, has on the decision making entity[73]. At any given time, the decision making entity has to consider a number of social factors, which may influence the decision. The social factors and / or distractions in the social environment may also determine the extent to which the decision making entity's attention is directed to the problem.

Process rationality is an interesting case. Here the rationality of the decision making process is concerned with whether the process itself stands up to rational scrutiny. Process rationality is concerned with the process taken to arrive at the decision and not so much with the outcome[74]. Thus the underlying generative process is considered, i.e. how and why did an organisation arrive at a particular process for making a decision? What process was undertaken to arrive at the decision? The questions asked with this model are primarily concerned with whether the process of decision making is systematic. In other words, can the process be defended when

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[70] Sofer 1973: 167

[71] 1978

[72] In Halpern and Stern 1998: 25

[73] March 1978 in Halpern and Stern 1998: 25

[74] March 1978 in Halpern and Stern 1998: 25

measured against a set of criteria, which putatively governs the process of rational decision making in organisations?[75]

March also coined the term 'selective' rationality[76]. Selective rationality describes the behaviour of organisations that are selective in their use of rational decision making. In other words, organisations, whether deliberately or inadvertently, go about their decision making processes in an inconsistent manner, i.e. one particular decision may be made in rational manner whilst another may not. This version of rationality is probably quite a good approximation of decision making in real organisational life.

The last of March's contributions to the definitional distinctions of rationality is called 'posterior' rationality[77]. Such a conception of rationality is an ex post facto exercise in the analysis of a decision making process. Once a certain decision making process has delivered a particular outcome, the process and its results are considered and if it is found that the outcomes are consistent with the maximisation of the objective of the organisation, then the process is viewed as rational[78]. Due to the retrospective view of the process, a case may be argued that the rationality of this type of decision making process is incidental. In other words, a decision is made and executed with certain outcomes. There is no particular method to the decision making process, such that it can be labelled as rational from the outset. However, upon retrospective consideration, it may become apparent that the achieved outcomes are consistent with the organisation's desired objectives. If the outcomes are consistent with those desired by the organisation and the process itself meets the criteria of rational scrutiny, then the process is labelled as rational.

A further form of bounded rational decision making is 'game' rationality. Originally, the theory is attributed to Oskar Morgenstern and John von Neumann[79]. Game

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[75] Such a process can be tested hypothetically. The test determines whether an outsider with the same knowledge about the situation and with the same calculative capacity would make the same decision.

[76] Reported by Shapira 1998 in Halpern and Stern 1998: 25

[77] Reported by Shapira 1998 in Halpern & Stern 1998: 25

[78] Reported by Shapira 1998 in Halpern & Stern 1998: 25

[79] 1944

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rationality is also known as game theory[80]. The underlying premise is that each situation is bound by certain rules and organisations need to merely uncover those rules, and then plot an appropriate strategy in order to succeed against their competitors[81]. Thus, by understanding the rules and constraints that govern a particular situation, an organisation can achieve its ends. If the rules are known and treated in a systematic and logical manner, then it is quite possible to achieve success. In an attempt to understand game theory, the academic community developed numerous mathematical and statistical models, engaged in countless explorations and created a number of thought experiments. Attributed to Albert Tucker[82], the most well known of these is the 'prisoner's dilemma'. Dearlove outlines the dilemma briefly: "…an imaginary scenario involving two prisoners accused of the same crime. During interrogation in separate cells they are each told that if one confesses and the other does not, the confessor will be released while the other serves a long prison sentence. If neither confesses, both will be despatched to prison for a short sentence, and if both confess they will each receive an intermediate sentence. By working through all the possibilities, the prisoners conclude that the best decision is to confess. As both reach the same decision they receive an intermediate sentence"[83]. The prisoner's dilemma illustrates very well the conditions that govern the outcome of decisions. In the absence of mutual knowledge, organisations arrive at decisions based on the calculation of what the counter party is most likely to do.

The relevance of game theory to organisations is that certain organisational environments are suited to game theory decision making styles. One such example would be regulated markets. In such a case, institutional parameters dictate how competing organisations are supposed to behave. A natural conclusion would be that, given the rules of the market place, organisations could systematically find loopholes

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[80] Game rationality / theory is quite an important area of study and can become very mathematical. Its mathematical nature allows for numerous applications in the business and organisational decision making environment.

[81] Dearlove 1998: 46

[82] 1950

[83] 1998: 46 – 47

to exploit, or devise strategies that would allow them to achieve the best possible results [84].

From an academic perspective, game theory has developed even further. In 1950, John Nash introduced the idea that at a certain point in a game theory scenario, given the strategic decisions of others, participants would reach the limit of their competitive position[85]. At this point, in a particular game scenario, a form of stalemate will have been achieved. This is known as 'Nash' equilibrium – i.e. as the prisoner's dilemma illustrates, players cannot improve their competitive position, even if they were to adopt a different strategic approach.

In 1976 a further significant development of rational decision making was published, namely the procedural model of Mintzberg, Raisinghani and Théorêt. It is to this model that we now turn.

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[84] Dearlove 1998: 47 – 48

[85] Reported by Dearlove 1998: 47

CHAPTER 3

THE PROCEDURAL MODEL[1]

This chapter is concerned with the description and discussion of the procedural model of organisational decision making. In this chapter, the nature of procedural decision making shall be investigated by examining the organisational decision making phases and routines. Thereafter, further developments of the model shall be considered.

The procedural model of decision making, was published in 1976 by Mintzberg, Raisinghani and Théorêt[2] under the title *The Structure of "Unstructured" Decision Processes* and was developed after studying the decision making processes and patterns in twenty five organisations.

The model primarily views decision making as the resultant of a process or series of processes that an organisation needs to undertake before being able to make a decision. In the case of procedural decision making, an organisation reacts to an occurrence in its environment, however, the appropriate course of action is only arrived at through an iterative organisational process of discovery. Once comprehension of the problem has taken place, a further iterative process is undertaken, by means of which an appropriate solution can be found and thereafter a decision can be made.

At the time, their article significantly added to the limited body of knowledge and furthered the debate on organisational decision making. Their focus was to uncover the systemic properties of decision making in organisations. They were looking for the 'universals' or 'generalities' in organisational decision making. The impetus for their paper was the very limited research that existed on decision processes that were not structured. Prior to 1976, a significant number of studies had been undertaken on the topic of institutionalised decision making. However, these studies typically looked at standard operating procedures, routinised decision processes and other organisational processes, which could be described and quantitatively analysed[3].

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[1] Also known as 'The Model of Organisational Process'.

[2] Hereinafter we shall refer to 'Mintzberg, Raisinghani and Théorêt 1976' as 'Mintzberg 1976'

[3] Mintzberg 1976: 246

These studies said very little about how organisations actually made decisions[4]. The interest of Mintzberg[5] lay in the study of decisions that were not part of the normal course of organisational activity. These decisions typically result from non-recurring and / or infrequent cues in the organisation's environment, and which the organisation is not prepared for or is not able to comprehend fully in advance. In general, organisations do not necessarily have in their decision making apparatus the institutionalised means to solve non-recurring or infrequent problems. Organisations are usually good at solving recurring problems through their institutionalised decision making routines, however, unfamiliar or new problems typically do not fit into the process of routinised decisions and require some sort of ad hoc handling. Unstructured decisions are understood to be "decision processes that have not been encountered in quite the same form and for which no predetermined and explicit set of ordered responses exists in the organisation"[6].

The study of Mintzberg[7] uncovered an implicit order to unstructured decision making. Any problem or issue that has never been encountered before would be dealt with on a case-by-case basis, in a manner that seems appropriate at the time. Since the decisional situation has never been encountered before, it would seem that each decision requires a process that would in many respects be unique compared with other decision processes. However, the findings of their study revealed that most organisations actually go through very similar processes when dealing with new decisional situations. The type of decisions that this model considers could range from the purchase of new equipment, the merger with another organisation or the appointment of personnel, to any other decision that does not reflect the routine operation of the organisation. The problems dealt with were typically important to the organisation[8]. Decisions relating to minor and trivial choices are not addressed in this model. This form of decision making pertains to questions, which in some way or another are intimately linked to the continuance of the organisation[9]. From the study

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[4] Mintzberg 1976: 246

[5] 1976

[6] Mintzberg 1976: 246

[7] 1976

[8] Mintzberg 1976: 246

[9] As an ex post facto exercise, the model of Mintzberg (1976) allows one to reconstruct a prior organisational decision making process, even if the resulting decision was trivial and inconsequential

of twenty-five strategic decisions in different organisations, Mintzberg[10] distilled an underlying model or schematic of the decision behaviour of organisations faced with major decisions. The model indicated that decisions consist of three distinct phases. Firstly, there is a phase of recognition, during which the problem becomes known, in some way or another, to the organisation. This phase is called the 'identification phase'. Thereafter, alternatives are generated and viable ways to solve the problem are analysed. This is known as the 'development phase'. Lastly, organisations go through the process of making the actual selection for a course of action. This phase is known as the 'selection phase'[11]. Mintzberg drew on a number of authors for the model[12] [13]. The model is graphically depicted (Figure 2) on page 36.

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within the framework of broader organisational objectives. Of the four models of decision making, only the rational and procedural models allow for reconstruction of decision making processes. The other two models are more concerned with the characterisation of decision making than with the unpacking of a decision making system.

[10] 1976

[11] Mintzberg 1976: 252

[12] 1976: 251 – 252

[13] In the derivation of this model, Mintzberg (1976) are indebted to a number of authors who have given them the basic conceptual tools, with which to look at organisational decision making. The most noteworthy of these authors include John Dewey (1910), Simon (1965) and Witte (1972). Mintzberg's (1976) work takes its greatest input from Herbert Simon. Each author offered in isolation a basic component for the model. In particular, they identified the various distinct phases, but did not combine them into a meaningful model, which would describe and adequately account for generic or systemic behaviour in the organisational decision making process.

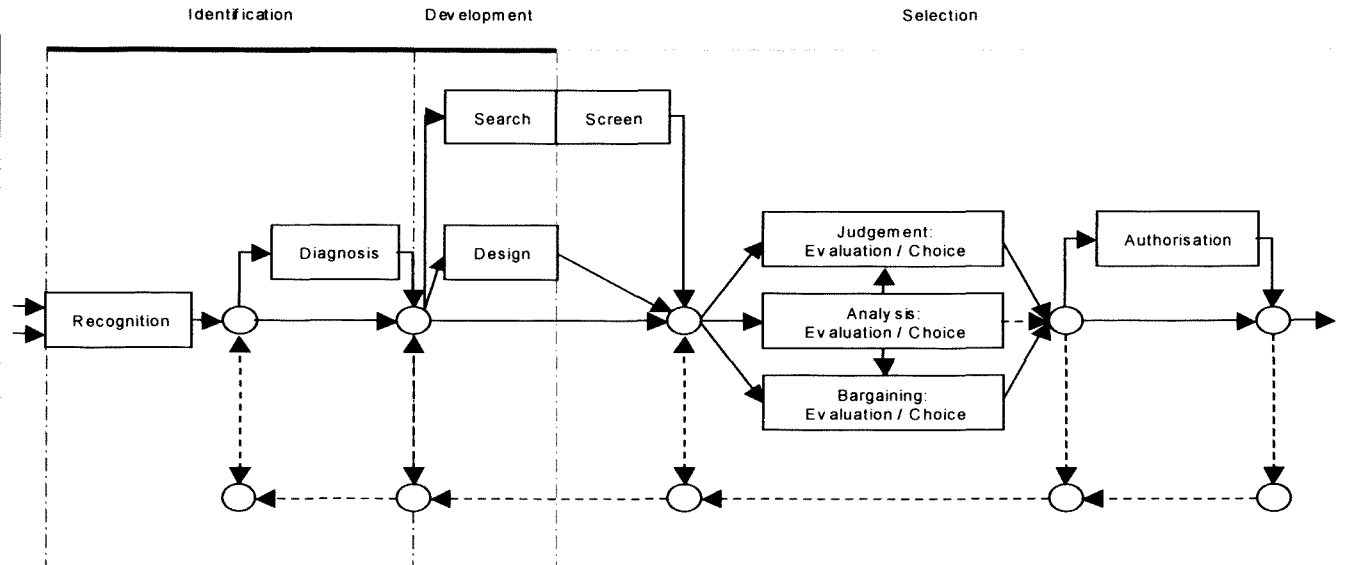The Decision Making Model of Organisational Process

Identification   Development   Selection

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              Search    Screen

      Diagnosis    Design          Judgement:              Authorisation
                                   Evaluation / Choice

Recognition                        Analysis:
                                   Evaluation / Choice

                                   Bargaining:
                                   Evaluation / Choice
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Figure 2

Adapted from Mintzberg 1976

Identification – Decision Recognition

In any decisional situation an organisation needs to delineate the problem. For an organisation to realise that it has a problem, it needs to have the appropriate sensory apparatus. The sensory apparatus allows the organisation to detect an incongruous event in its environment. Situations may exist where organisations ostensibly have problems requiring attention, however, do not have the capacity to rectify the problems. Similarly, cases exist where organisations have particular problems but do not have the necessary sensory apparatus to detect them, and consequently only face the problems at a stage when it may be too late. For Mintzberg, the capacity to recognise a problem can be reduced to an occasion for acting upon a stimulus, which may be the result of perceiving either a problem or an opportunity[14].

The stimulus may be one where the organisation is not able to function in the expected manner and thus needs to rectify the situation, i.e. a problem. Alternately, it may come across an occurrence in its environment, which suggests a manner in which the organisation can improve or expand what it does, i.e. an opportunity. Mintzberg[15]

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[14] 1976: 253

[15] 1976

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mention further instances for action when occasions arrive, where the information flow, either in nature or content or both is ambiguous. Typically, this leads to a state of organisational indecision. It is not so much that the organisation is not able to make a decision, it is more a case that it does not know what it is dealing with, i.e. the organisation is not able to categorise with any certainty the experience and does not know how to interpret it. The organisation may find itself in an ambiguous environment or may be uncertain as to the nature of the organisational experience.

The study of ambiguity and uncertainty in decision making theory helps to explain what decision making is all about. Let us therefore devote a little more attention to this organisational predicament. Sayles[16] and Mintzberg[17] state that the identification of a problem or an opportunity is usually not a simple process of pure recognition, but is rather ambiguous in nature[18]. This is primarily so because of the way organisations and individuals receive information. Organisational experience, from which information is extracted, does not flow in systematic patterns geared towards easy interpretation, but rather comes in streams that need to be appropriately deciphered[19].

One of the ways to understand the organisational activity of interpreting and deciphering experience is by making use of Karl Weick's[20] definition of sense making[21] as developed during the 1990's. Interpreting a cue in the organisational environment, which requires a reaction of sorts, necessitates sense making to take place. Sense making takes place when there is either ambiguity or uncertainty at play[22].

"In the case of ambiguity, people engage in sense making because they are confused by too many interpretations"[23]. The organisation does not know how to interpret on a predictable basis the event or the disruption of its flow of experience or the flow of information that it receives. Organisations, if considered as decision making entities,

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[16] 1964

[17] 1973

[18] In Mintzberg 1976: 253

[19] Reported in Mintzberg 1976: 253

[20] 1995

[21] In addition, an explanation of Weick's sense making will be very useful for the understanding of the anarchic model in Chapter 5.

[22] Weick 1995: 91

[23] Weick 1995: 91

are, in cases of ambiguity, not able to 'place' the event(s). In other words, organisations do not then understand what they are doing or what they are experiencing. The events do not fit into any particular frame of reference. "...[I]n the case of uncertainty, they do so [make sense] because they are ignorant of interpretations"[24]. In this case, organisations are able to understand occurrences, however, they lack appropriate information for the interpretation of the occurrence. Thus, organisations react to their environment either through bewilderment (i.e. a case of ambiguity) or by deciding to uncover the true nature of a problem (i.e. a case of uncertainty). In this latter case, organisations need to merely engage in a systematic process of discovery that assists in the comprehension of uncertain occurrences. Once the veil of uncertainty has been lifted, a decision can be made.

In cases of ambiguity, no amount of interpretation will necessarily deliver the appropriate response. Ambiguous events are per definition unclear. The reason for lack of understanding is typically systemic rather than a lack of knowledge of how an organisational experience may be interpreted. Ambiguous events may be so for a number of reasons. Amongst them are that the "nature of the problem ...itself is in question; information is problematic; multiple, conflicting interpretations; different value orientations, political / emotional clashes; goals are unclear, multiple or conflicting; time, money, or attention are lacking; contradictions and paradoxes appear; roles are vague, responsibilities are unclear; success measures are lacking; poor understanding of the cause-effect relationships; symbols and metaphors [are] used; [and] participation in decision-making [is] fluid"[25]. In cases of ambiguity, the organisation lacks the hermeneutic tools. The organisation is not able to cognitively understand what it is dealing with. Cases of ambiguity can become hugely problematic for organisations, for the simple reason that ambiguity does not suggest a lack of understanding to which the mere addition of information would serve as a resolution, but is rather so, because adding more information is not able to resolve the problem of understanding[26]. The resolution of ambiguity lies in addressing the structural issues that underlie the ambiguous event.

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[24] Weick 1995: 91

[25] McCaskey 1982 reported in Weick 1995: 93

[26] Weick 1995: 92

This still leaves the decision maker with no clear mechanism for resolving the ambiguous information flows. Ambiguity is only really resolved through the active construction and bracketing of experience in appropriate categories of thought. Mintzberg[27] do not suggest any specific treatment of the problem of ambiguity. Decision making theory at the time of Mintzberg[28] did not treat ambiguity in the manner that Weick would have done. Decision making theory at the time was rather concerned with rational decision making. Within the paradigm of rational decision making the notion of ambiguity is a misnomer and is rather approximated to uncertainty than being considered a problematic instance per se, which does not necessarily fit into any clear conceptual model.

In cases of uncertainty, on the other hand, organisations merely have to 'add' more information to what they are doing, until they reach the appropriate interpretation or understanding of the disruptive event[29]. Stinchcombe[30] states that uncertainty "is reduced through news...the residual uncertainty is transformed into risk and people make their bets"[31]. The essence of uncertainty is a lack of information. Throughout the Mintzberg[32] model it should become clear that the iterative decision making process that is undertaken, is in actual fact an instance of continual addition of information. This continual addition of information serves as a clarifying process, which ultimately results in putatively the correct decision.

Identification – Diagnosis

Once organisations have come to the realisation that they are in a problematic situation, which is of a strategic nature and which requires decisional action of some sort, they engage in situational diagnosis. In problematic cases, the authors found that there typically existed a continuum of responses. Organisations chose to deal with some problems in very structured and systematic ways, such as establishing committees or following a particular protocol. At the other extreme, organisations

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[27] 1976

[28] 1976

[29] In this context, a disruptive event denotes an interruption in the flow of experience or an event that causes uncertainty. It is not meant to necessarily have a positive or negative connotation.

[30] 1990

[31] In Weick 1995: 96

[32] 1976

chose to deal with other problems in a largely informal manner[33]. There may be a good reason for the level of formality at which problematic situations are identified and diagnosed. Problems of strategic concern usually relate to the survival of the organisation and hence the heightened level of attention and formality. In cases where the stimulus in the environment is actually a cue for opportunity, the diagnosis of the opportunistic situation is not treated as a threat to the organisation, and hence the urgency and formality of organisational process is not required[34]. Arguably, one would expect such organisational behaviour. Organisations would in all likelihood be more concerned with that which could undermine their survival than that which is an added benefit or 'nice to have'.

The 'diagnosis' process can be understood as a continuation of the initial recognition process. However, in the diagnosis process, greater clarity is gained about the problem at hand. It may well be that in this stage of the identification process the true nature of the problem becomes known - it being either of an uncertain nature or an ambiguous nature. Once a reasonable degree of clarity has been achieved as to what confronts the organisation, the 'development phase'[35] can begin. The development phase is primarily concerned with the development of suitable alternatives that would give resolution to the problem or opportunity.

The Development Phase

In this phase of the decision making process, there are two possible paths that an organisation can take to suitably resolve a problem. The development phase consists of the 'search routine' and the 'design routine'[36]. Both routines intend to deliver a solution to the problem, however the approach of either is different. An organisation may institute one or both of these routines. These routines are used for the generation of appropriate courses of action that will resolve the problem or alternately allow for the exploitation of an opportunity.

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[33] Mintzberg 1976: 254

[34] Mintzberg 1976: 254

[35] Mintzberg 1976: 255

[36] Mintzberg 1976: 255

The search routine is primarily concerned with finding an appropriate solution by making use of a previous solution[37]. The solution is, typically, the modification of some other prior organisational artefact. Organisations deal with a variety of problems in the course of their existence. Some of their past solutions can be tailored to problems that are encountered at some point in the future. The search routine is so called, because organisations go about searching the stock of organisational knowledge both internally and externally for a similar problem and solution set. [38]

Mintzberg[39] identified four ways in which the search routine can be satisfied. Firstly, organisations can search their own organisational memory for previous experiences[40]. Organisations can match past experiences with their present needs. Organisations may previously have had sufficiently similar experiences, the solutions of which might well adequately resolve the problem at hand. Secondly, organisations may make use of a 'passive search'[41] [42]. Passive search is an approach where the organisation chooses to do nothing about the problem and hopes that a solution will come to it. This inactivity may sound strange, however, it could nevertheless be a viable course of action. Sometimes organisations do face situations where the best course of action may be to do nothing and rather to wait and see how events unfold. The procession of time may just present the right solution. Thirdly, a 'trap search'[43] may be undertaken,

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[37] Mintzberg 1976: 255

[38] Today, the search activity enjoys a lot of attention in management literature. The approach today, given the high levels of organisational knowledge, is to find appropriate or efficient ways in which organisations can adequately internalise their stocks of knowledge for future use. Arguable, this may explain the management obsession with knowledge management, information management, knowledge strategies and so on. However, it must be borne in mind that 'knowledge' in organisations was previously understood in fundamentally different terms from today. The knowledge considered in the models of decision making in this thesis, is more concerned with information and the transfer thereof than with knowledge per se (Nonaka and Takeuchi 1995: 49). The knowledge / information in these models is of the type that can be expressed in data or information residing in organisational files and databases. Today, it is generally acknowledged that knowledge denotes the interpretation of information in particular contexts. Evidently, the way we understand knowledge has changed a lot over the last few decades.

[39] 1976

[40] Mintzberg 1976: 255

[41] Cyert & March 1963

[42] In Mintzberg 1976: 255

[43] Soelberg 1967

where groupings external to the organisation are informed of the problem in the hope that they would be able to present a possible solution. The organisation thus not only broadens its search field, but also employs more resources in the generation of a solution. Participants external to the organisation are recruited in the hope that they may well be able to deliver a solution. The last approach is an 'active search'[44]. An active search is a concerted effort to find a solution by actively searching the applicable areas that may deliver the solution. In the event that the search routine does not deliver an appropriate solution, organisations undertake the design routine.

The design routine is the process undertaken to generate custom made solutions for a problem. If an organisation is not able to find a suitable solution in its universe of prior experience, then it may either ignore the problem and hope that it goes away or alternately tailor a suitable solution. The process of tailoring a solution is not always very clear. Organisations know what they ideally would like to achieve, however, are not entirely sure how to go about achieving their desired outcome[45]. The mechanisms for designing a solution and what should constitute it are not always apparent. The design routine lends itself to being an iterative process, whereby organisations go through a circular process of refinement[46]. The solution is tailored and modified until such stage that it satisfies the criteria against which it is to be measured. [47] A variation of the basic design routine (i.e. to generate a solution from, as it were, scratch) is to take a search routine solution and modify it to suit a particular problem. If a search solution were to be treated in such a manner, then Mintzberg[48] would consider it to be part of the design routine rather than the search routine.

The development process comprising the search and design routines can take place in various combinations. Organisations may initially, when confronted with a problem, search in some form or another their internal or external environment. If unsuccessful they may custom make a solution. The customisation process is typically iterative and

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[44] Mintzberg 1976: 255

[45] Mintzberg 1976: 256

[46] Mintzberg 1976: 256

[47] This methodology should serve as a reminder of the rational model, which also undertakes a similar process to match solutions with desired outcomes. There are distinct similarities between the procedural model and the rational model.

[48] 1976

there is no reason why during this iterative process the organisation cannot continue to search its environment for an appropriate solution, which may have been overlooked in the previous search cycle. In the end, however, either through search or design or both, the organisation produces a solution or a series of solutions. At this point, the decision making process enters the 'selection phase'[49].

The Selection Phase

The selection phase is concerned with choosing the most appropriate solution that will satisfy one or a series of organisational problems. Logically, it is the final process in the model or organisational decision making process[50]. The selection phase is primarily concerned with three processes. The first is a 'screening routine'[51]. Once a series of organisational artefacts have passed the screening routine they are evaluated by some means or other in the 'evaluation-choice routine'[52], the most appropriate decision of which is then enacted in the 'authorization routine'[53]. Before looking at the three routines in greater detail one needs to be cognisant of the fact that the selection phase is not always logically positioned after the development phase. We shall address this question in greater detail, once we have covered the main aspects of the selection phase.

Once an organisation has developed a series of alternatives from the results of the search routine, then a screening routine is initiated[54]. A screening routine is an intensive evaluation of a proposed solution. It is used to evaluate solutions that have been tailored from other pre-existing solutions within the organisation's experience and knowledge. A solution is tested with the purpose of establishing whether a prior solution, modified to solve a new set of specifications, is in actual fact appropriate. The idea of screening, i.e. scrutinising a possible decision, is not new to decision making science. Organisational studies by Cyert and March[55] found that organisations screen various artefacts for inappropriateness, rather than appropriateness. In other

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[49] Mintzberg 1976: 256

[50] Mintzberg 1976: 256

[51] Mintzberg 1976: 257

[52] Mintzberg 1976: 258

[53] Mintzberg 1976: 259

[54] Mintzberg 1976: 257

[55] 1965

words, a negative test is used by which the ostensibly undesirable is rejected[56]. Mintzberg notes that the screen routine is in actual fact not an intensive evaluation of the various decision possibilities, but is rather a mechanism for the elimination of inappropriate or unfeasible solutions[57]. In this respect, the findings of Mintzberg[58] are consistent with Cyert and March[59]. Cyert and March, however, do suggest that screening takes place on the basis of loosely defined criteria or rather broadly formulated expectations[60].

According to the model of Mintzberg[61], no screening routine follows solutions generated in the design routine. The reason for this is that the designed solutions already have the assumptions of the problem implicitly built in. Arguably, when designing a solution, the designer is mindful of what needs to be achieved. In the case of a search solution the designer would also be mindful of what needs to be achieved, but creating a solution out of prior organisational artefacts may not necessarily deliver the intended result. The design routine thus has its own built in screening mechanism. The solutions designed for a specific problem are problem-specific. They are not coincidentally appropriate as the solutions from a search routine may be.

The evaluation-choice routine is the process whereby the organisation engages in making the actual decision. Simply put, the organisation decides on a course of action. The study by Mintzberg[62] identifies three ways in which this routine is undertaken. Organisations make an actual decision by means of 'judgement-evaluation', 'bargaining-evaluation' or 'analysis-evaluation'[63].

The judgement-evaluation approach is cited as being the most popular and also easiest to apply to a decisional situation. It is a quick form of decision making and is not necessarily backed by any rational or systematic process[64]. Furthermore, only one

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[56] 1965: 79

[57] 1976: 257

[58] 1976

[59] 1965

[60] Cyert and March 1965: 79

[61] 1976

[62] 1976

[63] Mintzberg 1976: 258

[64] Mintzberg 1976: 258

person typically undertakes the judgement-evaluation[65]. [66] The process is not systematic and accounting for such decision making to others may be problematic[67].

In the event that more than one person is burdened with the decision making responsibility or in cases where there are a number of persons and / or organisations involved in the decision making process, a decisional situation may be resolved through the bargaining-evaluation approach. In the case of the bargaining-evaluation approach, "selection is made by a group of decision makers with conflicting goal systems, each exercising judgement"[68]. The bargaining approach is a mere duplication of the judgement-evaluation approach; it, however, comprises a number of agents exercising their judgements. The political model (which follows this chapter) is concerned with resolving problems in which value judgements need to be made. The bargaining-evaluation approach is actually a case of political decision making.

The last manner in which decisional situations are settled is through careful analysis. This approach is known as the analysis-evaluation. This approach is a product of rational decision making and requires that the entire decisional situation be measured in some way or another, and then evaluated against a set of criteria. If the proposed solution is found to satisfy the criteria then a decision can be made. In practice, Mintzberg[69] found that technocrats would undertake the analysis of the problem and solution and would produce a factual finding, i.e. one based on a set of very descriptive and quantifiable factors, whereupon management would make a judgement-evaluation or bargaining-evaluation type decision[70] [71]. The actual decision is made in an autonomous or political manner and very rarely on the basis of pure scientific reason. The approach of analysis-evaluation was found in practice to be

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[65] Mintzberg 1976: 258

[66] If decision making is left to the individual to decide, then, presumably, a judgement-evaluation is based on experience and insight about a particular problem and about what may intuitively feel right and is not necessarily based on factual and analytical data.

[67] Mintzberg 1976: 258

[68] Mintzberg 1976: 258

[69] 1976

[70] 1976: 258

[71] This is also indicated on the schematic (Figure 2) on page 36.

least used by organisational decision makers; rather they seemed to make decisions in a judgement or bargaining manner[72].

In the procedural decision making model, strategic questions are typically resolved either through bargaining or judgement. The reason for this is that strategic questions are not necessarily the result of an analytical process, but rather the reaction to environmental concerns both internal and external to the organisation, which need to be acted upon. Questions such as whether to change a corporate budget or to invest in a particular project, are not only the resultant of quantitative study, but rather involve other factors too. "…[T]he evaluation-choice routine is in practice a crude one. A plethora of value and factual issues, few of them concrete, many involving emotions, politics, power and personality must be considered…the evaluation-choice routine gets distorted, both by cognitive limitations, that is, by information overload, and by unintended as well as intended biases. This has been found to apply to all modes of selection, including analysis"[73]. From the outset, the model of procedural decision making seems most rational in nature, however, the mechanism for decision making seems to undermine the rationality thereof.

The last aspect of the selection phase consists of the authorisation routine. Authorisation is only applicable in decisional situations, where the decision itself requires approval by persons higher up the organisational hierarchy[74]. The study found that a solution or proposed set of decisions were typically delivered in their entirety for authorisation. A particular problem would not go through an iterative authorisation process, whereby various parts of a solution were presented for approval, but rather a complete solution was presented for approval[75]. The approach taken by the authorising person or group is also typically of a judgement-evaluation nature. A decision would be accepted or rejected on the basis of time and information constraints. Furthermore, the study found that typically authorisation procedures rejected or accepted a particular solution in its entirety[76]. In the event of rejection, the solution was abandoned and a new one sought or suitably modified, before being

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[72] Mintzberg 1976: 258

[73] Mintzberg 1976: 259

[74] Mintzberg 1976: 259

[75] Mintzberg 1976: 260

[76] Mintzberg 1976: 260

presented in its entirety. Once the authorisation routine has been completed, the decision is enacted. This model does not suggest any insights as to how the outcomes thereof may be understood or may be dealt with by the organisation. The model further does not provide any insight on feedback loops that may exist between the external environment and the organisational decision making process.

The procedural model of decision making suggests that organisations go through three very distinct phases before a decision process is complete. The decision process, however, does not always proceed as smoothly as the model suggests. The decision making process is in actual fact regulated and facilitated by means of a number of supporting routines.

Supporting Routines

Mintzberg[77] identified a series of supporting routines that facilitated procedural decision making. These routines were: 'decision control routines', 'decision communication routines' and 'political routines'[78]. Each routine aids the decision process by ensuring continuity and removing hindrances. All three can be further analysed into sub-routines.

The decision control routine establishes the framework within which the decision making process is to take place. The decision process, as such, is planned, i.e. how will the process take place and what resources are to be allocated. This is known as the meta-decision behind the actual decision making process and involves the definition of the decision space and the parameters thereof[79]. Mintzberg[80] makes a further distinction. In addition to the decision planning process, there is also a 'decision switching process' or routine[81]. This process is concerned with the transition from one phase of the decision making process to another. For example, once the solution development phase has been completed, the organisation or decision making participants switch to evaluating their solutions. The switching process is primarily concerned with determining the phase or process in the decisional process[82]. The

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[77] 1976

[78] Mintzberg 1976: 260

[79] Mintzberg 1976: 260 – 261

[80] 1976

[81] 1976: 261

[82] Mintzberg 1976: 261

decision control routine provides guidance for the decision making process. It is the meta-plan or map, by which the process is guided.

The decision communication routine is primarily concerned with satisfying the informational needs of the decision making process. This covers both the information inputs and outputs[83]. In order to fulfil this function, Mintzberg[84] identified three underlying routines. They are 'exploration', 'investigation' and 'dissemination' routines[85]. The exploration routine is a passive routine, whereby information comes to the organisation and those concerned with the decision process. This flow of information is usually used to initially define the problem and the decision space[86]. This flow of information provides the impetus, on the basis of which further investigation takes place. The investigation routine is used for locating specific information[87]. It is used in diagnosing a problem and developing a solution. Once a problem has been diagnosed, specific information, used for further understanding is gathered, upon which a solution may be developed or searched for. The search activity for solution building is in itself also a case of information investigation. The last information process used in the communication routine, is the dissemination routine. This routine is concerned with the distribution of information. The study of Mintzberg found that dissemination became increasingly important the more people were involved in the decision making process[88]. The dissemination function is both the feedback mechanism whereby persons involved in the decision making process receive information about their actions and the channel by which new information is disseminated. The dissemination routine distributes both the information that resulted from the exploration and investigation routines as well as new information that has been created throughout the decision making process.

The last supporting routine that helps to maintain continuity in the decision making process is the political routine. The political decision making mode, solves situations, which are not easily resolved according to rational criteria. Mintzberg found that

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[83] Mintzberg 1976: 260 – 261

[84] 1976

[85] Mintzberg 1976: 261

[86] Mintzberg 1976: 261

[87] Mintzberg 1976: 261

[88] 1976: 262

bargaining was the manner in which the political routine was exercised[89]. In particular, the political routine serves to "clarify power relations ... bring about consensus ... [and] mobilize the forces for the implementation of decisions"[90]. The political routine lubricates the procedural decision making system, by providing necessary intervention in processes that may have ground to a halt or where unexpected decisions are required. It must be borne in mind that the procedural model may actually consist of a number of minor sub-decisions. The goal of arriving at a particular decision is a dynamic process and may require a series of minor decisions, which in themselves are typically also the result of decision processes, which consist of identifying minor problems, generating alternatives and then selecting the appropriate possibilities. The political routine performs numerous functions, including assisting with the definition of the problem in the diagnosis phase, ironing out problems in the derivation of a solution during the development phase, and helping set the stage for the selection phase.

This concludes the discussion of Mintzberg's[91] model. A number of interesting developments followed the publication of this model and will now be briefly considered.

Further Developments

In 1984 Paul Nutt, introduced his variation on the Mintzberg[92] model. His intention was to elaborate on and to investigate the finer details of procedural decision making, by looking at a sample of seventy-eight (as opposed to the twenty-five of Mintzberg[93]) service organisations[94]. His finding was that decision making processes consisted of five stages[95].

Organisations went through a process of, firstly, formulating the problem[96]. This is done to understand the problem and to set the objectives that are to be met by

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[89] 1976: 262

[90] Mintzberg 1976: 262
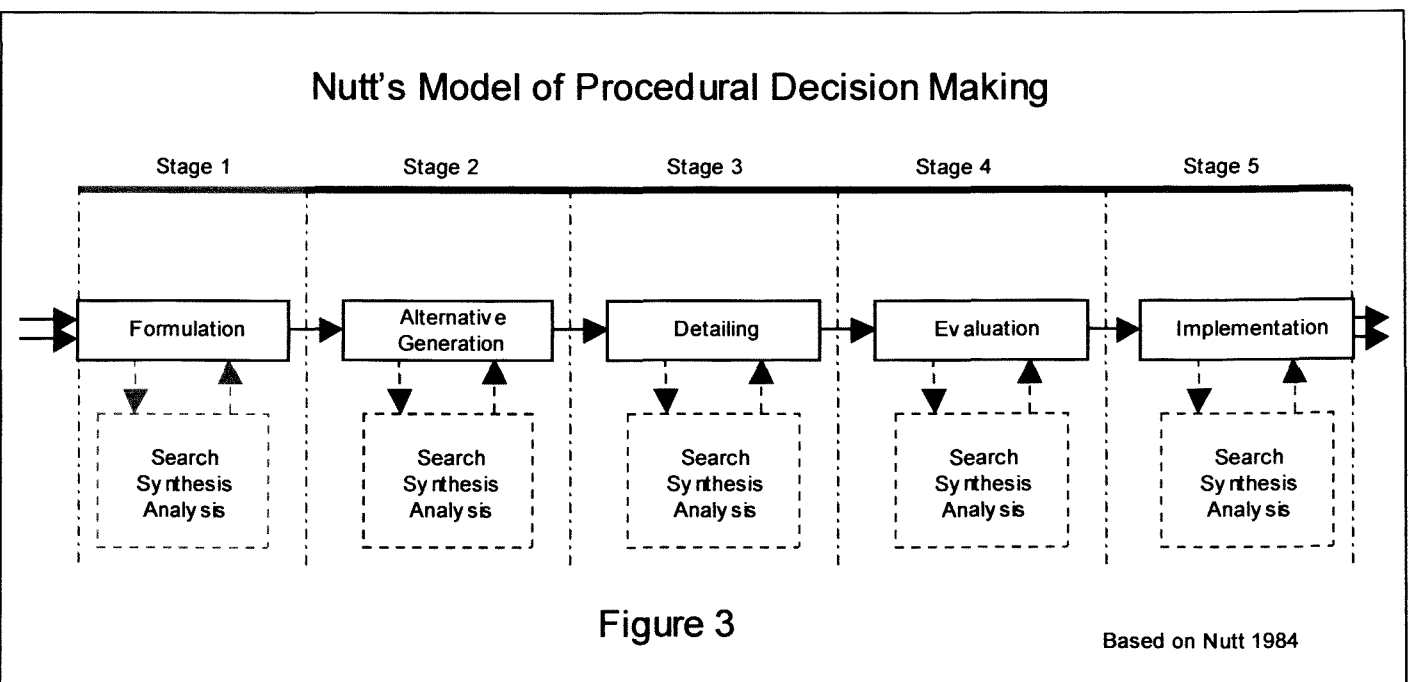
[91] 1976

[92] 1976

[93] 1976

[94] Nutt 1984: 414

[95] Nutt 1984: 416

[96] Nutt 1984: 416

resolving the problem. Secondly, possible alternatives / solutions to the problem are generated[97]. Thereafter, the decision making process enters a third stage, during which possible solutions are analysed, refined and tested[98]. Once the alternatives have been adequately refined, they are evaluated in the fourth stage[99]. This evaluation determines the relative merits and benefits of each alternative. Upon completion of the evaluation, the appropriate solution is selected and implemented in the final stage[100]. In addition, each stage of the decision making process is subject to a number of routines or steps. These steps include three activities, viz. 'search', 'synthesis' and 'analysis'[101]. These steps assist in improving the quality of the output of each stage. The search step fulfils an information gathering and distribution function. The synthesis step assists in the development of ideas or alternatives in each stage. Lastly, the analysis step refines and prioritises the output of each stage.

The following schematic (Figure 3) illustrates the model.

Figure 3

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[97] Nutt 1984: 416

[98] Nutt 1984: 416

[99] Nutt 1984: 416

[100] Nutt 1984: 416

[101] Nutt 1984: 416

Subsequent to Nutt's[102] model, no further models of procedural decision making were published. However, a number of authors did examine in greater detail the individual stages of procedural decision making.

Lyles and Mitroff[103] examined the question of organisational problem formulation. They primarily looked at how organisations became aware of a problem and what process was undertaken to formulate the problem. Problems were largely identified through "informal sensing techniques" and not always formally recognised by the organisation[104]. Since formal reporting systems in organisations failed to report problems, organisational participants were required to articulate perceived problems. In addition, Lyles and Mitroff found that in formulating common problems organisations typically made use of familiar methods of enquiry and investigation[105]. However, in cases where the problem was ill-defined the organisation typically lacked the apparatus or techniques to formulate such problems[106]. A similar study, which investigated problem finding was also undertaken by Gerald Smith[107].

Other aspects of the decision making process, such as the diagnosis of strategic issues, was investigated by Dutton, Fahey and Narayanan[108] [109]. Their paper describes the nature of strategic issues and how such issues are diagnosed in the organisation. Their central thesis is that the inputs of a diagnostic process determine to a large extent the range of strategic alternatives available to an organisation[110]. To this end, they developed a framework that consists of an "input–process–output model of SID[111]". The inputs to this model were the "cognitive maps" which participants used for understanding the problem, the political interests of participants and the related

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[102] 1984

[103] 1980

[104] Lyles and Mitroff 1980: 116

[105] 1980: 116

[106] Lyles and Mitroff 1980: 116

[107] 1989

[108] 1983

[109] Hereinafter 'Dutton, Fahey and Narayanan 1983' will be referred to as 'Dutton 1983'.

[110] Dutton 1983: 320

[111] Strategic Issue Diagnosis

problem or issue. The mixing of these elements determined the viable strategic alternatives[112].

Ernst Alexander[113] investigated a further stage of the decision making process. His analysis focused on the design and derivation of alternatives in the decision making process. To this end he developed a conceptual model that considered the impact of 'creativity', 'search activity' and 'closure of the problem' in the design process[114]. An interesting conclusion from his study, and one which certainly enhances our understanding of procedural decision making, was that alternatives were generated primarily through search and / or discovery processes and that organisations were not particularly creative or innovative in designing solutions[115].

Apart from the investigations of the different stages of decision making, further developments of the procedural model constituted insights on how the procedural model may be reconciled with other models of decision making.

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[112] Dutton 1983: 320

[113] 1979

[114] Alexander 1979: 382

[115] Alexander 1979: 402

CHAPTER 4

THE POLITICAL MODEL[1]

This chapter is concerned with the description and discussion of the political model of organisational decision making. In this chapter, the nature of political decision making shall be investigated by examining the historical context from which the model of political decision making originated. Thereafter, the characteristics of political decision making shall be discussed. Lastly, brief consideration shall be given to the development and applications of the model.

The model of political decision making is historically rooted in the Cuban Missile Crisis of the 1960's. Graham Allison's [2] [3] study thereof uncovered a form of decision making, which had previously not attracted much attention by organisational decision making theorists. Although this model is based on the behaviour of political institutions, the application thereof to other organisations is not limited to traditional political establishments. The generic manner of decision making described by this model is present in organisations that do not characteristically conduct themselves in a political manner, but in which organisational participants are able to observe the "'wheeling and dealing' through which different people attempt to advance specific interests"[4].

Political decision making is principally concerned with resolving normative situations. Normative situations are typically decided not on the basis of an optimal course of action, but rather through the exercise of value judgements. A particular problem would be resolved by choosing the 'appropriate' or 'morally acceptable' or

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[1] The first part of this chapter will draw primarily on Allison's (1971) derivation of the model of political decision making. Allison identifies a number of characteristics common to political decision making, however, he gives limited treatment to each. To fill this gap we shall make use of Morgan's (1997) analysis of political decision making. His unpacking of the characteristics is much more extensive and informative.

[2] 1971

[3] Allison wrote a very interesting and entertaining account of one of the tensest political situations ever. His "Essence of Decision" is worth reading for the interesting insights on the Cuban Missile Crisis.

[4] Morgan 1997: 154

'justifiable' course of action. [5] This model describes a decision making system, which would allow for the exercise of preference, which is not bound by a particular system of pre-conditioned or the lack of preferences, but is rather determined by normative consideration. Political decision making focuses on the decision making of individuals and coalitions[6]. (This may seem to 'clash' with the focus of this analysis, but we shall make the model relevant by generalising from individual to 'generic subjective'[7] [8] behaviour.)

In the absence of a decision making system or clear and guiding preferences, 'policy' is aimed at guiding organisations in areas, where only 'appropriate' action is possible. Policy becomes meaningful in situations, which are not resolved by predetermined answers[9]. Policy serves as the yardstick by which outcomes are measured. In a situation, for example, such as the alleviation of poverty, there are countless ways of potentially resolving the problem. In an attempt to resolve the problem, decision making consistent with the policy on poverty alleviation should take place. The outcome of the decision process is then evaluated against the policy. This still leaves the organisation with a decision making dilemma. The organisation does not have a means of choosing the appropriate course of action.

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[5] As an illustration, governments annually face the question of how taxes should be spent. It would be very difficult for any individual or institution to arrive at the optimal solution. Rather governments spend the taxes in a negotiated manner on the basis of what may or may not be appropriate. In other words, there are no definitive answers as to how government should go about its finances, but is rather bound by what it is able to justify.

[6] This concept will be defined and examined in greater detail under the characterisation of political decision making

[7] The 'generic subjective' is a term used by Weick (originally by Wiley 1988). This term describes individual or group behaviour in organisations in a generic sense. In other words, the individual traits are removed and the person is understood in relational and role performance terms. Thus, persons would 'cease' to be persons and rather be generic enactors of roles, participants in networks and relationships. Using such an approach, we can begin to speak of the constituents of generic organisational behaviour, where the individual is not addressed, but rather the role, position and purpose of the organisational participant is. Such an approach allows for the uncovering of systemic properties.

[8] Weick 1995: 70

[9] Allison 1971: 154

Before looking at the characteristics of political decision, an examination of the historical context and origin of the model is called for.

Taking a Cue from Political Decision Making in the 1960's[10]

The Cuban Missile Crisis brought the USA and the then USSR to the brink of nuclear confrontation. Never before in history had the USA and the USSR (or any other two nations) come that close to engaging in nuclear war.

In 1962 the USSR under the leadership of Khrushchev placed nuclear missiles on the island of Cuba. Further naval shipments from the USSR to Cuba took place. The USA decided to respond to the escalating threat with a naval blockade of the Soviet vessels. The blockade proved to be successful and the missiles were withdrawn. Escalation of this standoff between the two nations would have resulted in a form of national suicide. The casualties in USA, USSR and Europe, estimated at 200 million, would have exceeded the casualties of both World War 1 and 2.

In the light of the dire implications, which were most certainly known to both Kennedy and Khrushchev, this event, viewed from the perspective of the foreign policy of both the USA and the USSR, seemed very odd and inconsistent[11]. The actions chosen by each nation did not further their foreign policy goals of mutual improvement of international relations. In an attempt to understand the crisis, Allison articulated a number of questions, which indicated the anomalous nature of Soviet and American actions, viz. "[w]hy did the Soviet Union place strategic offensive missiles in Cuba? ... Why did the United States respond with a naval quarantine of Soviet shipments to Cuba? ... Why were the missiles withdrawn?"[12] At the time, the answer to these questions may have given insight as to the mutual divergence of foreign policy. Up to the present no systematic model of decision making could account for the strange governmental behaviour. Attempting to answer these questions, Graham Allison analysed the decision making processes through two different lenses. His first analysis examined the behaviour of both the USA and USSR through the lens of the rational model. He found the results thereof to be largely unsatisfactory.

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[10] This section looks at Allison's analysis of the Cuban Missile Crisis. The historical details of the Cuban Missile Crisis are not directly relevant to the discussion of the political model of decision making and will not be looked at in any particular detail.

[11] Allison 1971: 1 – 2

Rational decision making in such a situation would be geared towards maximising the foreign policy goals of each government, through the means that have the lowest cost or impact implications. By virtue of the systematic and calculative nature of rational decision making the analyst is able to determine the appropriate course of action, for both the USA and USSR. Either party to the conflict is able to determine reliably what the best course of action may be with respect to his opponent. The rational model allows the analyst or the decision maker the luxury of placing himself / herself in the position of the opposing party, i.e. the enemy from either perspective. Wohlstetter describes such a process "…that attempts to introduce the enemy by letting him, in his best interest, do his worst to our forces and then seeing which of our forces accomplishes the job most effectively in the face of this best enemy attempt"[13]. In this case, each government would try to anticipate what the other was about to do and then act (provided that government and its foreign policy arms are rational actors and do so in a consistent manner) according to that which would result in the maximisation of its national and foreign policy goals[14].

Within the framework of rational decision making such a model could not account for the Kennedy decision of a naval blockade and neither for Khrushchev's withdrawal from the Caribbean. A naval blockade did not in any way relate to the threat of nuclear missiles on Cuba and did not change the foregoing state of affairs, but rather indicated the seriousness with which the US viewed Soviet action. Nor did it necessarily force the USSR to dismantle its missile installations. This course of action was a stalling tactic[15] to a crisis that could potentially spiral out of control. The rational model does not seem to be able to adequately explain the series of choices, which both sides made. Incidentally, the USA achieved the desired outcome from the blockade, however, seen and analysed from a rational perspective a series of other equally if not more plausible outcomes could have been possible.

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[12] 1971: 1 – 2

[13] 1964 quoted in Allison 1971: 18

[14] The term 'goal' will be used in connection with the term 'issue'. Our understanding of these terms will be as follows: for each goal that is to be achieved in a political decision making situation, there is an underlying issue that needs to be addressed. The goal is the objective that relates to the resolution of the issue. For example, groups that would like to achieve a particular goal, lobby an underlying issue.

[15] Allison 1971: 61

The inadequacy of a rational explanation for the course of events led Graham Allison to consider a different approach towards decision making. In this approach government to the outsider may seem like a unitary institution, which exercises its foreign policy in a consistent and predictable manner. To the insider, however, government is a black box that covers many gears and levers[16]. An institution such as government, as is the case with the USA, is vast and covers countless agencies and arms, each of which typically exhibits a life of its own. It is through these agencies and loosely bound institutions that government exercises policy including foreign policy. Due to the broad scope and reach of government, policy processes and decision making processes differ within such an institution.

Viewing the Cuban Missile Crisis through the lens of a fragmented organisation, where semi-autonomous decision making takes place at different points and levels the following remarks can be made. Government perceives its environment through various sensory organs. Government is a fragmented organisation. The fragments and divisions deal with particular problems. These problems or situations are usually of a repetitive nature, and thus standard operating procedures are devised. Standard operating procedures are not particularly well suited to changing environments or non-sensible occurrences. Problems or situations are addressed in manners, which are usually semi-independent from other areas of government. In some cases, problems do exist, such as the Cuban Missile Crisis, which exceed the jurisdiction of any particular division of government and requires the output of various governmental departments. These departments, however, normally function reasonably independently of one another[17]. "…[G]overnment behavior relevant to any important problem reflects the independent output of several organizations, partially coordinated by government leaders. Government leaders can substantially disturb, but not substantially control, the behavior of these organisations"[18]. Sorensen[19]observes that, "[p]residents rarely, if ever, make decisions – particularly in foreign affairs – in the

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[16] Allison 1971: 5 – 6

[17] Allison 1971: 67

[18] Allison 1971: 67

[19] Theodore Sorenson was at the time of the crisis on the Special Council of President Kennedy and was privy to the inner workings of the political process surrounding the Cuban Missile Crisis.

sense of writing their conclusion on a clean slate…the basic decisions, which confine their choices, have all too often been previously made"[20].

In the Cuban Missile Crisis the courses of action by the two governments were chiefly determined by institutional constraints. These constraints determined to a large extent the quality and timing of the information received and furthermore what available military resources existed. These constraints were determined by the semi-independent outputs of different arms of government contributing to a broader policy goal. The following two examples should illustrate the foregoing. Firstly, in the case of the USA, Kennedy received intelligence regarding missiles installations on Cuba at an advanced stage of Soviet armament. Cuba was but one of twenty-five nations that was being closely monitored by the USA[21]. This vastly limited the options that the USA could exercise. Secondly, in the case of the USSR, the decision to place missiles on Cuba resulted from a policy decision that aimed to build up strategic Soviet missile capability. However, due to budgetary constraints, the only workable option was to make use of present missile capability and place it in strategic positions[22]. In the former case, the USA was bound by the slow internal operations of government and in the latter case the USSR was bound by its previous decisions and actions.

For both Kennedy and Khrushchev, their decisions had to function in a predetermined environment, with very little space for manoeuvrability. The analogy of a chessboard could be used[23]. With the exception of the opening move in a chess game, your options and opportunities for action are framed, limited and shaped by the preceding moves. At various points in the game, your possible moves and strategies are limited by your prior moves – you are bound by the history of the game.

This approach of Graham Allison could be likened to a definition of the parameters of decision making in organisations. He conceives of a model, which is in actual fact a series of constraining circumstances. For government, the moves that its departments undertake are largely determined by their outputs. Government being usually a very large and pluralistic organisation invariably struggles to maintain consistent goal directed policies. This is due to the influences that its various semi-autonomous arms

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[20] 1967

[21] Allison 1971: 120

[22] Allison 1971: 117

[23] Allison 1971: 100

have. The various aspects of government and its various agencies are not perfectly aligned. Each arm or part of government has a particular functional specialisation that treats and deals with particular problems. This severely influences and limits the options that government as a whole has when faced with a crisis.

This approach, contrasting it with a rational approach, has a further dimension that needs to be explained. For both the USA and USSR, the divergence from détente to the exacerbation of hostile international relations is anomalous within the framework of the rational model. The rational model is characterized by consistency and does not easily explain the divergence of foreign policy by both the USA and USSR from their earlier positions. In the case of the Graham Allison approach, such a divergence does not need to be explained. The outcome of governmental decision making is merely the product of foregoing constraining circumstances. Given the consequences of prior governmental activity, decision making is determined by what is realistically achievable. Decision making in such a model is explained by the built-in limitations that each subsequent decision of government, through its various organs, creates for future situations.

The major concern that is not resolved in the preceding discussion is that the prior models and approaches to understanding government decision making do not account for the leverage that political players or coalitions[24] have on the apparatus of government, i.e. the president and his / her advisors can interfere with the workings of a particular department, in order to affect some policy directed goal. The discussion thus far is not able to explain adequately the inner workings of groups of people who ultimately determine the course of action taken by governments. The rational model is not able to account for such behaviour either, except for cases where the dealings / leverage of the players is consistent with the goals of the organisation. This dynamic of this leverage will form the crux of our attempt to explain political decision making.

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[24] The term 'player(s)' and 'coalition(s)' are used to describe persons or coalitions within a political decision making situation. These 'persons' and 'groupings' are the actual constituents and final decision makers. These terms shall be used interchangeably and are meant to denote the various competing entities involved in the pursuit of decision making in a political context.

The Characteristics of Political Type Decision Making

At the outset one has to acknowledge that the political model of decision making is not really a model (as is the case with rational, procedural or anarchic decision making), in so far as it does not describe processes and features of a decision making style, but is rather a set of characteristics or elements that are manifest in environments where political decision making takes place. Decision making which accords with the characteristics described in this section, could typically be labelled as political decision making. The following two views give a good introduction to the nature of political decision making.

"The "leaders" who sit on top of organizations are not a monolithic group. Rather, each individual in this group is, in his own right, a player in a central competitive game. The name of the game is politics…"[25].

"Since organizational goals and objectives are negotiated among the groups of participants, it is unlikely that any allocation of resources will meet general agreement. The divergence of goals and the contention for scarce resources make organizational decision making inherently a political process"[26].

The political decision making model can be summed up as follows: The decision making body of an organisation usually consists of a number of persons. These persons engage in a decision making process, where the output of their decisions, i.e. that which the organisation will deliver with respect to a particular situation, is based on criteria deemed to be appropriate by their own estimation. But when the organisation in question is government, "players…act in terms of no consistent set of strategic objectives but rather according to various conceptions of national, organizational, and personal goals…make…decisions not by a single, rational choice but by the pulling and hauling that is politics"[27]. Within organisations, there are decision-centres[28]. The outputs of these centres are not necessarily consistent with the

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[25] Allison 1971: 144

[26] Choo 1998: 182

[27] Allison 1971: 144

[28]The term 'decision centre' shall denote the group of persons who contribute to the making of a decision in an organisation. This includes persons who only offer input and are not necessarily the decision makers themselves. The decision centre may constitute either a group of persons who advise a single decision maker or alternately make decisions on the basis of consensus.

stated or intended goals of the organisations. The organisational decision making process and especially communication process can be viewed as a game. As in all games, there are certain rules and constraints that participants have to adhere to. In an organisation, such constraints could be chains of command, hierarchies, firewalls, deadlines and so on. To be able to play the game, one must firstly be a player, and then know the rules. Advantageous use of the organisation, through political manipulation requires lobbying the correct issue or taking the appropriate approach to a particular problem. The approach should ideally appeal to an audience within the organisation that is able to best effect the desired goal. Furthermore, the mobilisation of such a goal requires critical mass or sufficient support.

A number of salient characteristics of the political decision making process can now be identified.

Decision Criteria

The first characteristic of political decision making is that the criteria against which a decision is measured are arbitrary. Arbitrary criteria allow individuals to build into the decision making process their own motivations and agendas. Using an example, the judgment of a decision maker on an organisational issue may well be clouded, by his / her own overriding personal considerations. The arbitrary criteria of such a decision making process flow forth from the following characteristics

Goal Diversity

The second characteristic is concerned with a "…diversity of goals and values that must be reconciled before a decision can be reached"[29]. At any given time a number of goals are promoted. These goals may not necessarily be congruent with one another. The diversity of goals may also be formulated through the lens of 'interests'. The interests of the individual within the decision making process determines to a large extent the goals that he / she is prepared to pursue. Morgan formulates interests as the "…predispositions embracing goals, values, desires, expectations, and other orientations and inclinations that lead a person to act in one way rather than another"[30]. The nature of these interests may differ for each player in the political game and may be organised in various combinations according to the 'task', the

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[29] Allison 1971: 157

[30] 1997: 161

'career' or the 'extramural'[31]. In one case, the player's interests are aligned with the organisation and with the functional requirements of the task that needs to be performed[32]. In another case, the player may make use of his / her role in the organisation to further personal vocational aspirations[33]. Lastly, the player may represent interests, which are external to the purpose or functional orientation of the organisation[34].

Closely related to the consideration of interests is that of the perspectives of the players. The views that players take on an issue are crucial. The ways in which different political players view a problem are functions of their own perhaps narrow understandings thereof, and may even be framed by their interests. Different players and coalitions would view what is ostensibly the same problem from different perspectives and frames of reference, and would draw their own conclusions as to what the optimal solution ought to be. Their point of view and solution are a function of their perspective[35]. This line of reasoning can be taken further: the solutions that are to be offered by the players are also functions of their positions in the organisation. Thus, the position that a player occupies within an organisation can shape the view that he / she has on the matter. This can bracket the problem and solution in terms of the maximisation of his / her particular organisational interest, which in turn is derived from the player's position in the organisation. The problem to be dealt with may seem entirely different to the various players, specifically because they look at it through the lens crafted by their own organisational position[36].

Divergent interests, perspectives and goals may become very problematic for organisations and are intrinsic features of the political decision making process[37]. The complexity of the situation is exacerbated even further when there are multiple players and coalitions that have divergent interests, perspectives and goals[38]. Goals may be such that the satisfaction of one excludes the possibility of others, or that

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[31] Morgan 1997: 161

[32] Morgan 1997: 161

[33] Morgan 1997: 161

[34] Morgan 1997: 161

[35] Allison 1971: 178 & 250

[36] Allison 1971: 178

[37] Morgan 1997: 65

[38] Morgan 1997: 163

some are mutually achievable, but not all. Very rarely in political decision making can all goals be satisfied. Political decision making allocates resources for the achievement of particular goals, through a process of rigorous personal interaction that does not necessarily rely on a set of objective criteria, but rather creates a decision according to some or other personal preference function. Understanding the interest orientations and perspectives behind goal formulation becomes paramount to the analysis of political decision making situations.

Bargaining

The third characteristic of political decision making is concerned with a bargaining game. The decision-centre is not a homogeneous group, but rather constitutes a number of people who intend to have their interests represented in the best possible manner. Each member strives to have his / her view of what may be best for the organisation enacted. Trying to arrive at a desired end requires of each member in the decision making group to negotiate, manipulate and trade-off against the other members. Each member is required to look after his / her own / departmental interest, whilst realising the broader organisational goals. Typically, the rules of a bargaining process are determined within the organisation. Bargaining is determined by the structural features of the organisation so well as the dominance and absence of personalities. Hence, how players and coalitions position themselves, greatly influences their bargaining positions[39]. Bargaining in organisations is, however, not just limited to individuals. Coalitions can be formed.

Coalitions can be defined as "…groups of individuals …[who]… cooperate in relation to specific issues, events, or decisions or to advance specific values and ideologies"[40]. When engaged in a bargaining process, coalition forming and coalition support may confer a number of benefits on the various players. Firstly, they confer popular support for the issue that is to be mobilised. Secondly, presence in numbers offers a certain degree of strategic clout. Coalitions create bargaining groups, which in certain cases may have a greater impact on decision making than an individual, mobilising the same issue. Morgan remarks that coalition development is "…a strategy for

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[39] Morgan 1997: 161

[40] Morgan 1997: 166

advancing one's interests in an organization, and organization members often give considerable attention to increasing their power and influence through this means"[41].

The pursuit of politics and coalition formation is endemic to pluralistic organisations[42]. The formation of various coalitions and bargaining units within a political decision making environment, results in each having "…its own turf to guard and power to protect. The result is a form of negotiation, sometimes covert, sometimes overt, in which the various representatives attempt to advance the interests of their sponsors by influencing problem definition and option formulation as well as by having an impact on the final decision..."[43]. The various issues tabled for discussion and decisions are represented by "competing clusters of people… who are identified with each of the alternative goals and policies"[44]. In some cases, a singular person may represent a particular issue, without having the support of anyone else. The presence of clusters of people, give varying weights to the issues that are being promoted. Different people or groups of people are associated with different issues. Some issues may enjoy more popular support within the decision centre that others. The presence of popular support does not mean that the issue can necessarily be effectively mobilised. A coalition may think that a particular issue is important and that it may have input on the decision process, but if the coalition is not able to convince the decision makers of its position or is not able to influence the decision process, then having a large number of supporters is merely incidental to the limited attention that an issue will enjoy. A large support base here does not necessarily translate into decision making power.

At the core of the bargaining game is conflict resolution. Bargaining strives to resolve conflicting goals and interests. In this regard, Thomas has identified five different ways in which such conflict resolution may take place: Firstly, players may 'avoid' dealing with the issue or confronting players associated therewith[45]. Secondly, players may negotiate or 'compromise' on the issue and come to a meaningful understanding,

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[41] 1997: 167

[42] Morgan 1997: 204

[43] Beach 1997: 125 – 126

[44] Allison 1971: 157

[45] Thomas 1976: 900

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which would offer an acceptable solution[46]. Thirdly, players may 'compete' to such an extent that the outcome of the contest is of a win-lose type nature[47]. Fourthly, players may 'accommodate' one another and choose the course of action, which, on merit, serves the organisation best[48]. Lastly, players may 'collaborate' in a mutually beneficial manner, such that the organisation is best served[49].

These mechanisms for conflict resolution in the bargaining process all make use of power as a means for decision making in a political environment. "Power is the medium through which conflicts of interest are ultimately resolved. Power influences who gets what, when, and how"[50]. In political decision making the role of power and status cannot be underestimated and deserves further discussion.

Power

Power can be outlined as the fourth characteristic of political decision making. The political decision making process is unpredictable and pliable. In such an environment, power often becomes a motivator for action. Power as a defined concept, has various meanings and interpretations, and enjoys by no means definitional certainty[51]. For our purposes we shall use Robert Dahl's[52] definition "... power involves an ability to get another person to do something that he or she would not otherwise have done"[53]. The desire for power may have potentially corruptive and counter-productive effects for the organisation as a whole. In such cases, the decision making forum becomes a vehicle whereby people are able to mobilise their own agendas[54]. "The relative power of ... different groups of people ... is as relevant to the final decision as the appeal of the goals they seek or the cogency and wisdom of their

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[46] Thomas 1976: 900

[47] Thomas 1976: 900

[48] Thomas 1976: 900

[49] Thomas 1976: 900

[50] Morgan 1997: 170

[51] Morgan 1997: 170

[52] 1957

[53] As formulated by Morgan 1997: 171

[54] It is of course desirable to align the objectives of the organisation and the individual in such a manner that they broadly overlap. An organisation needs to select individuals who in outlook will be able to represent and serve the objectives of the organisation.

arguments"[55]. In organisations, "…[p]ower structures rest primarily not on a social consensus concerning expectations about privileges or rights between superiors and subordinates, but on distribution of resources, by means of which compliance with demands can be enforced…"[56].

In organisations, a number of the manifestations of power can be identified: In the institutionalised form thereof, power is posited in 'formal authority'[57]. Formal authority is legitimised power, which is accepted on the basis of social consensus, for the purpose of running or managing an organisation and is typically underpinned by some form of organisational constitution or charter[58].

Power may also be derived through the controlling of organisational mechanisms. Of this type a number can be identified: Power may rest in the ability to control scarce organisational resources[59]. The leverage that a player may have over limited organisational resources can be hugely empowering[60]. Power may also be derived from the "use of organisational structure, rules, regulations, and procedures"[61]. In such a case, the structural features of the organisation determine where the leverage points lie. Exploitation of such structures becomes an effective source of power. To this one may add that control over technology in organisations can also become a source of power[62]. Technology is the tool, by which an organisation is able to generate some or most of its outputs. Control thereof is an effective source of power. As an example, control of the military in any government fundamentally influences power relations. In addition, the ability to control the decision process confers power upon the player(s)[63]. In this regard, Morgan distinguishes between controlling the "…decision *premises*, decision *processes*, and decision *issues and objectives*"[64]. These distinctions are part of Morgan's brief unpacking of decision making and

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[55] Allison 1971: 157

[56] Pettigrew 1973: 26

[57] Morgan 1997: 172

[58] Morgan 1997: 172

[59] Morgan 1997: 173

[60] Morgan 1997: 173

[61] Morgan 1997: 175

[62] Morgan 1997: 184

[63] Morgan 1997: 178

[64] Morgan 1997: 178

denote, firstly, what is to be decided upon, secondly, by whom and in what manner and, lastly, according to what criteria[65]. Power becomes manifest by virtue of controlling the process that determines the allocation of resources. "Control of boundaries" may also be a significant source of power[66]. In organisations, there are usually a number of semi-autonomous divisions or departments. The control and management of the various overlapping areas, boundaries or interfaces between the different divisions of an organisation can be a source power[67]. An understanding of the various intra-organisational boundaries could accordingly further the pursuit of power. Lastly, power may be held through the "control of knowledge and information"[68]. Information is the basis upon which decision making takes place. The control thereof may advance, retard or render useless the decision making process. This point will be further considered when we look at communication flows below.

Power is also manifest in more tacit forms. The management of and "ability to cope with uncertainty" may be a source of power[69]. Uncertainty in organisations can be exploited. Players may be able to confront uncertainty in the external or internal environment of the organisation[70]. Exploitation of such conditions may render the player powerful. Players may also derive power through a series of "interpersonal alliances, networks, and control of 'informal organization'"[71]. In such instances, players become powerful by virtue of their informal relationships with other organisational players. These relationships create the opportunity for making use of organisational resources, which would otherwise not have been possible. In addition, power may be derived through "symbolism and the management of meaning"[72]. The focus of such power lies in managing meaning or constructing reality for the organisational participants, through the manipulation of symbols and interpretations, in such a way that they becomes meaningful to the organisational participant. The last manifestation of tacit power may result from "the management of gender relations" in

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[65] Morgan 1997: 178 – 179

[66] Morgan 1997: 181

[67] Morgan 1997: 181

[68] Morgan 1997: 179

[69] Morgan 1997: 183

[70] Morgan 1997: 183

[71] Morgan 1997: 186

[72] Morgan 1997: 189

organisations[73]. Perceptions towards gender issues and the actual practice of gender equality in organisations may well determine the actual power of the different sexes in organisations. Situations do exist in organisations, where one or the other gender may be systematically discriminated against. The 'glass ceiling' in organisations is such an example, and prevents women from advancing commensurately with their male peers.

A final manifestation of power is to be found in the "control of counterorganizations"[74]. In such a case, power is derived by virtue of the player being part of a counter-organisation. The counter-organisation is external to the organisation and is a means of countering the build-up of power within the organisation by a small and select group of players[75]. Labour or trade unions are the most common example, but in modern organisational life a number of groups could fulfil such a role; these could include environmental groups, lobby groups or even the media.

In the context of the political decision making model, power is primarily concerned with the ability to make decisions, control the flow of information and motivate people to action. The implications of power for the decision making process are legion. The power distributions and the ways in which it is used can largely determine what an organisation decides on and what actions flow forth. The control and manipulation of power impacts greatly on the process and results that political decision making delivers.

Communication Flows

The last characteristic of political decision making is concerned with the communication flows that are central to all political decision making processes. They are the life-blood of the organisational decision making process. Controlling the flow of information is an important consideration in understanding political decision making processes. The ability to control the flow of information may provide leverage and renders effective control over the decision making process. Controlling information allows for the manipulation of the decision making process. In some cases, information is manipulated on a rather extensive basis. Based on the work of

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[73] Morgan 1997: 191

[74] Morgan 1997: 187

[75] Morgan 1997: 187 – 188

Meltsner[76], Choo notes that in certain cases, a preferred outcome or course of action has already been 'decided' upon, however, reasonable justification has not taken place[77]. The justification for such a course of action is only assembled afterwards. The necessary justifying information for the decision would be assembled and / or hidden after the fact. Only justifying information would be used and any other information that could potentially discredit the decision is conveniently omitted. In other cases, full information regarding a particular issue, such as is required in the rational model, may not be available. The lack of information may also be due to deliberate withholding. This is done for the improvement of a bargaining position. Alternately, it may be an unavoidable condition where the information is inaccessible or incomplete.

Closely related and following from the aforementioned, in the game of political decision making reticence is often employed. In this context, it is a concept that can be likened to that of 'hesitance' or 'restraint'. A player may be involved in the decision making process, however, does not engage himself / herself fully[78]. Such ambiguous behaviour is thought to "permit(s) other players to interpret an outcome in the way in which the shoe pinches least"[79]. Reticence is an intentional silence or reluctance to engage. Such behaviour is arguably manipulative and is typical of the political decision making game. To further the hazy game of political decision making other forms of vague communication can also be used. One such example is that of 'miscommunication'. As the word suggest, players communicate 'past' one another. This results in possibly incorrectly interpreted understandings and tends to fuel decision making conflict.

Applications and Developments

The major characteristics of political decision making have been examined extensively, and one may ask whether the model of political decision making has developed any further since Graham Allison's publication thereof? More recent literature on political decision making does not indicate that the basic premises or characteristics have been fundamentally altered. This model has also been used to

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[76] 1976

[77] 1998: 183

[78] Allison 1971: 153

[79] Allison 1971: 179

analyse other anomalous decision making situations[80]. The insights of Allison have been incorporated into other models of decision making, namely the procedural and anarchic models. The characteristics of political decision making have also been evaluated and analysed extensively, on a behavioural level, in the psychological sciences. Political decision making remains the means of "...creating order out of diversity..."[81] in organisations which consist of "...loose networks of people with divergent interests who gather together for the sake of expediency (e.g., making a living, developing a career, or pursuing a desired goal or objective)"[82]. Political decision making functions in environments where the individual and not the process is central to organisational decision making. This key point may perhaps explain why the model of political decision making has not changed significantly.

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[80] One example would be the study that Lucien Vandenbroucke (1984) undertook of the failure of the 'Bay of Pigs' invasion. His analysis makes use of Allison's model for the unpacking of the decision making processes that preceded the failed invasion.

[81] Morgan 1997: 154

[82] Morgan 1997: 166

CHAPTER 5

THE ANARCHIC MODEL

This chapter is concerned with the description and discussion of the anarchic model of organisational decision making. Michael Cohen, James March and John Olsen published this model in 1972[1]. The model is popularly referred to as the 'garbage can model'. In this chapter, the nature of anarchic decision making shall be investigated by examining the properties of anarchic organisations. Thereafter, the decision making styles and trends in anarchic organisations shall be discussed. Lastly, brief consideration shall be given to the additional developments and criticisms of the model.

The Garbage Can

In classical organisation and decision theory, organisations typically have "clear criteria of relevance in decision making…[and] the outcomes of decisions [are] independent of the micro structure of the broader context within which they occur…solutions are appropriately associated with…problems…and…problems are appropriately associated with…choices…[,] people appropriately participate in… choices…. Such criteria provide a tight linkage of choices, problems, solutions and people…all [which] serve to buffer a particular choice from its context"[2]. This has typically been the view of the decision making process, up to the development of Cohen's[3] model. The decision making models discussed thus far, make problematic assumptions regarding the link between human cognition, reaction to and influence of complex situations[4]. Cognitive ability is thought to function particularly well in environments which require extensive interpretation and understanding.

However, as has been shown in the rational model, the contrary tends to be the case. Reality is grossly simplified before human cognition is able to comprehend it. In addition, in the preceding models criteria of 'relevance' are assumed. By criteria of relevance, the following is understood: appropriate organisational participants know

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[1] 'Michael Cohen, James March and John Olsen' will hereinafter be referred to as 'Cohen 1972' & 'Cohen 1979'.

[2] Cohen 1979 in March and Olsen 1979: 24 – 25

[3] 1972

[4] Cohen 1979 in March and Olsen 1979: 24

when to participate in a decision situation and according to which criteria to resolve a problem[5]. Such an approach to decision making tends to buffer the actual choice from the context within which it takes place[6]. Such a separation of choice and context cannot always be reasonably assumed. Furthermore, prior decision making models have assumed that for every action in the environment, organisations are able to deliver an appropriate reaction, which is thought to be a suitable response to the action[7].

This clear causal link between environmental activity and directed organisational response cannot always be assumed in anarchic environments. Cohen[8] maintains that this link is much more loosely coupled that previously assumed[9]. Questioning the underlying assumptions of prior decision makings models, brings us to Cohen's model of decision making. Today, it is generally acknowledged that decision processes (and organisational processes) are not as calculated, planned and controlled, as many organisational theorists would like to believe[10]. The garbage can model is one of the first academic attempts at understanding anarchic environments within organisations as they pertain to the realm of decision making. In some cases, organisations can be characterised by the anarchic nature of their activities[11].

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[5] Cohen 1979 in March and Olsen 1979: 24

[6] Cohen 1979 in March and Olsen 1979: 24

[7] Cohen 1979 in March and Olsen 1979: 17

[8] 1979

[9] In March and Olsen 1979: 17

[10] With respect to the making of decisions in organisations, the development of the rational and procedural decision making (also a form of rational decision making) models, were attempts to set in stone the functioning of organisations. It should be evident to any participant in any organisation, that very rarely do organisations go about their business in a manner that is consistent with the above mentioned decision making models. These models of decision making fail to capture the subtleties of human behaviour and organisational experience. These models remain abstractions and struggle to approximate reality. For Cohen (1972), the garbage can model marks an attempt to come to terms with the complexity that characterises organisations. However, Cohen (1972) is still not able to avoid the temptation of formalising his model by means of computer simulation. Such a formalisation reduces an attempt at understanding complexity to a rational procedure.

[11] Cohen 1972: 1

Firstly, organisations may find themselves in environments, where their preferences are not clearly defined or articulated[12]. In other cases, organisations may find their environment ambiguous. Ambiguous environments require organisations to undertake processes that would assist in rendering the environment understandable[13]. Secondly, this ambiguity may be further heightened by the ability of organisational participants to selectively participate in decisional situations[14]. Decision makers within organisations have limited time and energy. This vastly influences the ability of the decision maker, hence the necessity for selectivity in decision making processes. Lastly, organisations tend to learn and sustain themselves in an unsystematic and inconsistent manner. The manner in which the organisation survives is not fixed, but is rather a case of staggering from one organisational occurrence to the next. To use the terminology of Cohen, the 'technology' of the organisation is unclear[15].

These three properties about the working of certain organisations[16] suggest an organisational format of 'organized anarchy'[17]. The organisation has purpose and preferences, but these are not clearly defined. The organisational environment is also poorly understood. Furthermore, organisational insiders do not necessarily understand the organisational processes. Lastly, the decision makers and organisational participants are seen as capricious. [18]

The garbage can model is a response to decision making in organisations that can be characterised by the three foregoing organisational properties. Organisational experience and decision making then consist principally of flows or streams of problems, solutions, participants and choice opportunities. "… [O]ne can view a choice opportunity like a garbage can into which various kinds of problems and

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[12] Cohen 1972: 1

[13] The question of ambiguity was addressed at length in Chapter 3 and will not be discussed further.

[14] Cohen 1972: 1

[15] 1972: 1

[16] Cohen's (1972) study focuses on decision making processes within universities in the USA. The model, however, is most undoubtedly applicable to other organisational types as well.

[17] Cohen 1972: 1

[18] This model by its very nature is unclear in its content. This can be principally ascribed to the fact that the model tries to characterise decision making in a complex and poorly understood environment. The scholar of decision making is left with a model, which defines the parameters and space within which this type of decision making takes place, but does not give content thereto.

solutions are dumped by participants as they are generated. The mix of garbage in a single can depends on the mix of cans available, on the labels attached to the alternative cans, on what garbage is currently being produced, and on the speed with which garbage is collected and removed from the scene"[19]. Stated in another way, this model describes complex streams of activity in organisations. Organisations are conceived as being collections of problems and solutions, in which the interplay of elements take place. In addition, organisations are understood to have the capacity required to connect these problems and solutions at appropriate times. "A decision then happens when problems, solutions, participants and choices coincide"[20]. [21]

The organisations studied by Cohen could be distinctly characterised by their absence of clearly defined preferences[22]. Structured and systematic decision making requires a set of preferences that serve as the guiding measure whereby occasions for decision making are used. The absence of such preferences, i.e. the criteria against which decisional situations are ascertained, is inherently destabilising for the organisation. If an organisation does not have a set of criteria against which occurrences within and outside the organisational environment are weighed, how can it know when it has to make a decision on a matter that in actual fact requires a decision? The apparatus that prompts an occasion for decision making is absent. The stimulus that announces the occasion for heuristic activity is not present.

The foregoing is an extreme case and most organisations would not function in the absence of preferences, however, situations do exist where preferences are poorly defined, conflicting or inconsistent across the organisation[23]. The preferences of such organisations are rather collections of ideas or loosely coupled preferences, for which overall coherence is lacking. An implication hereof is that organisations do not necessarily act according to their preferences, but rather define their preferences according to their actions[24]. Taken one step further, organisations in such as a position

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[19] Cohen 1972: 2

[20] Choo 1998: 184

[21] The metaphor shall be discussed in greater detail later in this chapter.

[22] Cohen 1972: 1

[23] Cohen 1972: 1

[24] Cohen 1972: 1

engage in an ongoing process of making their environment sensible through action. Organisations discover their preferences through a series of actions[25].

In such a case it is possible that the organisation may find itself in an internally and / or externally ambiguous environment. Due to the very way in which the organisation goes about defining preferences, ambiguity becomes a necessary condition in the model of Cohen[26]. In order to establish their preferences organisations need to explore the environment. [27] The process of defining preference is an occasion for sense making, which requires some understanding of the ambiguous environment. The occasion for making a decision itself can be prompted by ambiguity. "Environmental actions and events are frequently ambiguous. It is not clear what happened, or why it happened. Ambiguity may be inherent in the events, or be caused by the difficulties participants have in observing them. The complexity of, and change in, the environment often overpower our cognitive capacity"[28]. This partly sets the stage upon which decision making takes place. Organisations find themselves in an environment, in which they are not really guided by a coherent and consistent set of preferences and do not have the luxury (as they, putatively, do in rational decision making) to be able to understand their environment. This makes the pursuit and awareness of decision making highly problematic.

The model of Cohen[29] looks at the question of organisational survival. Cohen is of the opinion that in an anarchic organisation the members of an organisation do not entirely understand their own internal organisational processes[30]. This has serious implications for the organisation. If the members do not understand how the organisation operates, then organisational survival becomes more a question of good fortune than good science. Not being able to understand extra organisational uncertainty is understandable. It can be expected that, at times, organisations are not able to understand their external environments. However, cases for intra

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[25] Cohen 1972: 1

[26] 1972

[27] By analogy, the same could be said for people. For example, a person may not know what his / her particular preferences are with regards to unfamiliar foods, unless he / she has tried a variety of them.

[28] March and Olsen 1979 in March and Olsen 1979: 18

[29] 1972

[30] Cohen 1972: 1

organisational uncertainty may potentially be very troublesome. If the organisation's internal environment is ambiguous enough and there are enough different interpretations of what the organisation does and how it operates, then organisational survival may be threatened just as much by the internal environment as by the external environment.

Survival and adaptation in an organisation is the product of learning. Cohen maintains that organisations, in the anarchic context, learn through a trial and error process[31]. Intuitively, this seems to be correct. The environment and the organisation are changing, thus learning through tradition[32] may not necessarily be appropriate. Experiential learning is at work in the organisation. Organisations have a stock of knowledge, which is a function of their experience. If organisations learn through a trial and error procedure, then arguably they stumble from one organisational experience to the next, where the ability to recover from previous mistakes at least guarantees survival in the short term. Considering this type of learning and the manner in which organisational processes function, the organisation does not seem to have a clearly defined structure of processes that guides it through time and ensures survival. The procedural apparatus or technology within the organisation required for sustainability is lacking. This is very disconcerting, but can be expected in a context of ambiguity.

The last property of an anarchic organisation concerns the manner in which organisational members take part in the decision making process. According to Cohen members within organisations participate in decisional situations in a fluid manner[33]. Put in another way, members selectively enter and exit decision situations. The level and intensity of involvement can vary significantly through the organisation and over the spectrum of members that an organisation may possess at any given time.

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[31] 1972: 1

[32] The concept of learning through 'tradition' denotes an organisational environment, where the organisation is able to perpetuate itself by applying the methodologies that predate the present generations of organisational members. In other words, a stock of knowledge is passed on from one generation of participants in the organisation to the next. 'Traditional' learning typically functions in a relatively constant and enduring environment. This, however, is very rarely the case today. The modern organisational environment is typically subject to much change.

[33] 1972: 1

This property of anarchic organisations highlights the actual decision making process taking place within the organisation. A decision making process can be thought of in temporal terms. In this regard, any decision making process is a self-replicating, self-transforming and self-redefining process. Before a decision can be made, a process needs to be undertaken that refines the content and understanding of the subject matter, which is being decided upon. This process is necessarily intertwined with the procession of time. Time and the interference of external events with the decision making process may have a real influence on the ever changing content of the decision making process. Time becomes the limiting factor for a participant's engagement in a decision making process. Participants in decision making processes only have a number of hours at their disposal to attend to decisional situations. Typically, this attention is not exclusive, but is rather shared with a number of other responsibilities[34]. Furthermore, the energy and conviction that participants bring to decision making processes may vary significantly from situation to situation[35]. Organisational participants do not engage in decision making processes in a predictable and consistent manner, but rather selectively participate with varying levels of application. In addition, with the procession of time, the decision making process may change in content to such an extent that the participants in the process are different from those who started the process[36]. The decision making process is by its nature such that it continually refines its content and requirements. These changes may also require the maintenance of an appropriate audience, hence the possibility of changes in participants[37].

Selective participation can be explained in part as a necessary product of an ever changing decision making process. However, March and Olsen have suggested a number of other reasons, which may account for selective participation. A number of psychologies may operate in determining the level of and purpose of participation. Decision making processes and the instance of a decision "are a stage for many dramas"[38]. Firstly, people may participate in a decision making process, because it

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[34] Cohen 1972: 1

[35] Cohen 1972: 1

[36] Cohen 1972: 2

[37] Cohen 1972: 1

[38] March and Olsen 1979: 11

creates the opportunity to activate standard operating procedures or organisational routines. The activation of such a procedure is a form of "fulfilling role expectations, duties and earlier commitments"[39]. Secondly, decision making situations allow "for defining virtue and truth, during which the organization discovers or interprets what has happened to it, what it has been doing, what it is going to do, and what justifies its actions"[40]. Participants in decision making processes may do so, selectively, because it allows them to extol various organisational values, whether real or at a symbolic level. Thirdly, decision making processes become opportunities for the "distribution of glory or blame for what has happened...and thus an occasion for exercising, challenging or reaffirming friendship or trust relationships, antagonisms, power or status relationships"[41]. Fourthly, people may participate in the decision making process because it becomes an "occasion for expressing and discovering "self-interest" and "group interest" for socialization, and for recruiting (to organization positions, or to informal groups)"[42]. Lastly, participation in the decision making process may simply be undertaken for the purpose of "having a good time, for enjoying the pleasures connected to taking part in a choice situation"[43].

These reasons reveal the various psychologies that are at work when participants decide on the extent of their participation in a particular decision making process. It is important to remember that a significant amount of personal psychology is involved in organisations. Despite organisations being functional creations they are nevertheless populated by people and their problems. Decision making processes become occasions during which organisational dramas may unfold[44]. If decision making processes become occasions upon which organisational participants are able to, for example, "discover[ing] 'self-interest'" [45], then arguably, decision making processes could become vehicles whereby participants are able to mobilise issues other than ones requiring decisions. Decision making processes become arenas in which the manipulation of personal and organisational values takes place. Central to

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[39] March and Olsen 1979: 11

[40] March and Olsen 1979: 11

[41] March and Olsen 1979: 11

[42] March and Olsen 1979: 11 – 12

[43] March and Olsen 1979: 12

[44] March and Olsen 1979: 11

[45] March and Olsen 1979: 11 – 12

our understanding is that the decision making process is an occasion that is accompanied by further unpredictable behaviour from organisational participants.

If organisations truly behave in the manner described thus far, then it would be possible that organisations could be viewed as environments in which "participants arrive at an interpretation of what they are doing and what they have done while in the process of doing it"[46]. Decision making which is subject to such a process is for the participants a process of reality construction. In other words, participants are able to continually redefine what they are doing. In such a process, they may identify problems for which no solutions exist or a solution / organisational artefact for which a problem needs to be discovered. Cohen views such organisations 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"[47].

This taxonomy of decision making within an organised anarchy may explain Cohen's[48] use of the garbage can analogy. Organisations become environments of ever changing content. The content in such an environment consists of a number of problems that have to be dealt with in the course of time, with some problems being more urgent than other. Solutions may also be latent in the organisation. The organisation may have in its stock of knowledge the capacity and ability to deal with particular types of problems. It may have solutions to problems, which do not presently exist. The coupling of solutions and problems requires the attention of decision makers. Decision makers contribute to this process by being the activators thereof. The application of their time and energy largely determines the extent to which organisations are able to resolve problems successfully. In addition, the ability of participants to participate selectively complicates the process even further.

An important tenet of the garbage can model is the dynamic nature thereof. New decisional possibilities, interpretations and opportunities are created on a continual basis. The presence of participants, decision making opportunities, solutions and problems are all streams or flows of organisational experience. These four flows

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[46] Cohen 1972: 2

[47] 1972: 2

[48] 1972

operate simultaneously[49]. For example, a particular problem may occur in an organisation, for which the solution does exist, however, the organisational participants are not able to apply themselves to the problem. Or a set of solutions and capabilities exist within the organisation, however, no commensurate problem exists. Or decision making occasions are not available to participants that have solutions to particular problems.

Giving more substance to the four flows of organisational experience, 'problems' can be thought of as any personal or organisational occurrence that becomes an issue within the context of the organisation[50]. This can be anything from a person's personal problems that affect his / her performance, to production problems within an organisation, or even problems relating to how an organisation goes about interpreting an uncertain environment. Occasions do exist in organisations, when the organisation produces an artefact that becomes a solution the moment the appropriate problem arises. Thus it would be possible to say that solutions, latent within an organisation, are looking for problems[51]. The role of participants has been discussed at length, but it is worth mentioning, as Rommetveit points out, that the garbage can is general enough in its definition of participant interaction in a decision making process, such that participants are able to enter and exit the decision making process according to their definition of the situation or the problem at hand[52]. Lastly, choice opportunities are the culmination of the decision making process. These are the "the occasions when an organisation is expected to produce behavior that can be called a decision"[53]. In the context of the garbage can metaphor, "each choice opportunity is an open receptacle into which any currently unresolved issues may be dumped…the longer the

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[49] At this point of our discussion and as has been noted, it is worth mentioning that Cohen (1972) developed a computer simulation for the garbage can model. The simulation used problems, solutions, the energy or application of participants to solutions and problems, and choice opportunities as the four independent variables of the model. These variables are all functions of time. The simulation delivers interesting results, which seem largely to agree with the observation of decision making in real anarchic organisations (Cohen 1972: 11).

[50] Cohen 1972: 3

[51] Cohen 1972: 3

[52] 1979 in March and Olsen 1979: 151

[53] Cohen 1972: 3

choice remains unresolved, the greater the potential range of issues that are defined as relevant"[54].

This is an important point to note. The occasion for making a decision, invariably, becomes an occasion upon which other unresolved issues are dealt with. In other words, problems, which cannot be resolved at a particular time with a particular decision, become part of a bundle of issues. These issues for which the appropriate organisational solutions do not presently exist need to be dealt with at some later stage. The longer an unresolved issue drags on, the more it gets attached to other issues[55]. The procession of time allows for the addition of information to the understanding of a problem, as well as the redefinition of other organisational issues in terms of the unresolved problem. Decision making as an occasion for organisational activity, becomes an opportunity to lump together a whole lot of problems and to attach current issues to prior unresolved problems. Organisations become melting pots into which problems seeking solutions are dumped. Through this addition process, old problems become more complicated. Solutions seeking for problems are added to the mix. Organisational participants engage the problem and solution mix on the basis of their own narrow and continual redefinition of the situation.

The occasion for decision making, being the fourth aspect of the garbage can model, brings together the other three streams of organisational experience. In the garbage can model of decision making, it is the confluence of these four types of activities that make decision making in anarchic organisations dynamic and unpredictable. "The garbage can process is one in which problems, solutions and participants move from one choice opportunity to another in such a way that the nature of the choice, the time it takes, and the problems it solves all depend on a relatively complicated intermeshing of elements"[56].

Decision Styles

If organisations go about the decision making process in the manner described above, then the question can be asked what kind of decisions do get made? What is the nature

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[54] Olsen 1979 in March and Olsen 1979: 86

[55] Olsen 1979 in March and Olsen 1979: 86

[56] Cohen 1972: 16

of the decisions that are being made? Cohen drew some interesting conclusions both from the simulations and the observations of decision making in anarchic organisational environments. Principally, the following three styles could characterise decision making: decisions are made by 'resolution, oversight and flight'[57].

In cases where a decision takes place by resolution, the resultant decision is primarily a function of time and the application of energy to a problem, i.e. working on a problem[58]. An organisation faces a particularly problematic situation that requires the exercise of choice. However, the choice is not immediately made and the occasion for decision making is delayed. With the procession of time, the organisation is able to learn more about the problem and gain greater understanding in the tailoring of a solution. Eventually, enough organisational resources have been applied to the problem such that the organisation is able to create or recognise the right solution. The occasion for decision making then merely couples the problem with the solution[59]. This style of decision making is the expected result of the decision making process. Put differently, participants know that a particular problem will be eventually solved; it is merely a matter of working at it.

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[57] Cohen 1972: 8

[58] Cohen 1972: 8

[59] Cohen (1972) treats problems and solutions as reasonably autonomous organisational artefacts. This is intentionally so and is also an underlying assumption of the model. However, the autonomy or decoupling of problems, solutions, choice situations and decision makers or participants cannot always be assumed. Cohen offers the following justification for this approach, "…[a]lthough decision making is thought of as a process for solving problems, that is often not what happens. Problems are worked upon in the context of some choice, but choices are made only when the shifting combinations of problems, solutions, and decision makers happen to make action possible" (1972: 16). Whether one can make such an assertion as to the independence and autonomy of solutions, problems, decision makers and choice opportunities within the context of complex environments remains a field of study in itself. The notion that solutions without problems and problems without solutions are latent in an organisation is questionable. This would require further study into the nature and structure of problems, solutions, choice opportunities, decision makers and their respective interactions and absences. Cohen does concede that such a decoupling may not necessarily mirror real-life organisations (1979 in March and Olsen 1979: 36). For the purposes of the garbage can model, we can accept that Cohen's conception of the functioning of decision making processes in organisations is appropriate. Without such a conception of organisational artefacts, the model fails to be understandable and workable.

Decisions made by oversight are typically unintended consequences of the current organisational decision making process. In the case of an oversight decision, an organisation concerns itself with the resolution of a particular problem, trying to couple a particular problem with a solution. However, in this case the occasion for decision making stimulates or activates the possibility of making a completely unrelated decision[60]. Participants will occupy themselves with a particular problem-solution combination in a choice situation. The choice situation, however, provides the impetus to exercise a different choice situation that does not concern itself in anyway with the choice situation presently faced. The temptation to make such a decision can only be accounted for on the basis of speed and ease[61]. This type of decision making only takes place because organisational participants anticipate that the decision to be made can be executed quickly. Furthermore, the process of decision making does not require any significant application of organisational resources. Alternately, it can be argued that such a decision can be made on the basis that there are enough available organisational resources that are not tied up in the decision making process that currently faces the organisation[62]. Organisations go about their decision making activities, however, if the opportunity arises to make another decision quickly and easily then they typically do so. The decision is made while overlooking or neglecting the current decision making process.

The last decision style is that of flight. This type of decision making is characterised by an unresolved choice situation, where the problem-solution coupling is not optimal. This state of affairs continues until a better choice presents itself. This choice is per definition better suited and more attractive to the problem that requires resolution[63]. Given the autonomous view of problems and solutions of Cohen[64], this could be understood in one of two ways: either choices are able to move from one problem-solution set to another, or problems can be applied to different choice situations. In the strict sense of the garbage can model, choice situations attract problems, the longer the choice situation remains the more problems are attracted and
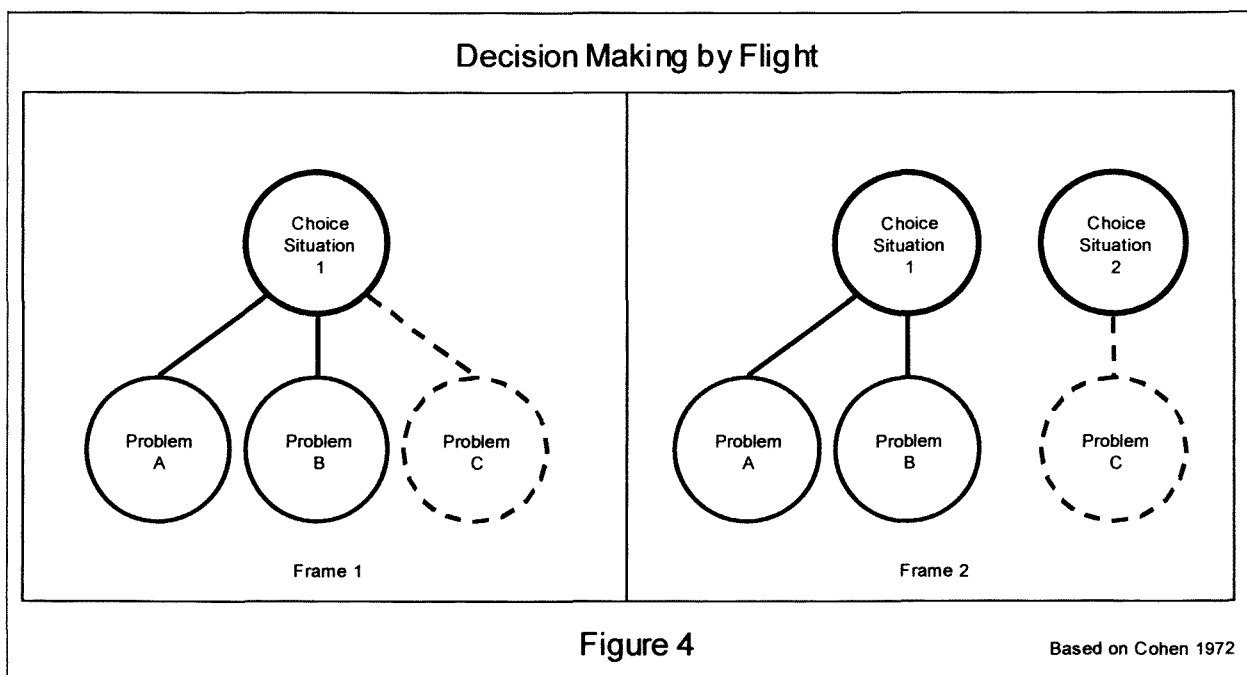
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[60] Cohen 1972: 8

[61] Cohen 1972: 8

[62] Cohen 1972: 8

[63] Cohen 1972: 8

[64] 1972

become relevant to it. If a new choice situation arises, it may well be more attractive to a particular problem, which in itself is attached to a different choice situation. An important subtext to the style of flight is that the original choice situation may be incorrectly associated with a particular problem. In other words, the organisational participants erred in their application of a problem to a choice situation. This accounts for the inability to resolve the choice or decision occasion. Once the problem has been removed from the choice situation and coupled with a better choice situation, the original decision could potentially be made[65]. The original choice situation is not able to resolve the problem that was (often incorrectly) attached to it. The resolution of the problem becomes the concern of the newly arrived choice situation. It is important to note that no decision has been made. Problems have merely been shifted from one choice situation to another. Hypothetically, a primary choice situation that has a problem associated with it may 'lose' the problem to a different and more appropriate secondary choice situation. In a sense the problem has 'flown' away. The following figure (Figure 4) graphically depicts this style of decision making.

Figure 4 — Decision Making by Flight — Based on Cohen 1972

In Figure 4, Problems A, B and C are associated with Choice Situation 1. However, Problem C is incorrectly associated and leaves Choice Situation 1, at the point in time when Choice Situation 2 becomes apparent to the organisation. No decisions have

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[65] Cohen 1972: 8 – 9

been made, however, the coupling of problems to choice situations in the organisation have changed.

At this stage it may be worth considering the decision making trends in organisations that make decisions in the manner suggested by the garbage can simulations. The following section will be concerned with the discussion of decision making trends in anarchic organisations.

Decision Making Trends in Anarchic Organisations

Cohen[66] used a computer simulation of the garbage can model to simulate decision situations and decision frequencies, i.e. how many decisions were made in a particular set of circumstances, and furthermore, what type of decisions. The outcomes of the simulations and the observation of decision making in a real life situation in university environments are most interesting and important for an understanding of how organisations operate in anarchic environments.

Firstly, decision making by resolution in anarchic organisations is, actually, not the most common style[67]. This has also proved to be the case in practice[68]. Intuitively, this is also correct in so far as organisations occupy themselves with problems that need resolution, however, the opportunities to make decisions by flight or by oversight are more frequent and are generally occasions where the level of ease in the decision making process is significantly higher than the making of decisions through resolution. Decisions made by resolution require of the organisation to work at the problem. The temptation of making a quick decision, whilst engaged in a significantly more complex process of resolving a difficult decision situation, has been found to be a salient feature of decision making in anarchic organisations. Organisations rather engage in quick effortless decision making and halt the more taxing task of decision making by resolution. Decision making by resolution is ostensibly the approach that organisations take, when initially faced with a particular problem. However, in the course of the decision making process, other problem-solution couplings may occur, which would present to the organisation an opportunity to make a choice. Such opportunities for decision making are typically utilised by organisations. This is an

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[66] 1972

[67] Cohen 1972: 9

[68] Cohen 1972: 11

interesting conclusion drawn by Cohen[69], in so far as organisations are not necessarily as focused in their decision making activities as previous models of decision making would suggest. Organisations seem to be distracted by the opportunity to make a quick decision, despite the fact that it is unrelated to the problem that they are presently trying to resolve.

Secondly, Cohen found that the decision making is greatly influenced by the level of activity[70] and the decision making agenda within the organisation[71]. Cohen found that if the level of activity in an organisation increases (i.e. the difficulty and number of problems faced, the number of participants involved and the amount of organisational resources required in the resolution of problems), then fewer rather than more decisions get made[72]. More decisions are made by flight and oversight than by resolution. Problems being worked on in the present are addressed through resolution. However, the activity of resolution is a slow process and hence does not lead to the making of many decisions. Whilst the organisation is engaged in the process of resolution, it typically has the opportunity to make a host of unrelated decisions by flight and oversight. In addition, an increase in the level of activity is also characterised by participants moving more frequently from one decision situation or set of problems to another[73]. A further conclusion is that problems take longer to solve[74].

These various observations, as they relate to the efficiency with which organisations make decisions, all point to a very interesting organisational factor. An increase in the level of complexity experienced by the organisation suggests an increase in the level of activity in the organisation. This complexity can be the result of numerous factors. A greater work load or energy application by the participants in the decision making process, can significantly influence the ability of participants to successfully engage

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[69] 1972

[70] Cohen (1972) defines 'energy' and 'load' as elements of his simulation of decision making situations. For our purposes, I have translated them into a more suitable term, namely 'level of activity', which does not require an understanding of the technical details of the simulation, but still allows us to discuss the conclusions in a meaningful manner.

[71] 1972: 9

[72] Cohen 1972: 9

[73] Cohen 1972: 9

[74] Cohen 1972: 9

in other decision making processes. This can be expected, because people have limits to their abilities of dealing with activities and situations. People can only be stressed up to a certain level of activity, before further personal participation starts to result in diminishing productivity. In a series of decision making processes, where a participant or group of participants is increasingly expected to contribute, it can be expected that at a certain point, participants would cease being any more efficient and productive, but would rather contribute to an overall reduction in efficiency. This seems to be the case in anarchic organisations, where a rising level of decision making activity begins to undermine the participants' capacity to engage in decision making processes successfully. Hence, it could be argued, that there is a point of optimal participant involvement in decision making processes within organisations, that would deliver the most efficient execution of decision making processes.

A further consideration is the difficulty of the problem. As can be expected, increases in the difficulty of problems, or of the derivation of solutions, would typically require greater application of the participants' energies and capabilities. In general, as the complexity of the problem increases, so does the time required to solve such a problem. Cohen noted that in periods of high organisational activity, participants tended to move into and out of decision situations, moving from one problem to another, without significantly solving problems.

This is an interesting finding, in so far as it suggests that, at certain levels of organisational activity, participants are not able to occupy themselves with the resolution of a particular problem or set of problems, but rather succumb to the temptation of engaging a number of problems in an ineffectual manner and jump from one problem to another. Participants would seem to fiddle with one problem, then try another and so forth in a rather ineffectual manner. A spectrum of complex problems would each be given light treatment in the hope that a solution will be found quickly. However, as time progresses the participants realise the complexity of the problem and move on to another problem, which offers the hope of quick resolution. This behaviour pattern in part explains why organisations tend to typically make decisions by flight and oversight rather than by resolution. It is significantly easier to make a decision in a case where a choice situation offers a solution to another latent problem or activates the possibility to make an unrelated decision. Decision making in organisations tends to follow the 'path of least resistance'.

Problem latency adds to the perplexity experienced in the decision making process. Problem latency can be defined as active problems that reside in the organisation, but for which no real solutions exist or to which no viable solution can be coupled[75]. A further feature that Cohen identifies in this regard is that the problem is generally "recognized and accepted by some part of the organisation"[76]. [77] In general, the number of latent problems in anarchic organisations place a notable burden on the capacity of the organisation to resolve problems[78]. Thus, the higher the level of problem latency in an organisation the higher the level of organisational effort required to address other problems. The presence of latent problems adds to our understanding of why decision makers would move from one problem to the next without really solving them. An organisation may, for argument's sake, have a number of active problems for which no real solutions exist. These problems are periodically picked up, examined and tried in the hope that some form of quick resolution may come. Latent problems are so because they are enduring and do not seem to be immediately resolvable. They commit organisational resources in an unproductive manner and consume the time and energy of decision makers in an unproductive manner.

In cases of high levels of problem latency and activity in an anarchic organisation, the decision making process takes that much longer, than when an organisation is relatively unoccupied[79]. This is to be expected. With respect to the decision making process, the presence of unresolved problems (latent problems), greater required participation and higher levels of usage of organisational capacity, all seem to

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[75] Cohen 1972: 8

[76] 1972: 8

[77] This line of discussion may be taken further. Within the sphere of organisational experience, a problem or series of problems may be detected. The organisation however fails to resolve them, i.e. the problems remain latent. If the resolution of a problem is understood as being a function of understanding the sense thereof, then organisations need to improve their abilities of interpretation and sense making. Improved understanding of a problem would ensure the removal of uncertainty or in cases of failed understanding the removal of ambiguity. Thus, the question that ought to be asked is, how can organisations in complex anarchic environments go about improving their abilities to interpret and make sense of their environments (and by implication also their problems)? In doing so, problem resolution would become a more thorough and effective process.

[78] Cohen 1972: 10

[79] Cohen 1972: 9

generate increased amounts of organisational inertia. This naturally slows down the decision making process and could suggest that organisations struggle to deal effectively with complexity[80].

The third important conclusion that Cohen draws, is that the structure of the organisation greatly influences the effectiveness of the decision making process[81]. In real organisations, as opposed to the abstractions that Cohen considers, organisations have various rules and protocols that determine which organisational participants may address which problems[82]. These rules or protocols determine the extent to which the participants are supposed to involve themselves with particular problems and choice situations. In practice, however, organisations rarely function, communicate and make decisions in the manner suggested by their organigrams. Attempting to approximate actual organisational behaviour in a theoretical manner would be exceedingly difficult. As can be expected, Cohen[83] is limited in simulating chaotic organisational environments. In an attempt to overcome this problem, Cohen[84] views organisations through the prism of problem occurrences and the occasions for making choices or decisions. Using such an approach Cohen conceives of three base case organisations, which will be considered shortly. The approach has been to conceive of organisations, where problems are graded on a continuum from unimportant to very important and where the access to choice situations is specified[85]. By analogy, this system is meant to mirror organisations, where important problems get addressed with urgency and who are able to mobilise the organisational resources where necessary, and where conversely unimportant problems get the lowly treatment that they usually do. In an abstract sense, a problem that is highly important to the organisation would have access to all possible choice opportunities, whether they are able to resolve the problem or not.

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[80] If organisations had been able to deal with complexity in an effective manner, the study thereof would naturally have been superfluous.

[81] 1972: 9 – 10

[82] 1972: 7

[83] 1972

[84] 1972

[85] Cohen 1972: 5 – 6

Given this basic understanding of decision making in anarchic organisations, Cohen[86] devised three organisational types. 'Unsegmented organisations' allow access for each and every problem, regardless of level of importance, to the entire spectrum of choice opportunity[87] that may exist in the organisation[88]. Furthermore, in an unsegmented decision making structure, each and every decision maker and participant has access to each and every choice situation. There is no limit on the extent of participation by decision makers. The second organisational type is that of a 'hierarchical structure'[89]. In the hierarchical structure, important problems have access to many choices; in contrast unimportant problems have limited capacity for resolution due to their unimportance[90]. For example, a problem which influences the survival of an organisation is necessarily dealt with by the most senior and responsible participants in the organisation and also has the commitment of resources for speedy resolution. The level of importance of the problem determines to a large extent the organisational attention. As the level of importance rises, problems proceed through a hierarchy of choice opportunities[91]. The last organisational form that Cohen considers is that of a 'specialized organisation'[92]. In this case, each problem is coupled to a specific choice situation. According to Cohen's model, each choice situation can only consider two problems and each decision maker is only confronted with one choice situation, where two problematic cases are the objects of consideration[93].

In the light of the three above mentioned decision making structures, a number of trends were observed. These trends, although derived in a theoretical simulation, largely mirror the activities of the real life organisations that Cohen studied[94]. Segmented organisations (of which specialised and hierarchical organisations are subsets) tended to resolve more unresolved problems than unsegmented

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[86] 1972

[87] Choice opportunities serve as the interface with participants who apply their capabilities according to necessity and the seriousness of a problem.

[88] Cohen 1972: 5 – 6

[89] Cohen 1972: 6

[90] Cohen 1972: 6

[91] Cohen 1972: 5 – 6

[92] Cohen 1972: 6

[93] 1972: 6

[94] 1972: 11

organisations[95]. This is due to the fact that each choice situation only occupies itself with a very limited number of problems. This type of decision making structure tended to decrease the presence of latent problems in the organisation[96]. A further observation was that hierarchical organisations were best suited to resolving problems of higher importance[97]. This is self-evident, since problems of greater importance usually command a higher level of organisational attention. In addition, Cohen found that problems that were recognised at an earlier stage than others, also tended to get resolved earlier[98]. Hence, the temporal property of a problem influenced the resolution thereof. The advantage of hierarchical organisations is that they cue problems and choice situations in accordance with the importance of the problem and the time at which the problem becomes recognisable to the organisation[99].

A further interesting finding was that organisations in the mould of the garbage can tend to be less successful in making important decisions than unimportant decisions[100]. There is here a distinct element of decision failure. The important decisions fail to resolve problems that were deemed important. This is accounted for by the manner in which important decisions are made. Important decisions are usually made by oversight or by flight[101]. For example, in the case of decision making by flight, an organisation has a serious problem, which it is not able to resolve by making the appropriate choice. A better choice opportunity is found to which the problem is attached and the problem is putatively removed for the time being. This however results in decision failure, in so far as a decision has been made in haste. It would seem that problems are only truly solved through decisions made by resolution, i.e. working at the problem and resolving the problem over the course of time.

The other case that tends to result in the decision failure of important problems, is when decisions are made by oversight. In such cases, organisational participants are working on a problem–choice situation, however, a choice possibility would become

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[95] Cohen 1972: 10

[96] Cohen 1972: 10

[97] Cohen 1972: 10

[98] 1972: 10

[99] Cohen 1972: 10

[100] Cohen 1972: 10 – 11

[101] Cohen 1972: 11

apparent that would allow them to solve an unrelated, but important problem. Resolution by oversight only takes place, when the occasion for making a choice can take place reasonably quickly and effortlessly. Cohen's simulations produced the type of behaviour (which was also observed in practice), which could be "...directly related to the phenomenon in complex organisations of important choices which often appear to just happen..."[102]. The likelihood of unimportant choices being successful is also interesting in so far as unimportant choices are made on the basis of resolution[103]. This seems to suggest, that unimportant choices remain latent and do not place any particular burdens on the organisation, but are merely addressed in the course of time or left alone until such time as they can be appropriately resolved.

Although particular styles of decision making were associated with decision failure, an interesting and perhaps strange set of instances was noted. The highest levels of failure were found amongst the most important and least important decisions[104]. In terms of the success or avoidance of decision failure, intermediate choices tended to be more successful in their resolution of problems[105]. In this regard, Cohen sheds some light on why organisations that are characterised by complex and anarchic environments are able to survive, especially when they "do not know what they are doing"[106]. Organisations in complex environments are facing constant changes in norms, decision criteria and the content of their environments. This makes appropriate decision making highly problematic and unpredictable. Based on the findings of Cohen[107], organisations seem to get most of both the important and the trivial decisions wrong. However, the decisions of intermediate importance (those that could possibly be responsible for the general maintenance of the organisation) seem to be made successfully. Hence, organisations in complex environments manage to barely perpetuate themselves, by virtue of 'doing at least something right'. The difficulty such organisations have, is that decision making in a complex environment requires a process of investigation and discovery into the appropriate decision making system or

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[102] 1972: 11

[103] Cohen 1972: 11

[104] Cohen 1972: 11

[105] Cohen 1972: 11

[106] 1972: 11

[107] 1972

procedure for the organisation[108]. Such organisations do not have the luxury of predictable and known decision making structures and procedures, but rather have to discover an appropriate structure, which itself may be subject to change on an indeterminable basis. Arguably, discovery of appropriate decision making structures would be achieved through experiential learning and intuition.

Although the decision makers move in and out of choice situations, a further finding of Cohen[109] was that decision makers tended to accompany particular problems. A person or group of persons tended to track certain types of problems and also dealt with these problems on an ongoing basis[110]. This is a logical expectation, in so far as decision makers who have prior experience relating to the resolution of a particular type of problem, would usually be best suited to address similar types of problems in the future. Within the context of the garbage can, problems, solutions participants and choice opportunities are of course all independent organisational occurrences, and Cohen found that problems and decision makers or participants would track one another from one choice opportunity to the next until the problem was resolved[111]. In the parlance of the model, one could say that problems meet the same type of decision makers and decision makers meet the same kind of problems in different contexts time and again[112].

This concludes the discussion of the garbage can model of decision making. We shall now devote attention to the further development of decision making in anarchic environments.

Additional Developments and Criticisms

After Graham Allison's model of political decision making, Cohen's[113] model was a further attempt to offer a theory of decision making, which was rooted in a "social interactive process"[114] [115]. Recognition was given to the idea that decision making

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[108] Cohen 1972: 11

[109] 1972

[110] Cohen 1972: 9 – 10

[111] 1972: 10

[112] Cohen 1972: 10

[113] 1972

[114] Langley, Mintzberg, Pitcher, Posada & Saint-Macary 1995: 262

was often the product of chaotic and socially interactive processes. These processes by their very nature are difficult to unpack and examine. Cohen[116] did however provide a model that accounted for decision making originating out of chaotic and disordered circumstances[117]. Decision making models after Cohen[118] have increasingly reflected this feature of organisational decision making.

Lawrence Pinfield[119] undertook an empirical study, applying the garbage can model to the analysis of decision making processes of organisations. He examined amongst other things how the context of the organisation, the role of the participants, and time influenced the decision making process[120]. He found that the assumptions of the garbage can model could not always be accepted and that the model was incomplete[121]. In particular, he found that participation in decision making was not 'randomly fluid', but was rather determined by the structure of the organisation[122]. In addition, participation in choice opportunities could be controlled throughout the decision making process[123]. Furthermore, choice opportunities were managed and did not occur in a haphazard manner[124]. The organisation could in actual fact control the formation of choice opportunities[125]. These assertions negate the assumptions that participation is fluid and that choice opportunities basically only occur when problems, solutions and decision makers coincide.

A further development has been the acknowledgement that the examination of decision making as a decision and its foregoing process is perhaps not the most appropriate unit of analysis. According to Langley, the study of decision making is best served by looking at the 'issues' underlying the decision rather than the decision

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[115] Hereinafter 'Langley, Mintzberg, Pitcher, Posada & Saint-Macary 1995' will be referred to as 'Langley 1995'.

[116] 1972

[117] Langley 1995: 262

[118] 1972

[119] 1986

[120] 1986: 366 - 367

[121] Pinfield 1986: 386

[122] Pinfield 1986: 386

[123] Pinfield 1986: 386

[124] Pinfield 1986: 386

[125] Pinfield 1986: 386

making process and the actual decision[126]. According to Langley, a clear decision process cannot necessarily be identified from the outset, but rather particular issue streams come onto the organisational agenda[127]. Organisations work with issues or streams of issues and not necessarily with decision processes. Despite having made a decision, organisations are often confronted with the problem that the issue has not been resolved[128]. Such a view of organisational experience is much more meaningful and a better approximation thereof, than the retrospective construction of decision making in the garbage can decision making model.

The garbage can model received even more criticism. According to John Padgett, the garbage can model is divorced from organisational theory, which describes structures and processes common to organisations[129]. The model appears to be only applicable to "highly decoupled and unorthodox organizational systems" [130] and it appears that, superficially, "the world is so contextual, idiosyncratic, and capricious that management is by definition impossible"[131]. Padgett tries to resolve this bind by investigating the possibility of garbage can decision making in organisations that are structured and hierarchical. He develops a hierarchical garbage can model, where a bureaucratic-type organisation experiences ambiguity. This predicament is resolved by ensuring that the "flows of issues…are embedded within classical bureaucratic chain-of-command constraints and operate through more explicit…individual-level models of information processing and decision making"[132].

Further theories of garbage can decision making were offered, however, these theories do not enjoy as much recognition and are different conceptions of decision making, and may not necessarily be likened to or be recognised as offshoots of Cohen's model of garbage can decision making. Increasingly, theories of decision making are beginning to bridge the gaps amongst different modes of decision making. These theories however do not fall within the ambit of our discussion.

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[126] 1995: 270

[127] 1995: 270

[128] Langley 1995: 270

[129] 1980: 583

[130] Padgett 1980: 583

[131] Padgett 1980: 584

[132] Padgett 1980: 601

CHAPTER 6

COMPARATIVE OVERVIEW
AND A META-PROBLEM

The concluding chapter of this thesis shall be concerned with two aspects.

Firstly, a comparative matrix shall be presented which will indicate how the preceding models are similar and differ from one another. It attempts to summarise in a highly compact form all the key features of the models that emerged from our analysis. Secondly, and drawing on the comparative matrix, a major problem of organisational decision making theory shall be discussed. It is the meta-problem of how generic organisational decision making activity can be understood without having to consider the behavioural features of decision making.

Comparative Overview

On page 98 a comparative matrix (Table 1) is presented to show how the four models of organisational decision making relate to one another. The models are compared on the basis of seven organisational characteristics. These characteristics are by no means exhaustive, but rather highlight some of the salient differences and similarities that exist amongst the models. The matrix gives a final overarching view of the different models of organisational decision making.

The different characteristics may briefly be described as follows:

Firstly, 'Theoretical Approach' shows how the models were conceived. Did they result from an empirical study or was a hypothesis formulated and tested? This comparison indicates whether the model is a product of imagination and then tested, or whether it is based on the observation of organisational experience.

Secondly, 'Focus' indicates how the authors of the respective models view decision making in the organisation. Is decision making in organisations defined as a behavioural feature or a systemic property of the organisation or both? Is decision making viewed as the product of individual behaviour or is it the output of a generic organisational system?

Thirdly, 'Nature of Decision Making Process' highlights the central feature or characteristic of the decision making process. How can the decision making process,

reduced to its most basic element, be described? Is it an iterative process, can it be the result of bargaining and negotiation, or is it simply to be understood as a collection of flows of organisational experience?

Fourthly, 'Decision Making Style' is a comparison of how the organisation actually makes a decision. What mechanism is used to reach a final decision in the decision making process? Is a decision the result of analysis and calculation, or is it the result of bargaining and negotiation?

Fifthly, 'Decision Making Means / Technology' indicates whether the organisation understands the process that needs to be undertaken before arriving at a decision. Is the process understood or does it need be discovered? To what extent does the organisation understand how to arrive at a decision, or must the decision be discovered through the decision making process?

Sixthly, 'Preference Definition' compares the assumptions that are made regarding organisational preferences. Organisational preferences or decision making criteria largely determine the outcome of the decision making process. Do the models assume that preferences are clearly or poorly defined? Are the preferences (implicitly) assumed or arbitrary?

Lastly, 'Organisational Environment' considers the assumptions that are made with regard to the external environment of the organisation. Is the environment perceived to be stable and / or slow changing, or is it chaotic and anarchic? The nature of the external environment may largely determine the type of decision making process that is undertaken.

This comparative presentation of the different characteristics is specifically undertaken to highlight an important problem in the understanding of organisational decision making. This problem shall be addressed in the following section.

The table (Table 1) is presented on page 98.

Comparative Matrix of Organisational Decision Making				
	(Bounded) Rational Model	**Political Model**	**Procedural Model**	**Anarchic Model**
Theoretical Approach	Theoretical	Empirical	Empirical	Theoretical
Focus	Behavioural Systemic	Behavioural	Systemic	Behavioural Systemic
Nature of Decision Making Process	Iterative	Bargaining Conflict driven	Iterative	Flows of anarchic organisational experiences
Decision Making Style	Analysis Calculation Bargaining	Bargaining	Judgement Bargaining Analysis	Not indicated by model
Decision Making Means / Technology	Clearly understood	Not indicated by model	Discovery	Poorly understood Discovery
Preference Definition	Clearly defined	Arbitrary	Implicitly assumed	Poorly defined
Organisational Environment	Stable	Changing	Stable Changing	Anarchic
Table 1				

The Meta-Problem of Organisational Decision Making

In the examination of the foregoing models of decision making a countless number of problems can be identified. The details of the models provide room for endless comparison, criticism and evaluation. The concluding intention of this thesis is, however, not to evaluate the details of each model further, but rather to place the models next to one another and highlight a crucial meta-problem. This problem becomes apparent when the four models are placed next to one another and the question is asked, 'What did these different models purport to describe or explain?' The problem can be unpacked as follows:

On the one hand, we live in a 'society of organisations'[1], where organisations form the front for social interaction. Social interaction is constituted and defined by the activities of organisations. Organisations in themselves do not exist like natural

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[1] Drucker 1994

objects, but are fundamentally abstractions. Only groups of people associated with certain collective activities exist. To such collective activities we give the name 'organisation'. These organisations are brought to life by the shared vocabularies of their inhabitants. These shared vocabularies are the shared meanings, organisational culture, premises, that regulate conduct, and so forth[2]. The construct of organisation is not devoid of reality. Organisations are the functional creations and fronts by which the majority of social interactions take place. In the society of organisations, organisations make decisions and become the vehicles whereby social activity is exercised and regulated.

On the other hand, decision making in organisations is ultimately undertaken by the individuals therein. Decision making is an activity which only individuals can ultimately perform. Yet at the same time, the organisation is the functional unit that engages in social activity. Models describing decision making in organisations do so in order to understand decision making as a product of the organisation. These models strive to investigate and describe generic decision making activity. Accounting for how decisions are actually made invariably returns to the study of individual or behavioural decision making.

In describing organisational decision making a meta-problem is not resolved. How does one *separate* the *decision making of individuals* from the *organisation as the decision making entity* and the *entity to which the decisions relate*? Conceptually, in describing organisational decision making, tension exists between the individual, i.e. the decision maker, and the organisation, i.e. the social front for the execution of decision making. Describing generic organisational decision making requires the removal of behavioural or individual descriptions. However, the individual and the decision are intertwined and inseparable. Thus, asking how organisations make decisions always leads back to the individual. How does one describe generic organisational decision making, when the activity of decision making is encapsulated in the behaviour of the individual?

This problem is evidenced in the different approaches that the four models of decision making take. In each case, the models try to describe generic organisational decision making. However, as has been shown throughout this thesis, the various authors

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[2] The concept of an organisation as 'shared meaning' was discussed in Chapter 1

struggle to maintain a coherent and systemic approach. Their focus in the description of organisational decision making tends to oscillate between behavioural and systemic.

In the model of perfect rationality, the conceptualisation of decision making does not address decision making as a generic output of the organisation, but considers only the decision making process, with no reference to the nature of the decision maker. The nature of the decision maker, whether individual or organisation, is largely irrelevant to the perfectly rational decision making process. The model is not concerned with the unit of analysis or focus. Hence, it is possible to understand rational decision making on a behavioural or systemic level. In perfect rationality, it is not indicated how the decision making process may be reconciled with the concept of 'organisation'. In the bounded version of rational decision making the focus is distinctly behavioural. Yet in describing rational decision making in organisations in the bounded form, the use of rule decision making and standard operating procedures still does not clearly indicate how an organisation makes a rational decision. In addition, it is also not clear how (rational) decision making, which is a behavioural phenomenon, can be understood as a generic organisational activity. Rational organisational decision making cannot be extricated from the boundedly rational individual in the organisation.

In the procedural model, the approach is putatively systemic. The decision making process is concerned with the organisation and not overtly with the individual, yet as the description thereof shows, decision making is still ultimately made by individuals in a manner which agrees with the characteristics of political decision making. Despite the description of a generic process for decision making, decisions are still made through the judgements and bargaining of individuals. Reconciling individual decision making with organisational decision making remains problematic.

In the political model, decision making in organisations is primarily a characterisation of behavioural traits with a few generic aggregations thereof. The unpacking of the characteristics of 'power', 'bargaining', 'communication flows' and so forth are behavioural properties of decision makers. Aggregating these behavioural traits with concluding observations such as organisations being arenas in which bargaining and conflict resolution takes place, still does not satisfactorily answer the question of how

the organisations make decisions. Describing generic organisational decision making is still confined to a description of individual and group decision making.

In the fourth model, anarchic decision making also purports to describe organisational decision making. This is achieved by delineating a number of central features of organisational experience. Despite understanding decision making in organisations as streams or flows of problems, solutions, choice opportunities and decision makers, one is still required to confront the fact that choices are made by individuals. Flows of problems, solutions and choice opportunities characterise the decision making environment. The organisational decision still remains the prerogative of the individual. In this case, an understanding the organisational decision making still requires an understanding of individual decision making.

Fundamentally the problem lies therein that the link between the individual and the organisation cannot be severed. Individuals and groups of individuals make decisions on behalf of organisations, yet in the society of organisations, organisations engage one another, not individuals. Understanding how organisations make decisions cannot be clearly related to what people, in their hearts and minds, decide on in the formalised structures called organisations. How the decision making of the individual or group relates to the organisation is not entirely understood. The organisation is the vehicle and the front for social dealings. The relationship between the vehicle for interaction and the decision maker residing therein is not clearly understood. How does one account for organisational decision making, without accounting for the behavioural nature of the individual? In trying to approximate generic organisational decision making activity, one is time and again confronted with having to describe the behavioural aspects of individual decision making.

The models in this thesis clearly indicate the extent of this predicament. Intending to describe generic decision making activity becomes frustrating, when one has to continually confront matters of individual psychology. The development of further models of decision making have also been attempts to understand the phenomenon of organisational decision making. Yet these attempts have had to confront the same problem. This meta-problem of organisational decision making has remained with organisational theorists and will not easily be resolved adequately. Further investigation of this problem is merited and can be done with the help of the insights of Karl Weick.

Bridging the Individual-Organisational Divide

Karl Weick[3] understands decision making as an occasion for sense making. The process of decision making is primarily an occasion to make sense of an incongruous organisational environment. Decision making is aimed at negotiating uncertainty in the organisational environment. What confronts the organisation is understood through interpretation and sense making.

For our purposes, we shall consider Weick's discussion of Wiley's[4] approach to sense making. For Wiley[5], sense can be made on three levels, viz. "the intersubjective, the generic subjective, and the extrasubjective"[6]. We are here only interested in the first two. These terms denote the following:

The intersubjective is concerned with the social interaction of individuals in groups, which are socially structured and where significant shared meaning is present in their collective activities[7]. In the intersubjective, the 'being' of persons is relevant and fundamental to the intersubjective activity (in the organisation). Sense making in organisations on the level of the intersubjective is dependent on rigorous personal interaction, where people come to terms with uncertainty through communication, interaction and decision making. Making sense in organisations at the level of the intersubjective is concerned with understanding how change in the organisational environment impacts on individuals and groups as organisational participants.

At a slightly higher level of abstraction, Wiley speaks of the generic subjective[8]. The generic subjective is concerned with the enactment of roles and the adherence to rules within the social structures of an organisation[9]. In the generic subjective, the self or personal characteristics are left behind and organisational participants are viewed as interchangeable enactors of roles[10]. Making sense in organisations at the level of the

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[3] 1995

[4] 1988

[5] 1988

[6] In Weick 1995: 70

[7] Wiley 1988 in Weick 1995: 71

[8] The generic subjective was briefly looked at in the Political Model of Decision Making

[9] Wiley 1988 in Weick 1995: 71

[10] Wiley 1988 in Weick 1995: 71

generic subjective is concerned with understanding how roles, functions and social structures operate and change[11].

 As the foregoing analysis indicates, the concept of organisation is used in conjunction with both levels of sense making. Within this taxonomy, it may be asked where the organisation and organisational sense making is posited? For Weick, the organisation is posited between the intersubjective and the generic subjective[12]. This can be accounted for on the following basis: Organisations are principally concerned with the pursuit of particular goals[13]. To this end, they require organisational participants that are able to perform the roles that result in the realisation of their objectives. The generic subjective is concerned with the performance of roles and the adherence to rules[14]. The generic subjective provides the control and management mechanisms for organisations. The intersubjective, however, provides the mechanism by which organisational creativity is brought about and by which uncertainty is negotiated through sense making and decision making[15]. For Weick, "...organizing is a mixture of vivid unique intersubjective understandings and understandings that can be picked up, perpetuated, and enlarged by people who did not participate in the original intersubjective construction. People can substitute for one another in organizations, but when they do those substitutions are never complete. There is always some loss of joint understanding when the intersubjective is translated into the generic"[16]. According to the foregoing, organisation has to be understood on two levels. On one level, acknowledgement is given to the behavioural aspects of people in organisations. On another level, acknowledgement is given to the generic and interchangeable roles that are enacted in organisations.

When we speak of organisations, we are concerned with a discussion at the level of the generic subjective. This thesis has been an investigation into the nature of organisational decision making, where the focus has been on the organisation and the manifestations of generic decision making activity. A generic inquiry of

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[11] Wiley 1988 in Weick 1995: 71

[12] Weick 1995: 72

[13] Drucker 1994

[14] Weick 1995: 72

[15] Weick 1995: 72

[16] Weick 1995: 72

organisational decision making is not focused on understanding the influence of capricious personalities on decision making, but is rather focused on uncovering the general or universal properties of decision making in organisations.

When one speaks of decision making, one necessarily does so at the level of the intersubjective[17]. Decision making can be understood as sense making and is in that respect an activity that is dependent on rigorous social interaction, where the input of the individual is of fundamental importance. Decision making is an intrinsic feature of intersubjective activity. It cannot be understood without reference to the individual. Arguably, the generic subjective role of the decision maker may exist within an organisation. However, in order to make decisions, interaction is required at the level of the intersubjective.

For Weick, and drawing on Smircich and Stubbart[18], organisations act as the bridging mechanism between the intersubejctive and the generic subjective[19]. Organisations become the mechanism by which collective social interaction is integrated meaningfully into role-based activity. This draws us closer to understanding the meta-problem. If organisation is the mechanism that bridges the intersubjective and the generic subjective, then an investigation of generic organisational activity may perhaps be intimately linked with intersubjective activity. Intersubjective activity is in fact the content of generic activity.

This outlines the major problem of organisational decision making. When deciding to investigate how organisations make decisions, one is necessarily interested in generic decision making activity, i.e. the generic subjective. However, decision making is tied up in the individuals residing in the organisation, i.e. the intersubjective. The different models of decision making have struggled to bridge this divide. In trying to address generic and structural features of organisational decision making, theorists still have to consider the role of the individual in the organisation. A good example would be from the procedural model. The model describes the decision process in generic terms

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[17] In the case of the individual, the sense making and commensurate decision making would take place at the level of the intrasubjective. The intrasubjective is concerned with "…individual thoughts, feelings, and intentions" (Wiley 1998 in Weick 1995: 70 – 71).

[18] 1985

[19] 1995: 73

right up to the selection phase, at which point Mintzberg[20] necessarily has to consider the behavioural considerations of decision making. How does one make sense of organisational decision making when one has to continually move between two fundamentally different levels of understanding? How are these two levels of understanding reconciled in a meaningful manner? How can the divide between understanding the organisation and understanding decision making in the organisation be bridged? Is there any other way, in which generic organisational decision making activity can be understood, such that the behavioural implications of decision making do not need to be considered?

This meta-problem will continue to plague organisational theorists. Whether the authors of the respective models of decision making were particularly aware of this problem at the time of their development is hard to say. However, upon comparison it becomes evident that what they purport to explain generically is undermined by their inability to meaningfully reconcile the rift between understanding the organisation and understanding decision making as a product of the individual.

It would seem that this predicament cannot be resolved. Whether it is understood in a positive or negative light still requires further study. The tension between the individual and the organisation will perhaps never be resolved. In the examination of organisational decision making, doing so at an intersubjective level, means that the organisation is no longer the unit of analysis. Examining organisational decision making at the level of the generic subjective gives insight into the generic nature of the organisation, but does not facilitate the study of decision making. If this problem cannot be resolved, then looking at organisations will always be a study at various levels of abstraction. This may in fact be an intrinsic meta-feature of organisations, and could perhaps be added as a further characteristic of the concept 'organisation'. This problem has clearly not been resolved in this thesis. We merely hope to have laid the groundwork for further relevant study thereof. Accordingly, we herewith conclude the discussion of organisational decision making and the problems that plague the understanding thereof (and thank the reader for staying with us)!

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[20] 1976

SUMMARY

This thesis has been an overview and description of four different models of decision making, where the organisation and not the individual has been the focus of the study. In each case, the decision making processes taking place in organisations that have been described in the most generic sense possible.

The rational model assumes that organisations are able to make decisions in a consistent and predictable manner. A number of assumptions are made about organisations that do not seem to adequately reflect the experience of organisational decision making. The procedural model of decision making is concerned with an iterative process that organisations go through when attempting to make a decision. This model is also closely related to the rational model. The political model characterises a decision making process that is an essential part of most organisational decision making processes. The political model illustrates the mechanism whereby decision dilemmas are resolved. The anarchic model of organisational decision making is concerned with the question of ambiguity in the organisational environment and conceives of decision making as the result of the intermeshing of various flows of organisational experience.

In the concluding chapter of this thesis a comparative matrix is presented. This matrix compares the four models of decision making with respect to a number of salient characteristics. In addition and importantly the meta-problem associated with studying organisational decision making is explained. In understanding decision making in organisation there is necessarily a tension between understanding behavioural activity, i.e. decision making, and systemic organisational activity, i.e. generic role enactment. Investigating decision making at the level of the organisation does not seem to resolve this dilemma. This problem will in all likelihood never be resolved.

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