Table 5.4: Comparing the Perspectives on Technology by Woodward, Perrow and Thompson

<table>
<thead>
<tr>
<th>RESEARCHER</th>
<th>ROUTINE TECHNOLOGY</th>
<th>NON-Routine TECHNOLOGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodward</td>
<td>Mass Continuous process</td>
<td>Unit</td>
</tr>
<tr>
<td>Perrow</td>
<td>Routine Engineering</td>
<td>Craft Non-routine</td>
</tr>
<tr>
<td>Thompson</td>
<td>Long-linked Mediating</td>
<td>Intensive</td>
</tr>
</tbody>
</table>

Source: Adapted from: Gerwin, D. Relationships between Structure and Technology at the Organizational and Job Levels. *Journal of Management Studies*, February 1979: 71.

Using this work, and the descriptions given by Woodward (1965), Perrow (1967) and Thompson (1967) as a base, it is possible to rate technologies in terms of the degrees of uncertainty and complexity associated with them. This analysis is represented below in Table 5.5:

Table 5.5: The Degree of Uncertainty and Complexity Inherent in various Technologies

<table>
<thead>
<tr>
<th>RESEARCHER</th>
<th>CLASSIFICATION</th>
<th>DEGREE OF UNCERTAINTY</th>
<th>DEGREE OF COMPLEXITY</th>
<th>TYPE OF CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodward</td>
<td>Unit Mass</td>
<td>High Moderate Low</td>
<td>High Moderate Low-moderate</td>
<td>Indirect Direct Indirect</td>
</tr>
<tr>
<td></td>
<td>Continuous process</td>
<td>Low</td>
<td>Low-moderate High</td>
<td>Direct Direct Direct</td>
</tr>
<tr>
<td>Perrow</td>
<td>Routine Engineering Craft</td>
<td>Low-moderate Moderate-high</td>
<td>Low-moderate High</td>
<td>Direct Direct Indirect</td>
</tr>
<tr>
<td></td>
<td>Non-routine</td>
<td>High</td>
<td>High</td>
<td>Direct</td>
</tr>
<tr>
<td>Thompson</td>
<td>Mediating Long-linked Intensive</td>
<td>Low Moderate High</td>
<td>Low-moderate Moderate High</td>
<td>Direct</td>
</tr>
</tbody>
</table>

For each technology type, the control style most ideally suited is presented alongside. Note that these refer again to the direct-indirect continuum, and the term 'direct' or
"Indirect" indicates a tendency to either side of this continuum. With the exception of continuous-process technology, the findings regarding uncertainty and complexity confirm that as the degree of uncertainty and complexity increases, there is a corresponding shift away from direct control towards indirect control. Jaeger and Balga (1985), in their analysis of Japanese organisations, note that the control of technology in these organisations represents a major competitive advantage. It is argued that organisations have had to develop alternative means of controlling the technological processes in order to adapt the latter to conditions of increased uncertainty and complexity. It is in this regard that indirect forms of control have proved particularly useful.

**Conclusions on the Impact of Technology on Control Systems**

In general, the findings on technology and organisational control confirm the conclusions arrived at concerning uncertainty and complexity.

Although these findings support the notion of an association between uncertainty, complexity and indirect forms of control, they are determined from a functionalist perspective. This considers the technological process as an interdependent variable within the overall organisational system. Accordingly, it is asserted that increased uncertainty and complexity is associated with indirect forms of control within the technological subsystem. Organisational subsystems far removed from the technological subsystem, are therefore not necessarily subject to this association. In order to make the findings pertinent within the interpretive perspective, we should therefore point out that the association holds good only for those organisational members involved in tasks and roles within the specific technological processes.

**Size of the Organisation**

Within the functionalist perspective, much attention has been paid to the effect of increased organisational size on organisational structure (Anderson and Warkov, 1961; Blau and Schoenherr, 1971; Child and Mansfield, 1972; Meyer, 1972). As in the case of technology, a number of important implications exist for the study of control.

Using the number of members as an indicator of organisational size (Robbins, 1983), increased size is seen to be associated with increased differentiation and complexity (Pugh, Hickson, Hinings and Turner, 1969; Child and Mansfield, 1972; Meyer, 1972; Child, 1973). Despite the argument that the relationship is not causal and simply an association
It is possible to identify a number of relatively robust associations between size and aspects of organisational control.

As differentiation increases, the narrower and more specialised role definitions result in greater organisational complexity. Although indirect control provides an effective means of controlling behaviour within the organisational sub-universe, it is the direct style of control which is used to provide coordination and control between these diverse sets of activities.

Increased formalisation, generally associated with increased organisational size, represents a more explicit means of controlling member behaviour. The use of standard rules, regulations and operating procedures is a manifestation of a direct style of control.

Finally, as the organisation becomes more decentralised, there is a tendency to define roles and tasks more explicitly. This often involves the use of standard rules and regulations, hence the association between decentralisation and formalisation. As a result, decentralisation is generally associated with predominantly direct control.

For an analysis of control in organisations, these findings are significant. They imply that, all other things being equal, as the size of the organisation increases, so the likelihood of direct control increases. Notwithstanding the effects of uncertainty, complexity and technology in the social environment of the organisation, larger organisations are more likely to use direct control to coordinate and regulate the behaviour of their members. However, because of the functionalist origins of the findings, it should be borne in mind that this conclusion only holds good for those large groups of members engaged in common tasks and role behaviours.

Summary of Control in Organisations

The discussion on organisational control has defined it as the process whereby the organisation regulates and coordinates the behaviours and outputs of its members. It may be classified by way of the style and manner that this is achieved. Variations in this style are revealed by way of a continuum.

The two polar extremes are defined in terms of Ideal types. These Ideal types, direct and indirect control, are shown to reflect different assumptions about the nature of the
organisation and its patterns of behaviour. Because of these different assumptions, the direct-indirect control continuum represents a powerful discriminating variable in the discussion of different organisation types.

With reference to the direct-indirect control continuum, three major contingencies within the social environment of the organisation are identified. These are the degree of uncertainty and complexity, the nature of the technological processes, and the size of the organisation. In each case, the specific contingency is analysed with respect to its association with the direct or indirect system of control. As the degree of uncertainty increases, so the organisation is more likely to display predominantly indirect means of control. As complexity increases, on the other hand, so the direct style of control becomes more prevalent because of its ability to coordinate and regulate diverse sets of activities. However, as uncertainty and complexity increase simultaneously, it is indirect control which appears to dominate. The uncertainty dimension is thus accorded greater status in predicting appropriate styles of control. In the case of different technological processes within the organisation, the dimensions of uncertainty and complexity are once again shown to be major predictors of the nature of the organisational control. As the technology increases in uncertainty and complexity, there is a shift away from direct control towards indirect control. Once more, uncertainty outweighs complexity as a predictor. Finally, in the case of increasing organisational size, the extent of differentiation, formalisation and decentralisation increases accordingly. All other things remaining equal, increased organisational size is thus associated with a tendency towards direct control.

As mentioned above, because of the different organisational assumptions underlying direct and indirect styles of control, the direct-indirect continuum reflects major differences within the organisation. Indeed, it will be shown that the style of control used by the organisation is manifested in the design and structure of the organisation itself. This is the theme of the following chapter.
Chapter 6

Organisational Structure
Organisational Structure

The Concept of Organisational Structure

Organisation structure refers to the underlying dimensions and forms that the organisation takes (Robbins, 1983). Most of the research into this area has been conducted within the functionalist perspective and has produced somewhat inconclusive evidence, particularly with regard to the nature of these underlying dimensions (Karmel and Egan, 1976; Pondy and Mitroff, 1979; Schwab, 1980). Lundberg (1976) notes that the researcher-oriented perspective followed by functionalists, has obscured much of the true meaning of organisation structure; that which is perceived by the members themselves. Arguing on the same lines, Pondy and Boje (1976), after Ritzer (1975), contend that much is to be gained from using what they term a social deflationist viewpoint. The social deflationist viewpoint is essentially the same as the interpretive perspective, where it is assumed that individuals actively create or enact their own social reality (Blackburn, 1982; Welck, 1979). The social deflationists argue that the interpretive perspective should be elevated to at least a position of parity with the functionalist perspective, and that much greater insight into the nature of organisations can be gained by using both viewpoints simultaneously (Ritzer, 1975; Pondy and Boje, 1976; Pondy and Mitroff, 1979). This approach is consistent with Boulding’s (1956) classification system outlined in Chapter 2, and accordingly, it is this approach that will be taken in this dissertation. The findings from the somewhat equivocal functionalist research will be combined with insights from the interpretive perspective to obtain a more complete understanding of organisation structure.

In terms of the interpretive perspective, organisation members are seen to create, or enact their own social environment through social interactions (Welck, 1979, Pfeffer, 1981). The organisation does not, therefore, exist independently of the actions of members (Burrell and Morgan, 1979). The organisation exists because its members have created it and "put it there". In addition, it is noted that the interpretive perspective views the organisation by
using culture as a metaphor. The organisation, therefore, is a culture (Smircich, 1983). Furthermore, culture is perceived as a three level construct (Schein, 1981, 1985), namely:

**Level 1**
Artifacts and manifestations: These represent the organisationally created physical and social environment and are usually comprised of sets of visible phenomena.

**Level 2**
Values and beliefs: Values represent a description of what "ought to be", while beliefs describe what "is".

**Level 3**
Basic underlying assumptions: These represent those beliefs which have achieved an extreme taken-for-granted status below the level of general awareness.

Combining the concepts of enactment and culture, organisational structure may be viewed as part of the first level of culture. In other words, organisational structure is a cultural artifact and manifestation, created by the behaviours and activities of organisational members. As will be seen further, the various forms and types of organisational structure are manifestations of different patterns of behaviour and activity on the part of members. More specifically, organisational structure represents these behaviour and activity patterns in a variety of organisational conditions. The most important of these patterns are discussed below.

**Structure as a Manifestation of Control**

Organisation structure may be viewed as the manifestation of members' attempts to integrate, regulate and control the organisation under conditions of varying uncertainty and complexity (Berger and Luckman, 1966; Thompson, 1967; Mintzberg, 1981; Robbins, 1983).

Mintzberg (1981) supports this notion, and demonstrates how organisation structure is a reflection of the means whereby coordination and control are achieved.

In terms of the discussion in Chapter 5, the style of control is seen to vary in concert with the degree of uncertainty and complexity in the organisational environment. It may therefore be hypothesised that a specific organisational form associated with a particular
style of control, will vary along with the degree of uncertainty and complexity in the organisational environment. As a result, organisational structure can be seen as a manifestation of the behaviour and activity patterns of members in their attempts to control the organisation in conditions of varying uncertainty and complexity. Indeed, Thompson (1967) views organisational structure as the mechanism used by members to manage the uncertainty and complexity in their social environment.

Structure as a Manifestation of Technological Processes

Organisational structure is also viewed as a manifestation of the various technological processes in the organisation (Woodward, 1965; Perrow, 1967; Thompson, 1967; Burack, 1972; Ouchi and Maguire, 1975).

In Table 5.5 above, which describes the relative uncertainty and complexity associated with various technology types, the control most often used with these technologies are outlined. Following from the discussion above, the style of control is manifested in the organisational structure.

Structure as a Manifestation of Differentiation and Stratification

Differentiation and stratification are measures of organisational complexity and are therefore manifest in the organisational structure (Robbins, 1983). Increased complexity reflects different role definitions, behaviour patterns and style of control. These, too, are manifested by way of the organisational structure.

Structure as a Manifestation of Size

Organisational size is often inferred from the number of members within the organisation. As noted in the discussion on control, increasing organisational size is generally associated with higher degrees of differentiation, formalisation and decentralisation. Increasing organisational size, therefore, is accompanied by changes in role definitions, behaviour patterns and style of control. These phenomena all manifest themselves in the organisational structure.
By using insights from both the functionalist and interpretive perspectives, the concept of organisational structure has been defined as an artifact and a creation of the organisation, enacted by the members in their patterns of behaviour and activity. These patterns of behaviour and activity vary in accordance with certain organisational conditions, and this results in alternative organisational forms or structures.

Dimensions of Organisational Structure

Problems in Identifying Dimensions

Within the functionalist perspective, it would appear as if a definitive answer to the question of structural dimensionality has been difficult to provide (Blackburn, 1982). The range of possible dimensions, as reported in various research findings, is wide. Pugh, Hickson, Hingley, and Turner (1968) suggest four dimensions of structure. James and Jones (1976) and Champion (1975) propose seven and eight dimensions respectively. Finally, Montanari (1978) contends that it is possible to identify some 16 possible dimensions. Table 6.1 lists some of the most commonly cited dimensions.

Table 6.1: List of most commonly cited dimensions of organisational structure

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative component</td>
<td>The number of line supervisors, managers and staff relative to total organisational members (Relmann, 1974).</td>
</tr>
<tr>
<td>Autonomy</td>
<td>The extent to which top management has to refer certain decisions to a higher level of authority (Relmann, 1974).</td>
</tr>
<tr>
<td>Centralisation</td>
<td>The proportion of roles whose occupants participate in decision-making and the number of areas in which they participate (Hage, 1964); an index reflecting the locus of decision-making with respect to major and specific policies, the degree of information-sharing between levels, and the degree of participation in long-range planning (Relmann, 1974); concentration of power arrangements (Thompson, 1967).</td>
</tr>
<tr>
<td>Complexity</td>
<td>The number of occupational specialists, the professional activity, and the professional training of employees (Hage and Aiken, 1967).</td>
</tr>
<tr>
<td>Delegation of authority</td>
<td>The ratio of specific management decisions that are delegated, to the total number that are available to make (Relmann, 1974).</td>
</tr>
</tbody>
</table>
- **Differentiation**: The number of speciality functions represented in an organisation (Weber, 1946); the difference in cognitive and emotional orientation amongst managers in different departments (Lawrence and Lorsch, 1967).

- **Formalisation**: The extent to which a member's role is defined by formal documentation (Relmann, 1974).

- **Integration**: The quality of collaboration between departments that are required to achieve unity of effort (Lawrence and Lorsch, 1967); plans or devices used for coordination between organisational units (Perrow, 1970).

- **Location of Staff**: The allocation of key organisational personnel in the organisation (Newmann, 1972).

- **Professionalisaiton**: The degree to which organisational members use a professional frame of reference to guide their organisational behaviour and activities (Hall, 1968).

- **Span of control**: The number of subordinates that an individual manager can and should supervise (Ouchi and Dowling, 1974).

- **Specialisation/division of labour**: The number of occupational specialities and the length of training required by each (Hage, 1965); the degree to which highly specialised requirements are spelled out in formal job descriptions (Relmann, 1974).

- **Size**: The extent and largeness of the organisation, usually measured in number of employees (Mintzberg, 1982).

- **Standardisation**: The range of variation that is tolerated within the rules defining the jobs (Hage, 1965).

- **Uncertainty**: The extent to which the outcomes of certain behaviours and actions, within the organisation's social environment, cannot be predicted (Ouchi, 1971).

- ** Stratification**: The depth in the structure, as measured by the number of different status levels within the organisation (Robbins, 1993).

- **Unit grouping**: The bases whereby roles are grouped together into units and these units into higher-order units (Mintzberg, 1981).

Why the wide range of possible dimensions of organisational structure? Blackburn (1982) argues that there appears to be a desire for closure in the argument on structural dimensionality, but that this has resulted in a number of methodological and conceptual problems.
Methodological Problems in Identifying Dimensions of Structure

The methodological problems are primarily concerned with construct operationalisation and a limited domain of possible dimensions. In their review of the research on dimensions of organisational structure, Ford and Slocum (1977) contend that much of the construct operationalisation has been faulty, and that this has resulted in doubtful findings. Dalton, Todor, Spedololini, Fielding and Porter (1980) agree with this view and add that the research needs additional longitudinal emphasis. A number of researchers have reviewed the original Aston research and conclude that the desire for closure has resulted in a limited domain for the dimensions of organisational structure. Holdaway, Newberry, Hickson and Haron (1975) and James and Jones (1976) contend that the Aston research might have prematurely reached closure as to the number of dimensions and, in so doing, failed to produce an accurate picture of structural dimensionality. Reiman (1974) argues that the assumption of a limited number of universal dimensions of structure is a dubious one, and proposes that different industries might produce different dimensions. Thus, purely from the methodological issues raised, the functionalist approach appears equivocal on the subject of structural dimensionality.

Conceptual Problems in Identifying Dimensions of Structure

The major conceptual problem in the research on structural dimensionality is that the model or view of the organisation might well be inappropriate. In their argument on this point, Roberts, Hullin and Rousseau (1978) suggest that organisational structure may be understood as a network of tennis balls connected by rubber bands. They add that

"...little is known about the rules - if there are any - governing the changes among the balls, and little is known about the composition of the rubber bands [that is, the processes underlying the connectedness among the balls]."

(Roberts, Hullin and Rousseau, 1978, p. 54)

The point is well made. The research on organisational structure within the functionalist perspective is not based on a sufficient understanding of the dimensionality of structure. Yet, most of this research has hypothesised the existence of certain dimensions, and then gone on to build instruments which depend on the validity of these initial assumptions (Karmel and Egan, 1976). The functionalists emphasise the researcher-perspective at the expense of that of the organisational member (Pondy and Boje, 1976). The
phenomenological element in organisations is therefore ignored, and the researcher gains an incomplete understanding of the organisation (Pondy and Mitroff, 1979).

The interpretive perspective, on the other hand, in line with its view that organisation structure is a manifestation of the patterns of behaviour and interaction amongst members, would have the organisational members themselves define the nature of the structural dimensions (Pondy and Boje, 1976). Research into dimensions of organisational structure should investigate how members come to invoke phenomena such as organisation and structure in their attempts to make sense of their surroundings. The interpretive perspective suggests that an alternative conceptualisation of organisation and structure is needed to supplement that of the functionalist viewpoint. By considering both of these, better insight might be gained into the dimensionality of organisations and their structures.
Chapter 7

Organisational Change
Organisational Change

Introduction

Organizations, as described in the previous chapter, may be viewed as manifestations of the behaviour patterns of their members. Members create or enact their own social environment, and the concepts of "organisation" and "environment" are simply labels for different patterns of behaviour. Within the Interpretive perspective, therefore, the concept of an organisation adapting itself to its external environment is not very meaningful.

The Interpretive viewpoint does not in itself provide a full explanation of the concept of organisational change. As is known from extensive prior research, organisations do undergo changes over periods of time (Chandler, 1962; Greiner, 1972; Scott, 1973; Miller and Friesen, 1980, 1984; Smith, 1985). The Interpretive perspective might have us believe that the organisational members bring about these changes themselves. However, it is known that organisational members generally resist change (Mintzberg, 1978, 1981; Kotter and Schlesinger, 1979; Miller and Friesen, 1980; Lorsch, 1984; Quinn, 1985). What, then, is the motivation for organisations to change?

In order to answer this question, there is a need to consider the presence of forces or factors beyond the direct influence of the organisation and its members. For this reason, it is suggested that a synthesis of the functionalist and Interpretive perspectives be used; one that allows for a definition of forces and factors outside of the organisation. This possibility was mooted in the previous chapter, where it was suggested that a more complete understanding of organisation structure could be gained by combining elements of both perspectives. An integrated perspective will allow for a more complete analysis of the organisation and those elements of the environment beyond its influence. In so doing, it will assist in resolving the distinction between organisations operating within independently and externally determined environments (functionalist perspective), and organisations enacting their own environments (Interpretive perspective). This, in turn, will allow for a more complete analysis of organisational change.
The objectives of this chapter are:

- To develop an integrated perspective for viewing organisations in their external environment
- To analyse the phenomenon of organisational change in respect of its causes and forms.

Firstly, the concept of organisational change will be broadly defined. Secondly, the concepts of homeostatic (reactive) change as well as planned, inventive (proactive) change will be analysed. The organisation-environment interface will also be discussed with a view to producing an integrated perspective of this phenomenon. Finally, the manner in which change occurs will be analysed. A distinction will be drawn between evolutionary change and revolutionary change.

The Concept of Organisational Change

There are many definitions for the concept of organisational change. Most reflect a particular set of assumptions about the organisation and its change processes. However, since we have yet to develop an overall perspective of organisational change, the concept will be defined in a somewhat broad and general manner.

Organisational change reflects a shift in the basic underlying assumptions, values, beliefs and patterns of behaviour of the members. Often, these are manifested in a change in the organisation structure along all, or some, of the dimensions. Since this structure is a manifestation of other organisational factors and processes, the latter may also be seen to change.

In further defining organisational change, it is useful to consider both the motivation for and/or causes of the change, as well as the manner in which the change occurs. In terms of the motivation for and causes of the change, the notions of unplanned/reactive change and planned/proactive change are the major issues to be discussed (Lipitt, 1982). As far as the actual change process is concerned, evolutionary/incremental change on the one hand, and revolutionary/quantum change on the other, represent the spectrum of change models most usually found (Lipitt, 1982). In the discussion that follows, these classifications will be defined and expanded.
Why Organisational Change Occurs

This section considers the various motivations and causes of organisational change. The two major types of change to be discussed are unplanned/reactive change and planned/proactive change. These will be referred to as reactive adaptation and planned change respectively.

These two types of change embrace differing assumptions about the nature of organisations and their environments. In order to address one of the key objectives of this chapter, namely, to develop an integrated perspective for viewing organisations in their environments, this section will cover three main areas. The first is an outline of the major features and characteristics of reactive adaptation in organisations. The second is a similar discussion of the phenomenon of planned change. Finally, this section concludes with an integrated perspective of organisations and their external environments.

Reactive Adaptation

Reactive adaptation describes the process whereby an organisation reactively adjusts itself in order to meet the needs of the external environment (Lawrence and Dyer, 1983). The organisation is viewed as being a purposeful and adaptive mechanism (Smircich and Stubbart, 1985) which exists within the overall system of the environment (Thompson, 1967). The environment, which is viewed as independent from the organisation, sets up a number of imperatives to which the organisation has to respond in order to ensure its continued survival and viability (Lawrence and Dyer, 1983).

A number of theories and approaches to the management of organisations have contributed to this view of organisational change. The "open-systems" perspective has led to a range of contingency theories that posit a best way for organisations to respond in different environmental conditions (Kast and Rosenzweig, 1974). It also considers the concept of organisations "fitting" with the environment (Aldrich, 1975). The industrial-economics perspective has produced frameworks which identify different levels of profitability as a result of specific industry structures and organisational responses (Hofer, 1976; Hambrick, MacMillan and Day, 1982). This has resulted in concepts like the PIMS data base, which suggests certain organisational structures and responses in a variety of industry conditions (Buck, Gale and Sultan, 1975). Finally, the "incrementalist"
view suggests that policy decisions are formed via incremental and/or political processes, and that attempts at planning the future of the organisation are futile (Cyert and March, 1963; Quinn, 1977, 1978; Murray, 1978).

Bourgoels (1984) points out that these deterministic views reduce the management of organisations and their changes to a computational exercise. In addition, it results in a belief that organisations are powerless to act, unless the environment and political forces within the organisation provide an opportunity or threat. Gemmill and Smith (1986) add that reactive adaptation assumes both a degree of determinism as well as a tendency for the organisation to continue returning to its steady state of equilibrium.

Viewed as a gestalt, the organisation displays a natural tendency to resist change and to return to a state of equilibrium (Pettigrew, 1974; Mintzberg, 1978; Miller and Friesen, 1980). Because of the overall alignment and integration of the organisational components (Mintzberg, 1973; Miles and Snow, 1978), reactive change only involves an adjustment of these components, and does not alter the overall gestalt of the organisation. As a result, the collective frame of reference remains relatively undisturbed (Hedberg, 1981; Berger and Luckman, 1966). This implies that reactive change is accompanied by only single-loop learning (Flol and Lyles, 1985; Argyris and Schön, 1977), and produces relatively rudimentary associations and insights. Sometimes described as functional rationality (Morgan and Ramirez, 1983), the outcome of this type of learning is primarily behavioural.

Reactive adaptation, therefore, does not result in a meaningful alteration to the organisation.

In a classification system based on Darwinian theories of evolution, Foster (1985) points out that reactive adaptation produces a "refinement" of the organisation by incrementally adjusting certain organisational parameters. These adjustments are intended to improve the alignment between the organisation and its environment.

Reactive adaptation usually takes the form of incremental evolution, where the organisation continues making minor adjustments to its configuration and external relationships in an attempt to optimise its efficiencies. This can be contrasted with planned change, which generally has as its objective the improvement of organisational effectiveness by redefining its gestalt and external relationships (Hofer and Schendel, 1978).
Mintzberg and Waters (1985) identify a spectrum of different approaches to organisational strategy which embrace the concept of change. In essence, they see a continuum between the extremes of planned change and reactive adaptation. Figure 7.1 below illustrates this continuum.

**Deliberate Strategies**

- Planned strategies
- Entrepreneurial strategies
- Ideological strategies
- Umbrella strategies
- Process strategies
- Unconnected strategies
- Consensus strategies
- Imposed strategies

**Emergent Strategies**

Deliberate strategies are those which have been carefully planned by management after an analysis of both the organisation and the environment. Emergent strategies, on the other hand, describe those strategies which are almost “imposed” on the organisation by the forces of the environment (Mintzberg, 1978). One of the intentions of Mintzberg and Waters (1985) is to illustrate the different degrees of influence exercised by organisations on the nature and process of organisational strategy. Deliberate strategies represent a high degree of influence, while emergent strategies reflect an almost passive approach to the setting of strategy.

In the same way, it may be said that reactive adaptation reflects a passive approach to change by the organisation. In reactive adaptation, the organisation merely resists changes to its overall gestalt, but allows ongoing, incremental adjustments to be made to maintain alignment with the environment. Mintzberg (1978) and Mintzberg and Waters (1985) also point out that some learning takes place within emergent strategies. It is inferred that they are referring to single-loop learning. This is consistent with the concept
of reactive adaptation in which the forces in the external environment are allowed to
determine the nature of the adjustments.

Planned Change

In the main, planned change is the antithesis of reactive adaptation. More accurately,
however, they should be viewed as polar extremes along a continuum which describes the
motivation and causes of organisational change.

Planned change reflects the view that organisations are able to proactively determine the
nature and process of their own change. Specifically, it demonstrates that organisations
are able to determine the manner (Child, 1972) and areas (Thompson, 1967) in which they
wish to engage their external environment, as well as that they have the ability to create
portions of this environment themselves (Welch, 1579; Smircich and Stubbart, 1985).

Planned change embraces two major sets of assumptions about organisations and their
environments. On the one hand, a functionalist perspective of organisation and
environment is accepted as in reactive adaptation above. However, organisational change
is not viewed as a deterministic process, but rather as one where the organisation has a
degree of "strategic choice" (Child, 1972). On the other hand, an Interpretive perspective
of organisation and environment is embraced, and organisations are viewed as forms of
human expression and behaviour patterns (Smircich, 1983). In this sense, organisational
members create their own environment through the process of enactment (Welch, 1979),
and the external environment is considered an output of the organisation. The concepts of
organisation and environment are not considered to be separate entities, but rather as
convenient labels for different patterns of activity (Burrell and Morgan, 1979). In this latter
view, the concept of organisations aligning themselves with the external environment holds
no meaning (Smircich and Stubbart, 1985).

How is the conflict between the functionalist perspective of organisational alignment and
the Interpretive view of environmental enactment resolved? This issue is the focus of a
later part of the chapter. For the moment, however, it is sufficient to note that a portion of
the organisation's environment is determined by factors beyond the organisation's control,
while another portion is enacted by the organisation itself. The organisation thus has two
modes for dealing with its external environment in terms of planned change. The first is in
choosing how and where to engage the environment in order to achieve its objectives, and
the second is in creating the environment through the process of enactment.
Strategic Choice

The concept of "strategic choice" emerges from the dissatisfaction with the deterministic theories of organisational strategy and change (Child, 1972; Bourgoels, 1980). Child (1972) argues that the traditional, contingency-based explanations, which posit environment (Burns and Stalker, 1961; Lawrence and Lorsch, 1967; Emery and Trist, 1965), technology (Woodward, 1965, 1970; Perrow, 1967, 1970) and size (Pugh et al, 1968; Blau, 1970) as the major determinants of organisation variation, only explain a small portion of the total variance. It is pointed out that organisations can exercise a choice in the manner in which they wish to operate within the environment. Indeed, as Child (1972) asserts, larger organisations may even be able to shape certain aspects of their external environment. On technology, Child (1972) argues that the initial choice of the technology is subject to a management decision, and that management is likely to choose a technology-structure combination that best meets the needs of the organisation. Similarly, the size of the organisation is subject to management choice, and is related to the nature of the organisation's activities, as well as to the technology being used (Child, 1972).

Bourgoels (1980) strongly supports the view that the deterministic theories provide an incomplete account of organisational strategy and change. As an example, Hofer's framework "Towards a Contingency Theory of Business Strategy" (Hofer, 1976) is analysed, and it is suggested that this represents one of the most accomplished and sophisticated deterministic theories to explain organisational strategy and change. However, as Bourgoels (1980) points out, if the theory were to provide explanations for the contingent relationships between all the identified variables, it would run into some 69 million different contingencies! Bourgoels adds,

"If, as Einstein asserted, 'the grand object' of all theory is to explain as large a number of observable phenomena, with as few concepts and laws as possible, then any 'contingency theory' .... has a few hurdles to surmount."

(Bourgoels, 1980, p.589.)

It would appear that contingency-models, based on deterministic principles, are not able to fully explain the concept of organisational change. In addition, there are elements within contingency models which directly contradict their own validity. In Hofer's (1976) model, a "shakeout" period is identified within the product life-cycle, out of which only the dominant competitors emerge. This implies that certain organisations out-perform others, although all are attempting the same, or similar, strategies. This is in contradiction to deterministic
theories, which suggest that strategic management follows almost automatically from a technical appreciation of the environmental situation (Bourgeois, 1980). Similarly, the concept of an organisation identifying and dominating a market "niche" is dependent upon an element of human choice, rather than a methodical, contingency-based analysis (Newman, Summer and Warren, 1972).

Child (1970, 1972) uses the Thompson (1967) framework to argue that little evidence exists for the view that organisational members have no control over organisational strategy and change. The concept of the dominant coalition (Cyert and March, 1963; Thompson, 1967) is used to explain how a group of powerful organisational members exert significant influence over organisational change. Child (1972) notes that this does not preclude the rest of the organisation's members from influencing strategy and change through bargaining and negotiation. The view of the organisation influencing and determining the nature of its changes, provides an alternative to the deterministic argument of environmental forces providing organisational imperatives which transcend the needs and motivations of the organisation's members. The concept of strategic choice, therefore, provides the basis for the planned change viewpoint.

Using both Thompson's (1967) and Child's (1972) contributions to the concept of strategic choice, Bourgeois (1980) acknowledges that the environment might well place constraints on the organisation, but that the organisation generally retains the ability to determine the nature and manner of its change. In addition, the organisation is likely to act in a "satisficing manner" (Simon, 1957), so producing enough slack to engage in activities and behaviours directly aimed at meeting the members' needs. Strategic choice, therefore, acknowledges the role of the organisation in determining the nature and manner of its own change, while at the same time admitting that the environment does pose certain constraints and opportunities.

Enactment

The concept of enactment has a number of similarities with the notion of strategic choice. It, too, disagrees with the deterministic bias of the contingency theories, and suggests that organisations are able to be proactive in determining the nature and manner of their change. Organisations are therefore able to control their activities in their environments. However, unlike strategic choice, the concept of enactment does not assume the existence of an independently determined environment. Although certain events and situations may exist outside the organisation's sphere of influence, the "environment" must
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be actively created by the organisation. It does so by linking these events and situations together in a coherent frame of reference, thereby giving them meaning (Smircich and Stubbart, 1985). This is the nature of enactment (Welch, 1979).

![Figure 7.2 The Enactment Cycle](image)

Figure 7.2 The Enactment Cycle

It is important to note that enactment is an ongoing cyclical process, and that the action-perception-sense-making cycle is perpetuated by individual organisation members, rather than by "the organisation". This is consistent with the interpretive perspective, which regards organisations and their structures as a manifestation of their members' behaviour patterns (Smircich, 1983). In the same way as the organisation is enacted by the members, so they also create the environment. Both the organisation and its environment, therefore, are manifestations of the enactment process of individual members acting collectively.

The organisation does not simply respond to forces or changes that exist in its external environment. Organisational members produce a number of realities as a result of their ongoing cycles of enactment. One of these realities is the concept of organisation, another is the concept of environment. As a result, the organisation and its environment
are both able to change shape and form by way of the members ongoing enactment. The causal link identified by the deterministically orientated contingency-theories, is simply part of the enactment cycle. During this cycle, the organisation and its environment evolve together as outputs of the members' patterns of behaviour and activity. Organisational change, therefore, is within the control and influence of the organisation itself, and not merely a pre-determined response to environmental pressures.

Redefining the Organisational Gestalt

One of the most distinguishing characteristics of planned change is that the organisation considers the notion of the destruction of the prevailing organisational gestalt, and the subsequent redefinition of another (Ramaprasad, 1982; Fiol and Lyles, 1985). Planned change, therefore, involves the reconstruction and redefinition of the various components of the organisation into a new configuration and, hopefully, synergy. Planned change involves the process of double-loop learning to achieve three ends (Argyris and Schön, 1977; Fiol and Lyles, 1985):

- A breaking down of the bureaucratic momentum and resistance to change caused by the prevailing organisation gestalt (Mintzberg, 1978; Pettigrew, 1974; Miller and Friesen, 1980)
- A coordinated programme to ensure change across all relevant elements of the organisation (Mintzberg, 1973; Miles and Snow, 1978; Tichy, 1982)
- A vision of the future gestalt, in terms of the new configuration and alignment of elements (Pettigrew, 1979; Mintzberg and Waters, 1985).

Organisational learning provides the basis for the creation and ongoing development of the organisational frame of reference (Fiol and Lyles, 1985). The organisational frame of reference, in turn, provides an ongoing guide to and context for actions, values and beliefs (Hedberg, 1981). In this way, it actually defines the organisation because it provides the context within which members behave and interact (Daft and Weick, 1984). Double-loop learning, then, is the process whereby the organisational frame of reference is changed and redefined. It represents the means whereby the whole organisation and culture might be changed (Shrivastava and Mitroff, 1982; Nystrom and Starbuck, 1984).

Double-loop learning and planned change are generally initiated by the organisation's dominant coalition (Thompson, 1967; Child, 1972; Bourgeois, 1980). This dominant coalition is able to partially remove itself from the organisational frame of reference and initiate changes to it. This is consistent with Mannheim's concept of the "free-floating
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coalition is able to partially remove itself from the organisational frame of reference and initiate changes to it. This is consistent with Mannheim’s concept of the “free-floating intelligentsia”, which provides the major impetus for societal change because of being able to partially and temporarily dissociate itself from the prevailing frame of reference (Mannheim, 1952, 1953, 1956). The changes suggested by the dominant coalition are usually perceived by the rest of the organisational members as being “outside of the current organisation and culture” (Lorsch, 1974; Kotter and Schlesinger, 1979).

To achieve a breaking down of the current gestalt and the definition of another, the dominant coalition has to gain some commitment from the members to a “vision” of the future (Buchanan, 1974). The “vision” consists of the new values and beliefs of the organisation, a redefinition of its purpose, the nature of member roles within it, as well as an indication of the challenges and dangers that the new organisation is likely to face (Pettigrew, 1979).

Planned “change” is usually brought about by the conscious and purposeful effort of the dominant coalition and involves a complete redefinition of the organisational gestalt. In this sense, planned change is the means to increased organisational effectiveness, a major source of competitive advantage in the task environment (Hofer and Schendel, 1978; Thompson, 1967; Foster, 1985).

A Synthesised View of Organisational Change and Environment

From the discussions above on reactive adaptation and planned change, two dimensions on the organisation - environment relationship emerge. The first considers the “origins” of the environment, while the second reflects the extent to which the environment imposes constraints and determines alternatives for the organisation.

Origins of the Environment

This dimension is best illustrated by Figure 7.3 below:
Environment determined by forces and conditions beyond the influence and control of the organisation

Environment created by actions of the organisation and its members

Independent Environment

Organisationally-created Environment

Figure 7.3: "Origins" of the Environment

The one end of the continuum reflects the notion of the organisation with no influence over its environment, while the other end considers the process whereby the environment is created as a result of the actions of the organisational members. The two polar extremes describe ideal types which are rarely found in their pure forms and, in reality, most organisations find themselves somewhere between the two ends. In other words, most organisations are likely to experience a combination of both types of environment. On the one hand, many factors in the environment will be independently and externally determined. Examples include conditions such as consumer spending, inflation, resource availability and broad technological trends. On the other hand, there are many factors which the organisation, particularly if it is powerful in comparison to the 'as is' environment, can directly determine. Examples include the creation of a new market by way of an innovation, employment opportunities in the labour market, and the development of technologies which become the new standards for the industry. Organisations therefore spend a portion of their time scanning and reading an independently determined environment, and the balance enacting the environment. This is plausible, particularly when it is considered that other organisations will also be enacting portions of their environments, which will then appear as externally determined entities to the organisation in question.

Environmental Influence

The extent to which the environment imposes constraints and determines organisational alternatives is best illustrated by way of a continuum in Figure 7.4 below:
Environment determined by forces and conditions beyond the influence and control of the organisation

Environment created by actions of the organisation and its members

Independent Environment

Organisationally-created Environment

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The one end of the continuum reflects the notion of the organisation with no influence over its environment, while the other end considers the process by which the environment is created as a result of the actions of the organisational members. The two polar extremes describe ideal types which are rarely found in their pure forms and, in reality, most organisations find themselves somewhere between the two ends. In other words, most organisations are likely to experience a combination of both types of environment. On the one hand, many factors in the environment will be independently and externally determined. Examples include conditions such as consumer spending, inflation, resource availability and broad technological trends. On the other hand, there are many factors which the organisation, particularly if it is powerful in comparison to the task environment, can directly determine. Examples include the creation of a new market by way of an innovation, employment opportunities in the labour market, and the development of technologies which become the new standards for the industry. Organisations therefore spend a portion of their time scanning and reading an independently determined environment, and the balance enacting the environment. This is plausible, particularly when it is considered that other organisations will also be enacting portions of their environments, which will then appear as externally determined entities to the organisation in question.

Environmental Influence

The extent to which the environment imposes constraints and determines organisational alternatives is best illustrated by way of a continuum in Figure 7.4 below:
Environment places severe constraints on the organisation and determines its alternatives

Organisation is allowed freedom of choice as to where and how to engage the environment

Deterministic Environment

Free choice

Figure 7.4: Environmental Influence over Organisational Change

At the one end of the continuum the organisation's alternatives are closely determined by the conditions in the environment, while at the other end, the organisation is able to define its domain in any manner it chooses. The polar extremes are again ideal types and are rarely found in their pure form in practice. Part of the organisation's environment will place it in a situation where it has to respond in order to survive. Examples include legislation, trade union activities and consumer boycotts. On the other hand, large areas within its task environment provide it with opportunities to define its domain. Examples include the choice of a particular strategy and market segment within a larger industry. The organisation is therefore able to act with varying degrees of discretion and freedom in different areas of its environment.

Combining Origins of the Environment and Environmental Influence

It is possible that the two dimensions discussed above are not entirely orthogonal. For instance, it can be argued that the organisationally-created end of the "origins" dimension is very similar to the freedom-of-choice end of the "influence" dimension. In addition, it can be stated that the environmental influence dimension only operates at the independent environment end of the "origins" dimension. Nevertheless, it is useful to combine the two dimensions in a matrix, (see figure 7.5 below):
Three cells are produced by combining the two dimensions. In cell 1, the range of contingency theories represents the combination of independently created environments which place severe constraints on the organisation's opportunities, and the nature of change. In cell 2, the concept of strategic choice is shown to reflect the situation where organisations are able to exercise a degree of discretion and choice in their domain definition. Nevertheless, this choice is exercised within the constraints provided by an externally defined, and independent, environment. In cell 3, the principles of environmental enactment are reflected. These assume the existence of an environment which has been created through the actions of the organisational members. As a result, the issue of environmental influence over the organisation is not raised.

Conclusions

Contingency theories, strategic choice and enactment are all valid explanations as to why organisational change occurs. Each embraces a specific set of assumptions about the relationship between the organisation and its environment. It has been argued that all three sets of assumptions are valid at different points in the organisation-environment interface. The extent to which one set of assumptions dominates this interface is a function of the nature of the organisation, as well as the make-up of its task environment.
In the case of the task environment, the presence of other organisations and bodies is of particular relevance.

Throughout each of the interfaces, reactive adaptation and planned change occur in varying combinations. They too, are subject to the nature of the organisation and the make-up of its task environment. The reasons for organisational change, therefore, may ultimately be seen as a reflection of the particular organisation-environment interface.

**How Organisational Change Occurs**

This section discusses the different modes and processes by which organisational change occurs. Two major categories are identified: the evolutionary/incremental change process, and the revolutionary/quantum change process. For reasons of convenience, these will be known as evolutionary and revolutionary change respectively.

The two types of change embrace many different assumptions about organisations and their learning. In describing these, a number of similarities will be noted between evolutionary change and reactive adaptation on the one hand, and revolutionary change and planned change on the other. It should be noted however that while reactive adaptation and planned change describe reasons and motivations behind change, evolutionary and revolutionary change describe the actual processes of organisational change. There are instances, for example, where planned change may well produce a period of evolutionary change if the dominant coalition chooses to engage in gradual, incremental adjustments.

The section covers two major topics. The first is a discussion of the features, processes and implications of revolutionary change, while the second is a similar treatment of evolutionary change.

**Revolutionary Change**

**Introduction**

The concept of revolutionary change has received much attention from researchers in organisation and strategy (Chandler, 1962; Greiner, 1972; Quinn, 1977, 1978, 1985; Miller and Friesen, 1980, 1984; Gluck, 1985). Out of this has emerged a somewhat romantic
stereotype of a dramatic, sudden happening, accompanied by the total destruction of the existing organisation system - an almost cataclysmic event. However, much of the empirical research into organisations reveals a somewhat different picture.

Before providing a definition of revolutionary change, it is necessary to point out an important distinction; that of the difference between the change process itself, and its effects on the organisation. The properties of equifinality and multifinality (Katz and Kahn, 1966; Maruyama, 1968; Wilden, 1972) highlight this difference. In terms of equifinality, two organisations starting out from different states may end up in the same state. In terms of multifinality, two organisations starting out from the same state may end up in different states. Thus, it is misleading to characterise organisational change processes on the basis of the effects produced. For example, very dramatic effects may be due to non-revolutionary changes, and revolutionary changes may not produce dramatic effects. The nature of the actual change process should therefore form the basis of the classification (Ramaprasad, 1982).

Revolutionary change may be said to occur when the entire organisation and culture is redefined (Greiner, 1972; Miller and Friesen, 1980; Gemmill and Smith, 1985). This redefinition may be entirely conceptual, structural, or processual, or a combination of the three (Ramaprasad, 1982). Conceptual redefinition occurs when the organisation alters its collective frame of reference and develops new systems of values, beliefs and basic assumptions. An example may be an organisation which changes from a predominantly product and production orientation to a marketing and customer orientation (Levitt, 1960). Structural redefinition involves a complete change in the patterns of behaviour and interaction amongst organisational members so that the whole organisational structure is altered. An example may be an organisation which becomes more complex as a result of greater role specialisation. Finally, processual redefinition involves the changing of key organisational processes, such as decision-making or control systems. An example may be the organisation that decentralises its decision-making and/or moves to a more indirect form of control.

If revolutionary change is perceived in this way, two major implications emerge for the study of change in organisations. Firstly, the change need not be sudden or dramatic. The redefinition of an organisation's technology base, for instance, may take place over a prolonged period of time, and may go unnoticed by competitors for an equally long period. Secondly, the change need not entail the complete destruction and reconstruction of the organisation. Organisations are able to develop and acquire entirely new
characteristics and abilities without completely changing their form. Thus, a somewhat different picture of revolutionary change emerges. As Ramaprasad (1982) comments,

"...the common stereotype of revolutionary change may indeed make us blind to such changes; and as we are awaiting a cataclysmic event, a revolution may be brewing slowly at our feet." (Ramaprasad, 1982, p.389.)

Features and Characteristics of Revolutionary Change

Revolutionary change processes may be seen to be characterised by four basic phenomena. These are described below:

The Presence of a "Crisis" in the Organisation and/or Environment

Two broad approaches are evident here. The first is the view that factors in the organisation's external environment set up conditions necessary for revolutionary change. Initially expressed by Chandler (1962) in the "Strategy-Structure" thesis, this view is now well accepted in strategic management (Hofer and Schendel, 1978). The second viewpoint is based on the dialectic view that certain factors exist within the organisation itself that set up the conditions necessary for revolutionary change. This is a central principle of the organisational life-cycle perspective, and has also received much support from researchers (Greiner, 1972; Mintzberg, 1973; Miller and Friesen, 1980).

Common to both approaches, however, is the notion that "all is not well" with the organisation and that meaningful change is necessary for its continued survival.

The Presence of Double-loop Learning within the Organisation

Revolutionary change in organisations is rarely able to take place without double-loop learning (Ramaprasad, 1982). Double-loop learning facilitates the development of the organisational frame of reference, and allows the organisation to question its own validity and viability while continuing to function on an everyday basis (Argyris and Schón, 1978; Fløl and Lyles, 1985). Double-loop learning has important implications for revolutionary change:

1. It permits the development of meta-values and meta-norms within the organisation. These values and norms hold the organisation together while the original values and norms are being changed (Waterman, Peters and Phillips, 1980). They are
necessary to prevent the organisation from being destroyed before the changes have been made (Ramaprasad, 1982).

2 Double-loop learning has the potential to influence the whole organisation (Argyris and Schön, 1977). Although the extent of the learning may outwardly appear to impact on only a part of the organisation, the nature of double-loop learning is that it ultimately affects the whole organisation (PIol and Lyles, 1985).

Double-loop learning, therefore, enables the organisation to develop the new cognitive abilities necessary to redefine its conceptual, structural and processual dimensions. Without double-loop learning, organisational members are unable to move "outside" the organisational frame of reference and change the orientation of their organisation.

The Redistribution of Organisational Power

Revolutionary change in organisations is generally accompanied by a redistribution of power (Lewin, 1951; Greiner, 1967, 1972; Tannenbaum, 1968). As discussed previously, the "power-expansion" viewpoint produces the most meaningful insights for organisational change (Tannenbaum, 1968; Pfeffer, 1981; Kanter, 1988). According to this viewpoint, organisational power is expandable and may increase the efficacy of both individuals and the organisation as a whole.

The redistribution of power is a means of overcoming the natural resistance to change produced by the organisational gestalt (Cyert and March, 1963; Tannenbaum, 1968; Mintzberg, 1978). This is achieved by altering the composition of the organisation's dominant coalition (Thompson, 1967; Child, 1972). Since the organisational members who make up the dominant coalition are able to exert disproportionate influence over the activities of the organisation, any changes to the make-up of the dominant coalition will result in a different set of influences being brought to bear on the organisation (Thompson, 1967). In addition, a change to the dominant coalition will alter the particular organisational configuration, thereby destroying the tight integration of the various elements of the organisation - the very heart of the gestalt (Pettigrew, 1973, 1974; Hedberg, 1976; Miller and Friesen, 1980).
Revolutionary Changes are Relatively Rare

Revolutionary changes occur relatively infrequently throughout the history of the organisation's development (Greiner, 1972; Scott, 1973; Abernathy, 1976; Pfeffer, 1981; Mintzberg and Waters, 1985). In their longitudinal study of change in 26 organisations, Miller and Friesen (1980) report that revolutionary change only accounts for some 25 percent of total organisational development and change. In reviewing major contributions to the study of organisational life cycles, Gray and Ariss (1985) and Smith, Mitchell and Summer (1985) note similar findings.

Two factors partially explain why revolutionary change is so uncommon. Firstly, the organisational gestalt creates "bureaucratic momentum" and a natural resistance to change (Mintzberg, 1973; Miller and Friesen, 1980; Cyert and March, 1963). Kuhn (1970) comments that as long as the existing gestalt appears capable of solving the problems it defines for itself, little motivation exists for change. The reasons seem clear:

"As in manufacture so in science - retooling is an extravagance to be reserved for the occasion that demands it." (Kuhn, 1970, p.76.)

Secondly, organisational structures and processes appear, in general, to be basically stable (Miller and Friesen, 1980; Robbins, 1983). As a result, a fairly large repertoire of incremental adjustment and adaptation is possible without the organisation having to undergo revolutionary change (Greiner, 1972; Ramaprasad, 1982).

The dominant tendency of organisations, therefore, is towards current momentum and resistance to change. Revolutionary change involves a major paradigm shift for the organisation and the natural tendency is to resist this.

The Processes of Revolutionary Change

The processes of revolutionary change describe the means whereby the conceptual, structural or processual orientation of the organisation is redefined (Ramaprasad, 1982). Much insight into this process may be gained from the work of Kuhn (1970, 1982), particularly with regard to his notions on scientific paradigms. Organisations are viewed as paradigms of knowledge and values, and the concept of organisational change is therefore analysed from the perspective of a shift and change in these paradigms.
As an earlier quote from Kuhn (1970) indicates, a particular paradigm is not dispensed with just because some anomalous findings run counter to its predictions. Abandoning the current paradigm in favour of another is prompted only by serious crises, coupled with the emergence of more powerful paradigms.

According to Kuhn (1970), revolutions may occur only years after initial anomalies are recognised.

When does the so-called "scientific revolution" occur? Kuhn (1970) argues that the revolution, or the change in paradigm, is brought about by a growing sense that the existing paradigm is no longer able to function adequately in the inquiry and research of phenomena. In other words, the perspective that initially led to the discovery of certain insights, is no longer able to further the development of understanding about these insights.

Using this perspective to analyse organisational change, it would appear that the organisation's members, or at least some of them, begin to realise that the current organisation is no longer able to fulfil the functions and expectations for which it was originally developed. Using various approaches to acquire and develop organisational power, certain individuals seek membership of the dominant coalition (Child, 1972; Kanter, 1983). Their intentions are largely centred around the redefinition of the organisational paradigm, or gestalt (Kuhn, 1982; Kanter, 1983). These new members of the dominant coalition bring with them a different concept of the organisation. Kuhn (1970) notes that these members will pick up the "other end of the stick". The same information and facts will be faced, but the new dominant coalition will place them within a different framework, thereby giving them new meaning (Kuhn, 1970). This view is consistent with the notions of "enactment" (Welcik, 1979) and "defining reality" (Berger and Luckman, 1966).

Although individual cases vary greatly, it is possible to identify a general model which explains the redefinition the organisational gestalt. The model is based on the theory of dissipative structures, which was first developed within the fields of physics and biochemistry (Prigogine and Nicolis, 1977; Prigogine, 1980), and subsequently

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1 The description of the dynamics of the dissipative structure was the basis for awarding the Nobel Prize in Chemistry to Ilya Prigogine in 1977.
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developed as a model for describing change in organisations. In essence, the model may be viewed as a synthesis of the various approaches to revolutionary change in organisations (Gemmill and Smith, 1985). The profound influences come from Weick (1977, 1979) and Argyris and Schön (1977).

The model postulates four stages of revolutionary change:

1. **Disequilibrium**
   Disequilibrium provides the major catalyst for revolutionary change. This generally takes the form of a "crisis" within the organisation itself or within its task environment. The ability of an organisation to perceive a crisis is often a function of the double-loop learning process. Clearly, the nature of the disturbance should be such that the organisation cannot merely make incremental adjustments.

2. **Symmetry breaking**
   This refers to the breaking down of existing relationships within the organisation. These might be conceptual relationships, such as the strategic orientation of the organisation in its task environment. Alternatively, symmetry breaking may refer to a change in the patterns of behaviour as reflected in the organisation structure, or a change in some key processual areas, such as decision-making. This is analogous to Lewin's (1951) concept of unfreezing, where the organisation breaks down established routines and practices.

   Symmetry breaking marks the redistribution of power within the organisation. As members engage in power acquisition, the make-up of the dominant coalition begins to alter. This, in itself, is a major force in changing the organisational gestalt.

   The period of symmetry breaking is a critical time for the organisation. While it is necessary to engage in symmetry breaking in order to ultimately redefine a new organisational gestalt, the process itself may often be dysfunctional. Symmetry breaking is essentially the breaking down of members' resistance to change, and the period may be extremely disruptive and traumatic (Kanter, 1983). To assist organisational members through the transition, the development of meta-values and meta-norms becomes necessary.

3. **Experimentation**
   The experimentation phase describes the period during which the organisation tries out several alternative configurations and forms. Although the "vision" provides a
general picture of the new organisational gestalt, many details have to be worked out after the period of symmetry breaking. As Ashby (1956) notes, the generation of novelty and variation is ultimately the organisation's best tool for dealing with the demands of revolutionary change. It is the ability of the organisation to reproduce what appear to be errors, that allows it to generate a sufficient variety of new forms (Bronowski, 1970). Peters and Waterman (1982) point out that the ability of organisational members to make mistakes is a major contributing factor to organisations being able to cope with difficult conditions of change.

Reformulation
This phase marks the "bedding down" of the preferred configuration. Having experimented with various organisational forms and configurations, the organisation settles down and begins developing a degree of synergy. This is the final stage of the redefinition of the organisational gestalt and represents a change from the original (pre-revolution) conceptual, structural and processual orientation. Although the theoretical definition of revolutionary change includes changes in any one of the three orientations, in practice it generally involves changes in all three. Because the conceptual, structural and processual orientations of the organisation are simply different manifestations of the same phenomenon (the construct of basic assumptions, values, beliefs and patterns of behaviour), they are generally seen to change in sympathy with each other.

With the redefinition of the organisational gestalt, the organisation is said to have reached the end of its period of revolutionary change. From this point on, the organisation evolves incrementally in response to both internal and external factors, until the next crisis is identified (Greiner, 1972).

The model above serves as something of a synthesis of a number of theories and approaches to organisational change (Gemmill and Smith, 1985). As Jantsch (1980) points out, the dissipative structures theory, upon which this model is based, expresses an associated ordering of elements and processes that exist across biological, organisational and social frameworks. As such, it is seen as providing meaningful insight into the process of revolutionary change in organisations.
The Causes of Revolutionary Change

In a sense, the causes of revolutionary change in organisations have already been identified above in the discussion on features and processes. It has been established that the presence of a crisis, either internal or external to the organisation, sets up the conditions for disequilibrium. However, what remains to be discussed are the reasons which give rise to revolutionary change instead of evolutionary, incremental adjustment. What are the factors that promote revolutionary change over and above the less traumatic incremental evolution?

Miller and Friesen (1980) point out that the pervasiveness of the current organisational gestalt often results in extremes and excesses in certain areas within the organisation. The particular organisational configuration may give rise to increasingly ineffective and inefficient practices. Clearly, these conditions may have been developing over a long period of time, but the problems may only have advanced incrementally. At a certain stage, however, a watershed of dissatisfaction occurs amongst organisational members as the incrementally enveloped problems begin to assume major proportions (Miller and Mintzberg, 1974; Hedberg, 1973, 1974). In order to rectify these conditions and problems, a piecemeal approach is no longer suitable (Hedberg et al., 1976). What is required is a substantial revolution within the existing organisational configuration (Miller and Mintzberg, 1974; Starbuck et al., 1978). This implies redefinition of the entire organisational gestalt.

It would appear, therefore, that a stage is reached when members' dissatisfaction with the apparent inability of the organisation to cope with an internal and/or external crisis, reaches a critical stage. It is difficult to define the point at which this stage is reached. A sufficient crisis is needed to create the degrees of freedom within which symmetry breaking can begin (Gemmill and Smith, 1985). Golembiewski, Billingsley and Yeager (1975) note that sometimes only a small jolt is required to push the organisation into a state of crisis or disequilibrium as in the "straw that broke the camel's back". Nevertheless, the crisis, and the level of dissatisfaction amongst organisational members, is sufficient to result in a change in the make-up of the dominant coalition.

This view of revolutionary change is well portrayed in Greiner's (1972) analysis of organisational development. Organisations are seen to move through successive periods of evolutionary development and revolutionary change. The conditions for the revolutionary change are set up during the periods of evolution. Argyris (1982) notes that
a degree of internal dialectic is responsible for these changes in the organisational gestalt, and the series of crises which pre-empt these changes are produced by the particular organisational gestalt at that time (Greiner, 1972). Each crisis is marked by a degree of dissatisfaction amongst organisational members. This results in a change of orientation amongst the dominant coalition, or even a change in the dominant coalition itself. Thus, the organisational gestalt, which produces the synergy and cohesion necessary for efficiency, often produces the very conditions necessary for organisational change.

**Evolutionary Change**

**Introduction**

In many ways, evolutionary change is the antithesis of revolutionary change. Whereas revolutionary change involves the redefinition of the organisational gestalt, evolutionary change retains the same basic organisational form. Similarly, where revolutionary change is marked by a redistribution of power and change in the composition of the dominant coalition, evolutionary change retains the same power structures and dominant coalition.

Evolutionary change involves an incremental adjustment of the organisation without the development of a new organisational gestalt.

Evolutionary change describes the continuous, evolving interaction amongst members in response to certain organisational and/or environmental pressures (Quinn, 1977). Unlike revolutionary change, in which the new dominant coalition influences the prevailing organisational frame of reference, no specific 'vision' of an alternative organisational gestalt is presented to members (Quinn, 1978). An essential feature of evolutionary change is that the current organisational frame of reference remains undisturbed, and that only general aims and objectives are articulated by the dominant coalition (Quinn, 1977, 1978, 1980).

Evolutionary change is what takes place in the organisation when there is no revolutionary change. It is the major mode of organisational change, in that it occurs during the relatively lengthy periods between organisational revolutions (Greiner, 1972; Scott, 1973; Mintzberg and Waters, 1985). It may further be referred to as the process of organisational refinement (Foster, 1985).
Features and Characteristics of Evolutionary Change

Although evolutionary change is essentially the antithesis of revolutionary change, it presents a number of distinctive characteristics. These are described below:

Evolutionary Change is a Reflection of Organisational Momentum:

The description of evolutionary change as the process that occurs between revolutions, is an apt one. The periods between revolutions represent relative stability and consolidation (Greiner, 1972; Mintzberg and Waters, 1985). Organisations, however, are dynamic and they are continually engaged in enacting parts of their environment, and responding to other parts. As a result, the period of stability and consolidation reflects a degree of movement, albeit along a predictable path. Organisational momentum is therefore a dynamic description of the organisation as it changes and responds in its environment.

The important point to note is that the nature of these changes is both prescribed and curtailed by the various integrating and controlling devices of the organisation (Berger and Luckman, 1966). These, in turn, are largely influenced by the organisational frame of reference (Hedberg, 1981). Thus, the current momentum of the organisation is merely a reflection of the current organisational gestalt, and, the current organisational gestalt is a product of the previous revolutionary change.

Evolutionary change is an ongoing phenomenon. A number of reasons exist to explain this. Firstly, the organisation develops “bureaucratic momentum” (Quinn, 1977; Mintzberg, 1978). The organisational gestalt which emerges shows a particular tendency to perpetuate itself (Miller and Friesen, 1980; Miles and Snow, 1978; Mintzberg and Waters, 1985). Secondly, the individual organisational members resist change. The current organisational form represents a “zone of comfort” and the fear of uncertainty is often great (Cyert and March, 1963; Kotter and Schlesinger, 1979; Lorsch, 1974). Furthermore, a belief exists that the organisation has only one steady state and any movement away from this will result in severe problems and performance deterioration (Ramaprasad, 1982). Finally, organisational forms appear to remain essentially stable over periods of time (Burns and Stalker, 1961; Kuhn, 1970; Robbins, 1983). This would seem to indicate that a broad range of adjustment is possible without any real alteration to the organisational gestalt (Ramaprasad, 1982).
Gestalt Maintenance

Evolutionary change is marked by the maintenance of the current organisational gestalt. Gestalt maintenance implies little or no change to the make-up of the dominant coalition. This is a distinctive feature of evolutionary change (Greiner, 1973; Scott, 1973). Although the views of the dominant coalition may evolve in response to organisational and environmental needs, the overall organisational frame of reference remains unaltered (Argyris and Schön, 1977; Hedberg, 1981). Unlike in the process of revolutionary change, the dominant coalition does not seek a change in the organisational frame of reference through the presentation of a "vision for the future" (Quinn, 1978; Pettigrew, 1979). As a result, there is little or no "outside input" into the existing system of basic assumptions, values and beliefs (Mannheim, 1956; Pascale, 1984, 1985).

The lack of infusion of new knowledge and values into an organisation or culture is essentially a lack of double-loop learning (Argyris and Schön, 1977; Fiol and Lyles, 1985), and reflects a distinction to question the validity of values, beliefs and behaviours. Single-loop learning results in the organisation developing largely primitive associations between cause and effect in its social environment (Fiol and Lyles, 1985). No major changes or additions to its repertoire of capabilities are therefore effected.

There are two major outcomes from the single-loop learning. Firstly, because single-loop learning involves little change to the overall system of values and knowledge, the current organisational form is "bedded down". This marks the transition from revolutionary change to evolutionary change, and indicates the consolidation period in the organisation's history. It is this period of stability that allows for the promotion of synergy within the organisational configuration and the ultimate development of the organisational gestalt (Mitroff and Kimlan, 1976; Miller and Friesen, 1980). In addition, this period facilitates the improvement in efficiencies within the behaviour patterns of members (Sathe, 1985). Weick (1987) notes that the consistency in the organisation and culture promotes reliability in the role behaviour of members. Fouter (1985) adds that this may be described as a period of organisational refinement, as the single-loop learning "fine tunes" the organisational gestalt (Fiol and Lyles, 1985).

The second major implication of the single-loop learning is, in a sense, the opposite of the first. Whereas single-loop learning facilitates an improvement in organisational efficiencies
by leaving the basic configuration and gestalt unaltered, the organisational effectiveness is at risk.

Single-loop learning does not question the viability or validity of the organisational gestalt; it merely seeks improvements within it (Argyris and Schön, 1977; Fiol and Lyles, 1985). As a result, the effectiveness of the organisation may slowly erode during periods of evolutionary change. This lack of effectiveness continues until the dissatisfaction produced by the anomalous findings causes a revolutionary change, and the paradigm is replaced by another (Kuhn, 1970). Organisations slowly lose their effectiveness during the process of evolutionary change as a result of the predominantly single-loop learning mode.

A final insight into the trade-off of effectiveness for efficiency is provided by Greiner (1972). The important point to note is that the periods of evolution actually set up many of the conditions necessary for the subsequent revolution. Each period of evolution causes a build-up of dissatisfaction, which eventually culminates in a crisis, and a resultant revolution.

**Uncertainty about the Future**

Evolutionary change is generally marked by an uncertainty regarding the future. This relates both to uncertainty regarding factors within the environment, as well as cause-effect relationships within the organisation.

In general, evolutionary change occurs within a “wait and see” climate. Where a great number of unknowns and uncertainties prevent a clear picture or vision of the future from being articulated, organisations tend to avoid laying out specific plans and objectives regarding the change process (Quinn, 1977, 1980).

By keeping their options open within the current organisational gestalt, organisations are able to collect more information before committing themselves to a specific course of action (Aaker and Mascarenhas, 1984). It must be emphasised that this “flexibility” should be viewed within the context of the current organisational configuration. Any meaningful changes to the orientation of the organisation will constitute revolutionary change (Ramaprasad, 1982). Therefore, the extent of the true flexibility of the organisation is a function of its single-loop learning. Nevertheless, evolutionary change usually gives the organisation the impression that it is keeping its options open and avoiding rigidity in its change agenda (Bourgeois, 1984).
Despite the limitations of the "flexibility" evident during periods of evolutionary change, the practice of not introducing explicit plans and objectives has the advantage of maintaining the current level of member commitment and loyalty (Quinn, 1985). By not outwardly attempting to alter the members' psychological contracts with the organisation, the resistance to change is reduced (Kotter and Schlesinger, 1979; Lorsch, 1974). In this way, the members' commitment is retained and their resistance to change suppressed, until the organisation and its dominant coalition have a specific agenda for organisational change (Quinn, 1980, 1985).

The Process of Evolutionary Change

The process of evolutionary change has earlier been described as the "bedding down" of the organisational form. Unlike the process of revolutionary change, no clearly discernible stages are evident. Instead, the process of evolutionary change is best described as the movement along a two-factor continuum. This is illustrated by Figure 7.6 below:

![Figure 7.6 A Model of Evolutionary and Revolutionary Change in Organisations](image)

It is easy to fall into the deterministic trap and assume the inevitability of the cycle of organisational momentum and resultant revolution. This is not the intention of this model. The model aims to show that the local single-loop learning mode during periods of evolutionary change and organisational refinements often results in a deterioration of the effectiveness of the organisation. It is this factor, by and large, which contributes to the onset of crisis and ultimate revolution. While the organisation and the dominant coalition refrain from articulating new goals and plans, the organisation "beds-down" and develops
synergics and efficiencies. The result is often a degree of “bureaucratic momentum” that produces high levels of resistance to change. Ironically, these are the very factors that the organisation hoped to avoid by refusing to make its objectives explicit! In addition, a revolutionary change is now needed to restore the level of organisational effectiveness.

Summary and Conclusions on Organisational Change

An Integrated Perspective of Organisational Change

This chapter has demonstrated that a broad perspective is required to understand organisational change. This perspective produces a general taxonomy of change in organisations, and it uses it to discuss change in greater detail. The taxonomy produces two continua to describe the “why” of organisational change on the one hand, and the “how” on the other. Planned Change and Reactive Adaptation represent the polar extremes of the reasons and motivations for organisational change, while Revolutionary Change and Evolutionary Change describe the range of processes whereby organisations undergo change.

The numerous perspectives produce a rich and multi-faceted view of organisational change which is not possible from a unitary viewpoint. The functionalist perspective reinforces the notion of the interface between the organisation and its environment, and highlights the interdependencies between the various elements in the organisation and its environment. The interpretive perspective, on the other hand, presents a more holistic view of the organisation, and introduces the relationships which exist between assumptions, values and behaviour. Furthermore, it provides insight into the concept of the organisational frame of reference, and its influence over strategic behaviour.

Change is Either Planned or Reactive

Reactive adaptation and planned change mark the polar extremes of the continuum which describes why organisational change occurs. Reactive adaptation is viewed as a highly deterministic viewpoint which describes the tendency of the organisation to adjust to the demands of its environment. A major characteristic of reactive adaptation is that there is
no major shift in the organisational gestalt. Reactive adaptation occurs mainly to ensure organisational efficiency, and is thus marked by predominantly single-loop learning.

Planned change, on the other hand, involves a conscious desire of the dominant coalition to bring about organisational change and thus involves double-loop learning. Much of planned change is concerned with overcoming the resistance to change produced by the organisational gestalt.

A Multiple Viewpoint of the Environment

Two key dimensions are revealed in the relationship between the organisation and its environment. The origins of the environment range from being independently and externally determined, to being created or enacted by the organisation. The influence of the environment on the organisation, on the other hand, ranges from being very powerful to somewhat insignificant. Depending on several factors relating to the organisation and its task environment, the organisation falls somewhere along the two continua. As a result, organisations are involved in varying degrees of strategic choice, enactment, and the application of traditional contingency theories.

Change Is Either Revolutionary or Evolutionary

The range of processes describing organisational change is marked by revolutionary change at the one end, and evolutionary change at the other. In describing revolutionary change, a distinction is made between the actual process of change, and the effects it produces. Revolutionary change is seen as the process whereby the conceptual, structural and/or processual orientation of the organisation is redefined. Revolutionary change is generally an attempt to redress the declining effectiveness of the organisation and is marked by a crisis within the organisational environment. The concept of scientific paradigms is used to demonstrate how revolutionary change occurs when the degree of dissatisfaction overcomes the natural resistance to change in the organisation. Revolutionary change thus describes a change in the organisational gestalt.

Evolutionary change, on the other hand, is a manifestation of the ongoing, incremental adjustments which take place while the current gestalt is retained. It is the more common form, or process, of organisational change and is generally viewed as the refinement of the
current gestalt. However, while the process of refinement continues, the organisation's effectiveness may often be seen to be steadily declining.

**Initiating Change Means Overcoming Resistance**

Organisational change is usually initiated by the dominant coalition. It has the ability to rise above the organisational frame of reference through the process of double-loop learning. As a result, the intended change represents assumptions, values and behaviours outside the organisation's current frame of reference. This is a primary cause of resistance to change, and represents a major focus in the agenda of the dominant coalition.
Chapter 8

Organisational Forms
Organisational Forms

Introduction

Previous chapters have described organisations as three-level constructs of assumptions, values and beliefs, and physical manifestations. As a result of its particular form at any point in time, the organisation is also seen to display considerable resistance to change. The particular organisational form, as organisation history reveals, can be fairly resilient and enduring. Although organisations can and do undergo change, the prime tendency is towards stability.

The primary objective of this chapter is to systematically order and explain various organisational forms. The chapter will outline a classification system within which the variations in assumptions, values and beliefs, and physical manifestations can be explained. Two broad streams of thought and research will be identified and integrated. The first is the research into personality types and management styles which has developed out of Carl Jung's work. The second stream of research is the ongoing programme into organisational effectiveness (OE). This research focuses on identifying the range of criteria that organisations use to evaluate effectiveness. By synthesising these two research frontiers, an integrated framework will be developed which may be used to explain variations in organisational forms.

This chapter is comprised of three sections. Section one outlines the basic dimensions of the Jungian personality model and shows how these have been applied in management and organisational research. Section two identifies the objectives and findings of the OE research programme and analyses some of the models of organisational effectiveness that have been developed. Finally, the third section integrates these two perspectives and develops a coherent framework to explain variations in organisational forms.
Jungian Personality Dimensions

Carl Jung

Initially a close friend of Freud's, and at one time the heir-apparent to Freud as the leader of the psychoanalytic movement, Jung eventually fell out with Freud. Jung's sharpest breaks with Freudian theory concerned his postulate of the collective unconscious (Bruno, 1972).

Jung argues that people possess two unconscious minds (Jung, 1959). The personal unconscious contains memories that are recalled by free will, while the collective unconscious is a collection of inherited thought patterns. These inherited thought patterns are known as archetypes and produce images and patterns of consciousness that "appear to come from nowhere" (Bruno, 1972).

The archetypes of the collective unconscious are viewed as being a priori, that is, they exist as primitive patterns before experience within the unconscious of individuals. By interacting with the specific experiences that the individual may encounter, they give rise to individual ideas. Thus, archetypes are not ideas in themselves, but only general tendencies (Jung, 1959).

Jung used the concept of archetypes to derive his theories of personality. In this respect, personality is seen to be made up of a number of continua which represent the various dimensions of personality (Bruno, 1972). By locating positions along these dimensions, it is possible to describe various types of personalities.

Jungian Dimensions of Personality

Based on Jung's work, Myers and Briggs (1962) developed a series of test batteries to identify personality types of individuals. This work serves to operationalise a number of dimensions implicit in Jung's personality archetypes.

The two dimensions that have been most widely used in management and organisation-related research are those of perception and judgment (McKenney and Keen, 1974; Mitruff and Mason, 1981; Mitruff, 1983; Greig, 1984). Perception is the
process of "becoming aware" of things, occurrences and ideas, and may therefore be seen as a data-input function (Myers, 1962). Judgement, on the other hand, is the process of coming to conclusions about what has been perceived, and may therefore be thought of as a major component of the decision-making style of individuals (Myers, 1962).

Perception

The perception dimension analyses the means whereby individuals receive information from their environment. The continuum may be presented as follows:

![Jung's Continuum of Perception](attachment://jung_continuum.png)

Sensing, as the word implies, is the "natural" way, using the five senses, of becoming aware of phenomena (Ramaprasad and Mitroff, 1984). People who rely on sensation tend to focus on detail, specifics and the "here and now" (Mitroff and Mason, 1982). Sensing types tend to break every situation down into isolated parts and feel most comfortable when they are in possession of "hard facts" pertaining to the situation (Mitroff, 1983).

Intuiting, in contrast, is indirect perception through the unconscious (Myers, 1962). In this form of data-input, ideas or associations from the unconscious are combined with perceptions coming from "outside" (Ramaprasad and Mitroff, 1984). People who rely on intuition glean information from their imagination (Mitroff and Mason, 1981). They focus on the whole, or the gestalt, and think about what "might be". As a result, they focus on hypothetical possibilities rather than getting bogged down and constrained by a multitude of hard facts (Mitroff, 1983).

Most individuals perceive their environment in both modes at different times. But, as Jung argues, individuals tend to develop a habitual way of perceiving a situation. Indeed, they
are usually unable to apply both types of perception, or data-input, at the same time (Jung, 1968).

Judgement

The judgement dimension analyses the means whereby individuals evaluate the information they have perceived and come to conclusions about particular situations. This continuum may be represented as follows:

![Jung's Continuum of Judgment](image)

Thinking is the logical and "rational" process which is aimed at an objective and impersonal finding on the basis of the facts of the situation (Myers, 1962). People who rely on thinking to evaluate a situation tend to employ formal and theoretical models of reasoning. Thinking-types generalise (Mitroff and Mason, 1981). They seek common dimensions in situations and express them in abstract and theoretical terms. In general, they feel uncomfortable unless they have a logical or analytical basis for making a decision (Mitroff, 1983). As a result, thinking will seek to find areas of similarity amongst inherently different phenomena and express these as theoretical, or abstract, concepts.

Feeling, on the other hand, is the personal, subjective and value-laden process of judging (Myers, 1962). People who rely on feeling to evaluate a situation use their own unique past experience to particularise the situation (Mitroff and Mason, 1981). They are sensitive to people and to individual differences. In general, they focus on judgements of good or bad, pleasing or unpleasing, and likeable or unlikable. As a result, feeling will seek to personalise every situation by stressing its individual uniqueness (Mitroff, 1983). Feeling, therefore, emphasises differences between situations and expresses these in personal, value-laden terms.
By combining the dimensions of perception and judgement, it is possible to gain some insight into the four basic personality archetypes that Jung postulates. A detailed analysis of these personality types is not intended, as this falls outside the scope of this dissertation. It is hoped, however, that the brief discussion of the personality archetypes will provide the necessary background information for an analysis of organisational forms. [For a more detailed discussion on Jungian personality types, see Myers, 1962].

![Diagram of Basic Jungian Personality Archetypes](source)

**Figure 8.3: Basic Jungian Personality Archetypes**


**ST:**

Sensing-thinking personality archetypes tend to be analytical and scientific in their approach and usually focus on detail (Mitroff and Mason, 1981). They are realistic and down-to-earth and, more often than not, narrowly economic. Control, order and stability are the generally preferred values (Mitroff, 1983).

**NT:**

Intuiting-thinking personality archetypes are conceptual and theoretical in their approach and are concerned with the reasoning behind their ideas (Mitroff and Mason, 1981). They are interested in the general concepts and issues, rather than the minute detail of precisely
defined events. As a result, they are broad conceptualisers and tend to focus on the problem definition, rather than the details of its solution. Flexibility and adaptability are the preferred values (Mitroff, 1983).

**NF:**

Intuiting-feeling personality archetypes are humanistic, conceptual and theoretical in their approach. They tend to focus on social and cultural issues (Mitroff and Mason, 1981). NF personalities are somewhat idealistic, and value flexibility and individuality in their interpersonal relationships. They are oriented towards the long-term and towards people. Preferred values are flexibility and creativity (Mitroff, 1983).

**SF:**

Sensing-feeling personality archetypes are humanistic, but particularistic, in their approach. They tend to focus on the plight and concerns of individuals (Mitroff and Mason, 1981). SF personalities do not care much for theory or general concepts, but are concerned instead with detailed human issues. They tend towards the details and facts and are therefore fairly realistic. The preferred values for SF personalities are personal warmth and interpersonal harmony (Mitroff, 1983).

The dimensions of perception and judgement, as well as the four personality archetypes presented above, have found acceptance in a range of management and organisational research. The four archetypes have been applied to management and decision-making styles, to the analysis of tasks and roles and even to the design of organisations. These areas of application are the major concern in this dissertation, and it is to this that we now turn our attention.

**Jungian Archetypes in Management and Organisational Research**

In outlining the management and organisational research applications of the Jungian archetypes, each of the four types will be discussed. For a summary of the various management and organisational characteristics of the four types, refer to Table 8.1 at the end of this section.
Sensing-Thinking (ST)

Decision Making

The sensing-thinking style has been termed the "Systematic Approach" to management and decision-making (Nutt, 1975). Systematic decision-making focuses on the facts and technical details of the situation. In an attempt to achieve an objective finding, the process involves the logical and rational analysis of hard data (De Waele, 1978, 1980).

Systematic decision-making may also be termed as "left-brain dominated", in that the processes used are primarily analytical and deductive (Agor, 1984, 1986). These approaches to problem solving involve breaking the problem down into its constituent parts and then approaching the problem in a sequential manner, applying logic at each stage. Sometimes, however, Systematic decision-makers are unable to "see the wood for the trees" in the sense that the propensity for analysing minute detail and facts may result in a loss of overall perspective (Hellriegel and Slocum, 1975; Henderson and Nutt, 1980).

Systematic decision-makers are further limited by the presence of so-called "wicked problems" where the complexity of the underlying issues and the absence of a meaningful solution surpass the ability of analytical and deductive thinkers (Rittel, 1971; Mitroff and Mason, 1981).

Management Style

A Systematic management style involves the practical implementation of systems and solutions which have been analytically and logically decided upon (Doktor, 1978). Systematic managers maintain an operational focus over their organisational domain and exercise impersonal, but realistic, supervision and control. They are extremely loathe to allow exceptions and variations into work practices, and define their subordinates' roles fairly narrowly (Kilmann and Mitroff, 1978). They perform their role unemotionally, and see people as "objects". Their primary goals and values are internal physical efficiency for the organisation (De Waele, 1978; Mitroff, 1983). As a result, they prefer situations that are structured and carefully planned and usually make use of direct forms of control (Agor, 1984, 1986).
Role Structure

Organisational roles and tasks may also be meaningfully described by way of Jungian archetypes (McKenney and Keen, 1974; Kilmann and Mitroff, 1976; Handy, 1978). The ST-type roles, as the description implies, fall at the sensing and thinking ends of the perception and judgement dimensions respectively. "Sensing" may be viewed as perceiving information within a task environment in which information is obvious and known to the member, and "thinking" is indicative of information manipulation and conceptual processes that are subject to clearly defined and explicit rules (McKenney and Keen, 1974). The major skill requirement is that of planning and the primary work effort involves the rearranging of data into a format which can be used as an input to a well-defined operation (McKenney and Keen, 1974; Kilmann and Mitroff, 1976). These tasks generally involve some sort of quantitative application (Agor, 1984). Examples of roles like these include production management, accounting, engineering and computing (Greig, 1984).

Organisational Forms

The ST-type organisation embraces many of the assumptions stated above. ST-type organisations are centralised and formalised and display relatively high degrees of stratification (Kilmann and Herden, 1976; Greig, 1984). The patterns of member interaction are relatively impersonal and attention is paid to detail and well-defined work roles in order to exclude ambiguity and uncertainty (Handy, 1978). ST organisations are characterised by high degrees of control, usually of the direct type (Mitroff, 1983). The emphasis is on the work and organisational roles, rather than on the particular individuals who fill these roles. The goals of ST organisations are realistic, limited in scope and time horizon and more often than not, narrowly economic (Mitroff, 1983). They are usually concerned with precise measures of input to output, or technical efficiency (Greig, 1984).

Intuiting-Thinking (NT)

Decision Making

The intuiting-thinking style has been referred to as the "Speculative Approach" to management and decision-making (Nutt, 1979). Speculative decision-making focuses on
Chapter 8

Management Style

The Speculative management style typically adopts a broad, strategic focus on work output of the organisation (Kilmann and Mitroff, 1976). Speculative managers are usually impersonal, but idealistic. They appear to be divorced from reality and have their "heads in the clouds" (Gregg, 1984). Because their objectives are usually framed in terms of external physical efficiency, they seem somewhat oblivious to operational detail (Mitroff, 1983). As a result, they may often appear as condescending, and even remote (De Waele, 1980).

Role Structure

NT-Type tasks and roles are characterised by unknown information and data (intuiting), and known information manipulation and conceptual processes (thinking) (McKenney and Keen, 1974). In other words, the required operations and methods are known, but the data involved is not. These are generally known as Intelllgence-search type jobs, where the prime focus is on the collection of relevant information. Examples of these organisational roles are market research, design work and logistics analysis (Gregg, 1984; Kilmann and Herden, 1976).

Organisational Forms

NT-Type organisations display an underlying order and structure with well-defined objectives and strategic plans (Kilmann and Herden, 1976; Gregg, 1984). However, there is often little concern for administrative and personal details, as long as the objectives are met (Mitroff, 1983). NT organisations do not focus much on detailed rules or lines of authority, but are concerned instead with general concepts and issues. Their goals are framed in terms of broad, imprecise macro-economic issues. As a result, NT organisations are impersonal, but idealistic in their overall goals and objectives (Kilmann and Mitroff, 1976; Mitroff, 1983). NT organisations are fairly adaptive in their interaction with the
external environment. Because of their broader role definitions, individuals and groups within the organisation are flexible in their patterns of interaction and can therefore respond more readily to changing situations (Mitroff, 1983). NT organisations are thus primarily externally oriented, with the emphasis on "organisation-environment alignment".

Intuiting-Feeling (NF)

Decision Making

The intuiting-feeling style may be termed the "Intuitive Approach" to management and decision-making (Nutt, 1979). Intuitive decision-makers focus on broad concepts and social possibilities in the various situations they confront (De Waele, 1980). In general, their decision-making is characterised by an attempt to develop a feeling and sensitivity for the broader issues that they and their organisations face (Henderson and Nutt, 1980). In direct contrast to Systematic (ST) decision-making, Intuitive decision-making is known as a predominantly "right-brained approach", because of its reliance on Intuition and Induction (Agor, 1984, 1986). Intuitive decision-makers adopt a holistic perspective and approach problems using a variety of patterns and hunches. As a result, they prefer situations that are fluid, unstructured and spontaneous and in which they are expected to challenge traditional approaches and assumptions (Doktor, 1978; Agor, 1984).

Management Style

Intuitive managers are often inspired by Insight and a "vision for the future" (Mitroff, 1983). They display a concern and flexibility about human issues and are highly personal and idealistic in their thinking (Kilmann and Mitroff, 1976; De Waele, 1980; Grelg, 1984). Their goals and objectives are framed in terms of achieving an external social effectiveness (Handy, 1978; Mitroff, 1983), that is: they have idealistic goals to achieve things of significance in the organisation's external environment. They also have the ability to give the organisation a sense of direction in the pursuit of these external objectives (Pettigrew, 1979). This is often achieved through the use of collegial and participatory authority structures, where Intuitive managers are able to interact with their colleagues and to influence them personally (Agor, 1984).
Role Structure

In NF-type roles and tasks, both the information required, as well as the manipulation and conceptual processes required, remain largely unknown. In these roles and tasks, individuals engage in a conscious search for cues and explanatory concepts, together with a quest for the development of methods for manipulation of the data thus gathered (McKenney and Keen, 1974). Examples of NF-type roles and tasks in organisations include promotional activities, the marketing function and employee counselling.

Organisational Form

NF-type organisations are typically decentralised with relatively few structural constraints (Nutt, 1979; Kilmann and Mitroff, 1976). These organisations, despite being focused on broad social issues in the external environment, are concerned with the personal and human affairs of their members (Mitroff, 1983). As a result, authority and leadership structures are fluid and no fixed pattern of behaviour and interaction exists. NF-type organisations often develop somewhat idealistic goals which focus on the broader social issues. They are relatively organic and fluid and are able to adapt and respond rapidly to different conditions. NF-type organisations, in summary, are primarily concerned with long-term, external matters, and with people (Kilmann and Mitroff, 1976; Mitroff, 1983).

Sensing-Feeling (SF)

Decision Making

The sensing-feeling style has been termed the "Judicial Approach" to management and decision-making (Nutt, 1979). Judicial decision-makers focus on the facts of individual realities and display a good feeling for human detail (Kilmann and Mitroff, 1976; De Waele, 1978). As in the case of Systematic decision-makers, they often miss the "big picture". The sometimes over-concern for human values displayed by Judicial decision-makers may result in a neglect of the larger issues (Henderson and Nutt, 1980).

Management Style

Judicial managers are sensitive to issues of morale and motivation and show concern for the improvement of human reliability (Doktor, 1978). They are personal and realistic in
their approach to colleagues and subordinates (Kilmann and Mitroff, 1976). As a result, their primary goals and objectives centre around the improvement of internal human effectiveness (Mitroff, 1983), that is; they seek to create an organisational environment in which individual members are able to develop and make meaningful contributions.

**Role Structure**

SF-type roles and tasks are characterised by data and information that is known, and an uncertainty on how to manipulate and process it (McKenney and Keen, 1974). The major problem in this work environment is how to use the available information to achieve the desired ends. Examples of SF-type roles in organisations include sales, public relations and health care (Greig, 1984).

**Organisational Form**

SF-type organisations are typically decentralised with broad, but well-defined role definitions (Nutt, 1979; Greig, 1984). These organisations do not concern themselves with theory and general issues, but focus instead on the detailed aspects of human relationships. They are concerned with the human and personal qualities of the specific people who fill the organisational roles (Mitroff, 1983). SF-type organisations are realistic, as opposed to the idealism of the NT- and NF-types. Despite the realism, the goals and objectives of SF-type organisations are to create a warm and friendly organisational environment, so that individual members feel welcome and needed (Mitroff, 1983). As a result, their major focus is internal towards individual members.

See Table 8.1 below for a summary of the four archetypes:
<table>
<thead>
<tr>
<th></th>
<th>Sensing</th>
<th>PERCEPTION</th>
<th>Intuiting</th>
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<tbody>
<tr>
<td><strong>Thinking</strong></td>
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<tr>
<td><strong>JUDGEMENT</strong></td>
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<tr>
<td><strong>Feeling</strong></td>
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<tr>
<td><strong>Decision Making:</strong></td>
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<tr>
<td><em>Systematic Approach</em></td>
<td>focus on facts and technical detail</td>
<td>logical analysis of hard data</td>
<td>focus on concepts and technical possibilities</td>
</tr>
<tr>
<td>MANAGEMENT STYLE:</td>
<td>practical implementation of solutions</td>
<td>operational focus on work role</td>
<td>conceptualisation of opportunities</td>
</tr>
<tr>
<td>ROLE STRUCTURE:</td>
<td>known Information, known processes</td>
<td>production management, accounting, engineering</td>
<td>unknown Information, unknown processes</td>
</tr>
<tr>
<td>ORGANISATIONAL FORM:</td>
<td>centralised, stratified, formalised</td>
<td>rigidly and tightly controlled</td>
<td>decentralised, few structural constraints</td>
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<tr>
<td><strong>Management Style:</strong></td>
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<tr>
<td>practical focus on work role</td>
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<tr>
<td><strong>Role Structure:</strong></td>
<td>known Information, known processes</td>
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<tr>
<td><strong>Organisational Form:</strong></td>
<td>centralised, stratified, formalised</td>
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<tr>
<td><strong>Decision Making:</strong></td>
<td><em>Speculative Approach</em></td>
<td>focus on concepts and technical possibilities</td>
<td>logical analysis of broad issues</td>
</tr>
<tr>
<td>MANAGEMENT STYLE:</td>
<td>conceptualisation of opportunities</td>
<td>broad strategic focus in work output</td>
<td>personal, idealistic</td>
</tr>
<tr>
<td>ROLE STRUCTURE:</td>
<td>unknown Information, unknown processes</td>
<td>market research, design, logistics, analysis</td>
<td>concerned for external efficiency in dealings with environment</td>
</tr>
<tr>
<td>ORGANISATIONAL FORM:</td>
<td>decentralised, few structural constraints</td>
<td>flexible controls, value and norm based</td>
<td>concern for external, human matters</td>
</tr>
<tr>
<td><strong>Management Style:</strong></td>
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<td></td>
<td></td>
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<tr>
<td>practical focus on work role</td>
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<tr>
<td><strong>Role Structure:</strong></td>
<td>known Information, known processes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Organisational Form:</strong></td>
<td>centralised, stratified, formalised</td>
<td></td>
<td></td>
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<tr>
<td><strong>Decision Making:</strong></td>
<td><em>Judicial Approach</em></td>
<td>focus on facts and individual reality</td>
<td>feeling and sensitivity for human detail</td>
</tr>
<tr>
<td>MANAGEMENT STYLE:</td>
<td>creation of cohesion and good morale</td>
<td>personal, realistic</td>
<td>personal, idealistic</td>
</tr>
<tr>
<td>ROLE STRUCTURE:</td>
<td>known Information, unknown process</td>
<td>sales, public relations, health care</td>
<td>unknown Information, known process</td>
</tr>
<tr>
<td>ORGANISATIONAL FORM:</td>
<td>decentralised with broad role definitions</td>
<td>well defined controls, value and norm based</td>
<td>decentralised, few structural constraints</td>
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<tr>
<td><strong>Management Style:</strong></td>
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<td><strong>Role Structure:</strong></td>
<td>known Information, known processes</td>
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<tr>
<td><strong>Organisational Form:</strong></td>
<td>centralised, stratified, formalised</td>
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<tr>
<td><strong>Decision Making:</strong></td>
<td><em>Intuitive Approach</em></td>
<td>focus on broad concepts and social possibilities</td>
<td>feeling and sensitivity for broad issues</td>
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<tr>
<td>MANAGEMENT STYLE:</td>
<td>providing purpose and direction</td>
<td>personal, idealistic</td>
<td>personal, idealistic</td>
</tr>
<tr>
<td>ROLE STRUCTURE:</td>
<td>unknown Information, known process</td>
<td>marketing, promotion, counselling</td>
<td>concerned for external efficiency in dealings with environment</td>
</tr>
<tr>
<td>ORGANISATIONAL FORM:</td>
<td>decentralised, few structural constraints</td>
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<td>practical focus on work role</td>
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