Strategic wisdom in small firms: exploring the chief executive's perspective

Pitt, Martyn Roger

Award date: 1993

Awarding institution: University of Bath

Link to publication
STRATEGIC WISDOM IN SMALL FIRMS:  
Exploring The Chief Executive's Perspective

Submitted by Martyn Roger Pitt  
for the degree of PhD  
of the University of Bath  
July 1993

Examined and accepted April 1994

COPYRIGHT

Attention is drawn to the fact that copyright of this thesis rests with its author. This copy of the thesis has been supplied on condition that anyone who consults it is understood to recognise that its copyright rests with its author and that no quotation from the thesis and no information derived from it may be published without the prior written consent of the author.

This thesis may not be consulted, photocopied or lent to other libraries without the written permission of the author for seven (7) years from the date of acceptance of the thesis.
ACKNOWLEDGEMENTS

I would like to acknowledge with grateful thanks the advice and support of all of the following:

My supervisor, Professor Iain Mangham, for his encouraging "interventions" and his wise counsel;

My colleagues and friends at the School of Management for their patience and interest, especially Dr. David Sims;

All the proprietors and managers who gave so freely of their time, especially the main subjects of this study;

Last but not least, my family, for their forbearance during more years of toil than we care to recall. Thanks to my wife Glenys, Alison and Robin, and my mother, Vera. This thesis is as much yours as mine.
STRATEGIC WISDOM IN SMALL FIRMS: 
Exploring The Chief Executive's Perspective

ABSTRACT

This is a cognitively-oriented, interpretive study of strategic managerial knowing and sense-making. It seeks to explore qualitatively the experiential, strategic knowing or wisdom of the chief executives of two small firms, as they guide the development of these firms over time and in contexts that they perceive to be both threat and opportunity laden.

The study considers how their knowing may plausibly and usefully be represented for the purposes of analysis and reflection. A variety of analytic approaches are employed, drawing on notions of scripts and dualistic constructs on one hand, and role-identities derived from organization process studies and metaphor constructions on the other.

A description of each firm's development path then follows, drawing on detailed, tape-recorded conversations with its chief executive and his senior colleagues. The outlooks and strategic knowing of the chief executives are subsequently treated in detail, individually and comparatively, providing a multi-faceted interpretation of their sense-making.

The study suggests that the two individuals have quite different patterns of knowing. Further insights are offered in terms of the theoretical approaches used to explicate their knowing. Thus the analytic approaches developed in the study are considered to be relevant and in principle amenable to further useful development.

The study concludes with some reflections on how the strategic knowing of these individuals has evolved, the relation of personal 'wisdom' and firm strategy, the significance of transformational thinking in strategic management, and some implications for enhancing strategic wisdom more generally.
## CONTENTS

<table>
<thead>
<tr>
<th>Acknowledgements</th>
<th>ii</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>iii</td>
</tr>
</tbody>
</table>

### CHAPTER 1: INTRODUCTION

1.1 The Study                           | 1  |
1.2 The Nature of Strategic Management  | 2  |
1.3 Strategic Knowing:                  | 7  |
    Experiential Executive Wisdom        |
1.4 The Small Firm Perspective          | 11 |
1.5 Implications for Research           | 17 |

### CHAPTER 2: REPRESENTING STRATEGIC KNOWING:

A multi-perspective approach

2.1 Knowing and Experience              | 20 |
2.2 Knowledge Representation as Cognitive Structures |
    2.2.1 Knowing as dualistic constructs | 26 |
    2.2.2 Knowing as frames or scripts   | 30 |
2.3 Executive Knowing as Conceptions of 'Role-Identity' |
    2.3.1 Knowing as metaphoric images of role-identity | 39 |
    2.3.2 Small-firm executive role-identities | 45 |
    2.3.3 Process representations of executive knowing | 50 |
    2.3.4 Reflections on process-derived role-identity | 56 |
2.4 Implications for Research           | 62 |

### CHAPTER 3: METHODOLOGY AND THIS RESEARCH

3.1 Basic Issues in Sociological Research | 65 |
    3.1.1 Research paradigms              | 65 |
    3.1.2 Quality-validity in research    | 68 |
    3.1.3 Precedents and prejudices in management research | 71 |
3.2 The Format of this Study            | 73 |
    3.2.1 Basic design options            | 74 |
    3.2.2 Fieldwork strategies and tactics | 76 |
    3.2.3 Sample design and selection     | 82 |
    3.2.4 Data collection                 | 83 |
    3.2.5 Data treatment: options and choices | 86 |
    3.2.6 The approach to script-analysis | 89 |
    3.2.7 The script approach applied to White and Dean | 94 |
CHAPTER 4: A CHIEF EXECUTIVE'S STRATEGIC KNOWING:
Bill White of Wittenshaw Abrasives

4.1 Synopsis of the Firm's Development 100
4.2 Script Analysis of Bill White's Outlook 113
   4.2.1 The niche-market opportunity script 115
   4.2.2 The stable plateau script 122
   4.2.3 The diversification script 131
   4.2.4 Commentary on the script analysis of White's outlook 138
4.3 Paradoxical Dualisms in White's Outlook 144
   4.3.1 Dualisms relating to self and others 146
   4.3.2 Dualisms relating to small-firms versus big-firms 152
   4.3.3 Commentary on paradoxical dualisms 157
4.4 Metaphoric Analysis of White's Outlook 161
4.5 Process Interpretation of White's Role-Identity 168
4.6 Chapter Summary 171

CHAPTER 5: A CHIEF EXECUTIVE'S STRATEGIC KNOWING:
Hamish Dean of Pyrochem

5.1 Synopsis of the Firm's Development 174
5.2 Script Analysis of Hamish Dean's Outlook 193
   5.2.1 The niche-opportunity contractor script 195
   5.2.2 Intumescent paint distributor script, 1976-9 197
   5.2.3 The aesthetic fire protection pioneer script 199
   5.2.4 Post 1981 Clan-crisis growth script 202
   5.2.5 Post 1985 manufacturing-crisis growth script 207
   5.2.6 Subsidiary-activity diversification script 210
   5.2.7 Related-product diversification-by-acquisition script 213
   5.2.8 Commentary on the script analysis of Dean's outlook 217
5.3 Paradoxical Dualisms in Dean's Outlook 222
   5.3.1 Loose control :: tight control 222
   5.3.2 Innovating :: consolidating 226
   5.3.3 Self-orientation :: orientation to others 228
   5.3.4 Commentary on paradoxical dualisms 231
5.4 Metaphoric Analysis of Dean's Outlook 232
   5.4.1 Personal experience and development 233
   5.4.2 Capitalising on opportunity 235
   5.4.3 Managing relationships 237
   5.4.4 Quality and integrity in business affairs 239
5.5 Process Interpretation of Dean's Role-Identity 241
5.6 Chapter Summary 245
CHAPTER 6: DISCUSSION AND INTERPRETATION OF THE FINDINGS

6.1 The Study of Executive Knowing 247
6.2 Representations of Chief Executive Knowing 249
6.3 The Evolution of Strategic Knowing 257
   6.3.1 Script-based insights 257
   6.3.2 Insights from role-identities 264
   6.3.3 Insights from paradoxical dualisms 267
6.4 Experiential Knowing and Developing Strategic Wisdom 269
   6.4.1 Personal knowing and organizational strategy 269
   6.4.2 Experience and transformational thinking 273
   6.4.3 Implications for enhancing strategic wisdom 282

Bibliography 290
Appendix I 312

****

LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Influences on executive knowing</td>
</tr>
<tr>
<td>2.1</td>
<td>Alternative lenses on executive knowing</td>
</tr>
<tr>
<td>3.1</td>
<td>'Cold Warrior': masterscript for a cold war ideology</td>
</tr>
<tr>
<td>3.2</td>
<td>Restructured 'Cold Warrior' script</td>
</tr>
<tr>
<td>3.3</td>
<td>Fully restructured 'Cold Warrior' script</td>
</tr>
<tr>
<td>3.4</td>
<td>Bill White's masterscript</td>
</tr>
<tr>
<td>3.5</td>
<td>Hamish Dean's masterscript</td>
</tr>
<tr>
<td>3.6</td>
<td>Example of nesting in Hamish Dean's script</td>
</tr>
<tr>
<td>4.1</td>
<td>Bill White's masterscript</td>
</tr>
<tr>
<td>4.2</td>
<td>White's 'niche opportunity' script</td>
</tr>
<tr>
<td>4.3</td>
<td>White's 'responsiveness' script</td>
</tr>
<tr>
<td>4.4</td>
<td>White's 'manufacturing' script</td>
</tr>
<tr>
<td>4.5</td>
<td>White's 'stable plateau' script</td>
</tr>
<tr>
<td>4.6</td>
<td>White's 'diversification' script</td>
</tr>
<tr>
<td>4.7</td>
<td>White's 'challenge status quo' script</td>
</tr>
<tr>
<td>4.8</td>
<td>White's script outlook (levels 3 &amp; 4)</td>
</tr>
<tr>
<td>5.1</td>
<td>Dean's masterscript</td>
</tr>
<tr>
<td>5.2</td>
<td>Dean's script outlook (levels 3 &amp; 4)</td>
</tr>
<tr>
<td>6.1</td>
<td>Paradoxical dualisms inferred in White's outlook</td>
</tr>
<tr>
<td>6.2</td>
<td>Paradoxical dualisms inferred in Dean's outlook</td>
</tr>
<tr>
<td>6.3</td>
<td>Mapping White's metaphoric roles on scripts</td>
</tr>
<tr>
<td>6.4</td>
<td>Mapping Dean's metaphoric roles on scripts</td>
</tr>
<tr>
<td>6.5</td>
<td>Types of script transformation</td>
</tr>
<tr>
<td>6.6</td>
<td>Envisioning space</td>
</tr>
</tbody>
</table>
1.1 The Study
This study explores the nature of the evolving, experiential strategic knowing or wisdom of executives and the relation of this knowing to organizational viability and development. More specifically, it examines how two chief executives in small owned-and-operated firms make sense of their firms' strategic development and their own contributions thereto. It explores the assumptions they make in the particular operating contexts of their firms, and how these evolve over time. In considering how their knowing develops as they pursue organizational effectiveness, the study asks how their learning may usefully be represented for the purposes of analysis and reflection. Nominally, the work locates in a field labelled by Pettigrew (1992) as studies of strategic leadership, decision-making and change, a subset of research into managerial elites.

For many readers this knowing or expertise is the essence of strategic management, where the latter is taken to mean executive responsibility for securing the long-run viability and direction of the firm under conditions of uncertainty. Viability implies not merely surviving, but enhancing survivability, extending competence in human and organizational terms. This process may be synonymous with growth, provided one does
not interpret growth narrowly as increased scale. Rather, as Normann (1977, 7) so aptly said:

'...the growth of knowledge or the process of knowledge development ...is the central process of growth as I interpret it'.

So the aspects of strategic management that are of most interest here are those enabling experiential knowing or wisdom to develop.

Chapter 1 refers briefly to salient aspects of strategic management, the nature of managerial knowing, the small firm perspective, and research implications for this study. Chapter 2 explores the literature in more depth, identifying a range of cognitive and process perspectives on how strategic knowing can be represented or mapped. Chapter 3 discusses methodological issues relevant to the enquiry, research options, and the chosen design. It also explores the concept of cognitive script in some depth. Chapters 4 and 5 present the empirical findings. Chapter 6 concludes the study by reflecting on these findings and their implications for effective managerial performance.

1.2 The Nature Of Strategic Management

Many writers have discussed the multi-faceted character of managing complex organizations. Much of their considerable and often prescriptive output has been treated under the broad heading of leadership studies (Czarniawska-Joerges & Wolff, 1991; Pfeffer, 1982; Stogdill, 1974). Yet the remarkable growth in the last two decades of the literature addressing firm-level
strategy has by no means resolved the somewhat fuzzy and controversial picture of the strategic role of executives (McGee & Thomas, 1986: introduction).

A popular definition of strategic management would be those executive activities concerned with building appropriate bridges between the organizational present and a viable future state, enabling and securing the firm's longer run survival and prosperity. In Harvey-Jones' (1988) terms, one might call this 'setting the direction'. Such activities are necessarily performed under uncertainty and they require the application of intuitive, uncodified knowledge and judgement (Barnard, 1938; McCaskey, 1982). This suggests that executives need periodically to stand back from operational concerns to reflect on doing the right things, as opposed merely to doing (current) things right (Drucker, 1974: 44). Indeed, this distinction underpins the 'strategic management paradigm' articulated by Schendel & Hofer (1979).

Pfeffer (1982, 13) distinguished three perspectives on executive action, namely (i) prospective, intendedly rational (ii) externally controlled or constrained and (iii) almost-random, emergent and socially constructed. He further distinguished two levels of analysis (a) individual/local and (b) organizational/global. Perspective (i–b) dominates conventional treatments of strategic management, the argument being that although executives must understand and negotiate with external environments, their strategies manifest an intentional, quasi-autonomous character with respect to the firm (eg.
Child, 1972). Thus for many commentators strategic management is a proactive process whose tangible outputs are variously conceived as organizational decisions, plans and programmes for contextual action (i.e. strategy content or matters for decision: Hickson et. al., 1986; Jauch, 1983).

Pennings (1985, intro.) attributed the origins of this view of strategy to military science, being synonymous with the 'art of war': resource deployments aimed at securing overwhelming advantage in the strategist's favour. Classical strategy is the enactment of plan (grand design) and ploy (tactics) in pursuit of position, for security and advantage (Mintzberg, 1988). In this perspective strategic action tends to formality, relating proposed (intended) initiatives to explicit organizational goals and is portrayed as essentially analytical (e.g. Ansoff, 1965; 1984). Hence, considerable efforts have been devoted to applying analytic disciplines such as industrial economics, decision theory, operations research and financial planning and control to support strategic management.

Yet other sources (including Mintzberg, 1978; Pettigrew, 1985a; Quinn, 1979; 1980; and Weick, 1987) have questioned the separation of the behaviour patterns whereby strategic choices emerge from those whereby they are realised, especially in an innovating context. An alternative characterisation of strategic behaviour, then, is an emerging pattern in a stream of unfolding events, underpinned by a largely shared, socially-
constructed vision of what the organization is about, promulgated in the ideas, cultural artefacts and actions constituting the currency and cumulative experience of organizational life (Johnson, 1987, Chs. 7 & 8). By implication, strategic expertise encompasses formulation through implementation seamlessly and iteratively. Whilst proponents of the second view would mostly accept that 'analytic' strategic knowledge is a legitimate component of expertise, it would be considered insufficient for anyone aspiring to the status of an effective strategic practitioner.

Today the strategy literature acknowledges a variety of alternative disciplinary perspectives and is increasingly research-driven and cautious in respect of its conclusions. Yet the literature offers a paucity of well-documented and systematic insights into how practitioners actually think and interpret situations in context over time.

Moreover, the experientially-derived aspects of strategic knowing have proved relatively unamenable to codification. Some sources advance interpretive schemas containing alternative models or research 'lenses' to be applied according to perceived utility (Allison, 1971; Lyles & Thomas, 1988; Morgan, 1986; Whittington, 1993), though their ranges of convenience are frequently unspecified. Underlying assumptions are also largely taken for granted (Brunsson, 1982). For example, in the rational analytic planning model of policy making (Allison, 1971; Chaffee, 1985) the validity of the twin
assumptions of intentionality and decision-rationality go unchallenged. Even the authors of classic statements about 'irrational' organizational choice processes (Cohen, March & Olsen, 1972; Cyert & March, 1963; Lindblom, 1959; Mintzberg et al., 1976) have generally not challenged the decision metaphor per se.

However, despite a tendency to introduce and apply terminology somewhat indiscriminately and inconsistently, there appears reasonable agreement that strategic organizational issues are important, being characterised by and concerned with:

* Long-run organizational viability and development
* Basic purpose or mission of the organization and how it is to be achieved
* Sensitivity to environmental potentialities and stakeholder expectations
* Continued matching of scarce organizational resources to specified activities and initiatives (thus defining the scope of the firm)
* Applying interpretation and judgement, not just routine, pre-programmed rules of thumb
* Coping with perceived ambiguity, uncertainty and risk, arising from complexity, incomplete information about unpredictable environments and events, and from human cognitive limitations.

Whilst these issues affect executive action throughout an organization, their problematic and fundamental nature makes them a natural concern of senior managers, particularly of chief executives. By the same token, there is ample scope for executives to demonstrate wide variations in style and degree of expertise in coping with strategic issues.
1.3 Strategic Knowing: Experiential Executive Wisdom

In Britain there has been much recent debate over the nature of managerial work, especially the thorny question whether it requires the kind of formal qualification considered necessary in professions such as medicine and engineering. A professional characterisation of management implies that particular knowledge and skills are best assimilated before as well as during practice, creating a cadre of 'chartered' managers. This perspective has some currency for example in French society.

Yet there remains practical disagreement over what managerial expertise comprises and the degree to which good practice can be codified and conveyed (Handy et al., 1988). Even so, probably few people would doubt the value of training and management development in the more-or-less technical skills of business administration, and to enhance interpersonal and organising skills as an essential part of executive process (Mangham, 1986).

Administrative skills, arguably, relate to the efficient running of the firm under moderate uncertainty and as such, require relatively codifiable knowledge. In contrast, strategic skills are presumed to be needed under conditions of greater uncertainty and over longer time scales. These situations require judgement based substantially on intuitive, experientially-supported, hard-to-codify, even paradoxical knowledge (Agor, 1986; Quinn, 1988; Quinn & Cameron, 1988; Torbert, 1987). Expressed simplistically, the contrast is between knowing
that and knowing how. According to Day & Lord (1992), experts and novices actually think very differently when asked to address the same problematic situations. It seems plausible, then, that the development of 'strategic' expertise depends on gaining insights via experience as much, if not more than via formal training. Indeed, it seems evident to the writer from contacts with chief executives in a number of small firms that one can scarcely doubt that their expertise has been forged in the 'experiential heat' of enacting leadership roles over a number of years.

So an opening assumption of this research is that to appreciate something of executives' emerging 'strategic wisdom' is a worthwhile venture. Evidence from both the workplace and the classroom reinforces the belief that however hard it may be to define such knowhow elegantly, one can often recognise it in action. So the study sets out to explore how chief executives in small firms interpret strategic events and conduct, the constructs they invoke and how their patterns of thought relate to the development of their organizations.

It is therefore relevant to identify the issues these chief executives judge to be important (strategic) for the long run viability of their firms. The assumption made here is that knowing is ultimately subjective; in other words, actors will address only the problems they perceive, bring to the foreground of their attention and enact: Weick (1969). Even in the 'classic' strategy literature this idea is accepted to some extent, for
example when Ansoff (1965) talked of a 'common thread' to underpin growth via diversification he accorded, in effect, a selective perceptual quality to strategic choices. Similar notions were expressed by Mintzberg & Waters (1982) and Tregoe et. al. (1989) when referring to single-brain gestalts and strategic visions.

Of course, management is ultimately about action. Mintzberg (1973a) documented what presumably most chief executives would accept, namely that they are generally so preoccupied with immediate issues that they appear to devote little time to reflective thought. Indeed, Peters and Waterman (1982) elevated a 'bias for action' to a major prescription for corporate success. Still, it would be wrong to infer that executives do not think about the future, even if they do not indulge in ivory-tower contemplation. To invoke Harvey-Jones again, this study is directed to executives' sense of knowing, and of knowing what to do next. Thus it seeks to explicate their verbalized reflections as they cope with the inherent ambiguity of an uncertain future. In particular, it considers their sense of their own conduct and priorities as encapsulated in the notion of 'role-identity'.

To appreciate something of this knowing, the researcher evidently has to try to access the beliefs and assumptions of strategic actors, mediated by the 'inner' and 'outer' contexts of the firm over time, notably the competitive environment and the outlooks of 'significant others' in the executive team. Insofar as executives can be persuaded to share their thoughts with an outsider,
one may seek to engage with them as 'reflective practitioners' (Schon, 1983), a challenging task since, as Schon explained, 'reflection-in-action' means knowledge that is:

'ordinarily tacit, implicit in our patterns of action and in our feel for the stuff with which we are dealing. It seems right to say that our knowing is in our action' (1983, 49).

This construction accords with Polanyi's view of personal or tacit knowledge (Polanyi, 1958; 1969) as it relates to complex and sophisticated tasks like medical diagnosis. This study, then, presumes an analogy between organizational and professional expertise.

Examining the knowing of human actors is methodologically problematic. Fortunately, others have offered encouragement and precedents in respect of strategic beliefs, ranging from relatively structured cognitive mapping methods (for which Huff (1990) offers an excellent compendium), to more client-centred approaches (eg. Mason & Mitroff, 1981; Schein, 1987; Schon, 1983). 'Script theory' in the domain of artificial intelligence and cognitive psychology also appears to be promising (Abelson, 1973).

Given the subjective nature of knowing, it will be argued in Chapter 3 that an appropriate mode of enquiry is to create rich pictures of a few cases via interpretive, loosely-structured interviews. In such research, findings rely principally for their validity on criteria of relevance, plausibility and insightfulness (Archer, 1988, Lincoln & Guba, 1985; Yin, 1984).
Realistically, they must be treated as exploratory: management scholars and executives alike share an understandable ignorance of the details of mental (re)patterning of complex, problematic knowing. Furthermore, it is one thing to be guided by—and to try to articulate to others on request—one's theories-of-action (Argyris & Schon, 1974) in relatively unambiguous contexts like a restaurant or a business meeting, quite another to explicate the wisdom developed through guiding an organization over many years. Yet capable executives evidently enjoy such wisdom and its nature remains a fascinating research question.

1.4 The Small Firm Perspective
The writer wanted to explore strategic wisdom in small firms not only because it was of personal interest but also because it was thought that some of the practical research difficulties referred to above would be ameliorated by relatively simple organizational contexts. So it seems appropriate to acknowledge some perspectives on small firms from the relevant literature, albeit one must also acknowledge that the latter generally adopts a more aggregate level of analysis, in which the firm is treated as the proverbial 'black box'.

Small firms manifest a number of distinguishing characteristics. After Bolton (1971) a small firm has typically been defined as a modestly sized enterprise (under 500 employees and £5 million sales turnover, though often much smaller), with negligible market share
and managed in a personalised way, usually by an owner-
proprietor who exercises considerable autonomy over its
strategic direction.

Pitt et. al. (1991) and Bull et. al. (1993) noted
the large, but volatile populations of small firms in
most Western European countries. In the U.K. during the
early 1980s for instance, according to Ganguly & Bannock
(1985, 31), new firms formed at an average rate of 9% of
existing stock per annum, but demised almost as rapidly
(8% of net stock p.a.). Further, whilst small firms
marginally increased their share of U.K. manufacturing
employment during the 'enterprise culture' of the 1980s,
jobs growth was mainly in services (Barber et. al., 1989,
3) where birth rates were in the range 10-14% of stock
per annum, and in the south east of England (10.5% of
stock p.a.). Birth rates were lowest in agriculture (3% of
stock p.a.) and in Northern Ireland (5.6% of stock p.a.).
To a degree, the recession of the late 1980s has halted
or reversed some of these trends and the future for small
firms currently appears problematic.

A small firm is most vulnerable in its early years
(Harrison & Mason, 1987), though attrition is heavy
during the first decade of life. Rates of growth and
profitability are also highest amongst young firms
(Storey et. al., 1987). By no means all small firms
sustain high rates of growth, variability being greatest
among the very small. Many quickly plateau in employment,
net assets and sales.
Statistically speaking, the net balance of births and deaths supports the population ecology perspective on small firms (Aldrich, 1979; Hannan & Freeman, 1977), in which little interest is accorded the executives who found and run them. This may help explain why many academics feel comfortable with taking the population of small firms as the relevant unit of analysis and few make direct contact with small firm executives.

A good illustration of this point is provided by Amin et. al. (1986) who posited three distinct models of small firm population development, demonstrating the influence of unique contextual factors on specific aggregate populations. In the so-called Birmingham model, deindustrialization and corporate restructuring creates 'forced entrepreneurship' as big firms shed peripheral low-technology activities which they subsequently buy in from local contractors. New small firms are the result of industrial decline, and are not a motor for innovation and economic regeneration. Rather, they provide large firms with a flexible workforce easily expanded or contracted in line with changes in demand: thus they constitute incremental capacity at low cost and risk (Berger and Piore, 1980; Goldthorpe, 1984).

In hindsight one can see that the resurgence of the U.K. small firm sector in the 1980s was also associated in part with the decline of medium sized firms through demise, disaggregation or takeover (Utton, 1984). For these reasons, only a modest proportion of small firm economic activity has been the result of what one might
call autonomous entrepreneurial vision and initiative (Fothergill & Gudgin, 1979; Shutt & Whittington, 1987; Storey, 1982).

In marked contrast, Amin et al. argued that in the Boston (U.S.A.) model new firms create new, high-technology jobs, boosted by proximity to centres of academic excellence (Harvard and M.I.T. in the Boston case itself), high U.S. Government spending, and ready access to venture capital. Founded by highly qualified and technologically literate entrepreneurs, these firms grow fast and stimulate additional local jobs in low-technology manufacturing and the service sector.

Amin et al.'s third (Bologna, Italy) model features clusters of small, flexibly-specialized firms in local industrial districts. They are generally found in traditional manufacturing sectors like ceramics, knitwear and furniture, but they use up-to-date methods and compete on efficiency and quality, not low price per se. Chains of subcontractors are coordinated informally by merchants with external market contacts. This model was considered effective because it achieves a 'critical mass' of firms which transcend the significance of any one.

Goffee & Scase (1987) and Smilor & Gill (1986) also emphasised small-firm development as a collective or social process within a mixed community or network of emerging and well-established firms, having competitive and collaborative aspects. One might therefore expect successful proprietors to enjoy significant external
linkages (Johannisson, 1986), participating in a variety of collaborative mechanisms such as the traditional co-operative (Chaplin, 1982; Cornforth, 1986), franchising (Hough, 1982; Stanworth et al. 1984) and technology transfer (Rothwell & Beesley, 1989; Watkins & Horley, 1986). A wide range of other technical and commercial associations may also provide support. Though knowledge transfer generally proceeds from the larger to the smaller unit, small firms can be sources of innovation for big firms (Freeman & Barley, 1990; Oakey, Rothwell & Cooper, 1988).

These and other sources (eg. Hitchens & O’Farrell, 1987; Pitt et al., 1991) confirm that small firm executives cannot escape conditioning by their macro and micro environments, in terms of prevailing socio-cultural attitudes, formal and experiential learning, the availability of relevant skills and resources, and the constraints and opportunities deriving from local patterns of industrial development. Research in small firm management must therefore be sensitive to context and prevailing outlooks (c.f. Stanworth & Curran, 1976).

Yet despite the insights to be gained from studying aggregate effects, one should not ignore the impact of individual proprietors on and their contribution to small firms. Some manage seemingly mundane enterprises and once a threshold size has been achieved, enhancing the prospects of long run viability, they are motivated largely by considerations of independence and other, idiosyncratic personal goals. Conversely, other small
enterprises are highly dynamic (Oakey, 1984), led by archetypal entrepreneurs (defined by Carland et al. (1984) as growth, profit and innovation oriented), and they sustain high rates of growth for long periods.

The evident contrast between autonomous, proactive small firms and subordinate contractors, it is argued, serves to underline the importance of personal knowing and conduct, especially on the part of their chief executives. This is particularly true if they are to capitalise on perceived opportunities and ameliorate shortcomings in their respective current skills and resources. Thus one returns to the nature of strategic management in the small firm. The literature is ambivalent as to whether - or in what respects - the management of small firms parallels that of large ones 'writ small', or whether small firms present a special case, albeit one still informed by obsolete, but durable and overly-prescriptive myths (Curran & Stanworth, 1984).

On balance, the small firm literature does not adopt a strategic management perspective, so that Robinson & Pearce's (1984) comment that:

'...the state of knowledge pertinent to the strategic management of small and growing firms is woefully inadequate'

remains broadly true. Thus to understand small firm strategies and processes, much remains to be done (d'Amboise & Muldowney, 1988).

Small firm executives, it is true, tend not to use words like strategy when explaining what they do and how they make sense of the world. It would be unreasonable to
expect them to adopt the highly formalised planning
behaviour of large firms (Robinson et. al., 1984), but
this should not lead us to suppose that small-firm chief
executives have little interest in the long term
viability of their firms, how so ever they construe their
role in achieving this goal.

1.5 Implications For Research
The underlying premise of this study is that it is both
appropriate and feasible to explore how executives in
small firms make sense of their strategic roles and
responsibilities, thereby exposing to some degree their
'strategic wisdom'. There can, no doubt, be a variety of
research designs appropriate to this end. The suitability
of an interpretive, exploratory and cognitively-oriented
approach has been implied, and will be explored in detail
in Chapter 3.

In this connection the study of small firms offers
several potential advantages. These are (i) relatively
straightforward organizational contexts, meaning that the
influences on the chief executive or proprietor should be
discernable (ii) the suggestion in the small firm
literature that executive outlooks will conform to
reasonably predictable patterns (iii) the managerial
coalition of 'significant others' with respect to the
proprietor can be identified and accessed with relative
ease and (iv) a case-comparative approach within and/or
across firms (Yin, 1984) is practicable even in a case
study approach, reducing the uniqueness risk attendant on a single instance (see Chapter 3).

To summarise, strategic executive knowing can be portrayed as the convergence of a number of influences. These are illustrated in Figure 1.1.

---

**Figure 1.1**

*Influences on Executive Knowing*

Unfolding path of the firm’s development (goals, directions)

External environmental influences (negotiation, enculturation)

Executive strategic knowing (wisdom)

(culture, myths, negotiation)

Organizational influences, notably the knowing of *significant others* in the firm

---

The knowing of chief executives, it is suggested, is complex, being mediated by a number of factors. Their accumulating experience is inevitably influenced by their enculturation in terms of background and prior work experience, the influence of stakeholders in and around the firm, and their understanding of the firm’s operating environment. These are allied to their perceptions of the firm’s developmental trajectory, appropriate personal and organizational goals, and available directions for achieving these over time.
In principle one can explore this knowing directly with such individuals, and indirectly via the testimony of influential colleagues in the firm, in the light of known environmental and organizational circumstances.

Executive knowing can be represented and explored in a variety of forms, some of which will be reviewed in Chapter 2. These approaches open multiple 'windows' onto the subject. Of course, one does not claim that in so doing the totality of their knowing will be revealed. Still, the aim here is to provide a rich, detailed and, it is to be hoped, plausible picture of two particular cases.
CHAPTER 2

REPRESENTING STRATEGIC KNOWING:
A multi-perspective approach

2.1 Knowing And Experience

Chapter 1 introduced the idea of reflective practitioners whose generally tacit knowing of the executive task has been portrayed as theories of action (Argyris & Schon, 1974). These knowledge structures are implicit, construed by individuals in order to act. Theories are abstract mental models, belief systems constructed from the perceived realities of actors' organizational worlds and salient prescriptions for coping therein.

The focus of this chapter is the sense-making of chief executives in respect of the complexity and ambiguity surrounding (and perhaps subverting) the long-run viability of their firms. The aim is to define research mechanisms suitable for elaborating and analysing their tacit knowing in this domain. One can then try to address the nature of strategic knowing and how it develops and becomes wisdom as the individual learns.

Two routes will be explored. The first draws on the literature of cognitive psychology and related fields, the second on the literature of organizational process. Three proposed ways of illuminating the strategic task as perceived in particular cases are the elaboration of (i) experientially-derived scripts (ii) seemingly paradoxical conflicts of priority and (iii) robust role conceptions.
deriving from an executive's assumptions about the nature of managing in organizations.

Knowledge structures have variously been termed world views (Mannheim, 1936), personal construct systems (Kelly, 1955); frames (Goffman, 1974), cognitive maps (Axelrod, 1976), schemata or scripts (Schank & Abelson, 1977) and linguistic codes (Huff, 1990). Other potentially useful terms include identities and orientations.

Exposing tacit managerial knowledge for subsequent 'treatment' is a major concern of clinicians and action-researchers (Clark, 1972; Jones, 1987; Mason & Mitroff, 1981; Revans, 1980; Schein, 1987), in which they attempt jointly with the client to identify functional aspects of the latter's tacit knowing and mitigate what is (agreed to be?) dysfunctional. But a vexing property of tacit knowing is that, according to Polanyi (1958, 140), it:

'...is indeterminate, in the sense that its content cannot be explicitly stated', hence 'we know more than we can tell and more than our behaviour consistently shows'.

Much theoretical discussion has centred on 'knowing how', or performative knowledge of particular domains of competence such as riding a bicycle or making a medical diagnosis, and how such knowing diffuses (eg. the capability to produce a new scientific device such as a laser: Collins, 1974). A good deal of professional and executive knowing is evidently performative (Mangham, 1987; Schon, 1983). Torbert (1987) has argued that executive expertise lies on a continuum, with strategic
expertise at the pinnacle of human potential. Strategic organizational knowing differs qualitatively from knowing how to manage a meeting or ride a bicycle. It is concerned with ends as well as means, and it generally adopts a longer time horizon. By analogy, one might say it is no longer concerned with balancing the bicycle, rather with setting directions and avoiding obstacles after balance has been mastered. One would expect strategic knowing to manifest intentionality and a concern for the future, hence for what is still ambiguous and unfamiliar (McCaskey, 1982; Pondy et al, 1988). Hence it requires and benefits from considerable reflection and judgement (Vickers 1965).

The assumption that executive expertise is analogous to that of so-called professionals is not universally accepted (Mintzberg, 1991). But in the absence of disconfirming data it seems reasonable to suppose that the knowing of experienced executives shares characteristics of coherence and pattern similar to that of other professionals. Equally, strategic knowing parallels more prosaic knowing in that it derives from experience and practice. It is not inherent, it must be acquired, accumulated and refined in action. One might expect strategic knowing to become well-entrenched and thus to resist revision (Johnson, 1987).

It is generally accepted that the knowing of an actor is structured and conditioned by experience. As Argyris and Schon (1974) said:
'All human beings - not only professional practitioners - need to become competent in taking action and simultaneously reflecting on this action to learn from it' (1974, 4).

The wisdom encapsulated in this knowing and learning process forms the:

'theories of action that determine all deliberate human behaviour'.

Research suggests that pragmatic human actors aspire to useful, interpretive heuristic theories. Our knowing, manifest as a skill or competence, comprises our ability to make sense of the particulars of a situation in terms of a coherent, recognisable pattern and hence establish a sound basis for action.

For example, a physician is expected to recognise symptoms and synthesise them into a coherent diagnosis. In making judgements of this kind she exhibits focal and subsidiary awareness. This property of knowing directs attention to what past experience indicates is relevant, what is construed therefore as significant and having priority. Pattern recognition is evidently facilitated by experience. Insofar as it leads to closure (convergence), it legitimises some actions and precludes others. Of course, a pattern may be read into ambiguous symptoms which subsequent outcomes disprove; hence function contains the seeds of potential dysfunction.

Experienced or expert knowing is personal - in the sense that it resides in the brain of the individual - but it must be externalised if it is to generate organizational action. The extent to which knowing is actually shared is a matter of circumstances. Even though
the diagnostic processes of expert physicians may be tacit (especially in the early stages of an event cycle) the clinical/surgical team must know and accept the diagnosis and its implications in order to take appropriate remedial action.

Theories of professional and organizational enculturation suggest that a major source of actors' experience is their exposure to prevailing norms of outlook and behaviour in and around the organization. Such collective beliefs, informing and informed by behaviour, have been variously termed paradigms (Kuhn, 1970; Johnson, 1987), logics-of-action (Hickson et. al., 1986; Karpik, 1972), ruling myths (Hedberg & Jonsson, 1977), frames of reference (Loveridge, 1990; Shrivastava & Mitroff, 1983); recipes (Grinyer & Spender, 1979; Spender, 1980, 1989) and (professional) ideologies (Beyer, 1981). Actors become aware of - and notionally come to share - core beliefs and assumptions about the world of the organization, how it works and how it should work. Everyday contacts promulgate taken-for-granted and context-specific knowing which complements and may over-ride personal, idiosyncratic beliefs. Senior executives and professional status people generally are not immune to such influences, indeed they are likely to be active in their promulgation.

Theories-of-action are in principle both descriptive and orientating (normative), as exemplified in the quote: '...their logic of action may be to press continually for innovation' (Hickson et. al., 1986, 13).
Influential theories predispose actors in favour of some outlooks over others, legitimise some conclusions and deny others. Less obvious, but still important, is the emergence of opposing theories which may generate tensions and disputes from their apparently conflicting implications. How these are reconciled in practice is clearly a crucial issue.

Senior executives are particularly significant because their personal theories of action, mediating and mediated by the prevailing organization paradigm, are instrumental in making sense of past, present and anticipated organizational events. Salient assumptions or constructs from their theories prompt actions judged appropriate to cope with events and shape future directions. Understanding more about the nature of this knowing will therefore shed light on the nature of strategic competence. The following sections explore a number of perspectives on how such knowing may be systematically uncovered and represented.

2.2 Knowledge Representation as Cognitive Structures

It remains something of an open question whether human cognitive processing creates understanding primarily by construing elemental propositions which are then integrated into a meaningful holistic pattern, or whether the mind intuits overall patterns from which particular constructs are subsequently educed. Recent cognitive research supports the view that processing majors on intermediate levels of generality or abstraction and
proceeds quite flexibly up and down a knowledge hierarchy (Neisser, 1987; Rosch, 1977).

The internal workings of the mind are not the point of this enquiry. What is germane, however, is that alternative hypotheses suggest relevant and differing aspects of knowing, each of which can be used to inform an empirical study. Specifically, theories-of-action can be represented as sets of personal (dualistic) constructs (after Kelly, 1955), operational patterns or templates-for-action, drawing on frames and script theory (after Abelson, 1973; Minsky, 1977), or intuitive metaphorical gestalts (MacCormac, 1985; Morgan, 1980).

2.2.1 Knowing as dualistic constructs
George Kelly argued that individuals make sense of (construe) the world of their experience by internalising a set of personal constructs - the construct system - (Bannister & Mair, 1968; Kelly, 1955). These help the knower to interpret the past and present, and to anticipate future events. They are invoked according to contextual utility, that is, they have a perceived range-of-convenience. Though individuals differ in their construction of events, to the extent that they have similar outlooks (common psychological processes and shared experiences), their constructions will be socially mediated and convergent.

Grinyer & Spender (1979) and Spender (1989) drew directly on Kelly's personal construct theory to formulate a view of shared theories-of-action or recipes.
In their view elemental constructs cohere as an overall theory widely recognised in an industry arena. To explain the complexity of the organization and its environment, actors subscribe to propositions (including causal relationships) about this world. Spender's empirical work on the influence of the sectoral 'cognitive arena' has been supported by others (Calori et. al., 1992; Huff, 1982; Child & Smith, 1987). At the firm level Johnson (1985) elaborated the recipe as two kinds of beliefs: frame constructs, mostly descriptive propositions about the firm's external environment and competitive position, and formulae, normative propositions about perceived 'strategic best-practice' for the firm.

What has not perhaps been emphasised by these researchers is that for Kelly, a construct affirmed an intrinsic dichotomy or opposition. In formal logic black assumes meaning when opposed to not-black, whereas psychologically most people construe not-black as white, a useful, but particular instance of not-black. Polar dichotomization enables the construction of a cognitive continuum of meanings. Despite this, it has been suggested that an actor's sense-making tends at a given moment to emphasise, favour or prioritise one pole of a dualism over the other. At another moment the reverse may be true, signifying a so-called slot-change (Bannister & Mair, 1968).

Psychological oppositions are useful in everyday sense-making as devices for coping with complexity and ambiguity. In so doing, actors construe oppositions or
dualisms which are personal and idiosyncratic, germi
nating the seeds of paradoxical or contradictory t
hinking (Ford & Backoff, 1988; McCaskey, 1988). For example, a construct defined by opposing black with consciousness might seem paradoxical, but could make sense to someone who equates blackness with unconsciousness, an equation that could be meaningful to someone who is afraid of the dark.

Kelly proposed ordinal relationships among constructs and a tendency towards internal consonance. A finite cluster or subset (typically 15-20 constructs) from a large array, he argued, establishes temporary closure of the system, enabling sense-making sufficient unto the immediate need. Closure implies judgements about relevance, sufficiency and priority. A closed system becomes problematic beyond its perceived scope, so one would expect multiple theories to be applied serially as the context changes. Accepting the limited scope of a theory is a mental strategy for coping with ambiguity; for instance, concurrent wave and particulate theories of light are widely accepted by and present few conceptual problems for most modern scientists, even though their concurrency is unquestionably paradoxical (Kuhn, 1970).

Spender argued that commonly accepted industry recipes also manifest closure around salient constructs, though he contended that shared industry beliefs are persistent rather than temporary. Brunsson's (1982) evidence was that shared, ideological beliefs are actually highly resistant to modification or rejection.
This amounts to collective 'tunnel vision' (Hedberg, 1981, 13, citing Schroder et al., 1967). However, Chaffee (1985) invoked Boulding's (1956) notion of requisite variety to suggest that skilled executives avoid this trap by thinking beyond conventional bounds.

Be that as it may, it seems plausible that a personal theory-of-action is somewhat fluid, dynamic and permeable, as its knower interacts with the world at large. It evolves as he learns (acquires experience), adding new constructs, and modifying or discarding others, ensuring that the set stays finite and functional, for:

'A personal construct system is not a collection of treasured and guarded hallucinations...(it) is a theory being put to perpetual test' (Bannister & Fransella, 1980, 24).

Festinger (1957) and Salancik (1982) argued that actors adopt beliefs which are not only internally-consistent, but consonant with their behaviour because dissonance-reduction is a powerful motivator. A dynamic and influential theory-of-action legitimises and remains consonant with evolving behaviour. But here one must distinguish espoused theory,

'...the theory of action to which (an actor) gives allegiance and which on request he communicates to others' from the

'theory that actually governs his actions...his theory-in-use' (Argyris & Schon (1974, 7).

Actors especially in organizational contexts have the capacity to espouse positions inconsistent with their behaviour, either consciously and perhaps deceitfully,
unreflectively, or simply as a consequence of a wide range of cognitive limitations and biases (Barnes, 1984; Janis, 1972; 1985; Schwenk, 1984; 1985; 1986; Staw, 1976; 1981; Sutherland, 1992; Whyte, 1986). So empirical research into executives' personal knowing must consider to what extent espoused theories are congruent with theories-in-use inferred from personal actions and organizational strategies.

To summarise, a theory-of-action posited as a set of dualistic constructs offers one route to represent an actor’s knowing, particularly in respect of the tensions or dilemmas generated in the process of sensemaking. Since strategic management is typically concerned with ambiguous, paradoxical issues, dualisms may be particularly relevant in this respect. Practically, this means inferring a set of context-specific dualisms from the actor’s language of exposition, his actions and from the strategies of the firm. In addition, one would look for the emergence of new constructs over time, changes to the particularity or referential focus of constructs and the possible significance of slot changes.

2.2.2 Knowing as frames or scripts
Since the late 1950s doubts have been expressed by some researchers over learning as:

'basically a bottom-up process of manipulating atomistic features', even though this notion has 'displayed.... staying power' (McCauley, 1987: 289).

Influential current views of cognitive processing emphasise that an actor imputes meaning to an idea as
much by what it is not, as by what it is, which implies comparison and categorisation. The hypothesis of categorically and hierarchically structured knowledge is now widely accepted (Neisser, 1987), though research has refuted categorisation based on criteria of necessary and sufficient attributes. The notion of clear, unambiguous categories has given way to the notion of fuzziness (Zadeh, 1965), which implies criteria of representativeness, meaning typicality or exemplarity (Medin & Wattenmaker, 1987; Rosch et al., 1976; Rosch, 1977; Rosch & Mervis, 1975).

Research by Rosch and co-workers on typicality suggested that some levels of construct abstraction are generally perceived as more typical or fundamental than others. Rosch cited the example of tool (a superordinate construct), hammer (intermediate) and claw hammer (subordinate), with the intermediate level having prototypical utility (1977, 215). Porac et al., (1987) reached a similar conclusion over executives' constructions of competitor types, though they posited five levels. The middle levels of the taxonomic hierarchy apparently enabled their respondents to make the clearest differentiations between competitor attributes. Thus, an actor is thought to structure descriptive knowledge in a loose categorical hierarchy in which intermediate levels of particularity have the greatest perceived utility.

Others have emphasised the organization of knowledge into prototypical structures variously labelled schemas, frames or scripts (Rumelhart & Norman, 1985; Minsky,
Minsky hypothesized that referential knowledge is contained in descriptive frames comprising slots or pigeon-holes which accept a limited variety of input values. A dog is invariably a mammal, but it can be brown, black or white. Some slots have default values: without information to the contrary, we assume a dog has four legs. So frames condition actors' expectations, helping to make sense of future observations. According to Johnson-Laird & Wason (1977, 342) default values are prototypical, thus a frame comprising an array of default values is a Roschian prototype: a prototypical bird has feathers, flies, sings, and lays eggs in a nest.

Some sources (cf. Medin & Ross, 1989) have advanced the case for a cognitive model or script based on exemplars (useful analogues) rather than prototypes (more analytical, but less pragmatic abstractions). This may influence our view of the content and range of convenience of a particular script but is less likely to affect its validity in principle as a representational model.

In a script-based view of knowing, then, actors acquire and structure knowledge in inference-facilitating frames or schemas. Lakoff (1987, 397) called these phenomena 'prototypical scenarios'. The approach has been used in artificial intelligence studies to program computers to simulate human cognition, of which the well-known 'restaurant script' is a good example (Schank & Abelson, 1977). Abelson (1973, 295) defined a script as:
'a sequence of themes involving the same set of actors, with a change in interdependencies from each theme to the next; an evolving ‘story’ of the potentially changing relationships of actors.'

As will be explored later, he proposed that themes have a nested, multi-level sub-structure decomposable down to very basic elements.

A valuable characteristic of cognitive scripts is their capacity to guide behaviour by reference to encoded prototypical situations (the protoscript: Gioia & Poole, 1984). They are scenarios whose default assumptions are appropriate expectations and responses to common situations. The 'restaurant script' is a well-defined, if stylised script. This does not diminish its utility because, in learning from our experience of restaurants, we generate particularized sub-scripts to suit unfamiliar restaurant contexts. Most of us learned to expect a restaurant to serve food on plates and provide cutlery. The first visit to a McDonald's hamburger restaurant probably caused dissonance between expectation and observed reality. Our restaurant script required modification, but once done, we happily invoke the 'McDonald's restaurant' sub-script in context.

Gioia & Poole (1984) called these strong scripts because they are quite specific and detailed. Lord & Kernan (1987) suggested that strong scripts encode both goals and multiple paths or strategies for achieving them (means-ends structures). Low level goals (ends) become the means by which high level goals are achieved. Scripts also encode sequence, since low level goals must be achieved in advance of high level goals.
A script, then, is a mental model of appropriate behaviour adaptable to a putatively recognisable situation. Because it encodes prototypical knowledge – including precedents and analogies – it permits inference or gap-filling, allowing the actor to proceed beyond description to prescription. Empirical studies of young children suggest that scripts are useful representations of how humans acquire and activate knowledge (Fivush, 1987). But it would stretch credibility to suppose that adults internalise an infinite variety of scripts. It is more plausible that they internalise a finite ensemble of varying generality and applicability.

Actors in organisations have been said to rely on a repertoire of tried and tested scripts or routines (Johnson, 1987; Nelson & Winter, 1982; Pettigrew, 1985b; Spender, 1989). Consistent with their patterning quality, Spender’s (1989) account of shared, prescriptive recipes noted that:

‘The essence of the recipe is more in the way its elements come together and synthesize into a coherent rationality than in the particular elements themselves’ (1989, 194).

Well-entrenched frames resist challenges over long periods because as Minsky (1977) said:

‘We can think of a frame as describing an ideal. If an ideal does not match reality because it is ‘basically’ wrong, it must be replaced. But it is the nature of ideals that they are really elegant simplifications; their attractiveness derives from their simplicity...we need not abandon an ideal... provided one can explain (excuse) the discrepancy...’

In ambiguous situations sense-making is predicated as heuristic pattern-matching, evaluating goodness of fit
of new circumstances with trusted scripts, albeit amended as perceived necessary to cope (Gioia & Poole, 1984; Lord & Kernan, 1987). Failure to make sense of a situation with a familiar script creates uncertainty. One response is to invoke a script characterized by more abstract, generalised guiding themes and purposes (as implied by terms like master or metascript). If recourse to the metascript aids interpretation, a more particular script can then be developed from the more abstract level, or in extreme an entirely new script may emerge.

Much remains speculative about the mechanisms of improvisation on an existing script, as well as the processes of script creation and substitution. A dramaturgical analogy (Goffman, 1959; Mangham, 1987; Mangham & Overington, 1983; 1987) highlights the fact that although scripts are usually pre-specified and quite stylised, the quality of their implementation draws substantially on the interpretive and improvising skills of the actors. The dramaturgical analogy also emphasises the performative stimulus of a good script (cues for individual and collective action), and its status as a shared, orienting schema defining roles for the actors on-stage and off (the director, sound and lighting technicians, producer, agents and of course the audience).

Though intuitively attractive to apply the script notion to interpretive strategic thinking, Gioia & Poole sounded a cautionary note, arguing that novel situations require weak or elastic scripts, allowing considerable
scope for interpretation, whilst wholly ambiguous circumstances stimulate unscripted behaviour (1984, 454).

Invoking an appropriate script in a novel situation is certainly not a trivial task, for as Schon (1983, Ch. 2) noted, the 'problem' must first be defined:

‘In real world practice, problems do not present themselves to the practitioner as givens. They must be constructed from the materials of problematic situations which are puzzling, troubling, and uncertain. In order to convert a problematic situation to a problem, a practitioner must... make sense of an uncertain situation that initially makes no sense.....

When we set the problem, we select what we will treat as the "things" of the situation, we set the boundaries of our attention to it, and we impose upon it a coherence which allows us to say what is wrong and in what direction the situation needs to be changed. Problem setting is a process in which, interactively, we name the things to which we will attend and frame the context in which we will attend to them. (1983, 39-40)’

Schon does not call this problem-setting activity strategic, but it is an appropriate label insofar as strategic thinking defines the context in which routine problem-solving takes place. When the future is perceived as unproblematic, reflection may be minimal, whereas uncertain or problematic situations may receive much reflection as the actor attempts to frame or reframe unclarified concerns. The capacity to invoke a wide range of tacit scripts in this process is an obvious indication of experience.

A significant aspect of strategic thinking is often said to be its cumulative nature, the unravelling of a thread of coherence underpinning what the organization is and is to be (Mintzberg, 1978,
Mintzberg & Waters, 1982; Pettigrew, 1985a). It is tempting to view this process as the reframing of essential ideas and values in the executive’s masterscript for the organization. However, Bartunek (1988), Hedberg & Jonsson (1977), Hedberg (1981), McCaskey (1982; 1988) and Mintzberg & Waters (1983) are all agreed that something has to be rejected or unlearned before a new image or frame can be focussed, ‘tearing down obsolete mental maps and starting anew’, to quote Hedberg. This second-order or deutero learning (Bateson, 1972) is unlike the incremental updating of scripts to encompass new, but unproblematic situations (the McDonald’s variant of the restaurant script, for instance).

Whilst the incubation of ideas for change may seem slow, frame substitution manifests the quality of a sudden gestalt shift, post hoc becoming identified with a discontinuity in the organization’s development path (Mintzberg, 1978; Miller & Friesen, 1980; Tushman et. al., 1986). Radical reframing implies the need for actors to entertain seemingly contradictory or paradoxical outlooks concurrently. To view situations and issues from opposing perspectives is exceedingly problematic, requiring creative, Janusian thinking (Bartunek, 1988; McCaskey, 1988). This proposition in turn directs attention to the use of metaphor as a device for knowledge representation (section 2.3.1).
To recapitulate, theories of typicality suggest that human knowledge can usefully be represented as self-contained cognitive packages or scripts. Scripts encode exemplary or prototypical assumptions and expectations, with descriptive and normative implications. A script's value lies in its status as a pattern-forming entity more than as a set of constructs.

The scope of a particular script is limited by de facto assumptions about its range-of-convenience. Generic scripts emphasise overarching goals and subsume particular ones. An element of 'fuzziness' permits a script to be used in somewhat unfamiliar situations and facilitates analogies with the past experience it encodes. Thus it provides a functional, albeit imperfect template for future action. Its use will be dysfunctional when subtle, but potentially significant distinctions are ignored (Gioia & Poole, 1984). Though a script can accommodate incremental revisions, a major environmental or other upheaval may cause it to be supplanted in a gestalt or revolutionary manner.

This study seeks to explore executive knowing in the form of scripts, the practicality of which is addressed in more detail in Chapter 3, drawing on Abelson (1973).

2.3 Executive Knowing as Conceptions of 'Role-Identity'
Section 2.2 proposed cognitive structural approaches to representing executive strategic knowing. The script is an apparently utilitarian model that might provide the knower with few imaginative insights. But as Gioia &
Poole (1984) noted, there is an implicit 'as-if-like' or metaphorical aspect to applying a known script to a new situation. In his discussion of shared scripts or recipes, Spender (1989) also acknowledged a creative contribution to managerial judgement under uncertainty. Scripts and metaphors both draw on categorisation and prototypicality (Lakoff & Johnson, 1980; Lakoff, 1987). So they provide complementary insights into personal strategic knowing. Specifically, one may represent the knowing of individuals via metaphoric descriptions of role-identity germane to the firm's context over time.

Here, role-identity is a synoptic label for the concept of 'what I believe I am, why I'm here and what I'm trying to do', or as McCall & Simmons (1966) defined it: 'the character and role that an individual devises ...as an occupant of a particular social position'. Thus, like scripts, role-identities engender a sense of purpose, indeed imply and legitimise behavioural predispositions perceived as consonant with context, especially in occupational settings where identity is significantly a function of what people do, not just what they are (Stryker, 1987). Here, however, in addition to considering role-identity metaphorically, we will draw on process theories of management, notably in small firms.

2.3.1 Knowing as metaphorical images of role-identity
An important aspect of a metaphorical, interpretive framework of personal knowing is its synthesizing quality. According to Polanyi, such a framework becomes
‘the centre of (the knower’s) focal attention’ (1958, 61). Knowing directs attention from the peripheral to the central, from the constituent parts to the overall pattern or essence, from background to foreground (Pettigrew, 1988).

Barnard (1938) described and advocated holistic executive thinking, by which he meant the:

‘sensing of the organization as a whole and the total situation relevant to it’ (1938, 235).

He argued that skilled executives combine logic and intuition, executive process being:

‘...essentially one of analysis...(but) in practice much of the process will be intuitive... (1938, 201) .... (it) ....transcends the capacity of mere intellectual methods... a matter of art rather than science... aesthetic rather than logical (1938, 235)....not intellectual ..... (but) aesthetic and moral... its exercise involves the sense of fitness, of the appropriate. ...(1938, 257).’

In a similar vein Hedberg & Jonsson (1977) posited the notion of ruling myth: a potent, symbolic, shared image that informs and constrains executives. When integrated into the cultural assumptions of the organization it legitimise roles and postures; it provides cues for action and has great motivational power. Prahalad & Bettis (1986) discussed a similar notion they called dominant logic.

Yet a myth or logic simplifies and perhaps distorts, even as it promote a truth. If, as likely, it becomes relatively inaccessible to critique, it encourages conformity; worse, those subscribing to a resilient myth are prone to ignore disconfirming or ‘aberrant’ data. So a myth can become increasingly dysfunctional, requiring
explicit challenge before it is displaced. A number of sources (eg. Brunsson, 1982; Hedberg & Jonsson, 1977; Starbuck, 1982) have equated strategic organizational change with transformation or overthrow of the ruling myth.

Cognitive science research (Lakoff, 1987; MacCormac, 1985) helps explain this observation by noting that human actors reconfigure their mental images abruptly, after the form of gestalt shifts. Schon (1963a) and others (eg. Gentner, 1982; Leatherdale, 1974) argued that this process, to use Schon’s term ‘displacement of concepts’, is the key to creativity and innovativeness. New images enable, just as cliched images hinder innovation and change. Analogy and metaphor appear to play a significant cognitive role for, according to Martin & Harre (1982), metaphors enrich otherwise utilitarian thinking, they should not be decried as ‘mere flights of fancy’ (Lakoff & Johnson, 1980).

Nonetheless, personal imaginings will influence organizational action only if externalised and shared, as implied by the ruling myth. This is likely to be a significant executive priority, consciously or otherwise. As Pettigrew (1979, 578) noted of entrepreneurs in particular:

'Visions with a simple yet ambiguous content, expressed in symbolic language...are not only likely to be potent consciousness raisers but also flexible enough to survive and thereby validate events. If visions are to be used by an entrepreneur as a potent mechanism for directing and influencing others the language contained within the vision is crucial. Visions may contain new and old terminology, sometimes using metaphors and analogies to create
fresh meanings. Words can provide energy and raise consciousness. The capacity to use the full power of words - to make words walk - I suspect is one of the unexplored characteristics of successful entrepreneurs.

Morgan (1986) also emphasised the importance of metaphoric thinking in the processes of organizational sensemaking and interpretation:

'Effective managers... have to become skilled in the art of 'reading' the situations that they are attempting to organize or manage....If we take a closer look at the processes used...we find...an ability to develop deep appreciations of the situations being addressed. Skilled (executives).... are aware...that new insights often arise as one reads a situation from 'new angles' and that a wide and varied reading can create a wide and varied range of action possibilities....

The basic premise ...is that our theories and explanations of organizational life are based on metaphors that lead us to see and understand organizations in distinctive yet partial ways' (1986, 11/12).

In suggesting that effective executives subscribe to myths or theories conveyed in a metaphoric or visionary style yielding potentially novel, transformational insights, Pettigrew and Morgan contribute to a growing literature on the role of language, ideology and myth in shaping organization affairs (Daft & Wiginton, 1979; Martin, 1982; Pondy, 1978; 1983). To decode and transmit meanings, executives must become skilled at 'reading' metaphors, a patently interpretive process (Kets de Vries & Miller, 1987); Manning, 1979; Daft & Weick, 1984; Daft & Wiginton, 1979).

For Jeffcutt (1983) metaphoric imagery was a major sense-making device with 'explanatory and predictive validity'. Further, as Shrivastava & Mitroff (1983) said, the use of
'metaphors embedded in the language and the jargon of organizational decision-making'...

promote collective meaning and in so doing...

'...go beyond being mere embellishments of language by stimulating the understanding of assumptions through a creative process of comparison and crossing of images.'

Whether or not she recognises it, one aspect of the role-identity of a chief executive vis à vis colleagues is arguably that of teacher; promulgating rich metaphoric images is germane to this role because communication skills have been related to representational ability (Wilson et. al., 1987).

All these sources, then, point to the contribution of metaphor to knowing, especially in the domain of the ambiguous and complex. As Lakoff (1987, 303) put it,

'Metaphor provides us with a means for comprehending domains of experience ...(without) a preconceptual structure of their own...(and is) one of the great imaginative triumphs of the human mind.'

Distinctively, a metaphoric image is not tightly-defined and conceptually exclusive; rather, its influence resides in its synthesizing and holistic qualities. But since there can be no indisputable, objective test of the aptness of a metaphor, it may promote action despite or perhaps because of persisting ambiguity over its implications. In sustaining ambiguities strong metaphors do not merely obfuscate. Rather, according to Pondy (1983), metaphor is a device by which ideas signify and facilitate the articulation of new organizational directions and priorities. For MacCormac (1985, 2),
metaphors produce insights and new hypotheses without which knowledge could not develop.

Formally a metaphor is a trope (style of discourse) of resemblance. It can be a single word or a complex analogical construction. It encodes a relational style where idea X (tenor) is construed as if Y (vehicle), implying that X has Y-like qualities: 'In combat he was a tiger'. In more complex formulations metaphor conveys an expressive non-literal comparison of the form X:Y :: A:B, where the X:Y correspondence draws on the correspondence A:B (Gentner, 1982: 107).

Incongruence between the domains of the X and the Y is the source of novelty and difficulty (Ortony, 1979). Ricoeur emphasised the consequent tensions between the X and the Y, and between their referential domains; between the literal and the metaphorical; and between identity and difference whereby some notional truth emerges (1978, 24; 246-7).

To say that X behaves as if Y in all domains is clearly to over-simplify. Likewise, emphasising the Y-ness of X diminishes the non Y-like, perhaps important Z-like aspects of X. Whilst a good metaphor generates insight, a stale, unremarkable and taken-for-granted metaphor misleads or denies insight.

To summarise, research suggests that actors subscribe to strong myths of organizational reality with analogic, metaphoric qualities. Within his perceived reality an executive construes and enacts a personal role-identity influential for a time in guiding and
stimulating his conduct. It is suggested that this role-identity has implicit or explicit metaphoric qualities which should be detectable in his language of explanation (Boland & Greenberg, 1988; Pondy, 1983). Moreover, an intuited need for change should result in shifting metaphoric constructions of role-identity.

A model of executive knowing expressed as metaphors of role-identity is consistent with knowing as intuitive, symbolic and experiential. Metaphoric imagery goes with out-of-context, potentially creative thinking. The absence of contextual bounds in comparison with scripts removes any obvious limit to the number, scope and potential application of these images. The prevalence of multiple images in an individual’s thinking could signify experience and expertise. Conversely, multiple images may promote ambiguity and dissonance unless qualified by sensible range-of-convenience assumptions.

2.3.2 Small-firm executive role-identities

In the small firm literature a number of role identities have been widely acknowledged. Here, one refers to a synoptic outlook, predisposition or self-image, not a personality type in the sense used by Chell (1985; 1986), for example. This section draws particularly on Stanworth & Curran (1976; 1986), after Smith (1967). They addressed the link between effectiveness in small firm development and a number of executive identities and suggested that three archetypes occur frequently, as follows.
(i) The artisan identity. This identity emphasised intrinsic satisfactions, notably personal autonomy, freedom to select one's colleagues and to determine the nature and quality of one's products and services. Income was secondary to other forms of gratification. The artisan was not unduly concerned with growth. Indeed, survival and growth were frequently problematic, for:

'...the internal logic of the firm from the point of view of its chief actor contains ...contradictions' which they interpreted as 'social marginality', arguing that entrepreneurs were to some extent societal misfits. In fact the artisan may come to see growth not as:

'a solution to social marginality (but) a situation reinforcing it.'

For example, one could infer that Amin et. al.'s (1986) Birmingham entrepreneurs became artisanal subcontractors to bigger firms, reinforcing positions of economic, if not social marginality.

The artisan is similar to Smith's (1967) craftsman-entrepreneur who tended to come from a working class background, have a limited, technically-oriented education, be something of a loner, be autocratic and paternalistic toward staff, and adopt a short term outlook with little regard for planning. His desire for independence made him equally suspicious of trade unions and outside sources of capital. The firm's posture towards customer relations tended to emphasise excellent quality and rapid delivery, often to the detriment of profits. The success of the firm was strongly associated
with the personal contribution and credibility of the craftsman himself.

Pitt et. al. (1991) reported a similar archetype they called the *operator*, characterised by hands-on involvement in the main value-adding activities of the firm. *Operators* were somewhat inward-looking and disinclined to delegate. However, there was a cross-cultural dimension to the identity; whereas British *operators* conformed to the *artisan* type, Italians were growth-oriented, albeit concerned to expand the business activity, not the size of the organization unit. Amin et. al.'s *Bologna* entrepreneurs paralleled the *artisan* to some degree, though they emphasised collective action in the local community of small firms. Lafuente & Salas (1989) identified a somewhat similar type, the *family entrepreneur*, who combined strong family priorities with an otherwise *artisanal* outlook.

(ii) The classic entrepreneur. Stanworth & Curran commented that this archetype resembled the neoclassical economist's view of entrepreneurship. Growth in size and earning potential were significant motivators for these market and opportunity-driven individuals, held to be outward looking and innovative (Carland et. al., 1984). Unlike the *artisan* proprietor, the *entrepreneur* was said to be ambitious and impatient to break out of the perceived constraints of small-firm ownership, if necessary by seeking external finance and by recruiting specialists managers, despite these actions tending to
dilute his personal control. His own contribution was to instigate and co-ordinate, rather than be directly involved in the value-adding activities of the firm.

Smith's (1967) opportunist-entrepreneur shared many of these characteristics, being relatively well-educated and socially integrated. Entrepreneurial status was likely to be part of a deliberate career plan. The firm typically grew faster than that of the artisan. This identity appears consistent with Amin et. al.'s Boston entrepreneurs, many of whom were well educated, eg. holding science Ph.D.s. In contrast, the chief executives of small, high technology firms in British science parks often appear closer to the artisan identity, lacking commercial realism.

Pitt et. al.'s (1991) director type also mapped the classic entrepreneur. The director was generally a founder-owner but adopted a more strategic outlook, controlling, planning, setting directions and delegating day-to-day responsibility to functional specialists. He was outward looking, concerned with frequency and quality of external contacts and seemed effective at growing his small firm comparatively fast, at least in the U.K., less obviously so in France or Italy.

(iii) The professional manager. This type was likely to be second generation, well-educated, concerned with acquiring managerial status, notably the approbation and esteem of colleagues and peers in the business community. He was also very conscious of the custodian aspects of
his role. Pitt et. al.'s director type manifested some similarities with the professional manager identity, particularly among French small firms.

To some extent Curran & Stanworth’s identities map those of Mintzberg (1973b) who offered a behavioural typology of the entrepreneur as hero, the heuristic adaptor, drawing on Cyert & March (1963) and Lindblom (1959), and the planner - after Ackoff’s (1970) ‘anticipatory-decision-maker’. Mintzberg posited hybrid forms as a consequence of organizational functions and subunits. He also argued that chief executive identity generally evolves with the stage of organizational development (cf. Greiner, 1972). So there is a temptation to see role-identity evolving progressively, for as Curran & Stanworth noted:

‘a small firm which survives the formative (artisanal) period and enters a period of sustained profitability constitutes a context conducive to the generation of a classical entrepreneur identity. The goals associated with the artisan identity will have been at least partially realised and the new social and economic situation of the firm is favourable to the possible emergence of a new self-definition for the entrepreneur’.

But they remained sceptical whether the transition will occur, because it requires the artisan to reject many of the assumptions about the firm’s success to date, and to effect major changes to his own behaviour. Even though entrepreneurs learn and mature, such a transition is by no means automatic, especially as personal traits and conditioning promote continuity in behaviour and outlook.
unless and until there is an obvious life crisis to catalyse the transition.

2.3.3 Process Representations of Executive Knowing

We now turn to the organization process literature for broader insights into the nature of executive role-identity, specifically to contingency perspectives on policy-making. In this context the individual is not the primary unit of analysis. However, individuals make assumptions about the nature of the processes in which they are engaged and the implications for managing effectively. Therefore, each archetype of process can be expected to legitimise a corresponding executive role-identity, an outlook predisposed to, or taking for granted, the underlying assumptions of that particular process mode. For, in the absence of such an outlook it is difficult to see how that process mode would exist.

A skilled executive may perhaps intuit a complex identity, invoking particular aspects of it flexibly according to his precise understanding of context at any moment. Another's thinking may be dominated by relatively static perceptions almost independent of circumstances. Either way, a review of theoretical process modes is a contribution to our appreciation of de facto role-identities, adding a new perspective on strategic outlooks and conduct.

The first systematic categorisation of executive processes was probably by Thompson & Tuden (1959) who posited four modes they called computation, judgement,
negotiation and inspiration. These were contingent on the intra-organizational environment, defined by variables of goal and technology congruence. Implicitly, their theory proposes that executives act - and expect to act - via consensus or conflict.

Computational processes obtain when there is consensus among actors over goals and over technologies (which define the links between actions and outcomes). Failure to agree in either respect creates uncertainty, which executives are generally minded to reduce. These authors argued that disagreement over goals requires negotiation. Disagreement over technologies requires judgement. Disagreements in both respects requires inspiration for dilemma resolution.

Allison (1971) who presumably drew on the work of Lindblom (1959) and Cyert & March (1963), posited three sets of descriptive assumptions about organization processes. The rational actor mode restated the classic unitary concept of policy making: actors with common world views, goals and choice criteria, broadly equivalent to Thompson & Tuden’s computational mode. His other modes emphasised organizational bureaucracy and political behaviour, both of which apparently subverted analytic rationality in collective decision making. However, Allison concluded:

'The three models are obviously not exclusive alternatives. Indeed, the paradigms highlight the partial emphasis of each framework.... The models can... be understood as building blocks in a larger model of the determinants of outcomes' (1971: 275).

Anderson & Paine (1975) proposed contingency variables of perceived environmental uncertainty and perceived need for internal change to define process. When perceived uncertainty and need for change are low, classic rational planning is the norm; at the other extreme adaptive contingency-planning, consonant with securing radical change, is the norm.

Miles & Snow (1978) posited four modes of organizational adaptation, with executive implications. Executives in defender firms pursue efficiency in relatively benevolent environments; prospectors are risk-positive, seeking opportunity-laden environments. Analysers, a hybrid mode, balance prospecting and defending behaviour; whilst reactors make aimless and unstable progress. The process implications were said to be that defender firms: PLAN > ACT > EVALUATE, ie classic decision-rationality, whereas prospectors in contrast: EVALUATE > ACT > PLAN, anticipating Brunsson’s (1982) exposition of action-rationality (1978: 43, 62). By inference, executive role-identities in such firms will map these process assumptions closely.

Pfeffer (1981a) advocated a politicised decision process mode apparently informed by the ‘garbage can’ model of Cohen, March & Olsen (1972). In bureaucratic and
politicized organizations he argued, unitary goals and optimal decisions are a myth: decision processes are fragmented, iterative and often biased to non-unitary, non-computational, negotiated and judgemental or inspirational behaviour (1981a, 30). However, he seemed reluctant to accept a contingency thesis, emphasising political bargaining as the dominant process.

Meyer, who contributed to the work reported as Miles & Snow (1978), detailed a separate study of hospital decision making (Meyer, 1984) in which he offered four contingent decision process modes: clinical, fiscal, political and strategic. The major influences on the mode-in-use were actors’ values and assumptions arising from their professional status and experience, and their sources of influence and power in the organization. Thus administrators’ outlooks clearly differed from those of clinicians. Meyer suggested that because an identity was associated with a particular group involved in the decision process, the latter inevitably had a hybrid quality. Lyles & Mitroff (1980) and Lyles & Thomas (1988) made similar claims, the latter asserting that any one of several outlooks might be invoked at any time since all are ‘embedded in the firm’s norms...and systems’, indeed variety improves the quality of the process (1988, 139).

Another of Meyer’s insights was that each process mode had symbolic as well as instrumental aspects, a claim supported by Pfeffer (1981b) and Smircich & Morgan (1982). Successful process behaviour therefore requires (i) resolution of conflicts arising from the disparate
identities and interests involved in the process and (ii) decisions in which instrumental and symbolic actions are mutually reinforcing.

Chaffee (1985) posited three strategic process archetypes: linear (parallelling the rational actor mode), appropriate in situations of low complexity and uncertainty); adaptive (with both reactive and proactive elements and appropriate in moderately uncertain contexts); and interpretive, involving the creation and promulgation of ‘orienting metaphors or frames of reference that allow the organization and its environment to be understood by......stakeholders’ said to be appropriate in highly ambiguous conditions.

Drawing on Chaffee (1985) and Allison (1971), Pitt & Johnson (1987) explicated a chief executive’s view of strategic process. They proposed that an individual may enact a variety of process assumptions synchronically, though their respective influences will change over time in line with evolving personal and organizational circumstances.

Of particular interest here, Shrivastava and co-authors (Shrivastava, 1983; Shrivastava & Mitroff, 1983; Shrivastava & Grant, 1985) considered the collective and the individual level of analysis. Shrivastava & Mitroff (1983) reported four policy making frames of reference (F.O.R.) informing senior managers in large organizations namely: entrepreneurial, professional, bureaucratic, and political. In their terms entrepreneurial was an individualistic and interpretive F.O.R., whilst the
others equated nominally with Allison’s three modes. Each executive allegedly subscribed to a dominant F.O.R. From apparently the same data Shrivastava & Grant (1985) identified four ‘prototypical patterns’ of policy-making. These mapped the managerial F.O.R.s closely, so one concludes that the F.O.R.s of senior executives had a strong bearing on the policy making processes in the firm and that hybrid processes either did not arise, were suppressed or simply not observed.

Quinn & Rohrbaugh (1983) offered a typology of process modes contingent on degree of centralization and internal/external focus, namely the rational goal approach (centralized, external focus), open systems (decentralized, external focus), human relations (decentralized, internal focus) and internal process (centralized, internal focus). One sees parallels with Miles & Snow’s types, with defenders being analogous to internal process types and prospectors to open systems types. Goold & Campbell (1987) offered a superficially similar typology based on the degree of centralization of policy making and the nature of control (loose/tight) exerted by the centre.

Friesen, 1978, 1984; Mintzberg, 1979a). Finally, Whittington (1993) proposed four models of strategic process defined by the dimensions of deliberate versus emergent action and profit-maximising versus pluralism. These studies suggest a correspondence between an hypothesised process and executive assumptions about the enactment of that process, which is in effect the notion of role-identity used here. For although an individual's role-identity draws on personal qualities to some extent, organizational contexts will have a major influence on that person's understanding of what are appropriate and admissible behaviours. This being so, one can ask how it may be possible to encapsulate salient features of these identities in a more synoptic form.

2.3.4 Reflections on process-derived role-identity
The thesis of section 2.3.3 is that an individual manifests a role-identity for the time being, based on a finite set of assumptions about executive process. Predispositions of this kind legitimise some forms of behaviour for that person, as for example, an implicit preference for consensus-seeking. Preference constructs or dualisms underpin a majority of descriptive process archetypes and by extension their associated role-identities.

Four such constructs appear particularly influential; each will be reviewed briefly, followed by a more general discussion.
(i) **Change preference**: conservatism :: radicalism. This dualism derives support from much empirical research on organizational process, some already noted. Burrell & Morgan (1979) and Pettigrew (1985b) referred explicitly to it and it has variously been expressed by others as incremental :: global change (Johnson, 1987; Mintzberg, 1978;), evolution :: revolution (Miller & Friesen, 1980) and regular :: transformational change (Clark, 1987). One pole reflects an identity predisposed towards stability, continuity-seeking, and sustaining the status quo. Change, when it occurs will be reluctant, incremental and reactive. The other pole is proactive towards change, valuing and seeking innovation, often desiring fundamental, destabilizing and irreversible change.

(ii) **System focus**: inward-looking :: outward-looking. Early writings on organizations tended to emphasise the optimization of essentially closed systems. Actors sharing the assumptions of Fayol (1949) for example would look inwards at the efficiency of the firm in bureaucratic, control-centralising terms. They would perceive the major complexities and uncertainties of the business to be within the firm. This appears to describe the defender mentality rather well.

Conversely, Lawrence & Lorsch (1967) and Thompson (1967) recognised that organizations have a wide external context, positing an open system perspective and hence the need for a less centralising, external-orientation, especially in pursuit of strategic effectiveness. Many of
the major ambiguities are perceived to emanate from the world beyond the organization and hence beyond the control, if not the understanding of its executives. This seems to fit the prospector type rather well.

In the small firm context this dualism also contains elements of independence (manifest as self-reliance and personal involvement of the proprietor) versus interdependence (meaning a propensity to form network relations and to delegate to others).

(iii) Basis of rationality: decision :: action. Decision-rationality has unquestionably dominated theorising about organizational process, particularly in the strategy literature. Decision-rational actors perceive that systematic analysis and clear, optimising decisions are necessary and sufficient conditions for action. Generally their decisions pertain to substantive issues amenable to analysis, as exemplified in the priorities of bureaucratic, defender type firms.

But as Brunsson (1982, 1985) and Peters & Waterman (1982) argued, the evidence for a rational comprehensive process is rather unconvincing. Given the cognitive limitations of human actors, it is at best a notional ideal. The alternative, however, is not anarchic irrationality, but pragmatic action-rationality. Many executives, particularly when experiencing the stress of strategic uncertainty, perceive action (often of an exemplary, symbolic kind: Pfeffer, 1981b; Smircich, 1983) not analysis as the appropriate basis for proceeding. If
they share Brunsson's views on appropriate and timely action, they are almost bound to support his contention that an action-rational outlook is an appropriate response to ambiguity, where actions precede and legitimise emergent strategies and plans, akin to the prospector type, not the reverse.

(iv) Co-ordination: consensual, unitary :: pluralistic, conflictual. The consensus/conflict dimension emerged clearly in Thompson & Tuden's (1959) analysis, the latter perspective being endorsed by Pfeffer (1981a), Meyer (1984) and others. It finds strong echoes in the work of Allison (1973) even though he may have regarded rational comprehensive processes with centralising, integrating tendencies as the norm, and bureaucratic and political processes as aberrations.

In any event, we know that when personal identities are grounded in individualism and executives perceive opportunism as legitimate, conflictual bargaining in pursuit of local, not global interests is likely. Executive process becomes fragmented and decentralised. The low level of co-ordination will itself then be a source of uncertainty and potential instability. Conversely, when apparent consensus is observed, quasi-unitary outcomes should result. This may be because there is genuine harmony, or perhaps merely the result of the behaviour of an autocratic or paternalistic chief executive, not unusual in proprietorial small firms.
Together, these four dimensions define a hypothetical 'identity space'. It remains an open question beyond the scope or purpose of this discussion as to the independence of these dimensions. In the abstract one would incline to argue that they are orthogonal: for instance, a decision-bias should no more orient an actor to stability-seeking, than an action-bias orients her to change-seeking. Actions can create change, but they can equally entrench the status quo. It follows in principle that a wide range of empirical identities would locate in this space.

However, it is intriguing to speculate on the association of polar constructs around two archetypal positions or identities. For convenience these are labelled Type I and Type II, thus:

<table>
<thead>
<tr>
<th>Dualism</th>
<th>Type I identity</th>
<th>Type II identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change focus</td>
<td>Continuity-seeking</td>
<td>Change-seeking</td>
</tr>
<tr>
<td>Rationality</td>
<td>Decision-oriented</td>
<td>Action-oriented</td>
</tr>
<tr>
<td>System focus</td>
<td>Inwardness and</td>
<td>Outwardness and</td>
</tr>
<tr>
<td></td>
<td>self-dependence</td>
<td>inter-dependence</td>
</tr>
<tr>
<td>Co-ordination</td>
<td>Unitary outcomes</td>
<td>Fragmented outcomes</td>
</tr>
<tr>
<td></td>
<td>via consensual</td>
<td>via conflictual,</td>
</tr>
<tr>
<td></td>
<td>harmony/autocracy)</td>
<td>opportunistic bargains</td>
</tr>
</tbody>
</table>

In respect of the small firm context, the Type I identity seems to correspond tolerably well with the artisan type of proprietor. It places a lot of emphasis on cautious development based on rather inward-looking self-reliance, allied to a concern for efficient operations. Progress is preferred via consensus, albeit it may be a consensus imposed by an autocratic or paternalistic leader.
Though the Type I identity is conservative, this does not imply that his firm experiences no change. Rather, one would expect continuing incremental adjustments if it is to avoid the phenomenon of strategic drift from its environment (Johnson, 1987). (A counter argument by Meyer & Zucker (1989) is that some organizations survive for long periods in what the authors define as a state of high persistence and low performance, a condition of more-or-less permanent failure). The implication is that the typical failure mode of firms led by a Type I identity is gradual and protracted.

The Type II identity encodes assumptions which are diametrically opposed to the Type I identity. It appears to conform much closer to the classic entrepreneur. By the standards of the Type I, the Type II is likely to develop her firm unpredictably and in spurts, via outward-looking, opportunistic and seemingly unplanned quests for growth and effectiveness, usually at the cost of low efficiency. In opportunity-laden environments forming inter-dependent networks and alliances offers a realistic way of coping with uncertainty and inadequate resources. Success will generate rapid, if potentially unstable growth, as the firm exploits innovations whose potential is poorly understood at the outset.

The Type II identity is not afraid of conflict, understands the pursuit of local interests and finds these processes stimulating as well as potentially rewarding in financial terms. She is comparatively
tolerant of the risk of failure. If a firm directed by a Type II executive should fail, it will probably do so abruptly and catastrophically.

Accepting that Type I and Type II identities are no more than plausible hypotheses, it is suggested that they provide useful additional agenda with which to discuss the role-identities of small firm executives.

2.4 Implications For Research
Several routes to representing the experiential, strategic organizational knowing of executives have now been explored. A construct-based approach highlighted the significance of paradoxical oppositions or dualisms. The implicit conflicts of priority in such dualisms, it is argued, have the potential to create psychological tensions that in principle give rise to both defensive and path-breaking motivational consequences for the individual and hence the firm. The exploration of dualisms in an executive's thinking is suggested to be a valuable source of insight for the researcher.

A script-based approach emphasised the contextual and experiential patterning of executive knowing. Scripts encode situationally relevant, utilitarian knowing. An actor makes sense of (interprets) a new situation by invoking a 'script of best fit' from her cognitive repertoire. Typicality theories help explain how this is possible and why a script transcends its constituent parts. Abelson's (1973) conception of the masterscript remains a useful prototype that will be developed in
chapter 3. In suggesting that one can usefully represent executives’ strategic knowing in terms of inter-related, multi-level goals and strategies, it too offers rich analytic possibilities.

A third generic perspective on representing executive knowing emphasised the need to explore their conceptions of role-identity. Arguably, the latter encode a good deal of what they regard as their main organising styles, personal contributions and priorities. One proposed approach to explicating role-identity is via metaphors, teasing out holistic, analogical sense-making and motivational images. In comparison with scripts they are expected to be situationally ungrounded, creative and inspirational, rather than utilitarian. A corollary is that they contain greater ambiguity between belief and action. Thus they may be able to mediate apparent contradictions and reconcile divergent positions and outlooks (Abravanel, 1983). The gestalt imagery of a dominant metaphor or myth can overwhelm competing myths and become a magnificent obsession, immune from empirical reality. Construing role identities in metaphoric terms, then, is a natural complement to the other perspectives described.

Finally, one may seek to illuminate role-identity in terms of theories of executive process, culminating in the hypothesis of two process-derived archetypes which, it was suggested, map well-known proprietorial identities extracted from the small-firm literature.
These various approaches offer the prospect of a rich, multi-stranded representation of executive strategic knowing, portrayed schematically in Figure 2.1.

Figure 2.1: Alternative lenses on executive knowing

Scripts
(experiential patterns, cues for action)

<table>
<thead>
<tr>
<th>Tension-creating</th>
<th>Executive knowing</th>
<th>Metaphoric role identities</th>
</tr>
</thead>
<tbody>
<tr>
<td>dualistic constructs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Process-derived conceptions of role identities
3.1 Basic Issues In Sociological Research

It is appropriate for the researcher to make and justify theoretical and operational choices over the objectives and conduct of an enquiry. This study was based on the assumption that one can usefully explore the experiential wisdom of executives. To uncover and make sense of their mental models in the strategic organizational domain is likely to require (i) direct contact with an appropriate sample of those having de facto responsibility for shaping the direction of their firms, and (ii) understanding 'reality' in intersubjective terms. These aims locate the study essentially in Burrell & Morgan's (1979) interpretive paradigm.

The assumptions and implications of this paradigm, therefore, are addressed in section 3.1, the practical and preferred research choices in section 3.2.

3.1.1 Research paradigms

The interpretive paradigm stands in marked contrast to positivism, although Burrell & Morgan (1979) acknowledged that interpretivism encompasses many phenomenological strands. Crucially, it attaches considerable weight to meanings as they are conveyed by and inferred from the words and deeds of the subjects of study.

Underlying the interpretive (or in Lincoln & Guba's term: naturalistic) paradigm are a number of assumptions
about the nature of reality, knowledge, and appropriate forms of enquiry (Burrell & Morgan, 1979, 1-9; 28-32; Lincoln & Guba, 1985, 37):

* Reality (ontology) is individually and socially mediated, drawing on the cognitive and emotional factors specific to individuals and those with whom they share meanings. Meanings are multiple, circumstantial, holistic and constructed.

* Valid knowledge (epistemology) is personal and (inter)subjective, a mixture of facts and values. The knower and the known are interactive and inseparable. Knowledge acquires meaning through insight and experience; its validity derives from its significance for the knower. ‘Facts’ are value-laden, therefore have no verifiable truth content independent of the knower. This stands in marked contrast to the positivistic assumption of value-free ‘objective’ knowledge.

* Society and its institutions are an emergent social creation. Social reality, insofar as it exists outside the consciousness of an individual, is a network of assumptions and intersubjectively shared meanings.

* Human nature: individuals act to create and mould the environment to their will. Their relations with it are voluntaristic, not deterministic.

* Enquiry methodologies investigate what is unique or particular to the individual, not what is general or universal. They focus on subjective and relativistic (ideographic) data, not objective and absolute (nomothetic) data.

* Causes and effects manifest mutual and simultaneous influences. Linkages may be neither significant nor discoverable, opposing the positivist assumption that causes and effects manifest discoverable, directional linkages in time and space.

Admittedly, these statements characterise an idealised position. According to Archer (1988, 274):

'...from a strictly philosophical standpoint there are some fairly strong objections to positivistic external realism and to normativistic subjective idealism.'

As Kuhn (1970) noted, scientific enquiry is never wholly value-free, and natural science acknowledges complex-
system reality, as in the theory of quantum mechanics and ultimate limits on determinism in physical systems. Nonetheless, experimental designs attempt to control for that complexity. Conversely, absolute adherence to interpretive axioms precludes learning from other research perspectives, as Morgan (1983b, 13; 1983c, 381) advocated. For instance, should interpretivism automatically preclude generalizations, analogies with other contexts, or speculations over local causality, even if global causality lacks meaning.

Archer (1988) therefore argued for an intermediate, more flexible theoretical position, advocating 'internal realism', with an ontology of intertwined and hard-to-disentangle facts and values, and epistemology as 'reality-for-us': intersubjective construction of shared cognitions (1988, 273). He commented:

'One would have thought that there was ample room ... for research approaches which accepted the validity of multiple-observation statistically based studies and those involving more intimate study of a small number (often one!) of examples.'

Morgan (1983c) suggested that assumptions and practices should link researcher and study phenomenon in a methodology underpinned by an implicit

'logic or strategy of research (since) what is studied and what is learned are intimately connected with the mode of engagement adopted'.

Because the essentially complex, messy nature of 'interesting' research means that there is no one best approach (1983c, 377, 379), he advised pragmatic choices from which a research philosophy can subsequently be elaborated.
Further, he argued, it is more important to develop insightful 'facts' via evocative research 'to be sustained, rejected or refined through future studies', than to conform to positivistic canons (1983c, 369, 392, 398). This advice echoed Starbuck's (1982) view that:

'misguided perceptions that objectively measurable phenomena are more real or more important (have justified) ...numerous studies of so-called objective phenomena... (whose)... aggregate finding is that almost nothing correlates strongly and consistently with anything else.'

However, the corollary of a pragmatic approach is that researchers should accept, modestly, that at best they illuminate a small facet of reality. Moreover, as Thorngate (quoted by Weick: 1979, 36) observed, a theory of social behaviour cannot be simultaneously general, accurate and simple.

3.1.2 Quality/validity in research
For Morgan (1983b), it was impossible to evaluate the claims and contributions of different research paradigms independently of one's prior viewpoint. The key problem is that most researchers are reluctant to acknowledge alternative ontologies and epistemologies, and feel no need to engage in paradigmatic debate.

A consequence is that interpretive studies are frequently exposed to inappropriate positivist criteria in assessing their legitimacy. As Morgan highlighted the dilemma (1983c, 394-6):

'...the hallmarks of good positivist research and the criteria that can be used to judge the quality of research generated by positivist and neo-positivist
strategies (apply) ...only insofar as one accepts the assumptions that underwrite the positivist approach.

Research strategies that abandon the positivist standpoint of the detached, neutral observer cannot be fairly judged in terms of the evaluative criteria normally applied to positivist research, for they seek a different kind of insight, adopt different methodologies, and favour different criteria for judging their knowledge claims.’

In response to the difficulties of establishing the legitimacy of phenomenological research in the eyes of positivist peers, Glaser & Strauss (1967, 223) proposed assessment criteria of trustworthiness, credibility, and plausibility. Lincoln and Guba equated trustworthiness with adhering to disciplined and systematic behaviour (1985, 251, 290) informed by the chosen paradigm assumptions, and conformity to a specified set of axioms. The other two criteria require the researcher to derive conclusions significant to herself and to her chosen audience. As Reason & Marshall (1987) expressed it,

‘valid enquiry rests on critical subjectivity, on the perspective of a personal view from some distance.’

The desire for rigorous quality criteria for qualitative research has led others to restate neo-positivist criteria (eg. Cook & Campbell, 1979; Miles & Huberman, 1984; Yin, 1984):

* Construct validity: there must be operationalised definitions of and measures for constructs used to explore relationships;

* Internal validity (truth value) of a posited relation between variables must not be seriously compromised by shortcomings in sample construction, instrument, construct validity, temporal effects etc. (Lincoln & Guba offered credibility);

* External validity: the generalizability of findings across persons, contexts and times must not be compromised by invalid constructs etc. (in Lincoln & Guba’s terms transferability, though context-
specific enquiry rarely aims to generalise beyond the subject under study);  

* **Reliability**: the potential for replication: a second, independent study should reproduce the findings, given similar subjects and contexts. *(dependability for Lincoln & Guba, though context-specific enquiry is, virtually by definition, unrepeatable)*;  

* **Neutrality**: a set of findings should be free of systematic bias due to the motives and perspectives of the investigator *(Lincoln & Guba argued for confirmability, a transparent evidential trail covering instrument development, pilot tests, data treatment, explanatory notes, personal reflections etc.*

Allison (1971), Bougon (1983), Miles & Huberman (1984) and Yin (1984) all stressed the importance of (i) systematic protocols to obtain, store and analyse data and to draw and verify conclusions, (ii) coherent chains of evidence in data interpretation and (iii) having draft findings reviewed by key informants to establish plausibility. Miles & Huberman advocated explicit checks for potential sources of bias and for representativeness of sources and findings. The investigator should also seek contrasting cases and possible refutations via outlying cases and rival explanations.

Many interpretivists would reject at least some of the foregoing criteria, not least that of neutrality, since at face value it denies the researcher scope to generate meaning interactively with the subject. In any event, qualitative research designs rarely meet all of the above criteria concurrently.

The tactic of **triangulation**, perhaps better termed multiple corroboration, has been advocated as a strategy for enhancing validity *(Bogdan & Taylor, 1975; Burgess,
1984: 144; Cook, 1983: 76; Denzin, 1978; Jick, 1979). It calls for multiplicity in one or more of the following: methods, instruments, data sources, times, populations, investigators, theories. However, as Popper argued, triangulation remains flawed in theory testing, for though N instances corroborate a proposition, the (N+1)th can disconfirm it. Large values of N do not increase the probability of the proposition being correct (Magee, 1973: 25, 43). Furthermore, triangulational incongruence may constitute insightful data, rather than signify invalid conclusions.

Some sources have advocated the value of integrating seemingly opposed research approaches, for instance Archer (as noted) with respect to philosophy and Jick (1979) over melding qualitative and quantitative data. Ultimately though, as Morgan advised, the solution to a particular research question is best addressed pragmatically. What is vital is for the researcher to appreciate both the benefits and limitations of his preferred research and to behave transparently and with integrity.

3.1.3 Precedents and prejudices in management research
During the last twenty years management research has greatly increased in scope and range (Fredrickson, 1983; Harrigan, 1983; Jauch, 1983). In a panoramic review of extant literature Thomas (1984) observed:

'Perhaps the only strong consensus...would be (the) lack of interest in well-written but rather empty
papers full of conjecture and plausible statements incapable of being tested or further researched'.

Thomas was perhaps mindful that part of the management literature has always contained simplistic prescriptions, ranging from the interesting but unproved to the downright naive or disingenuous. Such concerns have led many academics to advocate a rigorous quantitative approach, even when working with 'soft' qualitative data, as illustrated by these statements:

'Three central axioms...underlie the valid conduct of research in management science. First, the methods...should be objective; empirical observations should be impartial representations of managerial reality, unbiased by particular researchers' values or viewpoints. Second, the goal...should be the cumulative discovery of a common body of truth; the discipline should strive toward the establishment of a consensually validated core of knowledge. Third...management science should...yield directly applicable results...oriented toward the development of tools and techniques...pragmatically relevant to extant managerial problems'. (Astley, 1984, 259).

'The analyst faced with a bank of qualitative data has very few guidelines for protection against self-delusion, let alone the presentation of "unreliable" or "invalid" conclusions...' (Miles, 1979, 590).

'Although strategy researchers employ qualitative and...quantitative...approaches, the trend appears to be toward the use of large sample, quantitatively operationalized research designs' (Venkatraman & Grant, 1986, 71-2).

But if for some, management research has come to signify scientific, technique-oriented methodologies, there have been others who emphasise the subtle, performative skills of managers and the craft-like nature of research:

'The field of organization theory has...paid dearly for the obsession with rigour in the choice of methodology. Too many...results have been significant only in the statistical sense of the word...Increasingly in our research, we are impressed by the importance of phenomena that cannot be measured...by
the role that personality and intuition play in decision making' (Mintzberg, 1979b, 583).

'The natural science model is sometimes called quantitative research... (its) advocates stress the importance of reliability, validity and accurate measurement before research outcomes can contribute to knowledge. Others of us would answer that significant new knowledge about organizations is the result of qualitative procedures... concerned with the meaning rather than the measurement of organizational phenomena' (Daft, 1983, 539).

'We are aware that our choice of vocabulary to describe techniques of dramatistic analysis is bereft of the kinds of words - "sampling", "reliability", "validity", "interview", "generalization"... - that are customary for social scientists. We could have used such words; there is an audience for such "scientific" performance, but that was not our purpose. We think it unlikely that... those who respond favourably to the conventional melodramas of scientific presentations will... develop a taste for... our... mode for "seeing" organizational conduct.' Mangham & Overington, 1983, 231)

'... if rigorous management means the application of management science and technique, then a 'rigorous manager' must be selectively inattentive to the art which he brings to much of this day-to-day practice, and he must avoid situations - often the most important in organizational life - where he would find himself confronted with uncertainty, instability or uniqueness'. (Schon, 1983, 240-1).

Thus the polarization of outlook in sociological research generally is brutally manifest in organization and management research. If anything, lack of tolerance for alternative perspectives is increasing, even in small firm research (Curran & Burrows, 1987) and as Easterby-Smith et. al. (1991) remarked, the researcher must be 'politically' aware.

3.2 The Format of this Study

Turning to the conduct of this enquiry, section 3.2 begins with a discussion of appropriate strategies for data generation in relation to the study objectives.
Attention focuses on fieldwork strategies, followed by sample design and selection, then data collection and treatment.

3.2.1 Basic design options

Three strategies for data generation were considered seriously, all with precedents in the literature. These were (i) a search of (auto)biographical literature (ii) a structured (large-sample) survey of executives, and (iii) face-to-face fieldwork, in essence a case-based approach. The first option, though having some attractions (Sims (1993) offers a particularly elegant example), was ruled out on the grounds firstly that detailed statements from small firm proprietors are unusual and secondly because the available data would be partial, secondary and not interactive.

Surveys work best when constructs are clear, unequivocal and well-grounded in prior research, being generally associated with positivist testing of simple propositions. However, in exploratory research as envisioned here, one has no desire to impose constructs on subjects. Thus a survey instrument was thought unlikely to yield significant insights and, following Curran & Burrows (1987), it was ruled out.

Labour-intensive fieldwork aims to capture interactively the 'fine-grained' detail associated with a few cases (Burgess, 1984; Calori et. al., 1992; Harrigan, 1983; Schein, 1987; Yin, 1984). Attention shifted in this direction, given also the writer's prior experience of
unstructured interviewing and awareness of the long tradition of case-oriented fieldwork in management research.

A much cited weakness of the case approach is the tendency to rely on a single instance. Weick (1969, 18-20) criticised case research as situation-specific, ahistorical, one-sided, tacitly prescriptive and overly pragmatic:

'The usefulness of a theory is not determined by its usability in the everyday business of running an organization.....in terms of pragmatics...(A case study) will often provide a tacit 'prescription' for getting along in an organization. But we do not know the conditions under which that..prescription holds.'

A case study may show what works but it cannot refute, though Campbell (1975, 38) argued that if multiple predictions are made from a single theory, they may be refutable via a single intensive case instance. Another way of enhancing the value of a single case is to redefine the unit of analysis (McClintock et al, 1979). But theoretical generalization is clearly unwise unless multiple cases are compared (Jauch et. al., 1980; Yin, 1981; 1984).

Conversely, the case study is particularly useful for exploring and developing theory in an historical-contextual perspective. It is also a surrogate for longitudinal (real-time) study (Child & Smith, 1987; Johnson, 1987; Jones, 1983, 147; Mintzberg, 1978; Mintzberg & Waters, 1982; Pettigrew, 1973; 1985b; Whipp & Clark, 1986).
Thus, this study was conceived as essentially qualitative, interpretive, case-based fieldwork. Nonetheless, it was thought desirable to introduce an element of between-case comparison, as will be seen.

3.2.2 Fieldwork strategies and tactics
Available fieldwork strategies parallel the philosophical positions reviewed. Fieldwork implies interactive approaches (Blumer, 1969; Goffman, 1959), such as participant observation and unstructured interviewing, when the interest is in socially-constructed meanings (Berger & Luckman, 1967). Each approach has merits and drawbacks. The following discussion draws particularly on Bogdan & Taylor (1975), Burgess (1984), Denzin (1978), Schatzman & Strauss, 1973, and Schein, 1987).

Participant observation offers rich, real-time data. Given germane needs and access it is the obvious choice, though its efficacy can be compromised by inappropriate sampling tactics or inadequate resources to ensure full, reliable data capture. Because it is fundamentally intrusive, the observer must assess the affect of her presence on events. Conversely, if the research is covert there can be problems of ethics or of 'going native'. If an investigator is obliged to adopt multiple roles as the price of access, observations may be systematically biased in an unquantifiable way. Data capture over extended periods is difficult in practice. For all these reasons the data captured may actually be of dubious validity or shed little light on the research
question(s). These concerns are especially germane in small firms, where the presence of an extra person is a substantial perturbation on the status quo. So although participant observation could in principle shed light on the research agenda, equally useful data might be obtained at lower cost and risk by other means.

Interviewing was considered an appropriate alternative, though it was recognised that interviews are at best a ‘small slice of reality’, especially when done intermittently. They can be (i) highly structured, where the researcher uses a pre-determined question schedule requiring simple responses, (ii) semi-structured, where the schedule allows greater scope for discussion, or (iii) unstructured conversations where the format is limited to a basic agenda of topics or themes, giving subjects considerable scope for self-expression (Burgess, 1984, 108). Unstructured interviews have great potential for generating insightful data, yet require considerable interviewing skill (Mishler, 1986). The researcher should be undirective, beyond keeping the conversation on a broadly appropriate track. Above all, in seeking the subject’s perspectives the researcher must be a good listener, alert to unexpected signals - to avoid foreclosing on unexpected, but pertinent discussion.

Interviews are evidently intrusive because they are instigated by the researcher. Data will be shaped, perhaps inappropriately in the context of the research objective, by a respondent’s understanding of the purpose of the interaction. Many interviews in management
research are retrospective, relying on subjects' imperfect recall of events, though some safeguards exist (Huber & Power, 1985). A subject's motivation to participate and his candour, particularly if a formal record of the discussion is made, are open to question. These concerns are surmountable by developing a trusting relationship over time. Several extended discussions with a respondent are highly desirable, to erode initial reservations and inhibitions. An assurance of confidentially is also of paramount importance.

If the dialogue is tape recorded (a generally accepted tactic: Burgess, 1984) there is no problem of data capture and a verbatim transcript can be produced later. At the researcher's discretion, this can be presented to the subject for content validation or (if appropriate and approved by the latter) to an independent observer for comment. A transcript also evidences whether the researcher has avoided 'leading the witness'. An objection to tape recording is that it may inhibit the subject. This can be overcome in three ways, by (i) developing trust, (ii) allowing the subject the power to veto recording at any time (in the writer's experience the veto was rarely used), and (iii) interviewing one-on-one, a tactic employed in this study. One-on-one discussions can be supplemented with group discussions and/or 'stimulatory' interviews where subjects are confronted with feedback or controversial ideas, allowing the researcher to gauge their reactions (Miles and Snow, 1978; Salancik, 1979).
A series of interviews with key subjects generates a wealth of descriptive data, opinions and perceptions about particular topics of interest. But documents are additional sources of data (Denzin, 1978). Personal documents include memoranda, reports, diaries, etc. One can distinguish private from public documents, and between primary (solicited) and secondary (unsolicited, produced for a purpose other than the research in hand). Life-history analyses rely heavily on documentary sources (eg. Jones, 1983; Mintzberg, 1978; Mintzberg & Waters, 1982), though sometimes short, real-time accounts can be compelling (eg. Mintzberg, 1973a; Noel, 1985). In this study documentary data were used as an additional source where available. However, it was quickly apparent that small firms commit relatively little to documents, other than statutory accounting data.

Documents are often held to be unobtrusive sources. This is not necessarily so, because the significance of key documents is usually appreciated by a subject. Really informative documents do not lie around waiting to be read, one has to establish their existence and request sight of them. Detailed study necessitates their removal from the site or copying - requiring further justification and permission. In contrast, verbal comments are frequently spontaneous, gratuitous and irrevocable.

Potential biases exist in all forms of data, whether documentary, via questionnaires, interviews, or direct observation. They can arise from the investigator’s
choice of sources and from subsequent interpretation. It is important to consider the context in which data have been generated, as various texts on content analysis have stressed (eg. Krippendorf, 1980). Since unstructured interviewing was the main data source here, further comments on validity will be made specifically in this respect.

Construct validity: unstructured interviews, unlike surveys, allow the researcher the scope, indeed the duty, to clarify subjects' meanings. Sequential interviews permit the researcher to reflect ideas back, testing one's interpretation as well as the respondent's consistency of use. If properly conducted and analysed, interviews provide acceptable construct validity.

Internal validity: Statistical tests of qualitative data are rarely possible, save in the case of simple measures like frequency counts, so this aspect remains of some concern. As noted, the best safeguards are systematic protocols for data analysis and conclusion formation (Miles & Huberman, 1984). Difficulties can arise over face versus deep meanings and espoused versus action-informing beliefs. These problems magnify as the emphasis shifts from categorizing and counting to the interpretation of meanings. On the other hand, interpretive studies require the researcher to explicate his own sense of the data, systematically, with sensitivity to context, and with integrity.
Obtrusiveness is arguably of greatest concern. The researcher’s presence is bound to affect situations and to some extent create bias. Intermittent contact, however, minimises the risk of ‘going native’. The writer sought to avoid systematic bias in the process of data generation, for example by trying not to inject arbitrary or personal opinions. For this reason a clinical style in which the researcher’s opinions are routinely sought and offered (probably the main reason why access was granted) was avoided. The preferred approach was to act as a ‘mirror’ to a respondent’s comments. This does not eliminate the possibility of bias, to which the main counter must be vigilance. It is worth observing, however, that respondents who head business firms are not malleable objects; they impose their own priorities on a discussion and it is usually quite difficult to ‘lead the witness’, even if that were the intention. Verbatim transcripts allow one to monitor the use of open versus closed questions, ‘air-time’ ratios etc.

External validity: primary conclusions are specific to context and subject. Any attempt to generalise across sites, individuals, positions, firm types and so on, must be questionable. If generalisations are sought, two kinds of safeguard exist. First, the theoretical basis, if any, for generalisation must be explicit. Second, one can invoke the criterion of plausibility in relation to the contexts between which the generalization is asserted.
3.2.3 Sample design and selection

A study of chief executives in small firms was predicated on the assumption that they would strongly influence the firm's strategic path, a situation likely to be well-understood by colleagues. Small firms would facilitate identification of and access to the dominant coalition. It was also thought feasible to select a number of firms based on theoretical considerations, enabling a range of comparisons to be made.

The aim was to select established small firms in a variety of circumstances. Bases considered for possible selection included:

* Service, as opposed to manufacturing sector firms
* Specific industry sectors
* Entrepreneur identities

An initial design was conceived around six firms, of the form Yin (1984, 41, 48) termed 'multiple-case embedded', i.e. multiple cases and multiple units of analysis. In principle this would permit both literal replication (where similar findings would be predicted) and theoretical replication (where contrary findings would be predicted for clear, theoretical reasons).

Killeya & Armistead (1984) argued that relatively few firms offer pure services, activities divorced from the production, conversion or supply of goods. This conclusion applies to the sample chosen here, all the selected firms best being described as distributors. The perception of the executives was that the service
component remained a prime source of competitive advantage (Pitt, 1989).

Two firms were selected in each of three sectors, supply of industrial abrasive equipment and consumables, industrial services, and motor vehicle retailing. Emerging ideas about executive identity affirmed the value of the set chosen, since it appeared to contain examples of artisan, classic entrepreneur and professional manager.

Comprehensive sets of interviews were conducted in all six firms which, it was envisaged, would enable a range of comparisons to be made. However, as the research became increasingly focused on explicating strategic knowing via the multiple lenses of Chapter 2, it was evident that the thesis would benefit by restricting it to a straight comparison of two chief executives and their respective firms. The ones chosen will be referred to by the pseudonyms Bill White of Wittenshaw Abrasives and Hamish Dean of Pyrochem. They were selected because intuition and preliminary analysis suggested that they were clearly different identities when considered in relation to their artisanal and entrepreneurial qualities.

3.2.4 Data collection
Initial contacts were typically with a subordinate having access to the CEO. Interviews began in late 1986 and were concluded in 1991. Thereafter informal contacts have been maintained. Interviews were one-to-one and tape recorded.
Confidentiality was assured and respected. Although subjects were offered a veto over the recording of sensitive topics, this option was rarely exercised. Each conversation was transcribed in full. Notes of the recall of parts of a conversation not recorded were later appended to the relevant transcript.

As well as the CEOs, members of the dominant coalition or significant others were interviewed, together with a few others who had long histories with the respective firms. Approximately fifty discussions (generally one to two hours) with 22 people underpinned the exercise, with the report on the main cases based on seventeen interactions with eight people. Subjects were interviewed at least twice and in a few instances three or four times. Later discussions explored new topics and developed those discussed already. Diminishing returns appeared to set in after the second interview.

The first interview was based on a schedule of open-ended questions about the firm's development and the subject's views of that process and related matters (Appendix 1). Apparently significant events were teased out and later cross-checked with reports of other subjects. Agenda from a discussion with another party was sometimes injected into a later discussion when it could be done without breaching confidentiality.

The researcher attempted to be non-directive in style and to avoid expressing personal opinions other than where they could be presented as a form of devil's advocacy to stimulate reaction. Care was taken to
understand the ideas and constructs invoked by subjects, typically by re-articulating a proposition to get rebuttal, or confirmation by elaboration.

Whilst the aim was to discuss themes and topics significant for the firm's development, the researcher tried to avoid 'leading the witness' in respect of what was to be classed as significant. The use of the word strategy and related terminology was avoided, since it was thought that using the word would lead subjects to espouse formal planning which, as might be expected in small firms, turned out largely to be absent. Likewise, one remained sceptical about claims to intended (as opposed to emergent) strategy. Rather, what was sought and is hoped generally emerged were the issues and priorities considered by the executives to be genuinely important in context.

Themes emerging in a first interview were quite often repeated in later ones by the same or another subject. Since the author was a constant element of this process, it seems plausible that these themes were authentic, not contrived, though one would not claim they exhaust any subject's repertoire of themes with a strategic content.

The evidence of actions and events was also used to infer theories-in-use. Evidence of events was taken to include corroborating testimony by two or more colleagues. Documentary corroboration was also sought where possible, but as indicated already, this was not always the case. Of course, even where the fact of a
reported event is not doubted, its *significance* remains a matter for interpretation.

3.2.5 Data treatment: options and choices

Language is a powerful means to transmit and share meanings in modern organizational contexts. As Pfeffer (1981b, 9) argued,

'one of the tasks of management ...involves the construction and maintenance of shared meanings... paradigms ...languages and cultures'.

This study in effect tried to access linguistically the reflections of executives pertaining to the processes and priorities of managing their firms.

Everyday decoding of language is done incompletely and idiosyncratically. Systematic research decoding is problematic, even after transcription to text, as witness the differing aims and approaches of content analysis, semiotics, discourse analysis and literary criticism. A rich interpretation of textual material has three elements, syntactic/structural, semantic, and pragmatic: the interactional context of listener and speaker (Mishler, 1986, 74). Here the semantic component is of primary interest.

An excellent review of text analytic methods was provided by Huff (1990), including (i) content analysis (Berelson, 1952; Holsti, 1969; Krippendorf, 1980) (ii) cognitive mapping/modelling (Axelrod, 1976; Bougon, 1983; Eden et. al., 1979) (iii) repertory grid (Kelly, 1955; Fransella & Bannister, 1977; Reger, 1990; Ryle, 1975) (iv) argument mapping (Huff, 1983) and (v) narrative
semiotics (Fiol, 1990). Often several approaches are used in conjunction (eg. Calori et. al., 1992). In addition, one should mention (vi) theme analysis (Jones, 1977).

Content analysis has generally concentrated on manifest, surface-literal meanings, using mutually exclusive coding categories for the purpose of frequency counts. The technique has generally been used to ask a narrow range of questions of large quantities of secondary text.

Cognitive mapping techniques can be applied to text or to engage the subject interactively. Cause-effect 'influence diagrams' are often modelled on computer (Hall, 1976; Morecroft, 1983) to highlight counter-intuitive effects. Unless treated thus, typical 'spider's web' maps are difficult to interpret. Mapping policy-related constructs is associated with Axelrod's (1976) studies of political elites. Other notable studies include Bougon, Weick & Binkhorst (1977), Checkland (1981) and Eden et. al. (1979; 1986).

Repertory grid techniques work well with relatively structured approaches to data generation; analysis is efficient, using computer packages as good (or as flawed) as the processing algorithms employed.

Mason (1969), Mason & Mitroff (1981) and Huff (1983) were prime movers in the application of dialectical approaches to the analysis of managerial cognition. Argument mapping applies the formal structure of logical argument, after Toulmin (1958). It is a powerful expository device, though it imputes logical thought
patterns to the text, which is plausible for stylized texts such as company reports (Huff & Fletcher, 1984), but less justified in everyday communications. It is labour-intensive, though computer-aided analyses are possible.

Narrative semiotics (Fiol, 1990) has intriguing possibilities, analysing text via an 'actant' model based on the posited structure of fable (Gahmberg, 1983; Greimas & Rastier, 1968; Propp, 1968). Mishler (1986) also interpreted in-depth interview narratives analogically as fables or myths. Manning (1987, 50) used a semiotic approach to explicate the meaning of policy in an organization as five levels of abstraction. Semiotics is claimed to probe the deep structures of meaning, though it also overlays the data with an arguably rigid and contrived template, in contrast to the more pragmatic and potentially insightful metaphor of organization-as-theatre (Mangham & Overington, 1983; 1987).

Finally, attention is drawn to Jones (1977) whose thesis paralleled research in cognitive taxonomies and scripts. She argued that the key to decoding a text is to identify its theme, 'central thread', or 'minimum generalisation'. Theme was also defined as referential prominence: that which the text seeks to explain in and of the world out there. Themes form a referential and semantic hierarchy; a key concept constitutes the theme of a point, a key point the theme of a script, a key script the theme of a metascript, (the text as an entity).
Jones' approach mirrors Abelson's (1973) master-script approach. An actor's beliefs, Abelson proposed, can be inferred from his language of explanation and represented as a nested or hierarchical array of constructs (section 3.2.6). This structuring facilitates data reduction, as will be explained. Detailed, iterative codings of the transcripts can also be employed to tease out a range of concepts with seemingly paradoxical qualities. This analysis complements the script approach, along with the search for metaphors conveying executives' images of role identity.

Prior to detailed coding, raw transcripts can usefully be restructured into coding transcripts, temporally and by theme. That is, a subject's reflections on past events, view of the current situation and expectations about the future can be categorised and then further categorised by theme. This was the approach taken here, these coding transcripts being the principal sources of data for detailed analysis. The results for Bill White of Wittenshaw Abrasives and Hamish Dean of Pyrochem are reported in Chapters 4 and 5.

3.2.6 The approach to script-analysis
The analysis draws heavily on the script approach. Accordingly, this will now be elaborated in more detail. Scripts are heuristics, caricatures of complex cognitive realities (Abelson, 1973). Still, the essence of good caricature is its ability to generate insight. Applying a formalised script approach to the comparatively
unstructured domain of strategic thinking is a significant step, though consistent with the spirit of Abelson's (1973) research into masterscripts.

These invoked the elements of goal (desired end state), strategy for achieving this state, and confounding factors frustrating the achievement of the goal. Causality is an intrinsic feature of the masterscript, illustrated by Abelson's 'Master Script for a Cold War Ideology' with respect to superpower relations at that time. The formulation in Figure 3.1 is presented from the perspective of an American 'Hawk'.

---

**Figure 3.1**

*Cold Warrior: Master Script for a Cold War Ideology*

<table>
<thead>
<tr>
<th>Fuzzy liberal thinking</th>
<th>Communist schemes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Our call</td>
<td>Use of Free</td>
</tr>
<tr>
<td>to action</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Free World power</td>
</tr>
<tr>
<td></td>
<td>victory</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Free World</td>
</tr>
<tr>
<td></td>
<td>Communist victory</td>
</tr>
</tbody>
</table>

---

The goal encoded in Figure 3.1 is simple: Free World victory over the Communists. It is perceived to result from the strategy of using Free World power to counter the multifarious Communist schemes that pursue aims inimical to the Free World. Sadly, from the Hawk's perspective, liberal thinking paralyses the will of the Free World, subverting its ultimate goal, justifying a concerted call to action.
The masterscript indicates in general terms the means to a desired end and the perceived factors confounding that end. It is a cue for — and legitimiser of — certain kinds of behaviour, though it offers no specific prescriptions for action. For present purposes it can usefully be reconfigured as in Figure 3.2 which illustrates more explicitly the transformational nature of the script, defining the desired movement from a less to a more desired state (Newell & Simon, 1972). The logic of Figure 3.2 remains consistent with Abelson’s text. Assuming that time flows from left to right in the chart, the restructuring also emphasises the emerging stimulus-response or problem-solution nature of the hurdles to goal achievement.

---

**Figure 3.2**  
*Restructured 'Cold Warrior' Script*

<table>
<thead>
<tr>
<th>Communist expansionist schemes</th>
<th>Free World paralysis via liberal thought</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Free World insecurity</td>
<td>Free World security</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Countervailing use of Free World power</td>
<td>Free World call-to-action</td>
</tr>
</tbody>
</table>

From the perspective of the Hawk a paralysis-inducing atmosphere is a major confounding factor to emerge in the early 1970s after the difficulties of Korea and Vietnam, where a good deal of Free World power was applied. However one might take the view that
relationships between these factors are still not fully represented in Figure 3.2. Developing this observation to a conclusion gives rise to a nested structure (postulated in a somewhat different fashion by Abelson himself).

Figure 3.3 illustrates how nesting enhances the representation of the Cold Warrior's outlook. The principal confounding factor or hurdle to the achievement of Free World security is still Communist schemes, the response to which in the mind of the Cold Warrior is to apply countervailing force. For the Cold Warrior the latter is therefore now perceived as a desired proactive state - in opposition to the perceived extant state of inertia. This proactive state, it is argued, therefore constitutes a second-order goal underpinning the Cold Warrior's primary goal of Free World security.

---

**Figure 3.3**

**Fully restructured 'Cold Warrior' Script**

```
Communist expansionist schemes
            └── (Free World insecurity) ─── Free World security
                └── Liberal paralysis └── Countervailing use of Free World power
                      └── (State of inertia)
                          └── Call to action (awareness, debate, incitement?)
```
But the factor confounding the realisation of the Hawk's desired proactive state is intellectual paralysis perceived to derive from fuzzy liberal thinking. The Cold Warrior defines the solution as a concerted call to action.

In the format of Figure 3.3 the superordinate goal of Free World security is enabled by cognising a subordinate, goal, i.e. the proactive use of Free World power to reverse Communist advances. This is a challenging subgoal in an environment construed as liberal, appeasing, disinclined to act. Hence the Hawk perceives the need to overcome liberal sensibilities by raising consciousness via political debate. This call-to-action becomes a third-order desired state whose existence elaborates a moderately complex, cognitive hierarchy.

The general proposition is that a nested, temporally-sensitive structure in the format of Figure 3.3 will function equally well in representing the outlook of business executives. However, configuring a large transcript along these lines is not a trivial task. Despite systematic coding, the researcher coping with large quantities of relatively unstructured narrative and expositional text needs frequent 'judgement-calls' (Noblit & Hare, 1988, 34; Geertz, 1973). Interpretations also rely to some degree on contextual knowledge negotiated between analyst and text originator.

A practical question is whether to reconstruct a script by identifying the most detailed constructs and
working towards more general ones, or the reverse, addressing first the global sense of a text. In practice a full analysis requires several recursions upwards and downwards. Moreover, it appears that some constructs occur at different levels and times as the actor’s thinking evolves.

3.2.7 The script approach applied to White and Dean

To illustrate the process the respective master-scripts of Bill White and Hamish Dean, the principal actors of this study, are shown in Figures 3.4 and 3.5 respectively.

---

**Figure 3.4**

*Bill White's Masterscript*

Big firm working
environment/employee
status

(Lack of personal
security/control
of destiny

Run a successful
owned-and-operated
small business

→

Personal
security/
gratification#

# Meaning in practice, independence from arbitrary decisions, control of destiny, financial rewards linked to personal efforts, creation of a capital asset for ultimate resale.

---

Stated simply, White desired personal fulfillment and gratification from his working life. To achieve this state, he needed security and financial rewards linked to his own efforts. He also needed to feel he was in control of his destiny, which in practice he associated with
creating a substantial capital asset for his retirement. This goal would not be achieved by continued employment in a big abrasives firm. At metascript level the latter was therefore construed as a significant confounding factor which could best be overcome by founding and running a successful small business in a similar industry sector.

Owner status became, in effect, the goal of a second order script. As will be seen in chapter 4, the level below the masterscript appears to be particularly important, since it shows the practical direction of his emerging strategies for ultimate goal achievement. Thus it will be referred to as the strategy level.

Delving further into White's account reveals lower level goals, the achievement of which would underpin the main goal of a successful business owner. These subgoals prompt initiatives which in turn are subject to confounding factors and contingent responses. The latter in their turn define additional subordinate goal states. A rich picture thereby emerges of White’s outlook, adequately represented by three levels nested underneath the masterscript.

Interestingly, however, multiple levels appear not to increase the number of confounding factors and responses exponentially. This is thought to be because White exhausts his repertoire and achieves cognitive closure around a limited number of solutions, about two dozen. Some appear at various levels; for example, the solution of ‘reliance on personal involvement and
efforts' is posited at levels two, three and four (see chapter 4 for greater detail).

Hamish Dean's masterscript is similar (Figure 3.5). Being younger, Dean was less concerned with security. He wanted to make his mark and have fun. He claimed that he set up his own firm because his employer would not agree to his being an 'employee entrepreneur'.

Figure 3.5
Hamish Dean's Masterscript

Lack of personal credibility as an 'employee entrepreneur'

(Boredom and frustration of routine work) \rightarrow \text{Personal self-actualization}

Run a successful owned-and-operated small business

# Meaning in practice, independence from negative thinking, being challenged and winning, having fun, getting financial rewards linked to personal efforts.

Dean's masterscript was reconstructed in a similar way to White's, in terms of levels and recursiveness. The nested structure of his scripts is exemplified in Figure 3.6, covering the period when Dean had begun to operate a small distribution firm to handle special fire-protection paints in the U.K..

Unfortunately a major hurdle emerged, namely that his own enthusiasm for the product was not shared by a highly conservative marketplace. Dean assumed that the solution to this problem was to achieve a state where key
market influencers accepted and would endorse his products. He defined these influencers as fire officers.

---

**Figure 3.6**
An example of nesting in Hamish Dean's script

**Level 2 (strategy level)**

- Conservative market
- is unreceptive to
- the product on offer (fire protection)
- (Be a frustrated employee)
- Own/operate a successful (specialist paint distribution) firm

**Level 3**

- Severe scepticism over product's technical performance, especially in the long term
- (Be passive & independent)
- Get regulators & influencers eg. fire officers & bldg. controllers positively on his side

**Level 4**

- Inadequate means to communicate an aesthetic sales message to a sophisticated clientele
- (Functional appeal)
- Change basis of appeal to 1. aesthetics 2. function; talk directly to architects
- Commission top quality brochures and recruit high calibre field sales staff.
and other technical experts, whom he lobbied energetically. It then emerged that a major hurdle was their continuing scepticism over the product's technical performance and so, even in relation to his subgoal of successful lobbyist, Dean made little headway.

At some point, as a response to this problem, he reoriented his appeal to emphasise not only the functional, but also the aesthetic benefits, as compared with alternative forms of fire protection. This led him to redefine architects as the key influencers. They did indeed prove more receptive. But in pursuit of his new subgoal of endorsement by architects, Dean found he now had to overcome another hurdle, namely inadequate marketing resources to communicate his new message. This he solved by recruiting a small number of good calibre salespeople and commissioning extravagant, but authoritative literature, making his tiny firm seem as credible to a potential client as, say, I.C.I.

Thus Dean underpinned his ultimate goal of self-actualisation with a sequence of subordinate goals designed to tackle emerging difficulties. The second (strategy) level is of interest because it encodes his thinking as to the development path of the firm at that time, namely as a specialist paint distribution company. Level three informs us in more detail how the strategy was envisioned and developed in practice. Level four addresses quite tactical issues and is perhaps of less interest. In general it also repeats script elements from higher levels.
To summarise then, scripts with nested problem-solution structures informs much of the analysis reported in Chapters four and five. The approach acknowledges and elaborates on the masterscript concept of Abelson (1973). However, it will also be argued that lower level ‘solutions’ appear on occasion to invert in the hierarchy, becoming higher level solutions. As a consequence, the desired states they symbolise also become more significant in the thinking of the executive. This dynamic inversion or reframing process is comparatively infrequent and unpredictable. However, it is considered to be a characteristic of innovative strategic knowing and therefore highly significant.
In this chapter Bill White's strategic outlook is examined in depth using the approaches outlined in Chapters 2 and 3, likewise in chapter 5 for Hamish Dean of Pyrochem. The discussion begins with a description of the firm's development, drawing extensively on White's own account. This is followed by a script-based analysis of White's outlook and perceptions, including insights from close colleagues, drawing on their own accounts transcribed from interview discussions.

In later sections of the chapter the notion of cognitive dualisms are used to explicate White's outlook further. This is followed by an exploration of his perceptions about role-identity, expressed in terms of metaphors and archetypes.

4.1 Synopsis of the Firm's Development

Wittenshaw Abrasives was started in 1980 by two partners, Bill White and Graham Shaw to manufacture and sell abrasive belts for industrial use. White, an experienced sales executive with a major manufacturer of industrial abrasive products, was prime mover. He believed there was a market niche not satisfied by the major suppliers of sheet abrasives. White's motives for setting up Wittenshaw Abrasives were both personal and market-oriented. In the first place:
'I was a nervous wreck! While I was working for another (abrasives) company.... I always felt just a small cog in a big wheel. There was no real gratification to that.....

I’m really a square peg trying to fit in a round hole. I’d much rather paddle my own canoe... for my own personal satisfaction and enjoyment.'

There was also the question of reward in relation to effort:

'What you get out of life is directly related to your own initiative and effort. That to me is a more desirable situation than what I get is dictated by other people, irrespective of what effort or initiative I use. That really was the top and bottom of it, you know, to be in control of (my) own destiny to a greater degree.'

White was casually acquainted with Graham Shaw, a college lecturer. He explored his idea with Shaw because:

'everybody’s interested in setting up their own businesses, everybody wants to work for themselves... everybody would be keen in principle to set up their own business.'

After much discussion and many experiments in Shaw’s garage they formed Wittenshaw Abrasives with equal, nominal equity stakes in the venture. Initially they worked part-time, but White soon quit his paid job:

'I just (had) a belief in myself and a gut instinct I could fill a gap that needed to be filled in the market. It was just a gut instinct that if we bought in a thousand pounds of that material at that price, we could make (abrasive belts) and I ...could go out there and sell them...'

White accepted the need for extreme personal commitment of time and labour, particularly during the first 18 months:

'I went out in my Cortina and got an order at 10 o’clock, made the order between 11 and 3 o’clock and went back and delivered it the next morning and got another order elsewhere. As basic as that. It wasn’t a market I had any ...contacts in...but as soon as I’d walk through the door I’m half way there.'
Subsequently he continued to see personal involvement as the price he paid for being an independent small-firm owner. Throughout he was helped by Shaw and by Shaw's brother, one of the first full-time employees and now production manager, though he has only a minor input to policy decisions. In contrast, Graham Shaw remained influential yet joined full time as late as 1987 and still has other business interests.

At the start Wittenshaw served the smallest, most marginal industrial customers. It was a struggle to survive and make profits. Manufacturing was a core element of the project, producing abrasive belts for resale (a converter). White:

'I thought if I act as an agent (for big manufacturers) as a one man band I'm not going to get very good terms... and I'm not going to break my neck to sell (to users) at the (right) kind of prices ...in the marketplace. But if I can buy the raw material at the right price and convert it myself then I can come down to some very competitive prices and...stand a chance.'

This formula ensured immediate viability, albeit marginal profits in the first year:

'No job was unviable, the object was to get the job and then create a viable way of doing it. Whatever method you have to do to get it done. Even if, literally, you're handmaking a batch of belts (and you) say, if I had to carry on making those that way for ever I'd be pinning pound notes to every bundle'.

After a period Wittenshaw moved to proper premises:

'We got a little first floor unit, 300 square feet... it amazes me that we actually set up - everything was really so basic... far too tentative. The sales office was four feet by six, it was an old toilet with the toilet taken out. The workshop was two rooms like these two offices [about 15 feet square] (and yet) it's amazing...if you've got the...flair for tackling obstacles and surmounting them...there are still ways and means if you've got the initiative to look at things, maybe just from that different angle.'
Upto 1984 the firm grew moderately fast, catering for the needs of customers within a thirty mile radius of its premises in the centre of Wittenshaw. From the start it relied heavily on two Scandinavian sheet abrasives suppliers keen to gain share in the U.K. market. They accorded Wittenshaw more favourable trading terms than it could have hoped to get from alternative suppliers. As White’s confidence and knowhow increased he won business with somewhat bigger metal polishing firms. By late 1984 it was clear that bigger premises and more staff were needed, but Shaw now had other interests:

'The object was to build it up and get Graham into the business, (but now) we had to decide... whether to go forward with Graham as a part time contributor or to change it completely. ...he’d proven by that time that he’d got a flair for the commercial side of the business...the computer facilities... financial analysis...and I’d learned... how important that is to the success or failure of a business. And we thought there’s no reason why we shouldn’t carry on, on that basis...and...it (did) for about five years.'

They relocated to the present rented premises on a modern, if downmarket industrial estate near the centre of Wittenshaw in mid 1985. Concurrently, after a long 'courtship' White hired Mike Douglas, the sales representative of one of his suppliers, as sales director to accelerate growth. This happened with the supplier’s blessing, no doubt because it was thought cost-effective to channel abrasives to small users via Wittenshaw and similar distributors. White offered Douglas an 'excellent package' including a 10% equity stake.

Bringing Douglas in was:

'...a key step, but it upped our overhead. To pay for it (ie. Douglas' salary and the rent on the new
premises) we’ve had to achieve some more growth... two years...spent paying the price of that move, trying to build a fresh platform from which to go about doing things in a more sensible way.’

Douglas’ contribution opened up a wider set of users including stainless steel polishers and woodworking firms, both big users of belts. Over the next 18 months growth was rapid, but unfortunately at the expense of profits. Given the higher overheads, the firm’s financial state became parlous and a deliberate effort was made to refocus on sectors, customers and products which could be served profitably.

In 1986 an M.B.A. student did a business analysis and identified potential opportunities for profitable growth. Though competent, he failed to inspire anyone:

‘We had a study done by Guy, a pretty statistical kind of study... Graham being more of an academic type probably got more out of it. It had a lot of very relevant points in it, but the whole exercise wasn’t done in a way, presented in a way that I, or Mike, could associate (with)...’

By 1987 it was becoming clear that longer term prospects were unexciting, indeed White no longer expected growth from the core business:

‘We’re not in an expanding market, we’re in a shrinking market if anything...The ironical part is that (big abrasive firms) have realised this because people such as myself have pinched all this business. I’m not the only converter, a lot of other people have set up in the same thing....more and more people are after a slice of a shrinking cake.

I’ve got 60 big customers I have to look after now, so my capacity to prospect new business is very little....a smokescreen has been clouding the real truth, that our strength in the market to get new business has gone...’

To add to his misery:

‘More and more (suppliers) are coming in from places like Spain and Italy, even Germany, at prices that
will undercut the kind of raw material prices that we are paying.’

Despite the directors agreeing at the start of the 1987/8 financial year to raise prices substantially, by mid year it was necessary to trim back to protect levels of business. At this point White and Shaw allowed a second M.B.A. student to examine the options for diversification. This chap, a Frenchman, was charismatic and greatly impressed everyone with his action-research style. His final report in October 1987 reached the conclusion that ‘abrasives was a knackered market’ and that new options were required. He identified several merchanting options, the most attractive of which to White were to supply polythene shrink films for protecting newly polished metalwork and honing stones for high precision metal finishing in engineering and medical applications. Before completing his project the student negotiated successfully with a French supplier of honing stones.

Though selling polythene films to existing customers was a logical extension of Wittenshaw’s consumables business, it was a well-served competitive market. Only White believed it would capitalise on their image as a specialist supplier of abrasive belts. There was no consensus in the firm and it was not pursued, since with only 45% of the equity to Shaw’s 45% and Douglas’ 10%, White could be outvoted. Meanwhile, as an expediency to generate cash, White added protective gloves to Wittenshaw’s consumables range. He instructed a clerk to sell them by telephone:
'If you try to get Mike selling gloves, he's a confirmed coated abrasives salesman no matter what, he'll say, great, he'll agree...but his underlying mentality....'

White was critical of his colleagues for what he saw as their reluctance to embrace change, indeed in late 1988 he said:

'I had a lot of doubt ...that the joint collective mentality was right...for us to really obtain the true potential of (the firm).'

However, he felt that the French student's intervention had shifted the internal debate from shall we diversify to what direction shall we diversify in:

'Jean-Claude's contribution ...was in terms of the mentality of the people, more so than the facts, figures and statistics. That's what we needed...we've got bloody papers everywhere with computer figures on. What was actually needed...was some way of breaking down the very difficult personality barriers and pointing them in a direction that can complement each other...

For a year or more I was saying.... something has got to be done. It's just no good me going out in the car five days a week, trying to find some more people to buy abrasive belts and getting nowhere.. But I couldn't actually make a case to the others to say that things have got to change. That our position in the market is bad... Through the efforts of Jean-Claude we were able to quantify that.'

Shaw had a different perspective; in his view, talking achieved little without hard facts and a disciplined approach:

'It's damned difficult because we could do with that bloody (market) information. It's...come out of both Jean Claude and Guy's report... We don't log information about who we are selling to, why we are selling, why aren't we selling.... We just don't know...it's always on one person's say so...We tried to say, this is what we must do, every new customer, we should log him all the way through the system. From first call all the way through to whatever reason we didn't get (orders). So we can sit down and say why are we not getting penetration. Is it cost? Is it quality? Is it the fact that we can't do enough
calls a week or what is it? We just do not get it.... And it's bloody annoying to be quite honest... we've hammered this out a number of times and yes, yes, we've agreed we'll do it and it doesn't happen.'.

Though honing stones seemed compatible with the core business, the technical knowledge needed to sell bonded abrasives is different from coated abrasives and Wittenshaw had no reputation in bonded products. White remained the prime convert to honing stones:

'No way can I get Mike to prospect honing stones or anything like that...there is an inherent mentality block ...yes it's a great idea...but when it comes to doing anything about it...it just wouldn’t happen.'

Despite their scepticism, White's colleagues allowed him to go prospecting for this business. After six months he became convinced that he was in the wrong segments of the market. By now somewhat desperate, he identified a few specialist segments to aim at:

'...other areas...very healthy profit margins...more specialized...more problems in continuity of supply ... what they call super-finishing....for things like the ball bearing industry... I supply people who make artificial joints and they are working to very, very fine surface tolerances...

It happens to be where (our supplier's) strength is anyway. But of course we've wasted nearly 12 months farting around in the wrong areas... after six months or more ...I was at a point of having to ...say, hang on Bill, you've got to be strong enough if necessary to write off six or twelve months of work.

I really had to motivate myself. I had a very hard two or three months...trying to keep the momentum going...I'd flunked out of that initial market...one after another, bonk, bonk, they were going down like ducks. After two or three months I decided that I'd got to go and investigate other market areas. I had two or three enquiries... specialist applications... I thought, I've got to see those through...if these ... come up trumps, that says we should pursue those and forget about (the rest).'

After a further nine months he was optimistic that he had found a viable business area. His stones were being
evaluated by several firms for specific applications and though he had few firm orders, the omens seemed good. Meanwhile his co-directors kept the core business on a more-or-less even keel.

White also began to consider how they might extend their range of abrasive belts and cover new geographic areas:

'What's got to change to accommodate that is not a lot... it's an easier option as I see it...to take on a couple of guys and keep them within a narrow product range, chiselling away...', whereas new products incurred all kinds of operational costs and difficulties - new suppliers, stock holding arrangements, more warehousing etc. In practice, however, geographic expansion required them to prospect new industrial sectors, and:-

'It's not easy to come up with a product that's in overall demand across so many different industries'. So he was obliged to consider different products, either as an equipment agent or as a consumables factor. The absence of 'slack' resources for prospecting was a continuing worry.

In parallel with honing stones, White explored several equipment agencies personally and found possibilities. One came to his attention by chance and greatly excited him. This was a scrubbing machine for recycling woodworking belts, which clog with resin long before they wear out. With this machine he could offer selected customers a service to reduce their belt costs by an estimated one third, yet still be extremely profitable for Wittenshaw. He envisioned a laundry
service like roller-towels, customers paying a monthly rental for a continuing supply of recycled belts. Admittedly, ‘it’s still got to pass the acid test...if it comes anywhere near the projections, it’s going to be far and away the most profitable activity we’ve ever been involved in. It’s one of those things you’ve just got to try. We’ve done the sums, you don’t just go out on a whim, but... it’s quite obvious that something so basic doesn’t warrant months of investigation, just do it and if it works, it works, and if not, do something else, flog it (the machine) for what you paid for it.... You can overcomplicate things.

‘The difference between Wittenshaw now and 18 months ago is that (then) we would probably have done exactly what all our competitors I hope will do, look at the machine and think, "that’s bad news, I hope not many people buy those", and walk on. My guess is that if we can get this recycling project going it is a very quick-response growth activity and very profitable too.’

He attributed this new emphasis on a wider range of offerings to his: ‘...change of mentality...we’re not in the business of making abrasive belts, we’re in the business of trying to make profits. My mentality is definitely... (changing). If I had the money and someone could prove to me I could make twice as much opening a bistro or a doughnut factory round the corner than I can with honing stones, then I’d have no qualms about going into doughnuts or bistros.

I’m open to total diversification. I don’t necessarily think that would be the case with Mike or Graham.....I have very little inner commitment to our traditional business. I’m thinking of Wittenshaw as a company that will give a service reducing customers’ costs....filling the needs of very specialist niche applications in highly technical areas.’

Shaw and Douglas espoused more cautious enthusiasm for belt recycling. Intuitively, they seemed mindful of the merit of acting quickly and had agreed with White to order the first £2000 machine. If the project proved viable it would get priority, in effect becoming the cash
cow to fund growth of longer term projects, including honing stones. Shaw's apparently cautious outlook triggered an ironic comment from White:

'Bloody hell it's fantastic. I see it as something that could be the most profitable activity by far that we've ever had and the fastest (growing) and the strongest offer for customers in our lives..."We've got this little idea we are working on...!"

White made numerous references to the mentality block towards change and the problems of decision making:

'Graham is a practical bloke, likes to see things properly looked into... He is open to ideas, given that they can be proven to be viable.....'

As regards Mike:

'After working with him for 3 or 4 years I am convinced I am on a loser trying to change him. I'm trying to tailor things to suit him. Rather than try to get Mike to sell polythene tubes, give him the recycling project and the abrasive belt business... and (get him) to improve on what we already do.

If we want to go into polythene, get someone else, form a separate company, avoid the built-in barrier... Mike has a style about him...we've got customers... where people go in and undercut us, but they chose to buy from us because of Mike's style. He has his own style. We are totally different in approach but we both get results. I don't knock him because if a salesman's style is conducive to getting results that's a good style as far as I'm concerned. It's got to be natural... otherwise customers see through you.'

Over diversification, consensus was under strain. Agreed task specialization reduced the scope of each player to criticise publicly the actions of the others. Failure to reach consensus meant that new initiatives were either still-born or pursued covertly, perhaps under disapproving scrutiny. White saw the internal politics of the firm grounded in narrow technical and market expertise, to which he attributed the anti-change mentality. For example, Shaw's analytical outlook
emphasized the numbers-oriented, programmatic aspects of managing, a consequence of which was that Douglas had been strapped with difficult sales targets, making him defensive and unreceptive to change.

Arguably, the same could not be said of Shaw, however. One diversification option proposed light-heartedly by the French student was for Wittenshaw to be the U.K. import agent for his parents' winery. Publicly, this was laughed off. Yet for a time Shaw actually investigated this prospect and considered forming a new partnership to import organic wines.

At the peak of the economic cycle in the late 1980s Wittenshaw had grown to an organization of some 18 people including a few part-timers, and a turnover of around £500,000. Selling remained White's and Douglas' responsibility, though two agents also sent in orders. White acknowledged that the firm still needed to grow significantly to achieve a stable base. This would require a bigger, salaried sales force which he perceived as an expensive, up-front (and therefore high-risk) investment. He consistently refrained from taking this step:

'I could say, look, if I had half a dozen reps it doesn't matter how loyal they are, they are just selling tools... (but) I would rather have one good bloke, pay him well and gear a package to him that locks him into the business...can we as a small outfit... make his job that much more attractive than if he worked for a big firm.'

As regards other forms of investment, even after the expansion of 1985, expenditure on plant, equipment and other facilities was minimal. They treated belt
production as a cottage industry: the firm never borrowed money save for a modest overdraft facility, and had made only minor investments in equipment to enhance productivity. It was seen as the only way:

'We set up on a shoestring, we set up literally from nothing with nothing....other than having capital resources to do it on a respectable scale from day one and we didn’t....'

Ordering the belt laundering machine was clearly out of character. It was probably the single biggest capital investment the firm had made to date, aside from motor vehicles (purchased nearly-new, rather than leased). As Shaw explained:

'We made steady progress...there was no real need, or we didn’t think there was any need at the time to invest more capital. Both of us, I think, were not prepared to risk a lot of money ...we were not prepared to go and borrow £10,000 from the bank and put it into the company. Having said that, we did feel that the whole thing didn’t need that kind of money, we could actually...self finance it the whole way...by making profits.'

In the early days White and Shaw contained costs by not extracting proper salaries. In the late 1980s White still used his spare time as an essentially free resource in preference to hiring more full time staff, though he acknowledged that he had less time to plan and manage the business than he ought:

'I don’t want to be in the workshop cutting and making belts myself...I’ve got a team of blokes doing that... (but) I would like to have done the same thing for sales. I haven’t yet, but I’m determined to. I enjoy selling, but I don’t want to be... making cold calls for the rest of my life...I’d like other people to be doing that for me, leaving me free to do other things, whatever those things may be.

It’s a chicken and egg situation. How can I afford the time to just sit down...thinking (when) the orders aren’t coming in and the viability of the
company goes from bad to worse? On the other hand if you don’t, you don’t achieve your objectives as clearly or as well as you would have done.’

Shaw also gave his spare time freely in financial management and administration. Douglas and Shaw’s brother were the other two with managerial responsibility.

To summarise, though the firm occupied a market niche it had remained marginal. From a stakeholder perspective, there are so many suppliers of abrasive products that it is hard to conceive of suppliers or its customers being seriously affected were it to cease trading. The banks had no significant stake in the business either. Naturally, employees would suffer if it ceased to trade, though most had skills that would in principle make them employable elsewhere. Indeed, it remains surprising that so marginal a business can survive in such competitive circumstances. All credit to the principals that by sheer doggedness and by offering good customer service it has survived for so long.

White:-

‘We’re hanging on because of the relationships that we’ve developed with customers and the service that we’ve given. We still give probably the best turnaround in the business overall. I don’t think anybody would be able to match the kind of delivery that we give. It’s a key thing to our keeping customers...not necessarily the reason for getting the business in the first place, but very much the reason for keeping it.’

4.2 Script Analysis of Bill White’s Outlook

Constructing a script analysis of White’s strategic outlook required the identification of goal couplets:
less-desired goal state $\rightarrow$ more-desired goal state, followed by the hurdles apparently confounding the achievement of the more desired state. One then sought White's reactions to overcoming these hurdles. These become, in effect, subordinate goals enabling the achievement of the overall goal. But these reactions in turn define subtexts nested within the script. White's most general or masterlevel script was discussed in chapter 3 and is repeated for convenience as Figure 4.1.

![Figure 4.1](image)

\textbf{Bill White's Masterscript}

Big firm working environment/employee status

(Lack of personal security/control) $\rightarrow$ Personal security/

of destiny $\rightarrow$ gratification #

$\downarrow$

Run a successful owned-and-operated small business

# Independence from arbitrary decisions, control of destiny, financial rewards linked to personal efforts, creation of a capital asset for ultimate resale.

This script describes White's motive of personal gratification in terms of security (control of his destiny, financial rewards linked to effort and the creation of a capital asset for ultimate resale). He saw his big firm employee status as intrinsically unattractive because it stymied his personal goals, hence creating the drive to set up his own firm.
In the masterscript four levels of sub-script were used to represent White's outlook. It was necessary to work recursively through these levels of subtext, with the final stage proceeding from the top level downwards. The level immediately below the masterscript portrays what the writer understands to be White's key 'strategic' goals, as these emerged over time. Level 2 scripts are quite generic in character yet, in line with categorization theory, appear to have considerable utility for Bill White.

The following discussion concentrates on these strategically-useful scripts and their underpinnings. Three were identified: (i) *Script 2a: Niche market opportunity* (selling a responsive, semi-custom abrasive belt-making service to small, local customers in low technology applications) (ii) *Script 2b: Grow towards a stable plateau* in the abrasive belt market (thereby achieving financial security), and (iii) *Script 2c: Develop a diversified business base*. Each will now be discussed in turn.

4.2.1 The niche-market opportunity script (2a)
At the outset White was guided exclusively by this script in his quest for a successful owned and operated business. A number of hurdles emerged which had to be overcome, but their existence did not discredit the *niche-opportunity script*. Specifically, White had to tackle various confounding factors:-
(i) personal intolerance of financial and other risks,
(ii) lack of technical and market-related knowhow,
(iii) lack of resources including finance, and
(iv) lack of (short-term) credibility with customers.

White relied on a number of facilitating or circumventing strategies, as detailed in Figure 4.2.

---

**Figure 4.2**

White's 'Niche Opportunity' Script (2a)

<table>
<thead>
<tr>
<th>Personal risk aversion</th>
<th>Lack of technical knowhow</th>
<th>Lack of capital</th>
<th>Lack of credibility with customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intuition, Contacts, Partnership, Patience,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labour-intensity, Be responsive to customer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Be adaptive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal involvement</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To mitigate the perceived risks of a new business he (i) used intuition, doing what he felt instinctively was right (ii) entered an 'unburdening' partnership with Shaw and (iii) was patient, tolerating slow, plodding growth as the consequence of avoiding risks, especially those he associated with debt.

To counter lack of product and market knowhow, White (i) used ad hoc contacts wherever possible (ii) behaved adaptively (being experimental, reactive and action-biased) and (iii) was heavily committed to and involved in the firm, evidenced by working late into the night, every day of the week, if needed. The latter ploy also countered the lack of resources, the solution to which he interpreted over time as being the substitution of
labour for capital investment. Finally, to overcome his lack of customer credibility, White was highly responsive to customers' needs, which in practice meant delivering customised product quickly, when promised, and at a low selling price. By these means he won rapid acceptance of the firm's 'offering' in the short term.

White's emergent responses in the level 2 script constitute goals of level 3 scripts, towards which he had to strive in the face of another set of emerging hurdles. The latter were circumvented by additional responses that in their turn became the goals of level 4 scripts. To take one example, the Level 3 'responsiveness' subscript defined initially in the 2a script required White to address the question of how to deliver quickly at low prices (Figure 4.3).

---

**Figure 4.3**

*White's 'Responsiveness' script*

<table>
<thead>
<tr>
<th>Lack of</th>
<th>High cost</th>
<th>Variety of</th>
</tr>
</thead>
<tbody>
<tr>
<td>local &amp; responsive suppliers</td>
<td></td>
<td>customers' needs.</td>
</tr>
<tr>
<td></td>
<td>$\downarrow$</td>
<td></td>
</tr>
<tr>
<td>(Indifferent, big-firm style)</td>
<td>$\downarrow$</td>
<td>Be responsive</td>
</tr>
<tr>
<td>of response to customers</td>
<td></td>
<td>to customers'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>needs</td>
</tr>
</tbody>
</table>

Negotiate Make belts Make-to-order
with keen cheaper in-house
overseas suppliers

---

The first barrier to being responsive was the (perceived) lack of support from raw material suppliers, a consequence White thought of Wittenshaw's poor credibility, and because these suppliers saw him as a
competitor, rather than as a good customer. The second hurdle to responsiveness was the inability to offer low prices if he purchased ready-made belts from U.K. suppliers, due to his lack of bargaining power. A third difficulty was his customers' desire to use non-standard (i.e. custom) belts.

White's solutions to these hurdles were to (i) purchase basic materials from a Scandinavian company that had recently entered the U.K. market and was therefore willing to offer him favourable trading terms, (ii) minimise the costs of made-up belts by setting up a rudimentary facility to 'cut and paste' belts from large sheets of abrasive materials, and (iii) make a virtue of manufacturing belts to clients' specifications on receipt of order.

However, White's difficulties were compounded by the lack of people and physical resources to convert materials efficiently and speedily into belts. Whilst the ploys above enabled him to minimise on-costs, the corollary was a process that had to be 'operated on a shoestring', giving rise to the Level 4 'manufacturing sub-script' shown in Figure 4.4.

In this fashion it is possible to map out a complex pattern of goals, hurdles and responses cognised and enacted by White. Observations come directly from his account of how the firm developed. These help us to understand his outlook in relation to the development of Wittenshaw. An obvious implication of this script
approach is that an individual's changing outlook over time can be explored.

---

**Figure 4.4**

*White's 'Manufacturing' script*

Lack of investment capital,  
low mechanisation,  
small premises  

(Make belts cheaper in-house)

Run a 'shoestring operation'
- Personal involvement
- Adaptiveness
- Cobble equipment together
- Use relatives & part-timers

---

It is also useful to note how White's early scripts match the testimony of his close colleagues. As White's partner since 1980 Shaw was in a good position to comment on the development of the firm. Douglas had worked for Wittenshaw since 1985 and had encouraged White virtually from the start in his role of supplier's representative.

Shaw had no prior knowledge of abrasives. His motive for setting up the firm in 1980:

'was purely an opportunity. I hadn't been involved in any business enterprise before. I liked the idea. I could identify quite readily with the product, the market, being an engineer myself. I thought it would be a way of making money...which was totally...or partly under my control. My main objective was to get involved with something that looked exciting because it was new to me and hopefully after a few years make some money out of it and become involved in a business enterprise.'

Whilst his motives paralleled White's, his commitment and risk exposure never matched White's in the early
days. In addition to his 'day job' he was involved in another local startup:

'They both sounded interesting for different reasons ... (I'd) go along with them both and see how they run, one's bound to... fade away. I was hedging my bets in that respect.'

The firm that stopped him joining Wittenshaw full time:

'was a high tech venture, big potential...it offered all the things (this) didn’t. This was low tech, plodding, minimal rewards, easy to run, no great future.'

So Shaw presumably anticipated hard graft and wasn't sure if he liked what he foresaw. Douglas, however, captured the sense of excitement in a small owned-and-operated firm:

'It was a hell of an opportunity to be asked to work here. I still enjoy it. We have our ups and downs ...but I still enjoy coming to work in the morning and I still want to achieve a lot of things here. (Before this) I was always going to be a product manager, never a director and...I saw the chance... the future is a lot better here...I've got a good position, the future is...there to go for.'

Was there really an opportunity in 1980? Shaw:

'...we slotted in between the tool merchant distributor (who) could sell in small quantities at very high cost (and) the big manufacturers we were not competitive on price with, (but) offering a better price and a better service than the distributors. We generally went after the small user.'

Though White and Shaw portrayed the opportunity in market terms, Shaw pointed out the significance of the supplier opportunity, that they were fortunate to find two Scandinavian firms trying to build U.K. market share. They were targeting the less-profitable business from smaller, more marginal abrasives users and it was attractive to channel these small accounts direct to
converters like Wittenshaw. From their perspective White was a useful man at the right time. Equally, they were excellent news for Wittenshaw as Shaw explained:

'the only capital we required was for the stocks... financed from the suppliers, quite good credit facilities... we were very astute, we certainly never made any offer to pay earlier than we had to. We started off with essentially one major supplier... soon started selling quite a lot of their material in this area, so they obviously must have felt that we were a good bet, we had fairly good relationships with them.'

which extended to technical support as well.

The combination of few resources and a cautious outlook meant that patient, incremental development was in order. Shaw:

'There was never any mention of any capital involved. It was assumed to be a shoe string operation. Take it step by step. So my contribution would be first-of-all part time, which fitted in with this shoe string approach.'

They entered the market as recession deepened:

'In the first 18 months prices actually dropped - I think we were talking about £6.00 to £6.50 for a five-by-two belt... we were selling them for £4.15 soon after we started. It was really bad. We (said) if we can actually get through this, things can only get better. We were viable, just viable, for the first three years of trading. We were not making any money...'

As Shaw said, their inability to grow fast meant that their ambitions had to be modest:

'My time was free, the only one we had to resource was Bill... We never really investigated what ideally we needed for resources. Any moneys we started to receive could be used to resource Bill on a full time basis, and then transport and then everything else, getting more production people, bigger stocks. We got a company car, then two... I didn't take a salary for three years... we were just about managing to get along and make a bit of profit.

I was still prepared to put the time in for free whilst having some sort of benefit out of it. And it
went on and on...it still didn’t look really viable for me to come in full time. We could possibly have looked at...a different kind of forecast based on my full time involvement...we never really looked at it like that because it didn’t really seem necessary.’

Despite his perception of the marginality of the business, from the earliest days Shaw had attempted to budget and plan on a rudimentary basis:

‘we did have to do a forecast...to borrow money from the bank, we didn’t borrow a lot of cash, we put our houses up for security, borrowed a couple of thousand pounds, and to do that we had to give the bank some sort of business plan. So we had to set targets... but they were guess-timated really. We did a very simple business plan, cash flow if you like, just to try and establish what sort of money we needed and we used that for the bank to agree a thousand pound overdraft.

Really we just bumbled through the first year. Then we started to get real forecasts together for the years afterwards. I would say we were only looking months ahead really...to try and fill orders and didn’t think too much of sales targets, we knew we had to meet certain levels but there was no real... long term planning at all. We never projected anything more than 12 months....and when we got to about the tenth month we’d start looking at our next year’s figures. Which is really the same today. We’ve never really looked forward more than 12 months.’

4.2.2 The stable plateau script (2b)

After a couple of years it was becoming clear to White that whilst elements of the ‘opportunity script’ were still germane, it was insufficient to secure his long-run ambitions. Increased competition especially on price was eroding the competitive advantage of the firm. Its position could be maintained only by retaining the loyalty of customers, which required frequent face-to-face contact by White, a heavy personal burden, as well as vigilant attention to containing costs of manufacture.
These priorities demanded more resources, investment in equipment and people. White saw the problem as Wittenshaw's continuing inability to generate sufficient profits to fund these investments. Thus emerged the myth of incremental growth towards a stable plateau (script 2b). When this notional goal had been achieved substantial investments would be justified and affordable. One might alternatively call 2b the 'critical mass script'.

The immediate concerns for White within the emerging script were several. The partners had to confront the limited growth prospects of the formative market niche, populated by the smallest and most marginal users of abrasive belts. The emerging script legitimised (i) extending the product range via merchanting (extra business from existing customers and as a spin-off keeping them loyal) and (ii) prospecting bigger belt users in proximate geographic areas and applications.

Expansion was consistent with the new script, provided that White's personal control was not threatened, as it might be if they resorted to debt financing. Debt was excluded from the original script, the partners consciously adopting the patient personal-involvement approach to growth implied in the adjective 'shoestring'. This philosophy was perpetuated in the emerging 2b script, whilst the lack of investment capital meant that Wittenshaw continued to be labour-intensive, oriented to growth within its limited means (Figure 4.5).
In persisting with a cautious, evolutionary approach White avoided the need to reject script 2a explicitly; it continued to exert some influence, particularly the myth that they catered for a narrow niche market. Indeed, it is doubtful if White perceived a significant shift in his thinking at this stage. For example, his fear of losing control legitimised the same solutions of personal involvement and avoidance of debt as before.

Figure 4.5
White’s ‘stable plateau’ script (2b)

Limited growth in old niche | Fear of losing control | Lack of capital to invest | Loss of price-competitiveness

Eroding customer loyalty
(Knife-edge of viability) | Successful, stable firm, via growth towards a plateau

Give more attention to old customers

Avoid Labour-intensive debt-intensive finance, profit-improvement operations programme

Extend base of personal clients & involvement products

High Patience

After another 18 months or so, the ‘stable plateau’ script was serving to highlight the conflict between Wittenshaw’s lack of resources and its ambitions to grow by extending the client and product base. This led White to acquire bigger premises, more production staff, and to recruit Douglas as sales director. It now makes sense to
think of script 2a mutating irreversibly to 2b. White's initiatives certainly added momentum to script 2b because the commitment of extra resources explicitly required more profits to finance them. The subsequent, overt pursuit of growth in the prevailing competitive conditions depressed prices and compromised profits. In an atmosphere of crisis the first Aston M.B.A. student examined what was to be done. He affirmed script 2b, subject to urgent financial controls being implemented together with a profit improvement programme, which was duly implemented over the next year. Profits improved, but the belief that they were specialist niche players continued.

Meanwhile, between 1985 and 1987 new entrants similar to Wittenshaw and increased competition from the major abrasives firms (becoming more willing to deal directly with smaller users) increased rather than decreased the threat to Wittenshaw. The 'plateau' script and more specifically Douglas' efforts to enhance the attention given to existing customers countered the threat, but his efforts also compromised the growth aspect of the 'plateau' script by leaving less slack resource to prospect and develop new customers. White was obliged to expend his own efforts strenuously. Limited growth in sales continued, though profits remained disappointing.

By 1987 White saw fundamental flaws in the existing script(s). The original opportunity was collapsing, so his long-term desire for security and independence was in
jeopardy. The problem was knowing what to do, given the resistance to change he perceived in his colleagues. White’s initial solution was not to confront the lack of enthusiasm for change aggressively, recognising that he valued consensus (at least, absence of conflict). Then, enter by chance a vehicle for change, the second M.B.A. student, who prompted the chain of events that initiated the 2c ‘diversification’ script (section 4.2.3).

As regards corroboration of the ‘plateau’ script, Shaw commented that after three years or so the original small factory unit:

'was bursting at the seams...If we had continued there we would probably have done quite well (financially). With the number of people and sales we were profitable. But we felt that expansion in the way we envisaged was the right thing to do for the future because we would get a better, more stable company...it became fairly evident that running with...three full timers and a couple of part timers was a little bit dodgy, one person was away and the whole thing sort of collapsed.

We knew we had to grow to the point where we had a stable base ...such that (with) one person off the whole thing didn’t grind to a sticky halt. And the only way to do that was by growing... getting more sales, getting bigger premises, more staff... to become more self sufficient',

hence the move to the current premises and the recruitment of Douglas. White was so keen to get Douglas that he delayed relocation until the two events came together. For Shaw, 1985 was a turning point:

'Restructuring and financing the business into a bigger operation... meant it could support me on a full time basis. We could see that unless we expanded ...to take on more staff to take over the individual areas of responsibility we would always be tied on a day to day basis to the company... We wanted to... provide the executive management, not to be tied down to making belts or doing accounts...'}
Douglas was hired to generate sufficient new
business to cover the additional overhead including his
own income. Even so, it turned out to be very marginal.

Shaw:

'We did (it) again on a shoestring, simply by
increasing our overdraft. We moved premises,
increased rent, increased stocks ...we had a [modest]
grant from the City for ...equipping the premises,
new machinery, new equipment.

The equipment was hand made, there was probably a few
hundred pounds worth of equipment...the whole stock,
overheads, debtors were all financed out of creditors
and a thousand pounds overdraft...

We made steady progress...we didn’t think there was
any need to invest more capital. We were not prepared
to risk a lot of money.. we were not prepared to go
and borrow £10,000 from the bank and put it into the
company... Having said that, we did feel that the
whole thing didn’t need that kind of money, we could
actually ...self finance it ...by making profits.'

Wittenshaw by now had four suppliers, mostly on
complementary rather than competing lines.

The drive for stability apparently sustained the
myth that the stable plateau would be reached when the
firm was just that bit bigger than it currently was,
affirming the need to continue growing incrementally.
This was articulated clearly by Douglas and Shaw
respectively:

'We are all very cautious and we like to think we’ll
go one step at a time, just see how this goes down
and see if we can make a success of this. Give it
time to work and level out, then we’ll start thinking
where else to go.'

'We’re trying to progress on profits which.. really
speaking...are minimal in the sense of retained
capital and bank overdraft facilities. Which
inevitably restricts our growth considerably...If we
suddenly decided...this is a really good opportunity,
but it needs 40,000 quid or something, I’m sure I’d
be sympathetic to try and work something out.
But...we’ve never been in that situation.'
So they sought growth in existing areas of belt production and by selling more consumables. Shaw:

'one complements the other... just trying to resell (consumables) wouldn't be viable.' Equally, 'take the resale away and we'd be scratching around because we couldn't make enough belts...to make a profit to sustain these overheads. The two are very closely linked, I don't think we can separate them out.'

The traumatic and nearly disastrous expansion episode after Douglas joined caused them to try to manage the business more carefully. Shaw's increasing commitment to Wittenshaw after 1987:

'enabled me to ...do something positive.... we'd got a lot of systems implemented but not working properly because I wasn't here...cash flow in particular ... within a matter of three months we improved our cash flow by £17-18,000 and kept it at that.

We've also.... sorted out all of our redundant stock....we literally found we had something like £12,000 of stock which we shouldn't have.... really there was no control...we've achieved a lot just by me being here a bit more.'

As part of the profit improvement programme, Shaw attempted to persuade the others to be more disciplined in setting and feeling accountable for achieving sales targets. The message was getting home, but slowly:

'They are different in their way of thinking and doing things. Bill shares... the concern for having control...(on) the financial side. It's just...not in his nature to be totally sympathetic to having other sorts of systems, it's just not in his make up. He just can't work - he never has worked presumably - that way. So he finds it very difficult to go along with the idea that you've got to have a system for everything and ... try and work to it and only that way can you see clear ahead.

Mike gives the impression that he's far more organised... he is far more systematic about doing things. And he will certainly go along with filling out forms and working to the system ...he seems to be doing all the right things, but when you get down to it, the bits of paper he fills in...he fills in the top, he files it and that's it, they never get filled
in again. So it looks as if it’s all being done but it’s not really. We’ve got nowhere on sales records, absolutely nothing...’

Shaw’s achievements were acknowledged by Douglas:

‘Graham is very good with records, excellent ... he can run anything on that computer. If I want to know where we stood today there would be a piece of paper on my desk in ten minutes. For a little company we feel that is a big move, you go to some people and they haven’t got a clue from one month to the next... (they) haven’t got the luxury of Graham.’

However,

‘I’m not a great lover of paperwork, I just haven’t got the time...at the moment I’m 80% out selling, 20% in here looking after queries or anything else that might crop up.

But as far as planning goes, we are getting more into that side of it now...the first year I started, we didn’t lay down a proper plan, so we were a bit airy-fairy on where we were going, what were we actually achieving, and we learnt by our mistakes, we laid down proper. It’s a lot better (now).

We’ve all got our own individual targets...we all know what we’ve got to do... It’s a very open company, if anyone has a problem he only has to shout and we talk about it and get it sorted out quickly.’

But these improvements did not obviate the perceived need to extend the product and client base by reacting to opportunities as they arose. As Douglas said, they had to respond where the growth areas were. From 1987 these were in woodworking and the wide belt stainless business.

Woodworking offered:

‘Customers we deal with every month, it’s repeat business, and we’ve got ongoing contracts so as long as (they) keep going... our sales... stay the same.’

What they lacked in efficiency they made up for in enthusiasm and effort:

‘Customers know if they come on (the phone) today they’ll get belts tomorrow if they are in trouble. We don’t like (doing) that because it makes Geoff (production manager) feel wobbly... the lead time is more like five days on
average... but there are customers who want it a lot quicker.. if they run out...we’ll always help them out.’

According to Douglas, much of what success they had achieved was attributable to mutual trust and integrity in dealing with their supply chain. However, growth was also constrained because:-

‘we wouldn’t attack any other distributor (of a main supplier) in the area.... (conversely)...they are very sensible... they’ve only got ourselves and one other active distributor in the area....I know where 90% of his business goes, I wouldn’t dream of trying to undercut him, we’ve worked so closely for years..’

Despite close relationships, independence remained a priority. They would not willingly sacrifice independence to achieve faster growth. Borrowing money or accepting outside shareholders was equated with being on a slippery slope, as confirmed by Douglas:

'We were approached (by) a company in Sheffield who was prepared to buy into Wittenshaw or take us over completely... ...for Bill and Graham... they’ve struggled for years to get a company together. For what? Just to be bought out before they’ve really done anything? Bill certainly wasn’t very keen. I listened with interest... and amazement that somebody was sitting in that chair making this offer.

But we can control our own destiny here. O.K. the growth is going to be that much slower, but so what... it’s one of those facts of life. We feel that we’ve still got a lot of work to do...I like the idea of working here...for ourselves. As long as we make money we know our jobs are safe and nobody’s going to throw us out....'

Yet running ever harder without reaching the mythical stable plateau reinforced cautious attitudes towards new investment and recruitment, institutionalising the philosophy of incremental development. As Douglas explained:

'...if we want a piece of equipment or to renew something - like the telephone system...the money has got to be there. We are very strict with ourselves,
we might have seven projects on the go and we’ll list them in priority and then when we get the money... down the list we go...even company cars...we don’t just say it’s summertime, we’ve got to have a new car...it’s got to be the right thing and the money has got to be there.’

White:

‘There are still bits of equipment that I’d like that would give us greater efficiency and productivity. That kit I’ve got a brochure on there - £30,000 investment, even now I have to look closely at that.

Douglas still saw opportunities for profitable growth in the core areas:

‘...we are always looking for new market areas. Certain areas are proving to be very good and others...we...ease up on a little.’

Shaw was more sceptical:

‘I find it very difficult to get information regarding the size of the market. We’ve kept on growing by increasing our sales and what’s to stop us carrying on growing? I don’t know what the potential is within (our) geographical area...and nobody’s been able to furnish that information...

Marketing is not our strong point...we’ve got nobody with real marketing skills ...information is not available so I don’t know how far we can go on growing... What we don’t know is how many (potential) users are out there... You should be able to do some market research....so...I could feel convinced that yes, there’s a great deal more growth potential or, we’re perhaps reaching a point where we’re not likely to see (sales growth) other than by really dropping our prices.’

4.2.3 The diversification script (2c)

Despite the lack of solid data which Shaw desired, by 1987/8 White was convinced that the current script(s) would not secure growth. He wanted to reduce the vulnerability of the business, based on a narrow market platform. His thinking eventually crystallised as a diversification script (Figure 4.6). To address his
colleagues' perceived conservatism he felt intuitively that it would be necessary to challenge their status quo assumptions, but how? For some time he had no answer. Then, he was aided by the fortuitous intervention of Jean-Claude, the second M.B.A. student. White had not anticipated the unfreezing potential of an external change agent, but he was quick to exploit the possibility when it was demonstrated. He allowed Jean-Claude to act as devil’s advocate, openly confronting the collective ‘mentality block’ towards change, challenging in particular the prevailing belief that the solution was merely to do more of and better what they were already doing. By encouraging Jean-Claude, it seems that White hoped the ‘mentality block’ might be overcome without overt conflict.

But despite White’s faith in Jean-Claude’s charisma, success was apparently limited to a recognition that things would have to change sooner or later. Strong

---

**Figure 4.6**

White’s ‘diversification’ script (2c)

<table>
<thead>
<tr>
<th>Colleagues</th>
<th>No consensus</th>
<th>Lack of resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>focus on</td>
<td>over preferred</td>
<td>to prospect</td>
</tr>
<tr>
<td>old niche</td>
<td>direction of</td>
<td>new options</td>
</tr>
<tr>
<td>change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Narrow,</td>
<td>!</td>
<td>!</td>
</tr>
<tr>
<td>vulnerable</td>
<td>!</td>
<td>!</td>
</tr>
<tr>
<td>business</td>
<td>!</td>
<td>!</td>
</tr>
<tr>
<td>base)</td>
<td>!</td>
<td>!</td>
</tr>
</tbody>
</table>

↑

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Explore</th>
<th>Personal</th>
</tr>
</thead>
<tbody>
<tr>
<td>status quo</td>
<td>multiple</td>
<td>involvement</td>
</tr>
<tr>
<td>assumptions</td>
<td>options</td>
<td>(White)</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal</td>
<td>Patient</td>
</tr>
<tr>
<td>involvement</td>
<td>plodding</td>
</tr>
<tr>
<td>(White)</td>
<td></td>
</tr>
</tbody>
</table>

---
personalities, indifference and inertia seemed likely to stymie any effective action in the short term. The outcome was that once again White took the initiative whilst the opportunity to use Jean-Claude’s help was there. His ‘challenging the status quo level 4 sub-script’ is portrayed in Figure 4.7.

---

Figure 4.7  
White’s ‘challenge status quo’ script

<table>
<thead>
<tr>
<th>'Mentality block'</th>
<th>Strong personalities,</th>
</tr>
</thead>
<tbody>
<tr>
<td>on change and</td>
<td>inertia/indifference &amp;</td>
</tr>
<tr>
<td>desire to avoid</td>
<td>to changing</td>
</tr>
<tr>
<td>conflict</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>(Let sleeping</td>
<td>Successful</td>
</tr>
<tr>
<td>dogs lie)</td>
<td>challenge to</td>
</tr>
<tr>
<td></td>
<td>the status</td>
</tr>
<tr>
<td></td>
<td>quo</td>
</tr>
</tbody>
</table>

Use outside change-agent as devil’s advocate
Accept the need to proceed without shared conviction

---

In this limited sense then, the status quo assumptions were successfully challenged. But there was evidently no practical consensus over the best growth option of several that the student identified. Indeed, there was a continuing lack of resources to pursue any of them (refer back to Figure 4.6). So White decided to take action personally, pursue multiple options and accept the need for patient plodding as before.

The Frenchman found a supplier of honing stones and White began prospecting for sales, a process his colleagues supported indirectly by relieving him of his other selling duties. He began to explore other options
as time allowed. Thus, despite his incrementalist tendencies, White enacted a third, level-2 strategy script of diversification that was quite radical in comparison with previous scripts. He behaved adaptively and experimentally, by his own admission making a lot of mistakes, wasting a lot of time, learning painfully as he went. In exploring multiple options he could be likened to a gambler hedging his bets. The indifference of his colleagues merely reinforced his belief in the old formula of heavy personal commitment of time and energy.

After a protracted period of sales prospecting, it looked as if he would generate enough regular business to justify adding honing stones to the 'portfolio'. When the belt recycling opportunity later emerged and attracted consensual support, even modest enthusiasm, it assumed priority, since White saw it as a 'cash cow' to fund the development of longer-term opportunities.

Shaw and Douglas remained ambivalent about diversification. Shaw commented:

'Bill tends to be looking round, thinking of new ideas, Mike just wants better growth (in current market areas). ... When I started, the idea was to make a successful business that would carry on... that's still fairly important, but I'm thinking now of possible other ventures and I'm sure I wouldn't have done that two years ago.

'We've sat down and said right, we've got to look at diversification. We feel that's...inevitable. When it will come it is difficult to say, but I think we've accepted that diversification will come at some time. Whether it is slight or total...remains to be seen. We've started the ball rolling.'
Because White took responsibility for prospecting new areas, Douglas was put under pressure to sustain current business. Shaw:

'We restructured the company such that Bill purely concentrated on new areas, new markets, products, diversification, current selling was really split between (Mike) and Fred. ... we (are now) really looking towards diversification...to give us growth.'

Yet, in reality:

'...it is unlikely that diversification will be so great that we will be in completely different markets, require a whole new approach. If we decided there was nothing really close enough to our market to go for, it was all too different, then I guess we would leave it. We would try and get growth on the present product and then look again next year (or) another year when we were more financially sound....'

Shaw's attitude to new projects was that:

'Whatever proposition you make it's got to be solid, it's got to be based on something and that's what we've had difficulty with. Lots of ideas but no... real feel of what we should do, what should our objective be, how to measure performance and so on.

We have a lack of skills ...to quickly put on paper the rough pluses and minuses, costings and market projections, to be able to say look, I've got this idea, what do you think of these figures?'

As for Douglas, growth was likely to build on current markets. He took a narrow view of their collective expertise:

'We need to plan, we need to be able to put forward a sales forecast that we know we can achieve... and make sure that we are all exactly clear on what we are doing.

We are the experts in coated abrasives. Bill and I are coated abrasive people. Our personal backgrounds stem from abrasive belt manufacturers and it's what we know, that's where our expertise lies. And we've got a lot of contacts in the area and in certain business sectors and obviously we've got to utilise those and push them as far as we can....

But even we have got to accept that we've got to learn. There is nothing wrong in going out into a new
business area and learning. And say, oh, I’m not sure, how do you do that? And we are prepared to do that. We are prepared to learn. We’ve got to be.’

As regards out-and-out diversification he was cautious:—

'We don’t really envisage setting on a lot more labour in the works, we envisage going over to more semi-automated equipment to up the production figures. The expansion is going to come on the sales side... We’ve thought about how we could raise cash... We thought about buying out smaller distributors and taking their business... If (an opportunity) was that good we would certainly look at moving premises, but it would have to be good.

It’s a thing with me, if we are going to do it we either do it properly or just leave it alone...we’ve got a good reputation and I don’t want to...start doing things (where customers say), Christ they’ve let me down, they don’t do this or they don’t do that... I just want to run it right. And Graham does as well, we’d rather just wait until the time is right. Because we’re specialists in coated abrasives doesn’t mean we’re specialists in portable tools or diamond products or whatever, I mean, you can’t be good at everything.’

In acknowledging the possibility of diversification there were real differences in outlook. If specialism was interpreted as coated abrasives, growth prospects in this competitive and mature market were poor, since many users were in decline. If specialism was interpreted more broadly, it required investment in people, equipment and facilities and except for the belt recycling project there was a reluctance to take any financial risk.

The belt-recycling concept had focused their thinking. Shaw:

'I must admit (it) does look interesting. We’ve done all our costing, in fact we’ve gone ahead and bought the machine...and we’ve got two customers lined up who will probably take half the capacity anyway. Instead of making 15% margins we might be making 60% on a slightly reduced turnover. The euphoria we had for this was unbelievable, you know, we’d have banks of machines...this is fantastic...
We’ve only made that investment because we all feel confident. It’s not the typical euphoric reaction... which then decays. I know that we’ll...find all kinds of problems...and it will make the whole thing slightly less attractive or totally unattractive. This is what happens, you see, we get built up very, very early on.’

On his own, Douglas was also less than sanguine:

‘In this case it’s obviously...take the risk first and then hope. If we fill the capacity of that one machine we would have to review ... whether we put another (in) or whether we say, O.K., we’ve filled that, now leave it at that...

I still don’t think we’ve hit on the right thing yet. This washing machine is the nearest we’ve come because it’s so allied to the business we are in and it’s going to produce so much more gross profit... (but) once you’ve filled the capacity of that machine ... you are not going to be able to go on and on offering the service because ...the delivery times will just go way out the window and you will become ineffective.

I don’t think it will ever take over from (belt) making here. I see it purely as an add-on to the business we are already in... giving us a good inroad into some new business areas. We just haven’t the resources to go too quickly...’

Douglas probably summed up their collective thinking as regards the medium term:

‘I’m not really one for building empires, so I’m not too bothered about how many more people we’ve got or how large we are. I’d rather see the company diversified, more profitable and more stable, more consistency. But I don’t think we’ll ever achieve that...

We need to get this washing machine thing proved. The honing stones, get that on a more stable flow of business. And I think in three years time if we’ve achieved those two or three things we’ll have done quite well.’

There was a shared concern to keep the firm somewhere they all wanted to work. They all praised the staff. Getting the ‘wrong’ person was seen as a big risk.

Douglas:
'when you are small and you’re expanding, it becomes very hard to add the right person to that team. The last recruit was young Stephanie...(she) stood out so much from all the others.'

For a sales position the situation was even more acute:

'we had this guy ...prepared to work as an agent on commission for six months and then if he likes us and we like him, we can take him on. We look at all sorts of things like that instead of...taking all the gambles of taking somebody on, getting a company car ...a new salesman is a hell of an investment.'

Douglas saw continuing growth mainly as:-

'a way to achieve a solid base, a good company for everyone to enjoy. A lot of people have been with the company since it started and (only) now are they getting the rewards because they’ve stuck it out.... we have been over the moon that we’ve been able to reward them this year...they were all amazed ...If we can continue to give them a good standard of living ... it makes for a happy ship.

If we wanted two lads to stay behind tonight to get a rush job out you’d have two without saying you, you and you. We like that atmosphere, those working conditions. We wouldn’t want to change that.

We have a good balance here, we’ve got Bill who’s very outgoing and will say yes to anything really and Graham who’s very down to earth and goes by what the figures tell him. And me, who is cautious...and won’t jump until I’ve looked at all the different angles...

We’ve all got our own strengths and weaknesses which makes it a good working relationship. I don’t tell Graham how to do his ...financial reports and he doesn’t tell me how to sell coated abrasives. It works out very well. You could have three directors that are all salesmen...it just wouldn’t work. But all three of us have got our own areas of responsibility, we know what they are, - it’s all about communication, letting each other know what we’re doing....' 

4.2.4 Commentary on the script-analysis of White’s outlook

White’s evolving outlook has been described in terms of scripts. His masterscript was portrayed as a personal gratification script, operationalised via three second-
level, strategy scripts, namely a *niche opportunity script*, a "stable plateau-seeking script" and a *diversification script*. It was suggested that the *niche* and *plateau* scripts were probably concurrent for some time, whereas the transition to a *diversification script* appears to have been comparatively abrupt.

The strategy scripts - as the label implies - are posited as fundamental to an understanding of White’s development of Wittenshaw Abrasives. Initially he aimed to capitalise on a narrow niche opportunity. A relevant script unfolded as he confronted emerging obstacles to its successful implementation. Later this script apparently mutated into the *plateau script* as they pursued a limited-growth strategy towards the goal of a stable, if arguably mythical, state.

For a time these scripts were probably undifferentiated in White’s mind. Thus their diverging implications were not recognised, much less addressed. However, as the growth imperative of the *plateau script* became more salient, it legitimised a number of important 'investment' decisions. These investments (moving to new premises and hiring Douglas) mandated an *acceleration of growth*. Only later, when White realised that the price of greater market penetration was a catastrophic erosion of profits and, in cutting costs and service levels, an impending loss of competitive advantage, did he confront implicitly the validity of these scripts. As a consequence, the *diversification script* emerged.
In the analysis underpinning this conclusion, each of White’s scripts were elaborated via systematic coding of the interview transcripts into a vertical hierarchy as posited for script structures. Two levels were explored below the ‘strategy level’, the findings being summarised in Figure 4.8 where subscripts are linked to the three strategy scripts. Some thirty two such script elements are listed. Most are judged to have influenced White throughout the period under scrutiny, which seems plausible given what we know of White’s preference for cautious, incremental change.

Not evident in Figure 4.8, recursiveness arises in the vertical structure, with some level 3 elements re-occurring at level 4. This is predictable if an individual’s thinking is to manifest cognitive closure, ie. White has a finite repertoire of solutions to problems, which he redeploy as he deems appropriate in context. In other words, new difficulties that threaten his masterscript directly or indirectly prompt him to find new solutions or reapply those that have already ‘worked’ in a different context. However, until such difficulties must be confronted, White tends to persist with his current outlook.

It seems fair to conclude from the commentaries of Shaw and Douglas that they largely understood and shared White’s assumptions. In particular, there was strong support for those beliefs which reinforced a narrow, patient, risk-averse approach. Yet they recognised that the collective outlook was changing, with diversification
**Figure 4.8:**
*White's Script Outlook*

<table>
<thead>
<tr>
<th></th>
<th>Niche opportunity</th>
<th>Stable plateau</th>
<th>Diversification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partnership</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoid major debt</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Rely on intuition</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Patient plodding</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Use outside contacts</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Adaptiveness</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Personal involvement</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Labour intensive ops.</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Be responsive to clients</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Extend client base</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extend product base</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit improvement prog.</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenge status quo (*)</td>
<td>?</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Explore multiple options</td>
<td></td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

**Additional scripts found at level 4**

<table>
<thead>
<tr>
<th>Script</th>
<th>Niche opportunity</th>
<th>Stable plateau</th>
<th>Diversification</th>
</tr>
</thead>
<tbody>
<tr>
<td>In house belt-making</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Improve customer service</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Reactive investment (**)</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mutual respect/consensus</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rely on 'doers'</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Low risk recruitment (#)</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>A few key players tied</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in with good 'packages'</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoestring approach</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learn from experience/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mistakes</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Use overseas suppliers</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply to order</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Reinvest profits</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Preferred firms (#)</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Espouse better controls</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stockholder/merchant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>philosophy</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Espouse delegation</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Espouse professionalism</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>outside 'change-agents'</td>
<td>x</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(*) articulating a sense of crisis  
(**) rent, cobble together, do without until there is no alternative (whether people or equipment)  
(#) eg. part-timers, agents, relatives  
(##) Close contacts with key suppliers and 'quality customers'
now on the agenda. This was largely because of the interventions of the two external change agents, particularly the charismatic Jean-Claude. The latter won over White to the need for change, though it is doubtful if the others genuinely accepted his insistence on the need to spread risk by engaging in new projects. Thus diversification remained for them espoused theory.

Agreement over the pace and direction of change was evidently superficial because neither Shaw nor Douglas accepted that Wittenshaw had extracted all the possible returns from supplying small and medium sized regional users of abrasive belts. They supported the belt recycling project because of its apparent synergy with current activities, hence it did not require major changes or resource commitments. As regards the other options explored by White, they paid lip-service to his initiatives, but offered little direct support.

Paradoxically, Shaw had considered a new venture with different partners. This suggests that he saw Wittenshaw's scope as essentially static, i.e. coated abrasives, so that if either he or White identified a more attractive business option they would be free to pursue it independently. By contrast, White espoused the idea of Wittenshaw as a holding company for a range of activities drawing on the skills and enthusiasms of the current actors.

Turning to the process of script analysis, explicating White's outlook in this way offers valuable insights. Particularly at the so-called strategy level,
the analyst can map the emergence of new patterns of strategic thinking over time. This format accommodates White's evolving attitudes and responses to adversity. As we see how the script-in-use evolves, we detect the emergence of new strategy scripts. Moreover, by operating at progressively more detailed levels of script analysis, relating super- and sub-ordinate goals to perceived problems and attempted solutions, we are in effect using increasingly powerful 'microscope lenses' to expose the coping strategies and tactics construed by the actor.

Based on the analysis of White's outlook, it would seem that an emerging strategy script does not automatically supplant its predecessor. They may influence the actor concurrently for a period. This is thought possible for two reasons. First, as in White's case, many low-level components persist from one strategy script to another. This makes it likely that the shift is simply not recognised. Moreover, although it was argued that White ultimately rejected the niche opportunity script in favour of the plateau script, important elements stayed the same, underpinning an incremental, risk-averse approach. Second, to the extent that the actor becomes aware of concurrent scripts with differing implications, pragmatic range-of-convenience assumptions would seem to limit their perceived applicability. Thus White construed moving to new premises and hiring Douglas as consistent with the emerging plateau script, whilst precepts of parsimony and high personal involvement remained consistent with the 'low-rent' niche-opportunity
script. Unlike Dean, as we shall see, there are few instances where White unequivocally rejected an old strategy - demonstrated not just in words but in actions.

4.3 Paradoxical Dualisms In White's Outlook

A key assumption of script analysis is that when difficulties have the potential to frustrate goal-achievement, actors react to overcome or circumvent them. Each time White intuited a hurdle likely to confound his script-in-use, he sought a counter measure. From the perspective of the external analyst, his thinking sometimes appeared to contain contrary priorities and imperatives. These, it is suggested, can be presented as paradoxical dualisms in his outlook.

A paradoxical dualism means a juxtaposition of ideas which at first sight have opposed or mutually exclusive implications. To reconcile consequent implicit tensions, the actor tries implicitly or explicitly to find a constructive equilibrium, although probably favouring one idea or position more than the other.

Some dualisms are logically irresolvable. For example, business growth normally requires investment. If an actor's growth ambitions are juxtaposed with a desire to avoid investment, it could be said that there is a logical contradiction. She could cope with the contradiction in at least three ways (i) ignore the contradiction and its consequences for as long as possible (ii) rationalise away the contradiction by assigning differing ranges-of-convenience in space or
time to opposing priorities, or (iii) she can confront the contradiction aggressively and with imagination.

Some dualisms, however, constitute psychological oppositions in the sense that the actor construes idiosyncratic contradictions not substantiable via the rules of logic. For example, being personally involved in a business does not in a formal, logical sense preclude delegation. Still, an actor is free in principle to construe involvement and delegation as opposed and perhaps mutually exclusive. Because psychological dualisms are beyond logical critique they may prove highly persistent. Hence the empirical study of dualisms offers potential insights into the thinking of idiosyncratic actors.

White's dualistic thinking is now reviewed. The analysis paralleled the elaboration of White's scripts, with particular attention given to the identification of apparent contradictions. In what follows the symbol [::] will be used to signify opposition. To try to summarise White's outlook in this way, one points to two broad dualisms and their underlying assumptions:

* self-reliance :: dependence on (trust in) others,
* 'small firm' approach :: 'big firm' approach.

Much of White's thinking was grounded in the legitimacy of behaviours that he associated both with self-reliance and the small firm context. The respective oppositions of 'trust in others' and 'big firm behaviours' dimensionalise his interpretation of situations.
He attributed to small firms the characteristics of informality, unsophistication, operating on a shoestring, responsiveness and being action-oriented as opposed to being ponderous and deliberate. In contrast he tended to devalue the qualities he imputed to big firms. Likewise, (although the dichotomy was evidently less extreme), he valued reliance on his own efforts in preference to those of others. Thus his view of Wittenshaw as a small firm and himself as a pivotal, highly-involved, small-firm owner was not merely descriptive, but normative.

4.3.1 Dualisms relating to self and others.
The following dualisms were interpreted from White's own account of self in relation to others in the context of Wittenshaw.

(i) Personal expectations: financial returns :: non-material gratification. In setting up his own firm White sought personal gratification in terms of freedom from the perceived oppression of a big firm employer, hence to feel that his destiny was in his own hands. Independence meant that material rewards were in principle linked to his own efforts, not to the arbitrary whims of others. The autonomy to trade material rewards (profits) for non-material rewards was important. Although achieving good profits does not preclude intrinsic rewards per se, White tended to believe that actions to increase profits would have undesirable consequences, such as diluting his control or incurring unacceptable risks. So he tended to
perceive non-material and financial rewards as somewhat opposed goals.

(ii) **Getting results: self reliance :: depending on others.** From the outset Wittenshaw was White's project. He took for granted his total dedication to it, exemplified by long hours and being a 'jack of all trades'. Quite simply, he associated the success of the firm with his own contribution, in quality and quantity. His own input had to compensate for the lack of other people and facilities. Enthusiasm and long working hours were central to the low price/fast service formula for success. Later, he continued to see his 'action man' style as crucial to the success of the business.

Maintaining personal contacts enabled White to mitigate market and technical uncertainty. Information from his personal network allowed him to retain the illusion of control. Contacts also provided a chance to explore and test ideas in lieu of formal research, expanding Wittenshaw's *de facto* resource base. Good customer contacts insured against rejection and were personally gratifying, elevating his self-esteem. Accordingly, self-reliance came to be perceived as intrinsically virtuous, not merely a response to circumstances. It was arguably a justification in later years for not investing or recruiting.

Nonetheless, White was not totally opposed to collaboration. Self-reliance imposed a heavy personal workload and burdensome responsibilities. So from the
outset he entered a partnership which, though it diluted his control, he accepted as a price worth paying. He came to see Shaw as a trusted colleague because Shaw was a flexible and committed evening and weekend worker. Hence he allowed Shaw to challenge and improve his ideas. In this way, partnership eased White's burden and partly compensated for a lack of investment.

Later White espoused the view that being salesman and managing director was counter-productive; to detach himself from day-to-day pressures by delegating had become highly desirable. But the tension between the priority of order-winning (his forte) and creating personal space for a more relaxed and detached view of the business prevented it from happening. Frustrated by his colleagues' scepticism over diversification, he was determined to secure the desired changes himself. So Wittenshaw continued to depend on his direct contribution and White persisted in his preference for self-reliance over collaboration and delegation.

(iii) Basis for getting results: doing (intuiting) :: analysing (evaluating). To White, succeeding - getting results - was about doing, implying reactivity, being experimental and intuitive. Urgency was a valued characteristic of the early service formula to win orders and differentiate against competitors, especially big firms. This was consonant with the short-term, expedient 'shoestring' philosophy. But a 'bias for action' tends to devalue thinking and planning and later, if White were to
sit back and reflect, he feared criticism by the other 'doers' in the fold.

Besides, he associated reflective thought - being systematic and analytical, planning properly ahead, being 'professional' - with the 'big firm' approach. Thus despite (or because of) years of reacting to circumstances, his natural style remained intuitive, involved and biased to action. Indeed, he was suspicious of thinkers like Guy, the first M.B.A. student, to whom he listened politely but largely ignored. In Jean-Claude he saw a doer:

'Jean-Claude with his... flamboyant style could get ideas across to me and Mike ...He's not a man to shilly-shally about with statistics ....his contribution was in terms of the mentality of the people, more so than facts, figures and statistics.'

Jean-Claude offered White directions he could go in, things he could do. Ironically, whilst all three Wittenshaw principals espoused the need to analyse and evaluate proposals, only Shaw could be convinced by statistics. White and Douglas had to be convinced at the intuitive level. Predictably, then, White resolved dilemmas by 'doing his own thing', responding to a perceived opportunity, learning, making mistakes, and in the end getting results. But he was increasingly aware that different projects had different time frames, so that a more reflective-evaluative approach might reap dividends.

(iv) Attitude to human resources: labour-intensive operations :: unwillingness to recruit. The 'shoestring'
approach was labour intensive, principally of the partners in the early days. Over time it necessitated recruiting in all areas of the business. White's cautious outlook made him reluctant to recruit, even though some growth options clearly required extra staff. Even in production he made a point of hiring as few staff as possible. He used part-timers to test their skills and 'fit' with the culture. Aside from Douglas he recruited no permanent sales staff. A bigger headcount would require more formal structures and increase the chance of untrustworthy staff. Recruiting good sales staff was seen as especially problematic, reinforcing his perceived need for self-reliance. This reluctance to recruit hampered Wittenshaw's growth, a fact he recognised but did not act on, arguing that a bigger, more professional team could be afforded only after further growth had been achieved. Thus there emerged one of White's most fundamental dilemmas.

(v) Consensus decisions: changing the 'collective mentality': tolerating conservative colleagues. In the early days White and Shaw decided issues jointly as they arose. Later, all three share-holders desired progress via consensus. No-one saw White as 'the boss' even though his personal contribution and his 45% shareholding put his de facto status beyond reasonable doubt. The dilemma for White was that to diversify when only he believed in it was at odds with a consensual decision-making. Indeed, he could not be autocratic, since Shaw and Douglas could
outvote him. So White linked progress with collective mentality change, a shared mindset where all would embrace new options. But although he valued colleagues as friends and for their contribution to the survival of the firm, White saw them as conservative and sceptical. The gap between their reading of the situation and his was widening, which frustrated him and created tensions.

White ultimately decided he could not allow diversification to be stymied by colleagues' indifference. Reflecting on the internal politics of the firm, he concluded that goal achievement was not necessarily linked to consensus: he would make progress in the face of passive opposition. But this approach committed him yet again to day to day prospecting. It exposed him to bruising pressures, physically and mentally, as he sensed that they waited for him to fail, testing his self confidence and resilience to the limit.

No wonder that the belt recycling project seemed like nirvana. White had by now virtually accepted that he would not get consensus over, much less the active participation of colleagues in, schemes that they were unenthusiastic about. Rather, he would allow individuals (Douglas to begin with) to do what they could be relied on to do well and enthusiastically. Yet in truth White continued to wrestle with the dilemma of how to reconcile his natural desire for consensus with likely confrontation over diversification.
Historically, all the activities of the firm were lumped together for accounting and control purposes. It was not possible to say how profitable each activity was. Even after systems were improved, they still debated whether and how much one activity ought to subsidise another. White saw benefits in keeping all activities under the same roof. But the trend was towards spheres of expertise which made it harder to challenge the actions of colleagues, whilst still allowing each to blame another for failures to achieve targets.

For White, the logic of this situation increasingly pointed to an activity area being assigned to an 'owner' who would be clearly accountable for its well-being and development. This embryonic divisionalisation philosophy acknowledged that ownership of favoured projects should improve morale and results. But if implemented, divisionalisation would compartmentalize the business and perhaps further inhibit future collaboration and consensus decision making.

4.3.2 Dualisms relating to small-firms versus big-firms

Organization culture: 'big firm' professionalism :: small firm expediency, adaptiveness. The original opportunity was defined very much by what it was not, i.e. a business area served badly by the big abrasive firms because they did not see it as an opportunity. Objectively, one might agree with their assessment,
certainly in financial terms. But for a small firm there evidently was a gap *vis a vis* the big ones. So White thought in terms of 'what the big firms would not do'. He intuited a 'small-firm formula', a responsive approach for serving the needs of other small, insignificant firms.

After several years with this formula, lurching from one minor crisis to another, White appeared to accept that his *masterscript* would be stymied if he persisted with it. Indeed, it implied a definite constraint on Wittenshaw's development, since growth would ultimately destroy its small firm status. His longer term goals would be better served if the firm were positive, proactive and increasingly professional. Thus to improve growth and profits he espoused being more professional: he would have to be more of a *thinker* than a *doer*.

Much later, this style was still perceived as a luxury. Even over diversification White's attempts to be less reactive and more analytical soon reverted to charging around the country prospecting new leads. Meanwhile Shaw had implemented more professional control systems and was frustrated that neither White nor Douglas were taking them seriously!

(viii) **Attitude to investment:** continue the 'shoestring' approach :: invest to support growth. There was a continuing tension between investing in plant and facilities to increase productivity and drive down costs, and the low-rent, shoestring approach White felt
comfortable with. Investment was essentially a big-firm approach, creating other costs and risks in its wake. Long after the shoestring approach could arguably have been rejected or reinterpreted, he persisted with the myth that there was no practical alternative. This justified further expediency, tolerance of inefficiency, minimising the overhead burden.

Paradoxically, White rationalised the shoestring approach as circumstantial, not intrinsic to the culture of the firm. To be fair, prudent investment was a more obvious feature of his later outlook, but tension remained over the timing of investment. The dualism shifted from investment: yes :: no, to investment: now :: later.

Later still, he subtly reconstrued the dualism as investment: shorter term :: longer term. He was clear that the current market was no longer worth investing in, whereas recycling was innovative and beneficial in the shorter term, to be supported by other projects with a longer term payoff. But he still associated small firm status with an inability to invest. The conundrum of having to be more profitable to justify investment, yet having first to invest to raise profitability was never truly resolved. Thus it is doubtful whether he has ever made a significant investment.

(ix) Risk: growing the business :: staying in control of the firm. For the first year or so White's goal was survival. Then it became patient growth to secure longer
term viability and the means to afford and induce Shaw and others into the firm full time. Scale offered the prospect of better facilities and a lower cost base.

Patient growth was consonant with staying in control and provided White with an obvious rationale for a strong personal involvement in the firm. It was safe, though it delayed the onset of the mythical 'stable plateau'. Conversely, to the extent that rapid growth had to be underpinned by debt, outside equity, or the hiring of numerous staff of unproven ability and personal qualities, it was unacceptable.

To make sense of the dilemma of wanting growth, but rejecting the risks associated with it, White encoded his ideas in terms of progress, signifying growth without risking loss of control. The paradox was that to achieve the security he associated with notions of 'critical mass' required unacceptably risky actions. This dilemma went unresolved, since White refused to consider long term debt or external equity, guaranteeing that the firm remained small and on a knife edge of financial viability.

(x) Making progress: keeping current customers :: prospecting for new customers. Early customer acceptance at the 'rough' end of the trade led to repeat business and long term loyalty, which reduced the need to prospect new accounts. It mitigated much of the risk of the new venture. But the need for higher margin business soon focused attention on more demanding customers, and more
systematic prospecting. Maintaining the right balance between servicing current customers and winning new ones was never truly resolved, and priorities oscillated between them, notably after White realised that Douglas was an ineffective prospector. Despite this assessment, when White began to explore new market areas, Douglas continued prospecting in the old market, exposing current accounts to predation by competitors.

(xi) Making progress: product-led :: customer-led. Over time the narrow market niche of small-firm customers was extended geographically. When the decline of this core market was clear, Wittenshaw had around 200 regular clients. Extending this customer base was problematic in that it required prospecting beyond the locality, thus a bigger sales force was needed. Equally, if they offered Wittenshaw's current products to larger customers, or a wider spread of served applications, more sales staff would be required.

So White looked for compatible products to sell to existing clients, but he found none that conferred any competitive advantage on the firm. Thus, developing a wider product range for the current clientele proved scarcely more attractive than extending the core offering to a wider clientele. Priorities oscillated between these options and a clear direction was not established.

(xii) Adding value: making :: merchanting. One suspects that White's sales background made him unsympathetic to
manufacturing. True, the firm had a factory of sorts because making belts was originally seen as the key to low cost/price and customer acceptance. But it produced margins generally no better than reselling industrial consumables - nowhere near as good as the projected margins from belt recycling. Shaw argued that they needed both manufacturing and merchanting: one recovered the fixed overhead, the other generated the profit. White was less sure.

The truth value of this 'myth' was not really the point: White associated manufacturing with capital investment, so in his view extending the production base would cripple short term profits. By 1987/8 his mindset had changed, they were no longer there to make belts, but to make money. He inclined more and more towards reselling as a key element of the revised formula. As a salesman he also wanted a flexible, commercial outlook which militated against manufacturing. Accordingly, White became too sceptical to invest in manufacturing, but too locked into it to quit.

4.3.3 Commentary on paradoxical dualisms.
The proposition is that White faced a number of dilemmas arising from the juxtaposition of opposing, sometimes inimical priorities. In some cases they presented a natural contradiction, whilst others reflected a personal, idiosyncratic construction. In some instances a dilemma parallels an obstacle highlighted in the script analysis. In combination they illuminate his personal
outlook, helping us to understand his motives more fully and why some actions are apparently legitimised, others are proscribed. In particular, we appreciate White's outlook better when we are aware of two fundamental, unresolved dilemmas arising from his biases to self reliance and the small firm approach.

It is suggested that when White construes an opposition, he is prone to favour one pole over the other and to regard them as mutually exclusive. Whilst he pays lip-service to a balanced posture, the evidence of his actions suggests that he cannot readily do so. True, he managed to combine self reliance with partnership, but in general he tends to think in terms of 'or' rather than 'and'. Thus he struggles to achieve a reconciliation of opposing ideas. He seems aware of this difficulty, but is unwilling or unable to overcome it.

To be sure, he espouses the need for a different and contextually more appropriate balance between opposing priorities, for example to be less reactive and opportunistic, more systematic, professional and reflective in style. But in practice he finds such changes to his theories-in-use problematic, presumably because they challenge deeply held assumptions about his identity as a resourceful, independent small-firm owner. Moreover, when he does attempt to shift his position, the tendency is either to relapse into old patterns of thinking or to oscillate indeterminately between poles of a dualism. Thus decisive, effective action is stymied. In
general, his thinking is better described as 'either/or' than as 'and/both'.

Neither is there much evidence of radical new dualisms emerging. Rather, White's outlook appears to evolve by modifying dualisms instead of outright substitution. For example, his attitude toward growth and investment changed, became more positive, and perhaps more sophisticated. To what extent are such changes now part of his 'theory in use', as evidenced by his actions? In this particular example the evidence is that White's actions and espoused changes in outlook were converging, though it was still too early to know if the shift would prove irreversible.

Analysis of dualisms sensitizes the observer to an actor's assumptions about managing effectively in context. Without this sensitivity one would be tempted to portray a small firm owner like White as misguided or confused. Rather, it becomes clear that he reflects a complex bundle of assumptions and competing priorities one would associate with the genre of impecunious small-firm owners. That said, the purpose of the exercise is not to judge, but to explicate.

The complementarity of dualistic and script-based analyses is worth further comment. White's scripts were strongly contextualised in respect of his firm and its environment. For example his perception of niche opportunity makes sense when we know of his background in abrasives and his lack of resources. Other elements of this script were also circumstantial, including his
choice of small firm clients in and around Wittenshaw. Yet we may suppose that similar assumptions and conventions (i.e., build on the industry and locality you know) underpin the niche opportunity scripts of many founder proprietors. Given White's assumptions and constraints, one could predict which hurdles and responses will emerge. Although they will vary in their particularities, there is arguably a generic pattern that is recognisably niche opportunity.

In contrast, the emergence of dualisms depends on the psychological context provided by the individual. Her constructions will to a significant degree be personal, idiosyncratic and not necessarily or obviously related to external context. Thus for example, White preferred consensus whereas many in his situation will prefer autocratic decision making. Conversely, many entrepreneurs evidently temper a bias to self-reliance with a desire to delegate.

Both scripts and dualisms encode descriptive assumptions. To the extent that an existing theory-of-action is imposed on a new situation, its assumptions become prescriptive for the knower. However, the inference that past scripts-in-use are recycled may prove unreliable. The fact that White used a niche opportunity script does not necessarily help us to predict either how it will be interpreted in regard to future perceived opportunities, nor to predict the mutation to another script like the plateau script. Thus for the external analyst a script appears to have only moderate predictive
value in relation to the anticipated actions of the subject under study.

On the other hand, White appears to manifest considerable continuity with respect to his construed dualisms, presumably because they reflect fundamental, largely unchanging aspects of his outlook. To that extent, they may have predictive power. Of course, it is difficult to avoid predictions that are essentially hypothetical conjectures. For instance, the question "if White had £1,000,000 in the bank, would his outlook still be parsimonious?" is interesting, but irrelevant. White does not have £1,000,000 and his circumstances make it a highly unlikely scenario. Provided that his circumstances evolve in a manner broadly consistent with his past experience, we would expect his dualisms to persist and evolve incrementally as observed, offering the observer useful insights into his prospective knowing as it pertains to the world of his work experience.

4.4 Metaphoric Analysis of White's Outlook
In this stage of analysis White's outlook is described in terms of generally implicit metaphors characterising his inferred role identity in Wittenshaw.

(i) A rat in a maze. Many external obstacles had continually to be negotiated, especially in the early days. White would inevitably make mistakes in a process of repeated trials - like a rat in a maze - and like the rat he would slowly learn from the results obtained.
(ii) The commando on an assault course. This is a more purposive analogue of the rat-in-a-maze metaphor. White was on an obstacle course, getting fitter, learning, accepting the challenge of tackling problems proactively. The military metaphor emerges in terms of defending the current business against attack. The idea of putting himself to the test, more generally, was expressed in a variety of ways: getting out and having a go, seeing it through, cleaning up, accepting the need for personal challenge etc., soldiering on. At times there was an element of machismo: 'action man' coping with impossible odds, dragon-slaying, David against the bureaucratic, slow-moving Goliaths (the big firms) and the ogre of the tax man.

Initially the 'Alamo script' also came to mind: White battling to grim, ultimate defeat against impossible odds. But, arguably, perceptions of the heroic soon faded. Like Davy Crockett, White may have seen his original cause as worthy, but later he began to form contingency plans and in the end, unlike Crockett, he might leave his colleagues to be 'massacred' if they insisted on defending indefensible positions, rather than accompany him on the escape route of diversification.

The mountaineer is an analogous metaphor, evoked by various expressions of climbing, hanging on grimly, aiming for the ultimate plateau or higher (profit-making) plane. A significant change occurred as White learned
that the option of getting round a barrier can make more sense than trying to scale it.

(iii) The experimenter. An alternative interpretation of doing, getting out and having a go, is the metaphor of experimentation, encoded in White's use of the word 'project'. This was frequently associated with regard to creating a portfolio of business activities, exploiting synergies, integrating separate initiatives. Experimentation was about gaining and building on experience. Initially White saw this as time sequenced, but the portfolio approach could enable him to transfer positive lessons from his 'experiments' more or less concurrently.

(iv) The pathfinder/pioneer. This is probably the most pervasive metaphor evoked in White's account. It expresses the self-reliant, exploratory aspects of what he was doing, in phrases like charting new ground, patient exploration, paddling my own canoe, dipping a toe in the water, going it alone and so on. Equally, the metaphor emphasizes the journey, the waggon driver on an unmade road, finding a viable way through, generating momentum, looking ahead, reaching a crossroads, changing course, taking an indirect, lower risk route.

Though he accepted that he might not get through, feeling that he was making progress, mapping out a notional course, being in transit, was probably a more significant motivator for White than arriving. Indeed,
for long periods there was no progress, conjuring the image of wheels stuck in a rut, being on a treadmill, running ever harder to stand still.

Nautical metaphors intrude here: charting a course, taking new ideas on board, launching new products, having a fleet of representatives, getting on a growth trend. As time progressed, White's interpretation of the pioneer metaphor shifts to a recognition of his pathfinding and co-ordinating leadership role. He was now the coachman controlling the horses, the captain of the boat, Moses leading his weary and fractious compatriots to the promised land.

(v) The surveyor/prospector. Here the metaphor evoked images of mining and prospecting, plugging market gaps where discovered. The central image of the niche market is analogous to the seam of coal or gold, needing to be chiselled away at, seeing how things would pan out. In his mapping of potential new territories and market areas White implied the metaphor of the geological surveyor. The urge to find a new opportunity remained strong: shown a glimmer.....'just try and hold me back...'

(vi) The shoestringer. This metaphor was interpreted as meaning a hobbling, step-by-step, low-budget approach. Others might call it 'bootstrapping', levering up the firm from nothing with nothing. It encodes the notion of incrementalism, building on what you've already achieved, taking one step at a time, ploughing back what you've
reaped so far. White’s commentary implies adopting minimal risks, operating in the most basic, tentative and slender way, notably during the privations of their early sweat-shop working conditions.

(vii) Game-playing: the sportsman. At times White was the sportsman. Shooting was a popular metaphor: hitting targets, scoring fast, bagging a clutch of customers, finding only dead ducks. Poaching was a variant on the theme, expressing a perception of marginality, perhaps: swiping or snatching customers from the big boys, scrumping - picking the plums, and then coping with the inevitable reaction of the big-firm ‘gamekeepers’. He made periodic references to playing cards, waiting for initiatives to come up trumps.

Over time, he realised more fully his role as team captain or referee. He was increasingly concerned to promote team-work, break down (mentality) barriers preventing good team work. He wanted complementarity and co-operation, mutual trust and understanding, and to get people into positions where their natural talents and inclinations would be used to best effect, recognising, so to speak, that full backs and strikers are not the same breed.

(viii) The advocate. White perceived the need for advocacy, to make the case to colleagues. Failure to do so could result in ‘being laughed out of court’. Conversely, he sometimes had to act as judge and lay down
the law. The latter might arise in relation to diversification and his unwillingness to tolerate a change-averse mentality for ever. However, the Anglo-Saxon legal tradition is adversarial, a fact White was still reluctant to accept in his own context.

(ix) Being in service. Finally, there was the notion of being in service, a Jeeve's butler in the sense of being a useful intermediary, supporting and facilitating, the latter on behalf of clients especially. This included developing and exploiting supplier relationships in ways which might ultimately be useful to clients.

In particular, the new projects such as belt recycling would allow Wittenshaw to reinstate its traditional service formula, something for White to build on and feel good about. The metaphor of bespoke tailoring also springs to mind here in the sense of adjusting the product to the clients' needs.

The most striking observation based on the metaphors inferred from White's account is that they create a strong impression of man against the uncontrollable elements. For example, the imagery is of man pitting himself against the hazards of voyaging, exploring and hunting, experimenting with nature, or of coping with man-made adversaries on the assault course, or in the game. Even in the concept of service there is a perception of client as master, an environment in which White will inevitably find himself in a subservient role.
Despite his desire for control he feels that he is not fully in control. The world of his firm is one of continuing challenges to his ability to stay in control of the firm, but ultimately of his own destiny. This is patently a disconcerting situation to which he may react, but has no solution.

To use a different analogy he is a high-wire man with a constant fear of losing his balance. The pragmatic observer might advise him to quit in favour of a less stressful occupation. He does not; part of his outlook requires him to prove he can handle the challenge. In a perverse way he enjoys it.

In some instances the metaphors convey ambivalence. In the legal metaphor White is sometimes judge, sometimes advocate. As a pioneer he is sometimes driving the horses, sometimes the waggon is being dragged out of control. As a sportsman he is sometimes the player, increasingly the captain.

To return to the pioneer metaphor, like the early American pioneers White is on a transcontinental journey to a mythical 'Pacific coast' destination. If he stopped to reflect, he might conclude that he is simply not going to get there, but like the early pioneers he does not confront that possibility. Having spent several years fighting marauding Indians in the Appalachian mountains, and draining the Mississipi swamps of alligators, he is a long way from where he wanted to be. On the other hand, he could be said to be approaching the New Orleans of his
diversification projects; should he arrive, there are worse places to be!

In summary, the metaphor analysis of role identity produces some rich insights, though not to the extent initially hoped for. The metaphors evoked in and from his account convey a strong sense of insecurity, consistent with his many risk-limiting actions. The individual metaphors are for the most part neither evoked explicitly nor especially evocative, nonetheless, in concert they convey an interpretation of White's role identity as concerned primarily to explore and prospect in directions that are seen as likely to locate a safe, rewarding haven. In so doing he desires to keep his partners from falling behind and becoming lost, though there could be limits to his patience.

4.5 Process Interpretation of White's Role Identity

In Chapter 2 it was suggested that executives' role identities could be portrayed in process terms, specifically those derived from the small firm literature (Stanworth & Curran (1976), and paralleled by posited Type I and Type II archetypes (p. 60). What insights do these identities offer in the case of Bill White?

In fact he seems to be a classic artisan. He valued independence and intrinsic satisfactions over financial rewards and he continued to perceive his own contribution as central to the output and success of the firm.

Further, as Stanworth & Curran posited, he was ambivalent towards growth, being extremely reluctant to borrow to
finance it, largely because he equated debt with loss of control, a basic concern of the artisan. Wittenshaw's growth was therefore constrained to what was achievable by reinvesting its modest profits.

However, as Wittenshaw became better established, White considered prudent diversification to accelerate growth as the pre-condition for long run stability, as the theory predicts. But as Stanworth & Curran said (1976, 105) of the artisan:

'whether any dramatic take-off into sustained growth is likely, even when the external logic...is highly favourable, is a matter for debate and even scepticism.'

In Wittenshaw's case not only did the internal logic from the standpoint of the chief actor contain apparent contradictions, the firm's external logic in terms of market, competitive and customer relationships was also problematic. So one should not be surprised that Wittenshaw's growth was stymied. The continuing dilemma for White was that the means to grow could endanger all his achievements to date, whereas failure to grow would prolong Wittenshaw's marginal status and quite possibly threaten its long run survival.

As Stanworth & Curran noted:

'a sustained high rate of growth may change the firm from a solution to [the artisan's] social marginality to a situation reinforcing it'.

White's sense of marginality can be inferred from some of the role metaphors reported in the previous section. He related to the world beyond the firm as an unknown, hostile context for an exploratory, pioneering voyage, or
as a continuing obstacle or assault course. At best it was a relatively unknown land needing cautious surveying and prospecting. Thus for the most part White was predisposed to an orthodoxy of 'shoestring development', well understood and accepted by his colleagues.

Moreover, White was increasingly sensitive to an internal rather than external system focus. Although small, the firm was fairly bureaucratic, with spheres of influence understood and respected by the various actors. Though arguably an espoused theory rather than a theory-in-use, White wanted his firm to become more organised, systematic and professional. To this end he manifested only modest political skills, though his political awareness seemed to be improving. Since many of his difficulties were seen as within the firm, he now recognised the need for team-building and advocacy to manoeuvre his colleagues into accepting the rules of a new game. But one can argue that he had in fact failed to convince colleagues of the need for diversification, and in the final analysis he would continue solo, self-reliant progress if he could not mobilise active support for it.

Turning to White's other perspectives on process, as noted on several occasions, White preferred consensual, trusting unitary processes, though it did appear that fragmented, conflictual outcomes were no longer inconceivable. As regards rationality he clearly espoused the virtues of being decision-rational. In practice he was largely action-rational, as defined in Chapter 2.
Indeed, White was convinced by the results of (his own) actions, not by analyses such as the one done by the first Aston student. This was typified in his experimental approach to the unknown: try a course of action, evaluate the results and then tackle the next phase by incorporating lessons thus derived, exemplified in the way he prospected the honing stone opportunity. The latter is also understandable as symbolising to his colleagues and himself his commitment to change. As regards his posture with respect to continuity versus change-seeking, his inherent conservatism and preference for incrementalism has been noted already.

To summarise, although White had various artisanal characteristics, it seems fair to observe that he is not a pure type. Likewise he is not a pure Type I identity. Though closer to Type I than Type II, there was some evidence of contrary movement in his seeking to diversify proactively, albeit one could argue that the means he adopted were comparatively incrementalist. Thus White presents a largely conservative, artisanal outlook with a mix of posited Type I and Type II qualities biased to the former. This conclusion substantiates the continuity manifest in his various scripts.

4.6 Chapter Summary
This chapter began with a description of Wittenshaw Abrasive’s development, drawing extensively on the account of its proprietor, Bill White, and elaborated by those of his close colleagues in the venture. Thereafter,
the nature of White's strategic knowing was considered via the twin approaches of scripts and dualisms, as outlined in Chapters 2 and 3. These findings were enriched by drawing on the observations of close colleagues. Attention then shifted to a complementary interpretation of White's strategic knowing based on metaphoric and process approaches to role identity, as outlined in earlier chapters.

The result is a rich, multi-faceted interpretive picture of White's outlook on his responsibilities as steward of his young firm. There is no suggestion, of course, that White would necessarily concur with the conclusions drawn. Nor is the picture necessarily complete. Still, it is to be hoped that the account is coherent, plausible, and descriptively useful.

The various approaches have addressed somewhat differing aspects of the subject's knowing. The question of synthesis remains open. The assumption has been that, as in the use of microscope lenses of different powers, the images need to be interpreted on their individual merits. Indeed, they may not be amenable to synthesis.

Each approach however, especially the script approach, mapped an evolving outlook. If a strategist's knowing evolves, it is legitimate to enquire how. It seems that White's espoused theories change quite significantly at some stages, as he acknowledges signals from the operating environment and from particular change agents, including perhaps the investigator here. However, White's theories-in-use evolve for the most part
incrementally. This appears particularly true in respect of the lower level components supporting his ‘strategic scripts’, many of which appear largely unchanged and well embedded. His role metaphors also suggest an evolving pattern, rather than discontinuities in his outlook. Likewise, though the dualisms inferred in his outlook may change over time, some basic conflicts seem likely to remain essentially unresolved. As such, one predicts that White will be frustrated in his endeavours to develop the firm much beyond the status quo.

These observations therefore raise questions about an individual’s capacity to know and learn in an organizational context. The case of Hamish Dean, considered in Chapter 5, sheds further light on these questions.
CHAPTER 5

A CHIEF EXECUTIVE’S STRATEGIC KNOWING:

Hamish Dean of Pyrochem

5.1 Synopsis of the Firm's Development

Hamish Dean's is a remarkable entrepreneurial case history. His parents moved to the English city of Lanchester from the Scottish Borders when he was a youngster. They were committed members of an exclusive religious sect, the "Clan", whose beliefs influenced all aspects of their lives. Hamish, the young adult, was intellectually capable but forbidden on religious grounds to continue his formal education beyond school. He became a computer programmer. In 1971 when in his early twenties he married into another Clan family and took a selling job in a relative's wholesale firm in the Borders. He plunged enthusiastically into his new role, but after some 18 months he was increasingly frustrated by the proprietor's disorganised approach and lack of ambition.

As a sideline the firm supplied and maintained fire extinguishers. Dean became aware of new fire regulations imposing more stringent constraints on small businesses like private hotels. He discovered that even fire officers were poorly prepared to advise proprietors on compliance with the regulations and few contractors were able to offer cost-effective improvements:

'The national boys were used to putting in huge systems for factories, (they) couldn’t cope with small installations. So you had local electricians charging £2000 for a £500 job... Legislation was
demanding something and there was no single company geared up to supply it.'

Dean wanted to set up a new business to service this market. His boss refused, so Dean quit. Back in Lanchester, with encouragement from his wife and a small bank loan, he began to trade as a fire protection consultant, using subcontractors for installations:

'Learning literally by the minute...flying by the seat of the pants. Every minute a new problem came up and I had to find a way of solving it...it was fabulous fun.'

He was fortunate that his early clients paid cash on completion. His business avoided serious cash flow difficulties and grew rapidly. Within 18 months he employed about 20 full time staff and many part-timers:

'The guys I took on came on the understanding that they were going to do chippying and if we hadn’t any chippying that week they would help the electricians ....if there wasn’t any electrical work they could help the steel fabricators put up fire escapes, and if that didn’t work they could help prepare for redecorating at the end of the contract...(they) had to be very, very flexible.'

Several significant developments occurred during this period. First, Dean become a distributor for a fire alarm manufacturer, selling to third parties as well as to his own clients. This highlighted the profitability of merchanting. In 1974 he unearthed a special so-called intumescent paint, whilst looking for an alternative fire-retardant to asbestos sheet. The paint was applied by brush or spray in two stages (basecoat and sealer), creating an inert, thin film (about 1mm) which would swell to a 2-3 inch thick charred cladding in the heat of a fire. In theory this cladding would protect the
supporting structure long enough for the fire brigade to arrive and put out the fire. According to Dean:

'Within six months we were the biggest distributor (of intumescent paint) in the country. We weren't selling very much, but we were selling far more than anyone else.'

In 1975 Dean was asked to quote for protecting a large new factory in the locality. He couldn't handle a job of that size, so he quoted what he thought was a ludicrously high price. He was given the order and despite misgiving he accepted it! When:-

'We got halfway through, they doubled the size of the contract... we suddenly realized there were jobs around with a lot of profit potential....'

Still only 26 years old, he immediately decided to sell the contracting business to specialise in intumescent paints. He called his new firm Pyrochem. In 1976 he scoured Western Europe and found German and French intumescent products for protecting wood and steel respectively. Apparently, neither was selling well in its own country and Dean managed to negotiate U.K. distribution rights.

Subsequently he had great difficulty persuading the U.K. regulatory authorities that his products were trustworthy. It was easy to give spectacular demonstrations of their efficacy in test conditions, but would the products perform in situ? The most serious objection was that in a serious fire the promised 30 minute protection would be inadequate. Also, because clients and regulators perceived his products as paints, they assumed that re-treatment would be needed every 4-5
years, costly and often impractical. Dean assured them of his products’ reliability, but in truth no-one knew how well they might perform in, say, three decades time. In contrast, any ‘expert’ knew that asbestos sheet or asbestos-based cements were safe ...

Nonetheless, Dean persisted with niche applications protecting exposed woodwork in hotels and offices where regulations were less stringent or clients could be persuaded to use his paints essentially as an insurance policy. From 1976 to 1980 the firm grew unspectacularly. Major industrial projects like the first one were elusive. Dean’s self-belief and powers of promotion kept the firm afloat. In retrospect he claimed:

‘Without Pyrochem intumescents would have died a natural death in this country, if not far wider’. Initially he ran the firm from his home in Lanchester, storing chemicals in outbuildings and then in a separate 800 sq. ft. store. Limited stocks meant that they frequently had to rush imported supplies to impatient contractors. But the absence of competition allowed Pyrochem to charge high prices; keeping overheads low ensured a profitable, cash-rich business.

As the firm grew Dean recruited new staff from the Clan, to which he remained committed. By the end of 1980 Pyrochem employed eight full-time staff and distributed up and down the country to regional agents, most of whom were also Clan members. They in turn applied the product or used subcontractors. At this stage the products were marketed under distributors’ names and Dean was becoming
concerned that there was little awareness of the Pyrochem name.

Dean's brother, an industrial chemist, had joined the firm in 1977 and worked on product testing and improvement. Pyrochem subsequently sent products to the independent Fire Industry Research Association for testing. The results were good, allowing Dean to claim (somewhat optimistically) a one-hour protection capability. This advance, coupled with growing awareness of the health risks of asbestos and the convenience of intumescent paints, began to legitimise its use in structural fire protection, save for the most demanding applications.

Dean accelerated growth from the late 1970s by targeting structural specifiers (principally architects) as opposed to builders or fire protection agencies. This ploy widened awareness of the product and improved its chances of being specified, especially on steel-frame structures which were increasingly popular because of rapid construction and lower cost than reinforced concrete methods. A Dean 'masterstroke' was to offer the topseal in the full British Standard range of colours. He took this decision, it seems, with minimal thought to the operational consequences! Architects could now leave steelwork fully exposed as a design feature, yet be confident that by specifying Pyrochem the structure would be well protected. So Pyrochem's thin film products effectively established and came to dominate the U.K.
'aesthetic fire protection market', with a peak share by value of around 70%.

By 1980 Pyrochem had generated sufficient cash for Dean to acquire commercial building land in a down-at-heel part of Lanchester where he commissioned several small industrial units. Pyrochem relocated to one of these in early 1981 and Dean short-let the others. Relocation proved to be a symbolic and seminal event. The Clan Elders had become increasingly concerned at Dean’s ambition and Dean in turn was disillusioned with the way Clan policies obstructed his commercial scope. Matters came to a head when the Elders decided that he should hand over his equity and become the manager of Pyrochem. He declined. His employees - including his brother - walked out and his trade distributors severed relations.

Several respondents including Dean himself talked of his excommunication from the Clan. But if the Elders thought their draconian action would make him crumble and recant they were wrong:

'In anticipation of what was going to happen I'd set on a guy ...he's in the next office now...two days before (the walk-out) and he and I and my wife ran the company.'

Dean hired a new sales office administrator and a storeman; a few months later he hired three people as field sales representatives, building to eight within two years. The first of these, a trained architect, was later promoted to technical director. Another became field sales manager. Many of the early recruits still work for Pyrochem in one capacity or another.
Over the next two years Dean’s determination allied to shrewd decisions and luck overcame adversity, enabling substantial sales growth of Pyrochem products. Though the economy was in recession, the strategy of targeting architects paid off, as the Pyrochem name became widely known for protecting steel structures. More immediately, there was the problem of distribution. Several former distributors attempted to compete directly with Pyrochem. Dean avoided direct contracting, rather he opened up the distribution channel by encouraging the application of intumescent coatings by any reputable contractor:

'We took technology that previously had been regarded as sacrosanct to specialist users...and we said, really the specialization is in defining the requirement, not in the actual application. So there is no reason why non-specialist contractors can’t use this product without any problem, simply follow the rules in the same way as for ordinary decorative products.

Because local contractors can do it at far less cost than specialists - they have to travel a long way and put men up in bed and breakfast - we were able to transfer to ourselves in the form of additional gross profit...a proportion of (the cost saving)... which we invested back in sales and marketing activity.'

To demystify the process Dean produced a detailed specifiers’ manual to guide architects and contractors through the regulatory and technical aspects. They devised simple tests to ensure adequate standards of workmanship and instituted a system of application certificates whereby the sub-contractor confirmed to the client, in writing, his compliance with specifications. Thus Pyrochem avoided the expense of ‘flying squads’ of specialist contractors and contingent liability arising from faulty workmanship.
In retrospect, Dean and his senior colleagues attributed market acceptance from 1981 principally to effective marketing. In addition to showy 'live' demonstrations, the sales force became much more systematic in identifying and monitoring new building projects. The firm made intensive use of direct mail promotion with high quality, professional literature. Dean himself lobbied the Industry Association for higher standards and for registration and regulation of bona fide operators.

By 1984 Pyrochem employed some 20 staff, mostly in sales and promotion, working under a new sales director. In late 1984 Dean hired an experienced chemist from a major competitor to set up a small, on-site R&D facility. There was still little direct competition from the major U.K. chemical manufacturers, though some offered less convenient, 3 mm thick film intumescents. Pyrochem's expansion continued through 1985 and 1986, by which time headcount was about 60. Dean reclaimed extra units as leases expired on the Lanchester site.

Pyrochem also began to export to the Far East and North America. This initiative came to the attention of, and apparently displeased the French supplier, itself a relatively small firm recently taken over by a major chemicals company. Pyrochem began to detect variability in the quality of its bulk supplies, a major concern since most customers assumed that Pyrochem was the manufacturer and therefore controlled product quality. When major contractors complained Dean insisted that
French technicians visit his clients. In the event, no obvious improvements were forthcoming, so Dean stepped up Pyrochem's efforts to develop its own products. He recruited a French chemist who established a parallel R&D unit in Paris. By autumn 1985 relations with the French supplier were critical and Dean launched Pyrochem's own range of steel intumescent paints. His U.K. laboratory prepared the magic ingredients and a local subcontractor mixed and repackaged the final product. As far as customers were concerned the only change was improved product consistency. Not surprisingly, the French supplier took exception to summary termination of contract. There then followed litigation which took several years to resolve.

Pyrochem's growing technical expertise in Lanchester led to a range of improved intumescent paints, whilst Paris developed intumescent mastics and solid foam seals for structural gaps and cable ductings. By 1987 Dean could claim that:

'there is no-one else in the world selling as much thin film intumescent paint for steel as us, to our knowledge ...we know most countries.'

In saying this he included the major chemicals firms. Even so, the U.K. market now harboured over 20 actual or potential competitors:

'Others are beginning to follow now because we have laid the tracks....so far none of them have been successful but there's always the threat. If they posed too big a threat we would probably go into a different market.'

In 1986 Dean remained highly involved in the business. Excepting in sales, he lacked the management
support one would associate with a multi-million pound business. His instinct was to manage in an involved, but informal and quite paternalistic way. He provided a range of benefits such as Christmas bonuses and company-owned holiday accommodation for staff and their families. That way:

'If the guy is asked to work for a couple of hours one evening the family just don’t mind (because of) the lovely holiday a few months ago in Lanzarotti which they wouldn’t have had otherwise. They know those perks aren’t just ...directors’ perks... selection for staff perks is based on length of service not seniority. Staff see that and they know it’s a mark of respect for their efforts. I want them to benefit from (the firm). I genuinely appreciate the amount of commitment I get from them. I would like to be the best employer in Lanchester.'

Not all recruits liked the atmosphere and Dean’s involved and charismatic style, but those who did became fiercely loyal. Trusted staff had considerable discretion to do as they saw fit, provided that they ‘made things happen’. This approach produced results, but it also contributed to poor budgetary controls and inconsistent staff remuneration. Dean saw himself not as a man for detail, rather as ideas-driven. He wanted to have ‘three good ideas by the time I get to work each day’ which subordinates would implement without delay. But his role had become increasingly burdensome and 1986 proved a financially disappointing year:

'I was getting bogged down in the detail, I didn’t mind it but I wasn’t coping with it very well...I leave loose ends. I define a strategy and a general sense of direction and I expect people beneath me to pick up the threads...I need(ed) a senior management level to take up strategy very professionally, very thoroughly. I didn’t want to get to the stage of so many businesses where... the guy who set it up gets
to his late fifties and he hasn’t practiced delegating and he can’t...I want(ed) to delegate...’

He confronted the possibility that his style was creating a ‘management bottle-neck’, holding them back. He sought outside professional advice. The upshot was that he recruited an experienced managing director, a new sales and marketing director and various other experienced staff into middle management positions. Dean assumed the role of Chairman which he saw as liberating:

‘I want to be more objective about Pyrochem...more time (to think)...six months ago the phone would have rung at least ten times in the last hour or so.’

Subsequent reports varied as to how well Dean coped with his new circumstances. Colleagues acknowledged his partial withdrawal from day to day affairs, which pleased some and disappointed others. Some doubted the extent of change, saying he still meddled in operational details. Though Dean claimed not to have detailed control of operations, his view was that:

‘I do have the ability to go round any department and put my finger on a letter that should never have gone out or a customer complaint...or I’ll find out we didn’t get a supplier discount we should have done. I’m always putting my finger on the pulse, almost as if it’s a sixth sense....’

From mid 1987 the new managing director, Mike Simmonds, set about improving Pyrochem’s operational controls, implementing new budgeting and business planning systems. With Dean’s endorsement, he directed attention towards diversifying into new industry sectors. Given the still healthy state of the structural fire protection market, he promised Dean to grow the core business threefold to around £12 million in three years.
(a target which was broadly achieved). He also began to
tackle the issues of systematic personnel appraisal and
remuneration.

After hiring this cadre of professional staff, Dean
acquired much larger premises in another district of
Lanchester. The move was reminiscent of his 1981
thinking:

'I bought three factories, (this) one..is 25,000 sq.
ft., the others are 20,000 each. We only had 7,500
(on the old site) so this is three times the size and
we've still got another 40,000 to expand into if we
want to ...the other two are on short term leases. I
can't for the life of me imagine how we would fill
65,000 square feet but we've got it and we've just
secured over the road an office block and factory
unit...adding an additional 20,000 sq. feet or so.
We'll rent it out until such time as we need it if we
ever do'.

Shrewd timing of the deal meant that the new premises
were acquired for a net outlay understood to be only
around £50,000. Subsequently, Pyrochem weathered the
recession of the late 1980s and early 90s, albeit with
some difficulties including redundancies in the core
business as Simmonds grappled with the task of increasing
efficiency.

Anyone who thought Dean's chairmanship after 1987
would inhibit his entrepreneurial flair seriously misread
his motivation and drive. These traits are exemplified by
a 1983 decision to set up a graphics design agency.
Pyrochem was then promoting its name and its products
heavily:

'I was very frustrated with the creative designers we
were using. Although I'm not at all creative myself
I'm an appreciator of the art. The firm we were
dealing with and the others we were looking at all
seemed to put their energies towards creating award
winning designs for themselves - if they were any good at all - instead of coming up with designs that had empathy with the overall objective of the exercise, which was to get business for the client.’

Dean’s solution was to hire the agency’s chief designer to establish a new firm. Its prime objective was to create eye-catching and informative selling materials for Pyrochem, but over the next few years it gained some 20 external clients as its reputation grew. Whilst not hugely profitable, its six designers created excellent promotional material at much lower net cost and with greater empathy than Dean felt an external agency could achieve.

After this synergistic diversification Dean set up a variety of new ventures conferring benefits on the core business. His increasing need to travel prompted him to learn to fly and then acquire a twin-engined light aircraft. He chartered it on a per-day basis to defray running costs, employing professionals to fly the plane and manage it as a business. When the plane was fully utilized he bought a second. In 1987 he seriously considered expanding into executive jet charter, but held back in the light of airline industry deregulation. Instead, he acquired a retail travel agency. Between 1981 and 1987 he set up or acquired eight business activities, all of which were reasonably successful in financial terms, though the fast-growing Pyrochem remained the core business.

After the 1987 reorganisation, Dean began to investigate new opportunities for diversification. He
began by looking at products complementary to fire protection:

'I'm able to look at possibilities in terms of acquisitions, new product ranges, new uses for our present products. If I add a completely new product range it will be the first time I've done that for a while and that will be interesting and challenging. But it won't take that long to set it up because I have the management structure to implement it. Once I've done the product sourcing and set the parameters...those guys will take it and run with it.

I've suddenly realised our product range is terribly, terribly narrow. At best I was thinking in a rut within structural fire protection...I was saying we were in intumescent structural fire protection... (but) I started to look at our resources and say, well, actually, they could cope with an awful lot of products in a far wider context without diluting our effort on anything...there is scope for broadening our product base, markets and geographic territories.'

Domestic flame retardant paints and flame-proof fabrics for industrial and commercial use initially appealed to him. He identified a potential target for takeover:

'Their product range would fit superbly with ours: decorative, flame retardant, specialised, sold largely to architects...it would also give us a lever into a new area, shop fitting and exhibition areas and those could utilise some of our existing products as well. So it seems logical...I wouldn't mind taking them over.'

In the event, he followed Simmond's contrary advice, Pyrochem's first acquisition being a small firm manufacturing epoxy intumescents for the defence and aerospace industries. A year later, advised by an industrial consultant, Dean acquired another specialty chemicals company on the South Coast and immersed himself in its reorganization:

'It does appeal to me to look at a company...and, with a bit of trepidation think, if I try hard I can improve the management structure, improve their
marketing and turn a good chunk of their turnover into profit...go into the company...and sort it out.

I’m definitely needing a challenge...it’s a different size of business and a very, very different culture and it won’t be easy for me to...turn it into something highly profitable. I’m in the process of turning it around. Got rid of half their products, maintained their turnover, got rid of loads of costs, moved part of (it) to Lanchester...I’m turning it around, getting rid of lots of dead wood...

It’s got some unique products...I didn’t know they were there...overall it was definitely a good move. I’ve learned an awful lot, I’ll make a bit of money out of it....I want to get (it) right and having done that I want to do another acquisition. I’ve learned so much from this one...I feel I’ve been cutting my teeth...

In turning round a problematic situation, the secret of success he felt was to back his judgement, not tolerate a lot of waffle. He reduced headcount from 105 to 70 and brought in a new managing director in the process of sorting things out:

‘I’ve got this new guy who was production director, then managing director at M****. The first day he was there (they said) you can’t do that...he said why not, I’ve being doing it for five years! A tiny (example), there’s lot’s more....

I’ve made some bad decisions because of lack of experience and if I’m going to do any more acquisitions I’ve got to make better decisions next time. (This one) is my time at school in short trousers. Getting the odd rap over the knuckles!’

As to his thinking, the next firm in his sights was:-

‘...a logical fit to our existing product range ...We either....buy them outright or we attack and weaken them, (then) buy them, take their turnover and put the prices back up. If we attack them first, we might have to spend a quarter of a million....it might take a few months longer... That kind of strategy excites me just planning it, playing monopoly to win...

As Pyrochem entered the 1990s Dean’s concerns over future competition in the core business had proved largely unfounded. In line with their plans, turnover had
grown rapidly with the introduction of new products and under Simmond's stewardship Pyrochem increased to about 125 staff. During this period, gross margins were also maintained. Growth of intumescents compounded with the acquisitions expanded the group faster than Dean had anticipated and in 1990 he promoted Simmonds to Group Managing Director.

Yet, as with his acquisitions, Dean could be ruthless in Pyrochem, as evidenced by the rapid exit of the sales director:

'...because he screwed up the whole department... he was a good bullshitter and no one had any respect for him. Instant appeal, but after a couple of weeks they found he was very shallow and had all sorts of problems himself.'

At this point, had Dean achieved his life's ambitions? Hardly:

'The things I hate about myself now I hated fifteen years ago. I get to the end of a day and I'm always totally dissatisfied with what I've achieved. I'm not worth the salary. I wonder how the company copes.... I've learned to delegate a little bit in fifteen years...I've learned how to read a balance sheet... and I've learned from experience how to recognise fairly good people and fairly bad people, (likewise) companies...but the fundamentals of how I deal with people remain the same.'

Dean was comfortable making deals of all kinds. For example, he speculated in commodities and generally made money; when he lost he regarded these episodes as education:

'I made one big mistake...but it hasn't put me off. I had a computer on my desk in direct contact with stock exchange information for a year. I played with that and learned a bit...I guess I do have to do something different every year as part of the learning process.'
... I'm not inclined to follow the line of maximum profitability, I intend to follow the line of maximum ultimate achievement which might or might not be the same thing. I will definitely do things I enjoy rather than things that will get me a lot of money.'

Rapid response to problems and opportunities, experimentation and flexibility of outlook continued to be Dean hallmarks. For example, the graphics design subsidiary originally invested in printing equipment; it became clear that this was a mistake, so the equipment was sold and all printing was then subcontracted. Dean explained his philosophy thus:

'I always prefer strategies that have lots of options. I like there to be permutations that can be exploited. I like everything to be very, very flexible. Flexibility doesn't necessarily incur a liability or sacrifice. It simply requires forward planning and anticipation of what might happen.

I never planned to build a second floor (on the 1981 premises). I planned in case we needed to. I didn't expect to be using three units (on that site) or leaving (it) but I designed it such that we could.'

Looking ahead Dean rejected any notion of Pyrochem becoming a public company:

"The megastars like Branson have had to come to grips with (the fact) that you are answerable to a lot of investors who aren't very keen on mavericks and unconventional management styles... You can end up killing the inspiration and killing the fun. One of which is no good for the business, one no good for personal satisfaction. I think I'd sell out first...."

I like to do different things. I like challenges. If I hear that lots of firms have tried and failed at something and I still believe it is right and there is a way through, I'd like to try it just for the hell of it.... (I want) to enjoy tomorrow, I want new challenges.

I do like doing things better than anyone else... I can't do that in an academic sense, because I'm not bright enough. I can't do it in a physical sense because I'm not strong enough. So I try and do things better commercially. I don't mean within the company in terms of managing, but against competitors, that is the arena in which I operate."
I wouldn’t mind being a micro Lord Hanson...buying up companies and injecting some enthusiasm into their management, giving them a good image, putting in a good management information system and letting them run themselves with a bit of supervision. I’m hungry to have a go!

I like Pyrochem or any company I’m involved with to be thought of as doing things better than anyone else, very professional. That to me is actually much more important than making money (which) ...I don’t believe... is necessarily a very accurate yardstick. I’m much more concerned with being around in fifteen years time - because we have consistently done things better - than making a hell of a lot of profits today and (only) breaking even in five years time....

I live, eat, sleep and breath Pyrochem....the five year plan is in the subconscious and evolving all the time, changing shape slowly, responding to what I hear about the competition, products, costs etc. If I sat down and worked out a (formal) five year plan I’m sure a few inspirational things would come out of brain-storming with the other directors, but I don’t think it would fundamentally be that different from what’s in my mind. My guess is that when you have someone heading an organization who has been there for some time and emotionally, not just practically involved, the five year plan is an unwritten thing in the head.

Mike (Simmonds) has said that I have this ability to think broad and then focus all my attention on some minutiae because it is very important... I don’t see it ...Mike has that ability, though I think broader than him sometimes (but) I can’t focus as tightly. Our accountant ... he sees no difference between a pound and a million, as long as it balances it doesn’t matter. He doesn’t see scale at all.’

Dean remains a man of apparent contradictions in the eyes of colleagues, having great charm and charisma allied to a penchant for incisive and ruthless action. Certainly, there appeared little disagreement among colleagues over his unusual talents and style. Dick Thomas (product manager):

'Hamish is intuitive, therefore he sometimes makes mistakes, but because he’s proved himself successful it’s difficult (for) his management...they have to
justify (ideas) with logic and facts and figures...
But he doesn’t have to.

One of the ex-directors used to say he had to have all his ducks in a row, be sure of his facts, do all his preparation, spend an enormous amount of time assembling a logical argument for doing something and then find all that shot away...Hamish will just overturn it and say no, we’re not doing that.’

On the other hand, Thomas conceded that:

’He is touched with genius...and terrific courage. If you were to go through the figures you would probably not make a decision. But he doesn’t do that, he just thinks it and does it. You can make a go of anything fairly sensible, even marginal, providing you have the willingness to throw everything, all your assets, all your energy into that one thing. But if you fart about... play with it....He has had good fortune, but he’s also had the guts to do it and the determination to make a go of it.’

Jimmy Jones (facilities manager) defended Dean’s style:

’He’s very sharp...very clever...he sees a situation... that doesn’t mean to say he’s rushed in... He used to use me as a sounding board. He goes through the permutations...before making his decisions... It’s not just, let’s try that one and see how that fits and if it goes wrong we change. He does do a method of elimination....because nobody can be right that many times without doing it.’

Mike Simmonds (managing director):

’He is the most creative person in terms of marketing concepts that I’ve ever come across...he never stops having ideas, some of which are absolutely awful but some of which are absolutely brilliant...he’s got that inherent ability to always look at things from the punter’s point of view...he does it quite instinctively. As a result Pyrochem has grown very quickly in a very unstructured way.

It was somewhat ironic, then, that he was refused a place on the Part Time M.B.A. programme of a well-known University Business School. However, as Thomas observed, there remained question marks over his credentials, not least as a team player:

’Dean’s a very complex person...you have to know the way he’d feel about a situation before you can expose your own views. He doesn’t really take very kindly to
people who think differently to him. On the other hand he will change his mind immediately if somebody puts a point of view which he sees is correct, better than his...'

Simmonds had experienced just such a situation:

'Most people I handed my (visiting) card to after I joined (said)...yuck! I said to Hamish... I'm not very happy about the logo, I think we ought to get away from the current (design)... Like most things you say to Hamish, he says good idea... which I took to be the case...

... I've subsequently learned that good idea can be said in one of several different inflections from bloody awful idea to really good idea... I think deep down he was really quite against it, but we did it..'

5.2 Script Analysis of Hamish Dean's Outlook

The approach here is similar to Chapter 4. Unlike Wittenshaw Abrasives, Pyrochem had experienced significant upheaval and staff turnover during its 15 year history. None of Dean's present colleagues were with the firm prior to 1981, and of the new managers only Simmonds had been in post for more than a few months when the research began in 1987. In addition to Dean himself, the analysis is based on discussions with a cross-section of his colleagues, including Mike Simmonds, Dick Thomas, Jimmy Jones, and Paul Quinn (technical director, formerly architect and Pyrochem salesman). Thomas and Jones were hired directly after the 1981 Clan crisis.

As already indicated, all acknowledged with no trace of sycophancy their respect for Dean, his substantial achievements and his charisma. The long-servers were on first-name terms, yet claimed no special benefits or favours. Simmonds' insights derived from his scrutiny of the firm prior to giving up his good salary and promotion
prospects as divisional operations director of a U.S. multinational.

Dean's masterscript is repeated from Figure 3.5 in Figure 5.1. It is nominally similar to White's, but there are significant differences. Whereas White sought gratification principally in terms of reward and security, Dean was oriented to fulfillment or self-actualization, a strong desire to realise his full potential.

---

**Figure 5.1**

*Dean's Masterscript*

Lack of personal credibility as an employee-entrepreneur

(Boredom and frustration of routine) → Personal self-actualization (#)

Run a successful owned and operated small business

(#) Meaning in practice, independence from negative thinking, being challenged and winning, having fun, getting financial rewards linked to personal efforts.

---

He interpreted this motivation not so much in terms of money (a by-product of other things, not an end in itself) but facing and overcoming challenges. He equated this with having great fun. In a sense his outlook is similar to classic scientific 'puzzle-solving' (Kuhn, 1970).

Whereas White began his entrepreneurial career in his late thirties, Dean was, in his own words, 'barely
out of short trousers'. He polarised his career options between frustration as an employee or success as an independent entrepreneur. The immediate barrier to enhanced personal satisfaction was his boss, who refused him scope to be an 'employee-entrepreneur', so he went solo to exploit the opportunity he perceived.

Dean's evolving outlook can be represented as a variety of level-2 'strategy' scripts. The goal of each remains a successful owned-and-operated business, the enabling vehicle of his masterscript, although the specifics are reinterpreted as time goes by. These scripts are proposed as follows:

2a A niche opportunity script as a fire protection contractor to small businesses (1973-76)
2b Distributor script (specialist intumescent paints (1976-1979)
2c Aesthetic fire protection market pioneer script (1979-1981)
2e Manufacturing-crisis growth script (1985-)
2f Subsidiary-activity diversification script (1981-)
2g Related-product diversification-by-acquisition script (1987-)

Each will be reviewed briefly. Whilst they can be displayed in the form of Figures 4.2, 4.5 and 4.6, the reader is now familiar with the structural concepts, so the main hurdles and counter-strategies will be described straightforwardly in the text.

5.2.1 The niche-opportunity contractor script (2a)
Dean's perception of an embryonic opportunity as a fire-protection contractor triggered his entrepreneurial career, but a number of hurdles quickly emerged to curtail progress. Specifically, a lack of technical
expertise was an obvious difficulty, circumvented by getting as much advice as he could from fire officers. The lack of human resources was mitigated by using casual subcontract staff and insisting that they be as flexible as possible. His lack of funds was mitigated by concentrating on cash accounts, avoiding the need for debt. The need for supplies of specialist equipment such as fire extinguishers was resolved by becoming an agent for an equipment manufacturer.

By Dean's account, this script was quite effective. In under two years he was employing more people than Bill White employed after seven. His working capital needs were modest, but even his van was sub-let to recover overheads. Like White, Dean relied on an adaptive, problem-solving approach: enthusiasm, flexibility of outlook, satisficing, being prepared to make mistakes and learn quickly. Yet although he was prepared to roll up his own sleeves, his personal involvement as a doer in White's terms was arguably never more than an expediency. From the start Dean saw his role as executive, coordinating and directing as well as interpreting fire regulations.

The firm helped distressed proprietors cope with fire and safety regulations cost-effectively. In retrospect, this narrow base of expertise did not confer any long run advantage, and it certainly didn't satisfy Dean's need for challenge. Project co-ordination was a task he soon found tedious. On the other hand, the agency
for fire protection products made him wonder if merchanting would be a better way to make money.

He was also fortunate, perhaps, where White was not. If he hadn’t experienced pressure to find an acceptable substitute for asbestos sheet, he would not have discovered intumescent paints. He saw the commercial potential where others in the U.K. apparently did not (despite patents being issued as early as 1938) and he determined to use them wherever he could.

5.2.2 Intumescent paint distributor script, 1976-9 (2b)
A ‘crisis’ provoked by committing the firm to a bigger contract than it could really handle was the turning point. Thereafter, Dean did not doubt the great potential of intumescents. He reacted decisively to his assessment of the possibilities and sold the contracting business. Unequivocally, at a stroke, he substituted a new distributor script for the original one.

The first hurdle to emerge in his new script was the need to find a supplier willing to grant him U.K. distribution rights. Large U.K. chemical firms like ICI had subsidiaries offering similar materials, but would not help him, so Dean overcame this hurdle by finding suppliers in France and Germany who gave him exclusive U.K. rights. However, his boldness and ambition were allied to only a hazy notion of the acceptability of intumescent technology in the U.K. regulatory environment. As it turned out, unfamiliarity and
conservatism drastically inhibited sales and the successful 1976 project proved atypical.

Had the major chemicals firms put their reputations behind the technology, the situation might have been different, but mindful presumably of possible litigation over contingent liability, especially in the United States, they did not. As far as one can ascertain, Dean did not consider this prospect, although he hired his brother, a qualified industrial chemist, to maintain quality control over supplies.

Whilst the efficacy of Pyrochem's products could be demonstrated under controlled conditions, no-one had proved that they would still work years hence, so the acceptability hurdle remained. Dean attempted to overcome the problem by (i) lobbying the regulators (with little success), (ii) by doing technically undemanding jobs and (iii) like Bill White, accepting the need for patience. Another significant hurdle to sales growth was the lack of a U.K.-wide distribution and contracting service. Dean resolved this by using other Clan businesses.

All in all, the second script had an unspectacular start. Perhaps Dean's refusal to quit in the face of resistance from the fire authorities was a matter of pride; perhaps he was obligated to the Clan distributors. In any event, he kept going. When he did get an order, it was usually urgent, so another obvious hurdle was the problem of ensuring good customer service. He could afford only limited stocks, so there were frequent calls to the continent to expedite shipments. Meanwhile,
customers were mollified by sending small amounts of materials express delivery. Even today, company myths invoke heroic stories of Pyrochem engineers loading their cars with product at 4 am. and driving hundreds of miles to get the product on site at the start of the early shift.

5.2.3 The aesthetic fire protection pioneer script (2c)

Successful initial applications for intumescents were on non-structural woodwork where it could be sold as an 'insurance policy' in the absence of a legal requirement for such protection. Wood panelling in hotels and listed buildings could be protected with a clear intumescent varnish without affecting its appearance, a significant benefit. Thus Dean bought time for his steel-protecting products by selling wood treatments emphasising largely aesthetic considerations.

During the late 1970s he reconceived this core benefit as applying to steel-protecting paints, a classic example of concept displacement (Schon, 1963). That is, intumescents could offer aesthetic, cost-effective protection on any exposed beam or panel structure. To negate scepticism over technical performance he positioned his steel treatments as functional-aesthetic, redirecting the message at architects. The product could now be promoted as a liberating design factor. As Thomas explained:

'Nobody spends money they don’t have to on a building ...they are not prepared to put in fire protection as
insurance. They do it because the building regulations insist'.

But when architects wanted exposed steelwork

'they were prepared to fight building control officers'

to get intumescents approved. This created a new hurdle, namely the need to promote the message to a hitherto uninvolved audience. Dean began a concerted propaganda campaign to appraise architects and other structural specifiers of the benefits of intumescents, using attractive and informative sales literature, face to face selling and intensive mail shots. This chain of problems and reactions was depicted in Chapter 3, Figure 3.6.

A little later the aesthetic benefit was reinforced by offering top-seal coatings in a full range of British Standard colours. This coup created a subsidiary hurdle: the difficulty of controlling colour tint in batch production. Pyrochem had no experience, no specialist kit and relied on a couple of trusted staff. As Jones explained:

'we were just left to get on with it... we used to mix it in tubs with a big wooden paddle... To come up with a colour match... we've been at our wits end. But it was amazing, O.K. I'm not saying we were upto Dulux standard but we weren't far away. The complaints we got were few and far between.'

Meanwhile, via the industry association Dean continued to lobby the regulators, aiming to win full acceptance of intumescents, enhancing Pyrochem's air of legitimacy by distancing it from 'fly-by-night cowboys'. Pyrochem tried to convey the impression that it was a big and influential company and Dean was happy for people to assume that the products bearing its name were made
locally. In these various ways his script for Pyrochem evolved during the late 1970s from distributing some rather specialised chemicals to pioneering the 'aesthetic fire protection market', moving the competitive ground to where Pyrochem was strongest. This shift has a mutant quality analogous to Bill White's script change from niche opportunity to stable plateau.

In hindsight, Pyrochem was on a rising tide as steel frame structures became increasingly popular in the early 1980s. Not only had intumescents become cost competitive with traditional fire-protection methods, but an enhanced version of Pyrochem's main product achieved 57 minutes char resistance when tested by the independent Fire Industry Research Association. Not quite the magic hour, this result still proved a highly symbolic selling message. Paul Quinn, who joined in 1981 as a sales representative explained:

'if any company was associated with intumescents it was Pyrochem...it seemed like manna from heaven. This magical paint which could give fire protection, rather than (use) clumsy boards and casings... But legislators and contractors (found) it very difficult to believe in... there was (still) a great deal of resistance (over) the longevity of the material..

Refocusing on structural steel presented another hurdle: it required technical field representation. The problem was to hire capable staff who would appreciate where and how intumescents could be applied, an advisory role combining the technician and market researcher with the salesman. Dean also wanted them to identify new projects and negotiate supply contracts, be in close
contact through the construction phase, and ensure that
good quality work was done.

Accordingly, by 1981 he was starting to look beyond the Clan for the calibre of staff he needed, which proved a source of growing friction with the Elders. Moreover, as the business grew, Dean encountered the need for more space, resolved by the property development initiative mentioned. The seeds of the next crisis had been sown.

5.2.4 Post-1981 Clan-crisis growth script (2d)
If the Clan was becoming increasingly concerned at Dean’s ambition, relocating the business in new industrial premises in 1981 and hiring non-Clan personnel were flash points, symbolising to the Elders independent mindedness over duty to the Clan. Some sort of ultimatum was given, the upshot of which was brutal confrontation. All Dean’s staff including his accountant quit, save for the non-Clan member whom Dean had just recruited. Distributors severed trade links with Pyrochem and Dean and his wife were ‘excommunicated’. According to Jimmy Jones the 1981 crisis:

‘was a big drama for Hamish...when he questioned... that (he) could only work with people in the Clan and...decided it wasn’t the way he was prepared to go. The Monday morning that he was given the ultimatum to repent and come back into the fold he said, I’m sorry, my viewpoints are so-and-so and I don’t see that they should alter. There was a complete walkout...eight or so. It was excommunication time. There were certain members of the family they (Hamish and his wife) weren’t even allowed to speak to.

I got the impression that the concept was to destroy the company and in so doing, Hamish...that the place would collapse around his ears. The person’s
resilience came to the fore. He rose to the occasion. A lot of lesser men would have folded.’

It seems possible that Dean had come to see the Clan as a constraint on the aesthetic pioneer script, and his response was actually to provoke confrontation. But it is also clear how much support Dean had received from the Clan. Jones, again:

‘He needed that sort of protection around him. He did need a few people around him who were as sharp as some of the (sharks) who were coming along, (but) he learns quickly...’

According to Dick Thomas, prior to the split:

‘Hamish ran the business. The technical aspects were his brother’s responsibility. His loss was sorely felt at the time. The day before the Clan left they taught Bert (the new recruit) the job and then they quit...

... Hamish asked me for interview. The offices he’d just moved in were empty, there was nobody at all. He offered me the job there and then, kept upping the offer, threw in a company car and petrol, a good salary...it became an offer I couldn’t refuse.’

After the walk-out:

‘He didn’t want to see customers, I was sent to see them.... he’s become a lot more socially confident and I’m sure he is up to anything now. Previously he was very shy and not at all interested in coming up front, getting any free advertising in editorials etc. He’s a pretty private person.’

Yet patently the crisis diminished neither Dean’s self-belief nor his determination to proceed with his pioneering script. After the split, according to Thomas:

‘The phone never stopped ringing and I was the only one there to answer it. I also had to do site visits, three days answering the phone and two days driving all over the country to sort out technical problems. Each day a few little jobs...and perhaps a year later they’d come back with a big job. We were running around all day long...

After six months or so it was clear that he had a decision to make. He asked... should we stay the size we are or expand? It was clear we should expand
...safety was expansion, so he appointed a sales manager and then set up the sales force.'

The crisis of excommunication required Dean to reformulate the aesthetic pioneer script to take account of his new circumstances. The new variant had to combat hurdles such as the lack of staff, product distribution, site representation and contracting. In fact Dean accelerated the exploitation of intumescents. Within two years he had eight field representatives, one of whom was later promoted to sales manager. Quinn, a qualified architect, began as a salesman, later became technical director. To begin with, it was uphill work:

'In my first twelve months ..there was an awful lot of door knocking...playing at being an expensive person... starting to build... in the marketplace the name Pyrochem. Preaching the story of what it could do, the one hour product, cost comparisons with other materials, the decorative aspects...a lot of work. The main object...was to get Pyrochem's name on the specification, into the drawing, the bill of quantities.

There were bits of opposition about... competition from Europe...but none seemed to have their act together as well as we did. The literature we had then, it's not very good compared to what we have now, but it was streets ahead of anybody else.'

We did a lot of.. evening seminars, we'd put a bit of food on, a few pints, we did an audio visual presentation and a number of live burn experiments... people love to play with fire. We designed little tests which were quite spectacular.. the more you appeal to another sense... touch and smell and the like, the more ...the degree of impact it has, compared with going into an office and spouting for half an hour, nothing to see, to touch, to play with.

We would get letters of thanks and requests to go back and do it again. So that worked very well for us. It got our name very firmly established....We got a lot of relatively small orders and as confidence built in the material it started to be seen in larger projects. The timber product formed quite a high percentage of our low price orders (but) over that period there was a steady rise in the use of steel frame construction (as) the economics of steel became
gradually better... The credibility gap was filled but having filled it for ourselves...we were clearing a path for others.'

If the concept of effective sales communication had been largely envisioned, and physical distribution of product presented few real problems, the real dilemma was product application. Dean overcame this hurdle by 'demystifying' the process. He introduced a specifiers' manual explaining what the products would do and in what circumstances, how it was to be applied etc. Mindful of the trade's inclination to cut corners, Pyrochem specified coverage rates, provided thickness gauges to check work, and instituted a process of job certification for contractors.

Thomas confirmed that subsequent growth was:-

'absolutely explosive. At that time we could afford to make mistakes and we did...but it didn't matter. We'd cock up one order...and the next day we'd have the biggest order we'd ever had - and we didn't even know where it came from. We had a 100% increase in turnover in a year. That went on for two or three years, then down to 70% a year for a couple of years then down to about 50% a year where it is now. It was terribly exciting then, pioneer days.'

Even so, he said, they lost a lot of jobs to a competitor who took total contracting responsibility, which Pyrochem would not do. To counter emerging competition, Dean took a long term view by investing heavily in product development and seeking credibility via independent testing. As Jimmy Jones saw it,

'Dean ploughed a hell of a lot of money back in... which gave confidence to the people working with him, this guy isn't a flop, he ain't here just to line his pockets... Independent testing...is an expensive game, three or four thousand pounds per test... you may need four or five ...you can see why a lot of (competitors) wouldn't go down that road.
Pyrochem could put its hand on its heart and give you documented evidence to substantiate what it was saying. (On) the marketing side...lovely brochures all beautifully artworked....'

Throughout this period Dean was fully involved in day-to-day affairs. As the scale of Pyrochem's activities escalated, the risk of losing good staff became a preoccupation. He circumvented this perceived hurdle by showing that he trusted people, delegating as much as he felt they could handle and by offering a generous range of benefits, including cars and the use of company-owned holiday homes in Britain and abroad. He aimed for a caring, yet results-oriented culture in which personal initiative was encouraged and actions would be justified on the basis of getting results and keeping the customer happy.

Conversely, Dean expected a high degree of commitment from staff and his generosity to the loyal ones coupled with his personal charisma seems to have made most people, metaphorically speaking, willing to walk through brick walls for him. He evidently retained the knack of keeping his finger on the pulse, believing intuitively in 'managing by wandering around', a trait the writer observed on a number of occasions. Jones:-

'Hamish was a great believer in utilizing your talents ...never used to (interfere)...while a thing was (O.K.)...but he had this uncanny knack of sensing when there was a hiccup or anything untoward...he would appear on the scene. Never an intrusion, you never felt he's coming to tell me off (but)...with constructive advice in a friendly way... you never felt slighted in any way. (The staff) have...all got this affection for him solely because of that. He'll come up and say, has the wife got over her cold? They love it...
He doesn't have to shout at people...just looks crest fallen...you've done that have you...? It's as if you've given them a slap, you can see them wilting under it...oh God I've upset him...another guy could be thumping the table and you'd say, up yours mate! Even the ones who've come and gone - some out-and-out sharks - (if) I've met them afterwards they've said the same, O.K. I'd rob my grandmother but I wouldn't rob Hamish.'

To summarise, the post-crisis variant of the pioneer script contained action assumptions enabling Pyrochem to grow rapidly in sales, profits and headcount. By avoiding contracting, it was apparently more profitable according to Dean, who reinvested heavily in promotional coverage to present the firm as the obvious, the only sensible choice in its field. Furthermore, Pyrochem began exporting, winning some major civil engineering contracts such as the treatment of new power stations.

5.2.5 Post 1985 manufacturing-crisis growth script (2e)
Yet by 1985 another crisis was incipient. This arose from the poor consistency of the product received from France. Customers began to realise that Pyrochem could not deliver reliable product, and expected a satisfactory response. Because improvements were not forthcoming from the French supplier, Dean hired a senior chemist with experience of producing thick film intumescents. As Pyrochem’s relationship with the main supplier deteriorated the development of its own formulations was accelerated.

It is unknowable whether Dean at that time intended to go into manufacturing. But he certainly wanted better control of supplies and by inference to have the option
of manufacturing as soon as possible, should it be needed. He made the crucial decision to begin manufacturing in autumn 1985. For, despite numerous warnings, the supplier had not improved and as Dean saw it, Pyrochem's position had to be vigorously defended.

In hindsight Dean thought that this crisis was overcome with surprising ease:

'It was extremely easy... in terms of specialist kit and numbers of people it didn't make much difference. It was a very, very easy change, we had already got the lab to carry out the quality control function. It was a remarkably easy transition. I still wonder today what happened...'

It appears that his chemist had had a few lucky breaks. Subsequently the production initiative prompted a new hurdle as the French sought litigation over patent infringements and breach of contract. Years later, Pyrochem paid a large sum in damages to its former supplier.

The decision to proceed can be seen as a calculated gamble that the benefits of enabling Pyrochem to continue growing rapidly by supplying its own materials would more than offset damages it might ultimately have to pay. It also pre-empted competition from other suppliers in the U.K. market and allowed Dean to prospect lucrative overseas contracts, sending experienced staff to advise on requirements and applications techniques. His boldness and refusal to contemplate failure also bolstered morale during a difficult period.

This crisis marked the emergence of, in effect, a third variant of the pioneer growth script. The emphasis
was now less on market development, more on product performance and range extension. A by-product of the dispute was that Dean hired one of his former supplier’s chemists with expertise in sealing mastics. Dean saw that she could open up a complementary market, so he funded a small laboratory near Paris which subsequently created a range of novel Pyrochem products.

But with total responsibility for product formulation Pyrochem had no technological ‘backstop’. Competition in the U.K. marketplace was increasing and innovation in products and technology was needed. The U.K. laboratory extended protection times of the core product to two hours. Products were developed for different kinds of steel sections and for cast iron, for brushing on and for spraying. Soon, the intumescent product range included seals, electric cable protection, new wood paints and a wider range of seal-coat treatments. A better system of contractor approval was introduced for complex applications. Export sales were extended as the product range increased and Dean became more confident of Pyrochem’s ability to take on international competition and win.

By the late 1980s Pyrochem supplied product to some 50 countries. Its technical sales literature continued to be of superlative quality, so good that competitors had been known literally to copy parts of it. Pyrochem had become a major force in specialty fire protection, employing around 125 staff with a multi-million pound turnover. By continuing to pioneer and grow it had not
only retained its number one position in the U.K. aesthetic fire protection market, it had become internationally recognised.

### 5.2.6 Subsidiary-activity diversification script (2f)

Two further scripts appear to have informed Dean’s thinking after 1981. One concerned diversification into activities loosely supporting the development of the core business. It is possible to trace the emergence of this script from a concern in the *aesthetic pioneer* script that growth would be hampered by a lack of resources, in particular space. The *de facto* policy that emerged is illustrated by the creation in 1981 of a small industrial estate; the excess capacity thus created allowed Dean to short let units and reclaim them for Pyrochem when the need arose. This initiative recycled surplus cash, (resolving another dilemma!), but more importantly improved Dean’s control over a critical resource by creating ‘slack’ for future expansion.

It was also opportunistic diversification into property development and management. The script slowly became more explicit, namely to initiate support activities where they were feasible, financially sound and would improve control of critical resources. Thus, dissatisfied with promotional literature from outside agencies, Dean set up a graphics design agency. This was so successful that it now works for a number of blue chip companies. Jimmy Jones explained:
‘the [design] company he used had a brilliant chappie...who now works for Hamish....he took the source of the creativity, gave him the tools to do the job...I could see the wisdom of it with hindsight. He’d obviously seen the potential of having someone gifted... .’

Frustrated by travel on scheduled airlines, Dean learned to fly and acquired a light aircraft for his personal use. To defray its running costs, it was hired out per day to other companies. Later, finding his plane constantly in use, Dean acquired another and the cycle repeated itself, creating a small, but thriving air charter business. Thomas:

‘What Hamish has done is diversify, because there has been a sort of cash mountain...that’s probably the reason behind the aircraft. He had a small fleet of aircraft, two Partenavias and a Golden Eagle, a turbocharged twin piston-engined pressurised machine which travels above the weather. He bought the Partenavias second hand and hired them out. One was used overnight by the Coal Board for computer data transport, the other for celebrity transport, jockeys and comedians running up and down the country. Because they weren’t pressurised they had some bad experiences taking visitors around, vomiting for four or five hours at a stretch, so he got the Golden Eagle.

Later, Dean acquired various retail businesses including a travel agency. Influenced by a desire to expand Pyrochem’s distribution, he considered merchanting building products. Thomas:

Nearly everything he’s taken on has been a success. I think the first one was the design company, then a travel agency, another shop, a tele sales company, a printing firm, and there are two or three others. He’s got the sort of mind that can run perhaps twelve different businesses at the same time.’

These activities were managed separately from Pyrochem, but in one way or another manifest sufficient perceived synergy for Dean to justify the investment. They also reflected his need for new challenges and to continue
learning - even if, as occasionally happened - he lost money.

It is possible to interpret these moves as creating potential options should the core business falter. Equally, property development can be seen as a logical means to create a capital asset. Thomas:

'He moved into quite lavish offices which he built... actually supervised the sub-contract labour, bought the land for cash...the whole row of factories he owned. He was always dealing...buying and selling cars and houses as well. He'd be in and out of a house every twelve months and obviously making a profit on it....'

Quinn:

'When we set up a laboratory we obtained a third industrial unit in the row. We now had three out of the four. Hamish built them all originally... He did quite a lot of property development in the early years.'

These developments can also be related to the theme of flexibility. Dean's use of subcontract labour was the first manifestation of this. Likewise in the development of the industrial estate, flexibility of use was a key issue. As Dean explained, he insisted on having the scope to put a second storey on the building:

'I didn't plan for that, I planned in case it was ever useful. Flexibility doesn't necessarily incur a liability or sacrifice. It simply requires forward planning and anticipation of what might happen. I don't like there to be only one escape road or success route.'

After 1986, Dean was engrossed with these diversionary activities, plus managing the start-up of in-house production. Though he had a sales management team, other staff were supervisors, not managerial calibre. So he was still needed in the day to day running
of the business. He attributed the poor financial results of 1986 to his being a 'management bottle-neck' and he took professional advice on how to resolve this perceived hurdle to future growth. His considered solution was to hire a number of experienced professional managers. He then stood back from the day-to-day management and turned his attention to longer term growth issues.

5.2.7 Related-product diversification-by-acquisition script (2q)

It is argued that the 'management bottle-neck' crisis led indirectly to a new diversification script centred on Dean's revised role as chairman of an embryonic group of companies created by related-product diversification and sustained via acquisitions.

Turning Pyrochem into a professionally managed firm was a step everyone in the firm recognised. Thomas:

'Hamish decided the (previous) sales director's skill had been utilized to its fullest extent and for the company to grow he would have to go. That was a very, very major step... he was the company really in the customers' eyes. He had a lot of friends, was on a lot of technical committees. Hamish set him up in a personnel recruitment business, bought the company for him, said, off you go.

He took a very brave step getting rid of him. Recognised the inadequacies of the management he'd put in place... and acted on it. Terribly brave, determined, single minded position to take. He virtually stripped the guts out of the company, took on Mike Simmonds as M.D. and another chap as Marketing Director.'

Jones:

'At the beginning there were a lot of reservations, everyone was a bit apprehensive... what's going to happen next, we're all for the chopping block,
they've brought in a hit man... people were genuinely very worried.

I was trying to say, well if you’re... giving it (your) best shot... you can’t do any more... you shouldn’t be worried whether it’s Hamish or an authoritarian or a laid-back type of guy...’

In fact, Simmonds turned out to be:

‘quite strict, he doesn’t suffer fools gladly and he’s probably - even though he’s alienated a few people - been what the company needed to keep people on their toes. Now it’s getting bigger... discipline has to be maintained...

(Simmonds has) ‘brought a whole new approach... very procedural minded... Whereas you could always say to Hamish, I need an extra pair of hands... he would say, O.K. Jim, go and get somebody... that wouldn’t wash with Mike, you would have to have it on paper....’

From Simmond’s perspective:

‘I’m bound to say that the company was not very well organised.... it had grown from where it was to where it is now through Hamish’s supreme enthusiasm and ability to motivate people and perhaps even more important, his superb marketing skill... The company spent money like there was no tomorrow... if somebody thought it was a good idea we spent the money.’

Hamish has tended to do things... very much on the spur of the moment. And has tended to do things that have motivated one employee but sometimes had a negative impact on others.’

Having hired Mike Simmonds, Dean asked him to evaluate how Pyrochem could develop its core market and what others it could exploit with the same or similar products. Having agreed the broad direction, he allowed Simmonds to get on with running Pyrochem, though opinions differed as to what extent Dean succeeded in detaching himself from its day-to-day affairs.

Simmonds was in no doubt why he had been hired:

‘People know they are (now) being measured partly with respect to how well they perform against budgets... objectives form a major part... and people understand it’s a major part... We’ve all talked about why it’s important and that we are all going in
the same direction...and that we have targets and objectives. I'm very target oriented.'

He harboured no illusions about the culture change this implied in Pyrochem:

'One or two senior people have ...become anxious, counter-productive because it makes them less likely to achieve. Others are just doubting their own abilities because they've never been held accountable for anything...the sales force was incredibly laid back ..."you don't expect us to make more than two calls a day, do you?'

Simmonds seemed to accept his responsibilities philosophically, confident that his and Dean's respective styles harmonised:

'It is difficult to follow Hamish Dean...in all kinds of ways...you know, if the boiler goes wrong he'll go out and repair it. It's incredible, you might walk in one day and find him lying flat on his back putting his desk back together... Dean...likes creating and developing things, he hates nitty-gritty.. balls-aching things that we have to do. We ... bring him in almost like a consultant at an early stage of...projects to get his marketing concept.....'

But he acknowledged the need to manage sensitively:

'I'm not an autocratic manager, 95% of the time I will reach a consensus decision. I thrash things out with the key managers.. Hamish gets pulled in if it involves a major change or a major investment. If somebody has a good idea you can do for not a lot of money, that's fine, I'm quite happy to take that sort of risk.

If somebody is talking...of a quarter of a million pounds of capital plant, that's a different ballgame. I'm not going to...let somebody do something intuitive if they require heavy capital investment without having done the homework.. whereas if Hamish thought the idea was right, he would probably slap a quarter of a million down without thinking twice about it.'

Given Simmond's evident effectiveness, Dean perceived a new hurdle - how to keep himself gainfully occupied. Using his new found freedom he began enthusiastically to explore related diversification. In a
reasonably disciplined way he looked at a range of acquisition options. In hindsight his selection criteria appear to have been to look for a firm (i) similar in size or smaller than Pyrochem, (ii) manufacturing fire-protection products or speciality chemicals that would fit logically with Pyrochem's range, (iii) with poor financial performance, offering the chance to acquire it cheaply, (iv) with substantial, under-utilised assets, ideally freehold premises, hence the prospect of cash recovery via disposals, and (v) offering an exciting personal challenge.

By 1988 he had bought a small firm making intumescent paints for the military market, then another of similar size to Pyrochem making specialty chemicals. Dean spent the next 18 months or so making the latter more efficient and market oriented. He then hired a new man as its Managing Director, promoting Simmonds to Group M.D. reporting to himself as Chairman.

Diversification strategies can take many years to show results, so it would be premature to claim that the diversification script will succeed for Dean over the long term. Nonetheless, still in his early forties, Dean's declared intention was that 'I wouldn't mind being a micro Lord Hanson'. Simmonds commented:

'Hamish and I have talked a lot in terms of whether one should set up a separate company to do different activities. There are quite good defensive reasons for doing it...litigation... That apart, I believe in keeping things small...

If we grow in the way I hope, we'll split (the firm) up and run it as autonomous centres. The more people who are conscious of the bottom line, the more
successful an organization will be. If you get to the point where the chief executive doesn’t know everybody that’s the point where you’ve really got to start thinking about splitting it up.’

Looking ahead, Thomas commented of Dean:

‘He obviously has the drive to continue, gets pleasure in...creating things, making them grow and going on and doing something else. (If) I’d made a million I’d retire, that would be it. But that’s not Hamish’s way. He has this desire to go on building because he gets fun out of it, pleasure, excitement.’

Like Thomas, Jones was in no doubt that Dean would continue to innovate and diversify:

‘Hamish is that type of entrepreneurial chap. If he does as well with the other (ventures) he’s gone into (as with Pyrochem)...O.K. you might get a duff egg amongst one of them but he’s quick to (say) O.K., enough. I’ve got great confidence in him in that situation. His track record is exceptional. He likes the challenge of taking it from its infancy and then building it up...

It’s great for Hamish, but you must have that nucleus, that build-up behind... to keep the spark alive, get the thing into a big flame and to keep fuelling...so that when he looks back he’s got a big row of blazing beacons...and he can say, well I started all that. That’s where he’s going to get his kick. Your kick will be standing there at one of the beacons fanning it.’

5.2.8 Commentary on the script analysis of Dean’s outlook
As in White’s case, a range of quasi-normative scripts seem to have informed Dean’s entrepreneurial thinking. Some of his assumptions mirror White’s, for example the legitimacy of intuitive, adaptive responses; devoting much personal time and energy to the firm; taking direct responsibility for new initiatives; delegating only to trusted subordinates within agreed areas of expertise. However, Dean not merely espoused the need to detach himself from the minutiae of day to day operations to be
a more 'professional' manager, he took active steps to do so.

In other respects, Dean's outlook differed from White's. Although in the early days he used personal contacts in the Clan, he became more systematic in his exploration of options and sought high calibre outside advice. Unlike White, for whom close customer contact was critically important, Dean may have perceived contact with customers as comparatively unimportant. If so, we could speculate that this was due to the project nature of the construction industry or merely, as Thomas claimed, that he was customer-shy. Nonetheless, customer satisfaction has been part of the Pyrochem formula, as for Wittenshaw.

In the 1980s Dean explicitly rejected the patient, 'shoestring' approach, preferring bold, high-risk moves that accelerated growth. Compared to White, he took and implemented aggressive, proactive investment decisions. Although like White he relied heavily on trusted staff, Dean was capable of ruthlessly weeding out underperformers, a process that continues today. Dean, too, was open to advice from staff, but the evidence is that he valued ideas, not necessarily consensus, believing that the big decisions were his to take. Whereas White began with manufacturing and became disillusioned with it, Dean took the reverse route, so that manufacturing is now perceived as a major element of business success.

Dean manifested a very positive attitude to growth. This process can be portrayed as a search for challenges,
opportunities to learn, which he claimed very clearly was a fundamental motivator. But although decisions to enter new areas were sometimes impetuous, he made a virtue of engineering flexibility into his activities to ensure satisfactory outcomes. In contrast, for White control was the key issue.

The assumptions underpinning Dean's various scripts were generally well recognised by his colleagues, even if they did not always concur. When Dean had endorsed a course of action, they accepted that further discussion would centre on how, not whether it would happen. Even when there was personal dislike, it seems there was respect for his authority and his skills.

As in White's case, one can posit multiple levels in Dean's script hierarchy, albeit with greater richness. Yet overall, as can be seen from the summary of his lower level scripts in Figure 5.2, there is considerable continuity over time at levels 3 and 4. It is also argued that Dean appeared to sustain evolutionary thought processes more readily than White. He developed new patterns of thought as one strategy script evolved into another. However, Dean was more willing than White to confront perceived hurdles to growth, quite often stimulating perceptions of crisis to which he had to respond unequivocally. In effect, he would attempt to reconceive a threat as an opportunity which, if successful, would then form the basis of a new and sometimes 'revolutionary' script. A solution to a fundamental dilemma occasionally emerged from a low level
Figure 5.2: Dean's Script Outlook

### Level 3 Scripts

<table>
<thead>
<tr>
<th>Flexible use of s/con. staff</th>
<th>2a 2b 2c 2d 2e 2f 2g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Clan members</td>
<td>x</td>
</tr>
<tr>
<td>Hire/support capable staff</td>
<td>? x x x x</td>
</tr>
<tr>
<td>Use expert outside advice</td>
<td>x x x x x x x x x x</td>
</tr>
<tr>
<td>Good bank rels. &amp; cash mgmt.</td>
<td>x x x x x x x x x x</td>
</tr>
<tr>
<td>Maintain client variety</td>
<td>x x ? ? x x x x x</td>
</tr>
<tr>
<td>Seek/exploit distributorships</td>
<td>x x x x x x x x x x</td>
</tr>
<tr>
<td>Insurance appeal (to hoteliers)</td>
<td>x</td>
</tr>
<tr>
<td>Technical appeal (to regulators)</td>
<td>x</td>
</tr>
<tr>
<td>Aesthetic appeal (architects)*</td>
<td>x x x x x</td>
</tr>
<tr>
<td>Patient plodding</td>
<td>x x</td>
</tr>
<tr>
<td>Keep tabs by wandering around</td>
<td>x x x x x x x x x x</td>
</tr>
<tr>
<td>Excellent sales literature</td>
<td>x x x x x</td>
</tr>
<tr>
<td>Top-seal BS colour range</td>
<td>x x</td>
</tr>
<tr>
<td>Property investment/mgmt.</td>
<td>x x x x x x x x x x</td>
</tr>
<tr>
<td>Use of confrontation</td>
<td>x x x x x</td>
</tr>
<tr>
<td>Ad hoc hire of key staff</td>
<td>x x</td>
</tr>
<tr>
<td>Promote quality/standards/</td>
<td>x x x x x</td>
</tr>
<tr>
<td>authenticity</td>
<td></td>
</tr>
<tr>
<td>Demystify product application</td>
<td>x x</td>
</tr>
<tr>
<td>Operate in-house laboratory</td>
<td>x x</td>
</tr>
<tr>
<td>Espouse personal detachment</td>
<td>x x x x x</td>
</tr>
<tr>
<td>Create professional mgmt. team</td>
<td>x x x x x</td>
</tr>
<tr>
<td>In-house design capability</td>
<td>x x x x x</td>
</tr>
<tr>
<td>Control of personal travel</td>
<td>x x x x x</td>
</tr>
<tr>
<td>Commodity trading</td>
<td>x</td>
</tr>
<tr>
<td>Growth via diversification of</td>
<td>x x</td>
</tr>
<tr>
<td>activities</td>
<td></td>
</tr>
</tbody>
</table>

### Additional level 4 scripts

| Fast customer response         | 2a 2b 2c 2d 2e 2f 2g |
| Adaptable problem solving      | x x x x x             |
| Go for high-margin business    | x x x x x x x x x x |
| Subcontract idle assets        | x x x x x x x x x x |
| Be personally involved         | x x x x x x x x x x |
| Good staff packages/perks      | x x x x x             |
| Be ruthless                    | x x x x x             |
| Focus on wood products         | x x                   |
| Economy with the truth         | ? x x                 |
| Flamboyant demonstrations      | x x x x x             |
| Get independent test data      | x x x x               |
| Certification system           | x x                   |
| Develop export markets         | x x                   |
| In house production            | x x                   |
| Extend product range           | x x                   |
| Sell design expertise outside  | x                     |
| Diversify via acquisition      | x                     |

( # ) staff needed to be enthusiastic, adaptable and loyal
(*) Initially level 4 - see discussion
subscript; if effective he would elevate it to a more fundamental status. For example, the appeal to architects shown in Figure 3.6 as a low level solution to the problem of overcoming market scepticism was recast as a fundamental plank of the *aesthetic* script. This transformation process is explored further in Chapter 6.

Dean’s original strategy-level script was to exploit a niche opportunity in fire protection contracting. When a better opportunity was envisioned, this script was rapidly substituted. The second (paint distribution) script mutated into the *aesthetic* fire protection script. Successive enacted crises - over the Clan’s influence, over sourcing and manufacturing, and later over his own involvement in the firm - all allowed Dean to adjust and embellish, though not reject, the fundamentals of the *aesthetic* script. Meanwhile, one detects the emergence of two complementary diversification scripts which have continued to inform Dean to the present time.

To summarise, applying the script approach to Dean’s evolving outlook and knowledge appears useful in that it suggests a number of informative ‘level 2’ strategy scripts. In this way we can examine how his strategic thinking changes as he interacts with and learns from the environment in which Pyrochem operates. Yet, the analysis suggests also that some apparently low level assumptions encoded in these scripts are persistent and therefore intrinsic in his thinking about strategic issues affecting the future of Pyrochem.
5.3 Paradoxical Dualisms in Dean's Outlook

A number of seemingly paradoxical oppositions or dualisms emerged from Dean's account of Pyrochem's development and his own outlook on business. They can be subsumed under three broad oppositions:

* **Loose control :: tight control**

* **Innovating :: consolidating**

* **Self-oriented :: orientation to others**

Arguably however, in contrast to White, Dean did not merely accommodate paradoxes, but extracted positive benefits from their existence in his thinking.

5.3.1 Loose control :: tight control

*(i) Personal style: focused, committed, single-minded :: broad, uncommitted, open-minded.* Dean acknowledged his ability to bear down on issues with uncommon intensity and focus. His consuming passion of the moment would sweep other priorities aside, making life uncomfortable for subordinates. His obsessions seem child-like: wanting to 'push an idea to its limits', impatient to reach a conclusion. His single-minded commitment kept faith with intumescent technology until people accepted it, and again, later, when his French supplier became a liability: 'I live, eat, sleep and breathe Pyrochem...'

Without this intensity Pyrochem would surely have demised or become a bit-part player in this specialised market. Staff who quit or were fired could not - one suspects - understand, much less share his single-mindedness.
Yet Dean could also be dispassionate about situations. Soon after hiring a new management team, clearly affirming his commitment to the core business one might think, he said:

‘If (competitors) posed too big a threat we would probably go into a different market’.

So he could envision the possibility of exit even as the new team was settling in and the business was growing rapidly.

Always he desired multiple options and was willing to cut losses on misguided investments without apparent regret. The design agency exemplifies this:

‘We went into printing...to take (brochure production) to its logical conclusion. We spent... £50-60,000.... struggled for while... found we could get (it) done far cheaper by farming it out... so we discontinued our printing function.

I bought a plane...and got it completely wrong...but you know you write it off (about £30,000) and say, that’s down to experience. Life’s got to go on.’

(ii) Style: satisficing :: optimising. Acting impulsively is not a recipe for optimisation and efficiency. People interviewed said that Pyrochem could be chaotic and inefficient. Even though Dean’s enthusiasm got results, profits must have suffered to some degree, suggesting a satisficing outlook. But Dean also espoused and acted on the need to become more efficient, professionalising the firm by hiring efficient administrators. As he said:

‘I like any company I’m involved with to be thought of as doing things better than anyone else, very professional. That to me is actually much more important than making money. I’m much more concerned with (it) being around in 15 years time because we have consistently done things better..’
He expressed similar sentiments over his own contribution:

'I get to the end of a day and I'm totally dissatisfied with what I've achieved, I'm not worth the salary, I wonder how the company copes. If I'm flying I have to land the plane absolutely perfectly every time. If I'm driving I have to drive fast and very accurately and I chastise myself if I'm not. If we lose an order it hurts. If I offend somebody I'm annoyed and I analyse why I do it...'

(iii) Use of resources: flexibility :: productivity. This is a particular case of the previous point. Dean preferred flexible resources, whether human or financial; keeping options open so as to respond to events as they unfolded. Flexibility, he argued, can be designed into a project: without perfect future knowledge, it makes no sense to foreclose prematurely on potential opportunities, and one should avoid actions which might lead into blind alleys. His policy to keep spare factory space to permit rapid expansion is a good illustration. His aircraft were bought for their multi-role capability, people were hired for their ability to handle differing roles as circumstances changed.

But flexibility usually means lower efficiency. Intuitively, Dean reconciled the opposed priorities of effectiveness and efficiency. This could mean tough decisions: he did not expand into executive jet chartering because the most efficient aircraft were too costly and specialised, whilst the flexible alternatives were not productive enough.
(iv) Finance: cavalier/generous :: cautious/parsimonious. This pairing is exemplified by Dean’s willingness to invest considerable sums in risky ventures, yet show equanimity when losses were sustained, provided something had been learned:

‘If someone thought it worth spending £10,000 on a marketing campaign... it was going to be right for this reason, that reason...and it’s a complete waste of time, that’s great, I know that person learned from it and won’t make that mistake again’.

But he manoeuvred in canny fashion to reduce cash exposures. The manufacturing investment crucial to the firm’s survival was underpinned with a D.T.I. grant; carefully timing the purchase of his current premises minimised the net outlay even though the space was three times as great; the design agency is still denied a commission from Pyrochem’s advertising space. Dean also insisted on chapter-and-verse of minor expenditure:

‘I sometimes find myself worrying about too small things, I’ll say look, I know we can get an extra 10% discount on this stationery if we go to so-and-so...’

(v) Diversification: synergistic businesses :: stand-alone businesses. Dean rationalised his diversification initiatives in terms of synergy with existing activities and compatibility with future needs. Acquisitions had to complement Pyrochem and he had no plans to acquire or develop any company not fitting into a tight, coherent pattern of fire-prevention products and specialty chemicals. Yet he also insisted on new activities being run as separate, autonomous profit centres, presumably to enhance accountability and facilitate disposal if deemed
necessary. The design agency was typical in this respect. His aeroplanes were justified on their ability to generate profits by subcontracting, even though the first was bought in part as a synergistic cost-saving measure.

5.3.2 Innovating :: consolidating

**(vi) Pioneering: pursuing new ideas :: exploiting past innovations.** This opposition presents two faces of learning: *creating* and *applying* new knowledge. From his earliest career days Dean valued new ideas, was driven by curiosity. A challenge perceived was a challenge to be tackled 'because it was there', because challenges are 'great fun'.

Unquestionably a pioneering spirit, yet history is littered with pioneers unrewarded because of their inattention to detail and inability to cope with bureaucracy. Though Dean decried his administrative ability, he evidently soon accepted the need to extract the full returns from innovating by means of a structured, detailed approach even as he proceeded to innovate elsewhere.

When most suppliers were reluctant to promote intumescent paints because of the commercial risks, Dean effectively pre-empted serious competition by market innovation. Later, after Pyrochem had 'laid down the tracks', so that the market looked more attractive to new entrants, he increased the competitive stakes, demystifying the product, allowing general painting
contractors to apply it. He then implemented a stream of product developments. In retrospect it can be seen that Dean used innovating both to defend and exploit ground already held and to enhance Pyrochem’s future competitive status. Clearly, he had few conceptual difficulties in combining the excitement of innovating with the need to exploit current innovations.

(vii) Basis for and timing of action: intuitive/bold/urgent :: systematic/cautious/considered. Dean’s record confirms the power of incisive, intuitive actions. He seemed quickly to appreciate the key dimensions of a proposition, then promote urgent action. To be sure, he made mistakes - yet this style enabled him to learn from each episode. Thus, of a big loss in commodities trading he commented:

‘I can’t learn from books...I learn 100 times quicker jumping in the deep end...£60,000 (estimated loss) would buy somebody a very nice house ...I’ve got a very nice house. The company was making ten times that, so I wiped out 10% of its net profits... I’m glad I lost £60,000, it will probably stop me losing £600,000 in the future with the same kind of mistake.’

Yet having committed himself, Dean demonstrated patience and determination in securing the goal, especially between 1976 and 1981/2 when the uphill struggle to promote intumescent paints must have been very discouraging.

Though he tackled substantial challenges in relation to his current experience and resources, he also found ways to incrementalise change in a stepwise progression;
a bold commitment would be followed by prudent actions to limit downside risk. For example, building multi-unit premises and limiting financial exposure by renting some of them out until needed. In short, he appears to have judged when to act urgently and when to be patient, when to be bold and when to be cautious.

5.3.3 Self-orientation :: orientation to others

(viii) Style: Solo operator :: team player. Dean evidently had a natural instinct for what the marketplace needed, allied to a lack of inhibition to experiment. Thus it was his input that made the big impact. As Jimmy Jones expressed it:

'...the sharpness, the acuteness of the business acumen.'

Whilst much of Pyrochem's success resulted from his faith in his own ideas, Dean claimed to be hungry for challenging ideas from whatever the source:

'Once you've done something for more than a week ....you stop asking why am I doing it this way ....It's so easy to learn from everybody...you're a bluebottle, you can pick up good and bad points from all sorts of people and see what works and what doesn't. Find out problems, hazards, threats long before another person in the company will notice them.'

Despite his apparent self-reliance, he claimed to be a team player, needing and valuing colleagues:

'I'm not an entrepreneur...I do need to work in a team. The classic entrepreneur I don't think really does. He does it because he really believes in it and that's it. I like to carry other people along with me. I do like to persuade them that it's a good idea.'
The paradox was evident when he wanted to delegate yet remain close to the action. Nominally he delegated supervision tasks to subordinates, but he kept his finger on the pulse, 'managing by wandering around'.

Again, whilst he declared his team credentials, Dean also 'wheeled and dealt'. His 'trader' outlook remains intact and at the right price, who knows, he might be prepared to sell Pyrochem and start again.

(ix) Culture: idiosyncratic/personalised :: consistent/formalised. Dean managed in the personalised and idiosyncratic way one would expect of a small-firm entrepreneur. Indeed, 'too much accountability to men in grey suits' was his reason for not wanting to become chairman of a public company:

'you can end up killing the inspiration and the fun, one of which is no good for the business, one no good for personal satisfaction'.

Thus he valued idiosyncratic behaviour provided that it brought results, and he rewarded loyal and committed staff accordingly. Conversely, his disregard for staff he perceived as pedestrian, uncommitted or who abused their privileges could be arbitrary, even ruthless, as he continued to be an inspirational and paternal autocrat.

Yet despite this outlook, he had appointed a cadre of professional managers, recognising - like Bill White - the value of a more analytical and systematic approach, greater consistency in culture and style, less dependence on his own personality and skills. So there is a paradox between the paternal and professional in his outlook.
Best practice: exploiting Pyrochem's commercial advantage :: enhancing industry standards. Dean’s pursuit of an authentic, quality image for Pyrochem was undoubtedly prompted by notions of commercial advantage. Yet he also realised that it was appropriate to encourage improved 'best practice' in the industry, even though it might work against Pyrochem's short term commercial interest. As he explained:

'Contractors try to under-apply the product. We issue certificates of supply, send copies to the architect, the building control officer...so contractors are less likely to get away with it.

I’m on the Council of the Association of Structural Fire Protection Contractors and Manufacturers and our Technical Director is on the Technical Committee...We were the first company to satisfy the BS5750 quality assurance scheme called Certifire. There were two companies on the day of the launch...we were one of them....we are going to encourage (the industry) down that route.'

Self-interest: the needs of Pyrochem :: personal priorities and interests. Dean has consistently supported the growth of Pyrochem; he has associated himself unequivocally with this business. Equally, his other initiatives have gone well beyond the firm and led to investments in a range of other areas. For example, he developed the design agency beyond what was necessary to meet its original aim. More recently, having fired his sales director, he funded a new venture with him to set up an executive recruitment agency. Dean claimed that some twenty other firms had benefitted from his help, many of which have doubtless offered him directorships.
So one can advance the thesis that close as Dean was to Pyrochem, he was able to distance himself, eg. financially, by owning the freeholds of various properties and leasing them to Pyrochem or other tenants as he thought fit. So although he has been committed to the firm, he has not forgotten that his own interests might one day diverge from the firm's.

5.3.4 Commentary on paradoxical dualisms

The preceding analysis suggests powerful oppositions are at work in Dean’s outlook. Various characteristics seem to imply conflicting approaches of managing in a tight, controlled fashion and a loose, flexible and reactive way. There is the apparent contradiction of sometimes being bold, sometimes conservative, sometimes innovative, sometimes appropriative. There is the dichotomy between self-interest and awareness of broader collective interests involving Pyrochem.

In part these may be explained by his evolving from a small-firm entrepreneur to chairman of a medium-sized firm. Another possible explanation is that he has intuited a shifting, time-dependent range of convenience to these key constructs. Yet some ideas persist, notably the desire to continue seeking challenges. Dean is clearly a complex person whose paradoxical thinking has generally had constructive consequences. He does not become burdened, much less paralysed by conflicting imperatives, as White often appeared. Dean’s thinking is
realistically portrayed as ‘and/both’, shifting seamlessly from one pole of a dualism to the other.

Few people, one suspects, have such an innately flexible outlook. This quality was expressed by one respondent who described him as mercurial and unpredictable. He is a challenging man to work for, sometimes frustratingly so, because of his apparent inconsistency. From an analytical perspective this Janusian quality makes it hard to predict how he will construe and respond to particular issues.

For this reason, arguably, we learn less about Dean’s strategic outlook from considering dualisms than we do from his scripts. On the other hand, from dualisms we gain insights into the thinking that characterises a complex and sophisticated executive mentality, of which the most salient feature is perhaps the capacity to engage dynamic mental patterns.

5.4. Metaphoric analysis of Dean’s outlook
Here, as for White, insights into Dean’s perceptions of his roles are expressed in terms of metaphors inferred from his language of explanation. These are discussed under four broad headings (i) personal experience and development, (ii) capitalising on opportunity, (iii) managing relationships, and (iv) quality and integrity in business affairs.
5.4.1 Personal experience and development

(i) The student/scholar. Dean referred repeatedly to learning from experience, including his mistakes. He talked of the need for rapid learning, 'buying' important lessons, 'cutting my teeth', 'my time at school' etc. Learning was a goal worth 'doing grotty things' for, an antidote to boredom. He claimed new experiences were crucial, even after 20 years. To avoid getting stuck in a rut, he saw himself buzzing around, picking up ideas here and there, especially from outside the firm.

He associated learning with ideas and insights: 'I am an ideas person, or I should be'. It was important not to think narrowly, and to have one's ideas challenged. He was comfortable with concepts and many successes resulted from his imaginative, innovative ideas, reconceiving the nature of things.

(ii) The hedonist. Dean made it clear that experience had to be characterised by fun and novelty. From the earliest days the business had provided him with 'fabulous fun', 'spice and excitement', hence 'doing things I enjoy' and getting 'a buzz from doing what interests and amuses me'. The strong impression is of gratification-seeking, albeit self-actualization, rather than material reward per se, though the latter has obviously been substantial.

New initiatives must offer the prospect of amusement, provide the freedom to pursue whims. Thus there must be a sense of adventure, of being able to
satisfy curiosity. Above all, he needed to be enthused and to enthuse others. Recent acquisitions were important new sources of novelty. The firms he acquired would have enthusiasm injected into their operations.

(iii) The mountain climber. Dean needed challenges. Aside from the uphill struggle between 1976 and 1981 he did not refer explicitly to climbing, but this is an obvious metaphor: a classic, macho challenge, Putting himself to the test was a means of getting fired-up and to learn, of proving to himself and the world that he could compete against the odds and do worthwhile pioneering things commercially:

'I like doing things better than anyone else. I can't do that in an academic sense, because I'm not bright enough. I can't do it in a physical sense because I'm not strong enough. So I try and do it in a commercial sense, do things better than competitors, that is the arena in which I operate.'

(iv) The pioneer/pathfinder. Like White, Dean was taken with exploring and trail blazing, arguably with more justification. For a large part of his career he had been 'going it alone', 'ploughing my own furrow', 'laying down the tracks for others to follow'. Motivated by a desire to be ahead of the game, Pyrochem had consistently implemented new ideas. But like most trail blazers, Dean was wary of 'getting bogged down' or 'stuck in the swamp'. Despite tough going, he intended to continue experimenting, to 'lever into new areas'.
5.4.2. Capitalising on opportunity.

(v) The speculator/gambler. Dean’s opportunism was a matter of being bold and incisive, having faith in his beliefs and judgement. He trusted to ‘jump in at the deep end’ and be totally committed to exploiting a perceived opportunity to the full. Opportunism was about reading market signals correctly, reacting to events, backing his judgement, precipitating not avoiding decisions. It was about recognising and acting on priorities to enhance positions (to use his turn of phrase, "like a flea-in-a-nudist camp - where do you start?"). Opportunism was also knowing when to force the pace and when to be patient. It was about creating luck and knowing instinctively when to ride that luck.

(vi) The fencer. For Dean, being flexible and versatile was key to survival, being quick on one’s feet like a fencer side stepping thrusts or a boxer riding punches. It also meant keeping slack, underutilized resources in reserve to cope with unforeseen problems and respond decisively to openings. Flexibility meant bobbing and weaving, not getting trapped, being prepared to quit indefensible positions, to tolerate small mistakes as the price of avoiding big ones. It meant being philosophical about balancing losses against gains and making the best of situations as they are, not as one wished them to be.
(vii) The envisioner. To succeed consistently in opportunistic ventures suggests good anticipation, as well as luck. Dean disclaimed 'early-warning antennae' to spot emerging opportunities, but he did claim to envision options and possibilities, to create mental scenarios of where the firm could go, and to earmark the next steps on route. He had been a pivotal factor in Pyrochem's future development, especially as there was little evidence of formal planning until Simmonds was hired:

'...the five year plan is in the subconscious and evolving. All the time it's changing shape slowly, responding to what I hear about the competition, products, costs etc. It's a composition, the result of all sorts of diverse but relevant information. When you have someone heading an organization ... for some time and emotionally, not just practically involved, the five year plan is an unwritten thing in the head.'

(viii) The resolute partisan leader. Dean could be doggedly determined, as well as opportunistic, by no means always short-termist. At times he prepared for a patient a long-term struggle, plugging away until others joined the cause, a partisan, almost ideological role. Especially in the early days he needed persistence in adversity, a resilient, reactive problem-solving capacity, 'flying by the seat of the pants', 'living hand-to-mouth' etc..

His Clan upbringing probably aided this aspect of his development. When much later he encountered resistance to change in his first acquisition, he confronted the old ideas and imposed rapid and ruthless change. Substantive and symbolic actions were needed to
isolate and kill dissention: the blood of the dissenters pooled in the snow....

(ix) The predator. An overtly exploitative or appropriative aspect of Dean's opportunism was his 'trader mentality', an ability to wheel and deal in the marketplace, 'playing monopoly to win'. In recent years he has exploited Pyrochem's quasi-monopolist position to the full. Yet in the 1990s he still wanted to dominate. In the market he would 'go for the kill', if necessary attacking competitors or acquisition targets with a predatory game plan. He remained determined to push for growth: the business could not stand still, it must extend its product range and market coverage.

Though proper rewards for staff were important, they had to be earned. Dean's desire to exploit is posited as including staff, by weeding out low performers and exploiting the skills of the good ones.

5.4.3 Managing relationships.

(x) The team captain/coach. In the early days Dean's role was the doer. During the 1980s his role shifted to the coach, to oversee and co-ordinate, specifying general directions and letting others execute his wishes. In the Clan era he accepted that dedication and commitment substituted for formal training. After 1981 building a skilled, well-trained team was seen as an important factor for success. Dean expected and rewarded loyalty to
the team. He wanted enthusiastic people and to get results via team work. He 'managed by wandering around', encouraging and cajoling.

After the reorganization he was still co-ordinating, but increasingly at arms-length. He had to keep a lot of balls in the air, 'holding the reins', not 'letting things slip through the net', ensuring staff 'pull in the same direction'. He was concerned to 'keep managers on their toes', 'keep his finger on the pulse'. After the arrival of Simmonds, the new 'coach', Dean wanted to work in tandem to develop key players, psych up the team, get players pulling together, and establish good team spirit by equality of treatment.

(xi) The counsellor. In large measure Pyrochem's success was about the relationships established with customers, winning credibility by good communications, empathy, and service. Dean remained sensitive to customer needs, listening and learning, getting to know what impressed them and advising them by communicating relevant, positive messages. Rapport was vital to build confidence, as he learned from the episode with French supplier.

Trade contacts and other networks of information offered valuable two-way sources of ideas and market intelligence, clarifying the 'rules of the game'. External relations exposed him to ideas about best practice, showing what was necessary, providing the incentive to uplift Pyrochem's standards. However, Dean also made a point of getting help from outside
professionals, local firms and from other sources. As his contacts expanded, he envisioned a 'business club' to share ideas with peers in a more organised way.

5.4.4 Quality and integrity in business affairs

(xii) The the spiritual leader (guru). As a religious sect the Clan is presumed to set its members high standards of discipline and integrity in personal behaviour. Their tenets still appeared to influence Dean. For example, he was aware of his responsibility for maintaining integrity of the firm's behaviour. He also recognised that there had been a cult of personality which was no longer appropriate in view of the firm's size and need for professionalism.

Though he recognised and claimed to respect the style of his senior managers, the good aspects of the old culture had to be retained. A change-receptive, enthusiastic and participative culture should be encouraged. Harmony and trust between manager and managed should be central, integrity in one's dealings with people, treating them consistently and with respect, and a minimum of status symbols. Staff should be encouraged to improve their performance and behave ethically to clients and to one another, creating a harmonious, synergistic and effective working environment.

(xiii) The perfectionist. Dean espoused perfectionism in his own behaviour; he also wanted the firm to succeed by
pursuit of quality and to be seen to do so in the marketplace. This required quality staff and managers, respecting talent, improving consistency of performance and decision making, innovating to keep ahead, setting and meeting internal standards and matching or beating the standards of others. Thus for example it had been appropriate to comply with the tough BS5750 industry standard before others.

To recapitulate, Dean's metaphors (like White's) suggest a man pitting himself against an unpredictable world-out-there. White conveyed the impression that he was not in control, that fearsome beasts in the jungle were waiting to devour him; Dean by contrast was optimistic that he understood enough of his environment to experiment with it to his own advantage. Dean viewed his situation as being fun and was enthusiastic, whereas for White it was all very serious and energy-sapping. Dean implicitly construed himself as a winner, even though he did not invariably win, White mostly construed himself as a gallant loser, even though he did not always lose.

The metaphors describing Dean's inferred roles reflect something of the paradoxes noted in the previous section. There is a hard :: soft dualism evident in the juxtaposition of predator and guru for instance which is hard to explain, and which serves once again to demonstrate the complexity of his outlook.
5.5 Process Interpretation of Dean’s Role Identity

In process terms Dean makes a significant contrast with White. The thesis is that whereas White was largely artisanal and biased toward Type I in character, Dean was largely entrepreneurial and Type II.

As in the classic entrepreneur case, Dean was typically opportunistic and experimental, a 'first-mover' in the exploitation of intumescent paint technology. He courted risks of a magnitude that White would never contemplate. He gambled overtly, on the stock exchange, though he adopted tactics to contain losses; where he thought it necessary he would quit positions without regret rather than expect unrealistic turnarounds.

Though Dean claimed not to be an empire-builder, nor concerned with growth for its own sake, his actions tell a different story. Growth held no terror for him, the prospect excited and motivated him. Having achieved a handsome rate of growth between 1981 and 1986, he desired more, a classic entrepreneur trait. Admittedly the nature of his business meant that he did not have to seek external cash, putting his control at stake. Conversely, he was prepared to import expertise by recruiting a professional team with whose help the firm trebled in size over the three years to 1990, via a combination of organic growth and acquisition. Further growth looked set to continue, and barring a major unforeseen set-back, one would envision Pyrochem’s transformation from a small firm to a medium or even large company with the passage of time. As in the classic entrepreneur case, Dean also
acknowledged that his own role had to shift to co-ordinating and directing if growth were to continue, difficult as this might be in practice.

Despite the disclaimers, like many successful entrepreneurs Dean enjoyed material success, a large house and a fast car, for instance. He also enjoyed the luxury of being in a position to do more or less as he pleased, and wanted to indulge in a great many ventures, often with a high degree of originality. As in the characterisation of Carland et. al. (1984), he was impatient to progress, implying a low threshold of boredom.

However, it must be noted that Dean had grounds to feel at least as socially marginalised as White. Clan membership constituted a form of social isolation from society at large; more prosaically it prevented him from pursuing a legitimate career in higher education. Later, its dependency culture may also have stymied his ability to cope with the rigours of entrepreneurship, whilst his subsequent ‘excommunication’ was an extreme, traumatic instance of marginalisation. So in some respects the distance between artisanal and entrepreneurial qualities are narrowed.

As befits the Type II identity, Dean was biased towards novelty and innovation, willing to contemplate and initiate root-and-branch change. Equally, there has been a strong commitment to the core business of fire protection, providing continuity of background against which more unusual ‘experiments’ were conducted. Like
White, Dean has clearly been action-rational. As his colleagues acknowledged, he has championed new ideas, attacked defensive routines, persisted with experimental behaviour which more deliberate, decision-rational colleagues like Simmonds have had difficulty adjusting to.

However, Dean’s action-rationality has combined with an intuitive, reflective understanding of possibilities. In this respect the absence of formal plans has not meant a lack of anticipation, quite the reverse. This was a significant difference between White and Dean, since the latter evidently believed that because detailed outcomes cannot realistically be envisioned, the flexibility of multiple options is necessary to respond to threats and opportunities as they emerge. Thus he has been happy for multiple initiatives to run in parallel, given only broad-brush envisioning of options and potential outcomes.

Dean appears also to have done much more than White to develop a wide range of contacts beyond Pyrochem. In some instances this has been to the extent that quite unexpected alliances and ventures have arisen, whose logic was not immediately obvious, even to close colleagues. His external orientation as manifest in these wide ranging contacts has also been underpinned by quite effective political skills, promoting shared interests among the community of clients, industry stakeholders and others. He has mobilised external contacts beyond the immediate trade network to identify and exploit potential
opportunities. However, although unquestionably opportunistic, the evidence points to a relatively unitary view of co-ordination processes, albeit for the most part determined autocratically rather than democratically. Like better known entrepreneurs, Dean’s political skills appear to reside largely in the authority of a charismatic personality. Accordingly, he has been more sensitive than White to the symbolic as well as substantive aspects of managing, for instance his provision of benefits to staff that add value well in excess of their cost.

All in all, during the long evolution of Pyrochem Dean appears to have conformed broadly, though not perfectly to Stanworth & Curran’s entrepreneurial identity and to the Type II identity defined in Chapter II. But more recently Pyrochem’s culture has evolved toward what one might term mature professionalism. Dean’s own outlook has arguably not changed significantly, a possibility noted by Stanworth & Curran. There is for example some tension between his action-rationality and the dictates of being chairman of a sizeable enterprise. So it may be that Dean will ultimately construe his contribution and role-identity as increasingly marginal, remote from Pyrochem’s operations and - in that context if not elsewhere - limited to endorsing the decisions of others. One can envision circumstances where he might become sufficiently frustrated, even marginalised, that he quit as chairman, perhaps would even sell out to regain lost enthusiasm in an entirely new venture.
5.6 Chapter Summary

Chapter 5 replicated for Hamish Dean the analyses done for Bill White. The result is an equally rich picture of a complex role-identity presenting a variety of seeming paradoxes to the observer.

Script analysis was useful in making sense of Dean’s evolving patterns of thought, in particular how his strategic thinking developed in response to external perceived stimuli.

The analysis of dualisms indicated a notable difference when compared with White’s thinking, namely Dean’s apparent capacity to reconcile opposed and potentially conflicting propositions constructively and to feel comfortable with consequent ambiguity, avoiding the frustrating tensions White experienced.

Indeed, the dilemmas seem to exist principally for the observer wishing to make sense of Dean’s outlook. To colleagues he could appear unpredictable and inconsistent: promoting loose and tight control in tandem, innovating and consolidating with equal facility. As argued earlier, he turned AND or combinatorial, flexible thinking consistently to commercial advantage.

This is not to deny that some conflicts have been genuinely problematic for Dean. There remains potential conflict for example between caring and predatory instincts. To behave ethically and with integrity is clearly at odds with conventional impressions of
predatory present day entrepreneurs, though paternalism is in the tradition of the great Victorian entrepreneurs.

In his quest for self-actualization Dean espoused the status of explorer, wanting to experience and appreciate as much of his chosen world as possible. Many of the role metaphors inferred from his account differ qualitatively from White's. To take one example, though each saw himself as a pioneer/pathfinder, Dean construed his world as bountiful in the range of challenges and opportunities it conferred on him. Like an expert mountaineer, with a judicious blend of boldness and caution his gaze would take in not just Everest, but the entire range of Himalayan peaks waiting to be climbed. White, in contrast, sees challenges as burdens, most certainly not generally to be enjoyed.

A variety of role metaphors testify to Dean's curiosity and resilience in engaging the 'world out there', above all believing in his ability to influence outcomes and to inspire and motivate colleagues to achieve bold results consonant with his ambitions. White, in contrast, construed challenges rather negatively. They are typically threatening because he perceives his modest capacity to influence events; hence his cautious, incremental responses.

Finally, Dean appeared to contrast sharply with White in being much closer to the model of an entrepreneurial, Type II actor, whereas White was much closer to an artisanal, Type I model. However, it is stressed that the match was not perfect in either case.
CHAPTER 6
DISCUSSION AND INTERPRETATION OF THE FINDINGS

6.1 The Study of Executive Knowing

Knowing is presumed to be a key determinant of the ability of purposive, goal-directed individuals to achieve desired personal and organizational outcomes. This study links evolving, experiential knowing or wisdom (Sternberg, 1990) with strategic management in small firms. Investigating experiential executive knowing, it has been suggested, can lead to a better appreciation of the nature of strategic competence.

There are at least three important research aims (i) ways to represent and interpret knowing (ii) exploring how (and why) that knowing evolves, and (iii) gaining insights into the facilitation of learning in a strategic organizational context. The preceding chapters offered various representations of the strategic knowing of two individuals and how it has evolved in each case. This chapter reflects on these findings and discusses the evolution of knowing, particularly in respect of scripts. It concludes with some reflections on the enabling of effective strategic learning.

It was argued in Chapter 2 that one can usefully distinguish cognitive structural representations of knowing such as dualistic constructs and pattern-encoding frames or scripts on one hand, and an alternative approach via metaphoric and process conceived role identities.
Drawing on Kelly (1955), paradoxical cognitive dualisms were inferred in the knowing of two executives. The theory of dissonance reduction (Festinger, 1957) leads us to suppose that consequent tensions encoded in their dualisms could have motivational consequences. How and to what degree opposing priorities are resolved and with what implications, is therefore a matter of legitimate interest.

The second avenue of cognitive structural investigation drew on the script concept of Abelson (1973) and others. Scripts, it was argued, encode a wealth of accumulating, implicit knowing of a somewhat utilitarian and prescriptive form. Scripts offer a systematic, multi-layered approach to representing this knowing, and how it evolves over time.

The representation of knowing also explored the concept of role identities. It was proposed that executive knowing is illuminated by exploring the organizational roles which they construe and enact. One strand of investigation inferred metaphors of role identity. Metaphors provide a conceptual bridge between abstract cognitive structures and tangible behaviour. They encode potentially insightful constructions of roles and their implied consequences. Like scripts, metaphors are experiential analogies, but there are important differences. Metaphors are essentially stylistic and context-free. They address the imaginative, creative, even fanciful aspects of role; by comparison scripts tend to be prosaic, utilitarian and contextually-grounded.
A complementary approach to exploring role identity examined various perspectives on executive process, within the small firm and more generally. Small firm archetypes of artisan and entrepreneur were noted. So-called Type I and Type II archetypes were also hypothesized, located in an 'identity space' defined by the perceptual/motivational dimensions of (i) continuity versus change-seeking, (ii) decision versus action-rationality, (iii) internal versus external focus, and (iv) consensual versus conflictual co-ordination processes. These archetypes proved moderately useful in the cases explored, accepting that empirical identities are generally hybrids, not pure types, and will develop over time.

The discussion now continues with further observations on the three research issues noted above.

6.2 Representations of Chief Executive Knowing

The script analysis presented in this study drew on Abelson (1973), highlighting goal-directed, behavioural assumptions of the actors. The benefit of the script approach is that it renders explicit the generally tacit or uncodified causal assumptions held in personal, experientially-derived patterns of thought. We assume that actors seek movement toward desired goal states, and the frustrations or hurdles they encounter on route stimulate responses that become lower level scripts in their own right. The conclusion from subjects White and
Dean is that such hierarchical structuring is both feasible and productive.

The content and structure of individual scripts remain matters for investigation. The similarity of the two subjects' situations led to apparently similar metascripts, reflecting a quest for gratification and self-actualization, to be channelled by owning and operating a successful small firm. This 'solution' became the desired state of second level (strategy) scripts, in many ways the most interesting ones. Here we find the strategic organizational knowing of the executives encoded in a quite generic form, for example the 'niche opportunity' script, recognisable by countless small firm proprietors. In contrast, lower level constructs are particular to the knower and the context. Whilst a specific strategy script is operative, it is doubtful whether the validity of the meta-script is questioned.

The nesting of sub-scripts could in theory continue without limit. But since there is finite variety in an individual's portfolio of ideas and responses, there seems to be considerable persistence of many lower level components. Thus for example, in all three of White's 'strategy' scripts he accepted the need for a high level of personal involvement. To use an analogy, the plumber continues to use an adjustable spanner whether he repairs a water leak or installs a complex heating system. In consequence, little was gained by extending the analysis beyond four levels.
To represent Dean's knowing adequately it was, however, necessary to uncover more scripts than White. Dean also appeared more likely to retain some of them concurrently. There was also greater variety in his lower level scripts. The specifics of these scripts will be considered again in relation to role identity.

Turning to the exploration of cognitive dualisms or paradoxes in thinking, the main findings are summarised for White and Dean respectively in Figures 6.1 and 6.2.

---

**Figure 6.1**
*Paradoxical dualisms inferred in White's outlook*

- **Expectations:** financial returns :: non-material gratification
- **Results:** self reliance :: depending on others
- **Basis for action:** analysing (evaluating) :: doing (intuiting)
- **Resources:** labour-intensive :: reluctance to recruit
- **Consensus:** tolerate conservatism :: urge to change mentality
- **Structuring the firm:** integration :: separatism
- **Culture:** 'big firm' professionalism :: small firm expediency, adaptiveness
- **Investment:** 'shoestringing' :: invest to get growth
- **Risk:** grow the business :: keep control of the firm
- **Progress:** current clients :: prospecting new clients
- **Progress:** product-led :: customer-led
- **Adding value:** making :: merchanting.

The point to emphasise is not the content of these lists *per se*, but that sets of this general dualistic form constitute an important part of the intuitive knowing of small firm executives and can be investigated systematically with their co-operation. They encode taken for granted assumptions about the world of the knower's organization, and his priorities in that context. Each element contains an apparent contradiction or paradox.
Figure 6.2
Paradoxical dualisms inferred in Dean’s outlook

* Personal style: narrow, committed, single-minded :: broad, uncommitted
* Personal style: satisficing :: optimising
* Use of resources: flexibility :: productivity.
* Finance: cavalier/generous :: cautious/parsimonious.
* Diversification: synergistic businesses :: stand-alone businesses
* Pioneering: pursuing new ideas :: exploiting past ideas
* Basis for and timing of action: intuitive/bold/urgent :: systematic/considered/cautious
* Personal style: solo operator :: team player
* Culture: idiosyncratic/personalised :: consistent/formalised
* Best practice: exploit Pyrochem’s advantage :: seek enhanced industry standards
* Self-interest: needs of Pyrochem :: personal priorities.

The existence of a dualism constitutes a potential tension in the subject’s outlook. To the extent that a subject leans toward one pole of a dualism for a time, he makes an implicit choice. Polarised thinking may be expected to legitimise some forms of action and preclude others. Thus dualisms provide insights into the behaviours of the respective subjects. Taken as a set, they offer substantial insights into the knowing of executives in relation to the management of their firms.

It was suggested that White typically adopts more-or-less polar positions (eg. preferring ‘shoestringing’ to capital investment). In this sense he appears consistent. Dean’s postures are altogether more ambiguous, colleagues might say whimsical. He adopts positions consonant with his ‘reading’ of particular circumstances and his generally opportunistic approach.
As a consequence he sometimes appears inconsistent to others, not to be confused with being indecisive.

Turning to the notion of role identities, Stanworth & Curran's (1976, 1986) small-firm proprietor identities were helpful in describing Messrs. White and Dean, respectively the *craftsman/artisan* for whom the small firm provides comparative independence, and the *classic entrepreneur* who is naturally opportunistic and motivated by the prospects of growth, success and social acclaim. The notion of role identity can be encapsulated as 'what I believe I am, why I'm here, and what I'm trying to do' and an executive's conception of her role-identity is posited as central to her organizational self-awareness, knowing, and expertise.

The two process-derived role identities labelled *Type I* and *Type II* also offered moderately good matches. White was *Type I* in his preference for continuity, consensus and an inward-looking bias; however, although he espoused decision-rationality, his behaviour was typically action-rational. Dean, in contrast, was *Type II* in his preference for change, an external orientation, and a willingness to confront as well as to seek consensus. Though his behaviour was sometimes impulsively action-rational, he also manifest a capacity for shrewd, reflective thinking which one would associate with decision rationality. Whilst this pair are not pure archetypes, their respective role identities are in many respects mirror images. This approach to role identity
holds promise, albeit one recognises the dangers of categorising complex actors too simplistically.

The exploration of *metaphors* of role identity looks especially promising. Dean prompted a greater variety of role metaphors than White, though some were equivalent, for example the *pioneer, prospector, explorer* and *team leader/coach*. White's metaphors, taken together, convey the impression that he interprets his role identity in terms of being continually tested on an obstacle or assault course which presents real and unwelcome barriers to progress. The world beyond the firm presents an unknown, hostile context for his exploratory, pioneering voyage. In contrast, Dean sees the challenges of the unknown as opportunities to experience, learn, achieve, and to gain satisfaction from achievement. The contrast is highlighted in White's *shoestringing* imagery (cautious, pessimistic, muddling along) compared with Dean's *speculator/gambler* (bold, proactive, optimistic, opportunistic). White's outlook conjures mundane images of plodding experimentalism, whereas Dean is much more the forecaster or prophetic envisioner and inspirational communicator.

White's and Dean's respective role identities were apparently well understood by their colleagues. In passing, the evidence also points to differences in identity between each CEO and his immediate colleagues. Empirical support for this view exists, albeit from large British firms. Norburn explored the match between chief executive type and other executives in the 'top
management team' (Norburn, 1989; Norburn & Birley, 1988), concluding that CEOs were more likely to have had profit-centre responsibility early in their careers and to have run, or at least seriously considered running, their own firms. So it seems reasonable to propose that in a comparatively stable organization a CEO's role identity will be complemented by those of other colleagues.

The role metaphors attributed to the two subjects are quite persistent. This is seen in Figures 6.3 and 6.4 when roles are mapped against strategic scripts. It seems plausible to suppose that role identities and scripts ought to be correlated in some respects. However, the Figures do not corroborate this in any obvious way, suggesting the need for further research directed explicitly to this question. More generally, it is hoped that these findings lend credence to the exploration of how role identities and scripts facilitate the strategic sense-making of executives.

---

**Figure 6.3**
*Mapping White's metaphoric roles on scripts*

<table>
<thead>
<tr>
<th>Script &gt; Role</th>
<th>Exploit Niche Opportunity</th>
<th>Growth to stable plateau</th>
<th>Diversified business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rat in a maze</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Commando/mountaineer</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Experimenter</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Pioneer/pathfinder</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Surveyor/prospector</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Shoestringer</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Sportsman: hunter</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>: team captain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advocate</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Servant</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---
Figure 6.4
Mapping Dean’s metaphor roles on scripts

<table>
<thead>
<tr>
<th>Role</th>
<th>Script &gt;</th>
<th>2a</th>
<th>2b</th>
<th>2c/d/e</th>
<th>2f</th>
<th>2g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student/scholar</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Hedonist</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Mountaineer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Pioneer/pathfinder</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Speculator/gambler</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Fencer</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Forecaster/prophet</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Partisan leader</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Predator</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Captain/coach</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Networker</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Guru</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Perfectionist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

2a Fire protection contractor niche; 2b Intumescent paint distributor; 2c/d/e Variants of the aesthetic fire protection market pioneer; 2f subsidiary activity diversification; 2g related product/market diversification

Exploration of executive cognition in these ways is relevant theoretically and empirically, not least in providing a language and an agenda for clinical studies where practitioners reflect on their knowing and capabilities. Whilst learning (gaining expertise) at lower organization levels may be largely about acquiring factual (technical, professional) knowledge, at senior levels it also requires awareness and conceptualising of ambiguities in prior experience from which the knower hopes to distil useful lessons for the future. In this regard an actor’s scripts and role-identities condition his assumptions and interpretations about what is to be done, how it is to be done, indeed what factual knowledge will actually be required in the future.
To summarise, each way of representing strategic organizational knowing sheds some light on the outlook and expertise of the two executives studied. The script is possibly the most systematic and replicable approach. The analysis of paradoxical dualisms may be particularly relevant in clinical investigations. Archetypes of role identity have a synthetic elegance, but inevitably oversimplify; their underlying dimensions may generate better insights. Metaphoric representations of role identity provide elegant, multi-faceted, synoptic insights unlikely to be derived by other means.

6.3 The Evolution of Strategic Knowing

Each of the approaches used here also has something to offer in providing insights into the evolution of strategic knowing, in the sense that one can identify changes over time: from one script to another, from one metaphor to another, from one pole of a dualism to another, from one dualism to another. If we can map these changes systematically, we shed light on the way that knowing evolves in particular cases. Whether or to what degree the processes of evolution of executive knowing are generalisable is beyond the scope of this study, but are evidently legitimate and researchable questions.

6.3.1 Script-based insights

Representing evolving strategic knowing via scripts is relatively straightforward, given that perceptual stimulus-response (problem-solution) structures and
desired goal states emerge progressively. Thus the changing outlooks of the two subjects, White and Dean were expressed as time-series of dominant scripts in use. Some scripts persisted and were elaborated over time. Others, it is argued, were supplanted by a new script with differing characteristics. This raises the question of why script changes arise. Several mechanisms for evolution and transition are suggested.

Script appropriation. Both White and Dean may have had proximate role models, though the direct influence of these does not emerge very clearly from their respective accounts. Role models at large abound, however, and as the evidence shows it is not necessary to have a fully elaborated script at the outset. When each decided to start a business he had a moderately well formed concept of what it meant to be the proprietor of a small firm. In the event, each appropriated the skeleton of a ‘niche opportunity’ script, probably from a variety of sources, and this was necessary and sufficient to begin trading.

Apart from the setting up of the two businesses, the clearest instance of script appropriation is arguably Dean’s later decision to engage in related product diversification. One could rationalise this move as a crisis of confidence in the growth prospects of Pyrochem, but in truth there was no objective necessity for Pyrochem to pursue such a radical approach. In the event, it seems an instance of Dean implementing the first step of his implicit goal to become a ‘micro Lord Hanson’.
**Script elaboration** Having appropriated a script, the knower can be said to extend or elaborate it over time to encompass solutions to new problems as they emerge. These 'solution hypotheses' are validated or rejected in the light of experience. For instance, White's original script soon relied heavily on solution subscripts such as (i) intuition to mitigate risk, (ii) personal contacts to offset lack of detailed market knowledge, (iii) using his own efforts to combat lack of resources and (iv) responsiveness to customer needs to enhance his credibility as a supplier. When a solution appeared effective it was integrated into the script-in-use and soon became taken for granted. When the problem which had given rise to it was neutralised, it ceased to dominate his thinking, being supplanted by other priorities. Yet although an elaborated script incorporates multiple solution hypotheses, it remains recognisably the same script. Elaboration does not challenge the basic script, on the contrary it corroborates and reinforces it.

**Script rejection.** Abrupt, outright rejection of a script-in-use is uncommon, arguably because it devalues and sacrifices prior experience. Yet it does occur; in this study the most obvious instance was when Dean sold his contracting business to become a specialist paint distributor. This created a hiatus in his business affairs, signalling a concrete change of mission and direction.
The seeds of the transformation lay in his quest to eliminate the health hazard of asbestos when used as a fire preventive medium. Dean could have mitigated the problem by issuing workers with face masks and laundering their overalls frequently. But he was evidently concerned to find a less hazardous alternative. This prompted a proactive search which discovered intumescent paints. Dean converted a perceived liability to an opportunity, by rising to the challenge he had identified. Having met the challenge he envisioned a new script which looked so attractive that the script-in-use was jettisoned.

**Script mutation.** More commonly, a script appears to metamorphose into another. This shift can be likened to biological mutation. White's 'niche opportunity' script mutated into a script emphasising the quest for security by growing toward a mythical stable plateau. The plateau hypothesis signified to White that growth was expedient, not an end in itself. To reach the plateau necessitated a proactive search for business opportunities beyond the original niche, yet it continued to legitimise many assumptions of the original script.

As in the biological cell analogy, mutant forms co-exist for a time. Ambiguity arising from the use of overlapping scripts may actually be functional in preventing resource-sapping debate over their competing claims. Equally, it seems that a particular 'solution hypothesis' may remain influential, sometimes in a passive or mythical sense, even after the script in which
it evolved has been superseded. For instance, White's acceptance of the minimalist 'shoestring' approach remained influential well after the 'niche' script had been displaced.

Further examples of mutation are the successive transformations of Dean's 'aesthetic fire protection pioneer' script. The script emerged in the mid/late 1970s as a mutant form of the paint distributor script as Dean came to realise that he would not get the endorsement he sought from fire officers and other regulators, thus threatening the success of his venture. His solution was to appeal directly to architects and other specifiers, emphasising cosmetic, not purely functional benefits. The new script was still about paint distribution, so it had much in common with its predecessor. But the new focus on communication with specifiers required modification of the 'aesthetic' script to address specific problems, including the need to commission eyecatching and informative sales literature.

Ironically the success of the mutant 'aesthetic' script led to Dean's parting from the Clan. This traumatic event evidently did not make him doubt the validity of his goals. Subsequently the script-in-use mutated in response to new crises such as the unreliability of the French supplier, leading to the 'manufacturing' script. Yet the common thread remained specialist paint distribution, because that concept continued to 'work' financially and in the marketplace.
As the preceding instances suggest, the galvanising mechanism for script mutation is the emergence of a problem which is seen to be insoluble within the existing frame, hence construed as a crisis. This observation is of course not new (eg. Pettigrew, 1985; Pitt 1989; 1990). Mutation itself is characterised by a shift of perception such as re-construing threat as opportunity. Emphasising the cosmetic benefits of the product was initially Dean’s low level, tactical response to the problem of non-acceptance by the authorities. The revised benefit statement allied to the new medium of communication proved so effective that he then conceived of pioneering an aesthetic fire protection market, elevating the concept of cosmetic benefit to strategic status. As already argued, this is classic 'concept displacement', drawing an analogy between wood and metal treatment markets. Such inversions of perceptions evidently require some innovativeness and creativity in the knower’s evolving patterns of thinking.

The various script changes of the two executives are summarised in Figure 6.5 below. The study of scripts reinforces an evolutionary, rather than radical interpretation of strategic organizational knowing. A script locates the actor in time and context and provides a sense of deja vu. It suggests that new events are assessed in the light of prior experience, tending to highlight incrementally different solutions to the knower, contributing to the development of experience in
a fairly predictable, incrementalist manner. A highly-elaborated script is an extremely useful interpretive template, though the construction of new insights is constrained by the quality and extent of prior experience. For, functional as a script may be, it promotes action-influencing myths that with the benefit of hindsight may prove misleading. These myths become widely understood, promoting conformity and lack of reflection. For instance, White subscribed to the myth that the *shoestring* approach would sustain growth and lead ultimately to a stable state.

Fundamental, transformational shifts require creative, unpredictable, out-of-context thinking, as Dean demonstrated from time to time, a point addressed in section 6.4.2. Exposure to a rich variety of ideas and

---

**Figure 6.5**

*Types of Script Transformation*

<table>
<thead>
<tr>
<th>Appropriative</th>
<th>Mutative</th>
<th>Substitutive</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Niche opportunity</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Plateau</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Diversification</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dean</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Niche opportunity</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Distributor</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Aesthetic pioneer</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Post-Clan pioneer</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Manufacturer</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Subsidiary-activity</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Related-product</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>diversification</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

---
sources could be a relevant antidote to incrementalist thinking. White, whose scripts encoded personal commitment and consensus, was considerably – perhaps dysfunctionally – influenced by a limited set of colleagues. Dean, in contrast, appears not to have been influenced by any particular individual for long; he is very much his own man and those who work with him have had to strive to influence him by the quality of their deeds, ideas and skills of advocacy. As regards the external competitive environment too, Dean’s scripts have benefitted from his acceptance of differing market challenges and outside contacts.

6.3.2 Insights from role identities

From a strategic perspective role-identity could be of major importance in the evolution of executive knowing. As Stanworth & Curran (1976) and Barber et. al. (1989) noted, the imperatives of founding and growing a small firm are very different from maintaining and enhancing it in later years. Stanworth & Curran hypothesized that small firm proprietors develop from artisan to entrepreneur and potentially to professional manager. This is neat, if somewhat implausible. For as they recognised, some individuals will effect a partial or reversible transition, whilst for others role identity will typically be rather stable. Because the shift to professional manager identity is especially problematic, we should not be surprised if the founder consolidates and builds on his entrepreneurial identity, recruiting
professionals who will complement his outlook, as Dean and (less explicitly) White have done. Thus the evolving mix and complementarity of identities in the dominant coalition is important. Failure to recognise this may force the founder to quit prematurely or be deposed.

The defensive, risk-averse culture in Wittenshaw seems likely to survive White himself, not least because an entrepreneurially minded potential successor is unlikely to see the firm as an attractive opportunity. Equally, whilst Dean is in charge at Pyrochem there seems only a remote possibility of the opportunistic culture ceasing. However, the longer he remains chairman and the bigger the firm grows, the more likely it is that his successor will be a professional manager rather than an entrepreneur. According to Simmonds, Dean could resolve this concern by divisionalising Pyrochem, selecting a chief executive for each division with a role-identity judged appropriate to the priorities facing it.

Inspection of the posited Type I and Type II identities makes it clear that postures adopted with respect to their key defining variables can be well-entrenched, so that transitions between identities will tend to be espoused rather than truly action-informing. For example, White espoused a shift towards decision-rationality, but his conduct suggests that he remained largely action-rational. Likewise, the evidence is that Dean retained an action-rational, externally-oriented entrepreneurial identity, so his appointment of professional managers can be interpreted as a substitute
for, rather than a conversion to, decision-rational professionalism.

The weakness of using archetypes to explore these developments in knowing is that they are oversimplistic. It makes more sense to appraise the evolution of complex identities via their underlying dimensions such as those identified in chapter 2, which have aided discrimination between two empirical cases here. We should also be able to distinguish the evolution of espoused theories from theories in use, and might anticipate contextual aspects of identities, such as continuity in the internal affairs of the firm allied to change-orientation in the external (competitive) domain. This appears true of Dean over quite long periods. Hence a richer and more subtle picture of an evolving identity can be mapped.

The metaphoric approach also allows the evolution of identity to be mapped. Such analysis has the potential to highlight revealing, and also quite subtle changes in outlook especially if used in a clinical, interactive context. Under these circumstances a wider range of perhaps quite ephemeral images may be detected. Repertory grid and other idea-associative methodologies can be applied to formalise and facilitate analyses and to explicate the underlying sense of a metaphoric role construct.

Identities informed by metaphoric thinking provide implicit cues for (and legitimation of) specific actions by the knower. These actions will tend in turn to reinforce the images and constructs with which they are
consistent. Hence we should not expect influential images to change readily, indeed, the evidence presented in Figures 6.3 and 6.4 is that they are rather persistent. However, it is possible that when change occurs it is abrupt, in the fashion of a gestalt shift. A metaphor based approach will be all the more potent if it can be shown to highlight linkages between the evolving role identity and patterns of action over time.

6.3.3 Insights from paradoxical dualisms

Broadly similar comments apply to the mapping of paradoxical dualisms as role identities. Again, the potential exists to highlight changes in the repertoire of an executive’s constructs over time. That said, it is hypothesized that many executives manifest continuity in their constructs. White for example never truly outgrew the growth :: control paradox. Given his bias towards control-seeking, this effectively stymied Wittenshaw’s growth prospects.

To the extent that construct changes occur, they take several forms (i) inclusions and deletions of particular constructs from the identity set (ii) increasing (declining) salience of particular constructs (iii) subtle reinterpretation of the form of a particular opposition and (iv) a ‘flip-flop’ in the posture of the knower with respect to a particular dualism. A few instances will suffice as reminders.

As far as can be ascertained, White introduced only a handful of new constructs during the period studied.
Arguably, some increased in salience, for example, his growing awareness of the need to base action on analysis rather than intuition, and of the need to invest to grow. Sometimes the form of the dualism shifted, as discussed in chapter 4, such as the shift from invest: yes :: no, to invest: now :: later.

Most of White’s mental shifts, however, were ‘flip-flops’, consistent with OR thinking. For example, he shifted from being tolerant of conservative colleagues to being keen to change the collective mentality. Later he appeared to shift his preference markedly from manufacturing to merchanting. Notwithstanding the problems of conducting a true longitudinal study, it is concluded that a majority of White’s dualisms as presented in Figure 6.1 retained considerable salience over time, indicating comparatively little learning.

Many of Dean’s dualistic constructs also appeared quite durable, though he did evolve new constructs (eg. over diversification), and he allowed others to atrophy (eg. pioneering). As regards ‘flip-flops’, Dean showed evidence of greater mental flexibility than White in modifying his posture, leading colleagues sometimes to regard him as inconsistent. For instance, over money he might be cavalier or generous in one situation, yet in another berate a colleague for wasting a trivial sum.

In summary, there seems little doubt that knowers’ constructs do evolve. Whilst particular constructs may appear to change quite abruptly, the persistence of many others in the knower’s cognitive set means that the set
itself tends to evolve gradually. Observation of how an individual's construct set evolves is a valid exercise, though one would not expect the results necessarily to be neat and consistent, hence analysis must be done with care and sensitivity to context.

6.4 Experiential Knowing and Developing Strategic Wisdom
Three themes are addressed here, firstly, the link between personal knowing and organizational strategy; secondly, the significance of transformational thinking; and finally, some implications for enhancing executive strategic knowing or wisdom.

6.4.1 Personal knowing and organizational strategy
Winter (1987) argued that the knowledge and competences lodged in organizations are key strategic assets. Much of this knowledge resides in the personal knowing of senior executives. Indeed, a plausible definition of a competent strategic executive is that she has developed and can apply a broad repertoire of scripts. A valuable aspect of extending this repertoire is to experience a variety of contexts and new relationships and to have one's ideas challenged periodically. But how does this developing personal knowing relate to organizational strategy and can one be developed consciously in support of the other?

The emphasis on organization strategy could be taken to imply that it is partly or even wholly actor-independent. This is an understandable view, given recent theorising about strategy in bureaucratic organizations,
whether business, government or military. The formal strategy paradigm culminating in work such as that by Hofer & Schendel (1978) elevates strategy content to the pinnacle of strategic management achievement, appearing to transcend the value of the strategists responsible for its development and implementation. This surely cannot be. In a small firm, certainly, the scripts and role identity of the chief executive are central to the evolving strategy process and its realised outcomes. The development of Wittenshaw and Pyrochem cannot be understood in isolation from the outlooks of their respective CEOs.

Yet despite the influence of the strategic knowing or wisdom of a CEO on organizational strategy, it remains largely tacit, personal property. Constructions such as scripts and role identities are personal and remain more or less idiosyncratic. Of course, key elements of this knowing enter the 'public domain' in and around the organization. Nonetheless, shared knowledge remains relatively fragmented and ill-diffused. Colleagues internalise what they can in order to interpret the particular actions required of them. Here the dramaturgical analogy is instructive.

Through the medium of the script a play presents a rich and contextually specific narrative in which the responses of the main characters (roles) to problematic challenges are central elements. The result on the night is an elusive product of the interpretive performances of the actors as they seek to make the script their own. As
the audience we expect this; it is what we pay to see. That an executive makes an essentially personal interpretation of a script is therefore no surprise. Yet the dramaturgical metaphor also misleads insofar as it generally signifies a written, externalised script, whereas a personal script is patently neither written, nor highly specified, nor necessarily well planned and crafted. It is merely an unfolding improvisation whose enactment selects and raises the salience of some past experiences, encouraging hypotheses of plausible and acceptable future actions in a broadly familiar context. Its application elsewhere may in fact be problematic, in that it suggests stylised rules and principles which implicitly render some conduct unacceptable. For example, White set his face against investing in machinery and employing sales staff because such moves were inadmissible according to his script-in-use. Equally, Dean would have difficulty applying White’s scripts in Pyrochem or his own scripts in Wittenshaw.

By comparison with a dramatic script, Abelson’s concept of script focused on events and acts, rather than roles. Here, using the concept of role identity, this shortcoming has been at least partially addressed. A construction of role identity is a persistent feature of personal knowing, locating an actor in the scene and combining his motives with implicit specifications for his active contribution: I am, therefore I behave.

Appreciating these analogies allows us to predict how individuals will improvise when facing future
challenges. We may suppose that White will generally act to contain uncertainty and improve his perceived control. Despite his best efforts, the nature of his perceived role identity is such that he will continue to regard himself as at the mercy of his environment. So we should not be surprised if he remains risk averse, depending on actions he perceives as low risk because they have 'worked' in the past. In contrast, Dean will continue to seek challenges and find ways to overcome them. No doubt he will make mistakes, but the flexibility inherent in his outlook suggests that he will find a way to resolve such dilemmas. As he does so, his tacit repertoire will continue to develop, adding to the argument for considering him an expert strategic manager.

In general, though personal knowing is not lost to the organization for as long as the knower is associated with it, such knowing becomes public only to a limited extent. In contrast, organization strategy is explicit, shared property: in a sense strategy can be regarded as the lowest common denominator of key actors' personal knowing. In a small firm the key actors are normally close, so colleagues should in theory have a good sense of the chief executive's personal scripts and role identity. Yet Dean's colleagues did not always appreciate the assumptions underpinning his knowing until they were clarified in the light of unfolding events. Furthermore, even in small firms personal knowing encodes interests which do not automatically coincide with the interests of the firm as an entity.
6.4.2 Experience and transformational thinking

Experiential knowing has been represented variously as evolving perceptions and enactments (Weick, 1982) of scripts, dualistic tensions and role identity.

The analysis of scripts highlighted the distinction between elaborative and mutative development. Elaboration appears to be the dominant mode of developing experience, analogous to Mintzberg's (1978) evolutionary organizational change. The continuing elaboration of a basic script indicates that the executive is taking account of changing circumstances in the 'out-there' world as she interacts with or enacts it.

Hamish Dean's frequent use of the learning metaphor suggests a belief in proactive experimentation, seeking bold (but not reckless) challenges. Reacting to environmental stimuli is a legitimate way of gaining experience, but it is preferable to find ways that do not make the interaction costly when failures occur. Dean interpreted this as the need for his thinking to be highly contingent, in his terms, identifying options within options, or escape routes:

'So many theoretical strategies on paper look superb, but in fact they are often dependent on twenty different conditions being met. Maybe there is a high likelihood of all twenty being met ...but it needs only one to go wrong and it can take the bottom out of your whole proposal.'

Thus he takes for granted the need for flexible, adaptive behaviour, adjusting his cumulative knowing in the light of experience. Consistent with his flexible
experimentalism, he maintains slack, redeployable resources, as for instance, keeping factory space unused even though it adds cost that colleagues would prefer to avoid.

But we should not overlook Dean’s capacity to anticipate problems and rehearse solutions, in effect, to construct de facto crisis stimuli to which he believes he must respond. Pyrochem’s lack of sales representation was construed as a mini-crisis which justified spending substantial amounts on high quality brochures; his inability to control the quality of subcontractors’ work led him ultimately to introduce a specifiers’ manual and a system of certification. Having construed a problematic issue as a threat prompts a creative response which often converts the threat to an opportunity. He then acts incisively and proactively to realise a plausible new scenario or alternatively to vacate a losing position.

In his book ‘Strategies for Change’ J.B. Quinn (1980) pointed to the significance of ‘precipitating events’. He noted:

‘No organization – no matter how brilliant, rational, or imaginative – could possibly foresee the timing, severity, or even the nature of all such precipitating events. In this sense, they were truly unknowable’ (1980, 20).

Dean might have written this, which is arguably why he does not spend inordinate time formally planning his business. Instead, he copes with uncertainty by creating his own ‘precipitating events’, constructing crises which flexible responses generally enable him to conquer. In so doing, it is argued, he envisions solutions to problems
other people either do not recognise or are prepared to tolerate. We can portray this in Figure 6.6. in which Dean expends a good deal of mental energy roaming the upper left quadrant. Having located problems and threats,

he finds ways to translate them to the lower right quadrant. A more typical behaviour, and one which characterises Bill White for much of his time, is operating in the lower left quadrant where he is obliged to seek solutions to problems imposed upon him.

The significance of Dean’s proactive approach is that, paradoxically, he actually increases his control of situations. The process is dynamic; like a cyclist or skier he relies on his ability to shift ‘strategic balance’ at short notice. Such ‘anticipatory problem solving’ is what Ackoff (1970) rightly called planning. Anticipating difficulties is not a negative, pessimistic
outlook, provided that the planner takes steps to solve
the perceived problem promptly and imaginatively.

A good deal has been written about the challenge of
coping with organizational ambiguity and achieving
positive change. Executives like Dean appear to envision
and revise their strategic constructs over time,
affirming the experiential basis of their knowing.
Torbert (1987) posited four development stages in this
process, diplomat (apprentice), technician, achiever, and
strategist. The second pair are of interest here. The
achiever, according to Torbert, is proactive, responsible
and goal oriented, and adjusts behaviour positively to
feedback. The strategist level, said to be reached by
less than one in five is more flexible and less goal
oriented than the achiever. The strategist accepts
contextual relativism, manifests complex and often
paradoxical thought processes and has the capacity for
transformational thinking. Logic and judgement are allied
to intuition, creativity and reflectiveness (Agor, 1986;
McCasky, 1982, 1988; Schon, 1983). In general
strategists will appreciate the merits of dialectical
enquiry and devil's advocacy to explore and understand
issues (Mason, 1969; Mason and Mitroff, 1981). Though
they have a positive outlook, they are tolerant of
frustration and acknowledge the possibility of failure.

Dean is certainly an achiever, arguably a
strategist. White appears to be a mix of technician and
achiever. Dean acknowledges the process of continuing to
master his craft, a concern he articulated clearly and
frequently. Instinctively he has learned by doing, behaving with an insatiable curiosity, internalising and later reflecting on his experiences. Perhaps this is a common quality among effective entrepreneurs. In any event, Dean’s multifaceted and flexible thinking, his ability to cope constructively with ambiguity and paradox arguably do not explain his growing expertise, but are emerging consequences of it. To quote Torbert:

‘...paradoxes .... cannot be resolved solely through creative turns of the mind: they and their resolution must be lived’.

Dean directed his skills to business since he felt he had an aptitude and because the avenue was open to him. Equally, his challenge-seeking and envisioning capability might have made him a formidable scientist. The role of innovative analogical thinking in experimental science has been much discussed (Bohm & Peat, 1987; Leatherdale, 1974; Schon, 1963b). Arguably, it is Dean’s ability to go beyond puzzle solving behaviour (Kuhn, 1970) that distinguishes him.

Innovative, non-linear mental processes have been called lateral thinking, concept displacement, paradoxical, contradictory or Janusian thinking (De Bono, 1970; Cameron & Quinn, 1988; Koestler, 1964; Quinn, 1988; Westenholz, 1993). After the event, such mental shifts may seem rather obvious. Yet the ability to reconceive a pattern is relatively uncommon for two reasons. In conception the idea or assumption which was subsidiary becomes (or has the potential to be) primary and therefore strategic. In implementation it requires a
bold, determined, but flexible approach, coupled with continuing tolerance of risk and ambiguity if the idea is to progress to a satisfactory conclusion.

Dean's capacity for mental gymnastics appeared to underpin various script changes. Sometimes his mental inversions have been quite tactical, in other cases envisioning has effected a transformation in his thinking, evolving a distinct new script, a process likened earlier to biological mutation. Such innovative thinking is consistent with various role metaphors that were imputed to him. There is Dean the challenge seeker, the pioneer of uncharted territory, the speculator and the forecaster/prophet. There is also Dean the student, with an enquiring, childlike enthusiasm for establishing how the world works.

Cameron & Quinn (1988) cited several studies purporting to show that paradoxical thinking was central to effective performance (1988, 10-11). Westholz (1993) linked paradoxical thinking to the 'reframing' of situations in organizational sense-making. For Ford & Backoff (1988) paradoxes create inherent tensions in organization life which:

'may produce gradual or sudden and abrupt translative...or transformative shifts.'

But in their view it is not possible to:

'assure progressive transformations merely through "health enhancing" translative changes'.

If the latter are considered akin to script elaboration, this study corroborates this conclusion.
Gaining insight via paradoxical thinking is significant in the strategic domain, for making apparently sensible choices may still lead to organizational failure in the absence of insight and luck (1988, 113). Conversely, as Meyer & Zucker (1989) noted, even incompetently managed organizations sometimes survive for long periods, so the link between innovative thinking and firm performance has to be treated cautiously.

Ford & Backoff pointed out that formalised logical thinking establishes polarities and mutually exclusive categories which stimulate OR rather than AND thinking, hence the exhortations by others to 'chart dilemmas' (Hampden-Turner, 1990) and to 'go beyond rational management' (Quinn, 1988). Logic, of course, remains valuable in defining the poles which the AND thinker seeks to encompass, synchronically or diachronically. The former is truly creative, whilst the latter is consistent with the use of flexible, contingent mental heuristics cast as evolving scripts and role identities.

The management of small firms has to contain and resolve seemingly contradictory and opposing goals and priorities, particularly those arising from lack of resources or access to opportunities. This process creates inevitable dilemmas, some of which are ignored or rationalised away. Others persist and are accommodated pragmatically. Bill White rationalised his investment dilemma (whether or not to invest to grow the business) by recasting the dilemma as \texttt{invest: now :: later}, opening
up the option of deferring investment indefinitely. Dilemma resolution which involves adopting a polar position implies rejecting the opposing position. Bill White typically construes opposites as exclusive choices, one of which therefore has to be rejected if progress is to be made. Thus he construed retaining control meaning that he had to reject rapid growth, since the latter would increase outside interference in his firm.

Some of White's dilemmas are logical oppositions: growth does carry increased risks; limited resources do make it hard to keep existing customers happy and prospect new ones. The resolution of such dilemmas is genuinely problematic. Some however, are questionable in terms of externally applied logic; is it inevitable that non-material and financial rewards are mutually exclusive? Some of White's other dilemmas highlighted oppositions between espoused and action-informed positions, for example, the unresolved dilemma between intuitive behaviour and the analytic, systematic behaviour he imputed to 'professional' managers.

A lesson for White is that his construed dilemmas need scrutiny and challenge from outside thinking. He needs encouragement to reformulate oppositions in more constructive terms. In particular he needs to shift at least partially from OR to AND thinking.

In contrast Dean is clearly a paradoxical AND thinker. Though his dilemmas appear to the outsider to be as weighty and durable as White's, he retains an ability to envision seemingly opposed ideas and concepts without
discomfort, applying whichever seems more appropriate in context. For Dean this Janusian thinking is clearly a source of strength. Moreover, his willingness to envision new options allied to his enthusiasm for their implementation means that his repertoire of experiences has accelerated way beyond that of White.

A criticism noted already is that colleagues see him as inconsistent and whimsical: behaving intuitively and boldly in one arena, whilst being evaluative and cautious in another; sometimes looking at a situation as a team player, sometimes as a solo performer. True, there have been apparent movements in his posture as he accepted the need to be somewhat more 'professional', valuing efficiency and productivity as well as flexibility and expediency. In fact he resolved this dilemma by a range-of-convenience trick: by delegating he made efficiency someone else's problem.

Finally here, one notes that Dean is exceedingly articulate. Whilst this quality alone will not guarantee managerial effectiveness, it is a necessary component. For although the mental skills to envision, construe and categorise are key aspects of intellectual capability, they are of little significance if linguistic capability is inadequate to the task of galvanising a wider audience with enthusiasm for novel ideas, or as Pettigrew (1979) said:

'...to make words walk...is one of the unexplored characteristics of successful entrepreneurs'.

6.4.3 Implications for enhancing strategic wisdom

What can be said about enhancing personal strategic knowing or wisdom in a reasonably systematic way? Dean may be a role model of a learning manager, but that does not make him easy to emulate. Indeed, executives with the potential to achieve strategist status in Torbert's terms are likely to be too busy learning by doing to feel able to devote time to learning in a more formal context, such as at a business school. Indeed, many schools have little to offer someone like Dean, since they provide few real opportunities for either thinking creatively or learning experientially — after the fashion of Revans (1979).

Nonetheless, reflecting on past or present experiences can be an experience in its own right, ideally to be shared (Easterby-Smith & Davies, 1983; Kolb et. al., 1986). Dean no doubt shared formative work experiences with mentors in the Clan, and in the traumatic period after his 1981 excommunication he acknowledged that his wife was a major source of advice and support, as was Paul Quinn, the former architect. Subsequently a few respected outside "mentors" are also known to have influenced his thinking.

There would appear to be a role as yet largely unexplored for external agencies such as business schools to act as mentors to developing executives. Realistically, what such agencies ought to offer is the opportunity for creative, out-of-context thinking and various forms of prompted self-reflection. The latter might take the form of discussion with or without formal
supporting techniques such as repertory grid (Reger, 1990; Ryle, 1975), cognitive mapping (Eden et. al., 1979) or expert systems (Hertz, 1988).

In this research the investigator was in a position to prompt executives to reflect on what they know. With few exceptions all those participating appeared to find the experience unusual and challenging. Of more than two dozen people interviewed at length, only one, whose business subsequently folded, declined a second meeting. Because interviews were non-directive and exploratory, respondents seemed to find the experience unthreatening, even therapeutic. Whilst these brief encounters are unlikely to have made them more effective managers, they did surface aspects of their otherwise tacit sensemaking, which may subsequently have been thought provoking for them.

Can such interactions systematically enhance expertise development? Jones (1987) described the approach she sought to implement as:

'...a research relationship in which the persons concerned articulate their image of their worlds not primarily to please (or deflect) me but because doing so is part of a process of reflection and analysis about their issue which is of relevance and use to themselves.'

Schein (1987) distinguished clinical and ethnographic interventions. The clinician is involved because she is asked - and presumably paid - to be. Access may be harder for the ethnographer to negotiate, but having done so she is under less pressure to perform, that is, to be prescriptively useful. Indeed, the ethnographer will have
scope for impartial, exploratory discussion that may win the trust of respondents who would be suspicious in different circumstances. In short, the interaction may be more productive between voluntary participants than in the asymmetry of a client-consultant relationship.

Thoughtful and enthusiastic people like Jones may gain access to the likes of Dean and White because the latter are curious. If they have few expectations of such encounters they may actually gain more. It is possible also that a subject gains most from the initial interaction: in the experience of this writer subsequent discussions ran the risk of being perceived to generate less novelty than the first had done. Thus interventions may benefit from being comparatively self-contained, with all participants accepting a limited scope to and expectations of the process. Absent either of these options, colleagues in a firm may benefit by engaging in non-routine interactions like the mentoring process commonly attributed to Japanese firms. A useful alternative for entrepreneurs is to develop contacts among peers in the business community, as Dean has done.

Although a slightly fanciful phrase, the concept of strategic wisdom appealed to the writer from an early stage of the research. The collection by Sternberg (1990) reinforced the view that wisdom is an appropriate label for the phenomena studied, particularly given the section in his text on 'psychodevelopmental conceptions of wisdom' including themes of 'Wisdom and reflective judgement: knowing in the face of uncertainty' (Kitchener
& Brenner) and 'Wisdom: the art of problem finding'
(Arlin). For these authors the development of (strategic)
knowing or expertise is patently about the development of
wisdom. Unfortunately, as Sternberg noted in his
introduction, 'Wisdom is about as elusive as
psychological constructs get'.

Although isolated exceptions are found, Kitchener &
Brenner's research concluded that:

'reasoning characterised by an awareness of the
uncertainty of knowing and an ability to make
reasoned judgements despite this uncertainty is
clearly not associated with youth or young adulthood'
(1990, 223)

Thus ageing and experiencing are necessary, if not
sufficient conditions for the development of wisdom to
cope with:

'the difficult, wicked-decision problems of adult
life' (1990, 226).

They noted also that individuals with sophisticated
knowing abilities develop and defend good judgements
which:

'reflect a recognition of the limits of personal
knowledge, an acknowledgement of the general
uncertainty that characterises human knowing, and a
humility about one's own judgements in the face of
such limitations' (1990, 226).

Above all, wisdom is required when facing
unstructured strategic problems, such as those
encountered by senior executives. Whilst it may be
largely of semantic interest to conjecture on the
congruence of wisdom and expertise, Day & Lord (1992)
observed that:

'the knowledge of novices is organized around
explicit information provided in stimulus materials,
whereas experts' knowledge is organized around implicit principles and abstractions, which are used to guide responses (sic)'

In a similar vein, Schon (1983, chapter 8) posited the:

'testing of (an executive's) intuitive understanding of experienced phenomena...in the form of a reflective conversation with the situation',

a process in which she:

'draws on (accumulated) organizational knowledge, adapting it to some present instance' (1983, 241-2)

and which appears similar in concept to Torbert's (1987) 'action inquiry'. Dean might riposte that in small, growing firms the repository of organizational knowledge is inadequate, or - as exemplified in his 'Clan-crisis' - readily dissipated. In any event, it points to the need to develop and exploit a network of contacts as well as drawing on collective knowing in the firm.

Arlin (1990), echoing Schon (1983), emphasised the problem-finding aspect of wisdom, a quality attributed in this study to Hamish Dean. She asserted that this is a major component of wisdom. Nonetheless,

'knowing what one does not know can be represented by the questions one asks, the doubts one has, and the ambiguities one tolerates',

implying that wisdom is manifest also as an insatiable curiosity to probe beneath the 'surface structures of a domain'. In drawing a close parallel between wisdom and problem finding, Arlin defined several key features:

* A sense of when a problem is important, as opposed merely to being interesting
* A sense of complementarity, meaning an ability to detect patterns of similarity and conceptual conflict between analogous situations
* A feeling for symmetry, detecting subtle signs of imbalance that go unnoticed by the casual observer
* Receptivity to new information, and the ability to think creatively and imaginatively, thereby changing one's understanding of a situation
* Pushing acknowledged norms and standards of behaviour or performance beyond presently accepted limits
* Envisioning as part of the approach to address ill-defined problems.

Though these qualities may not be amenable to being learned in a conventional sense, they imply a stylistic direction in which to attempt to enhance personal expertise. Schon's advice, though plausible, is hardly operationalised, other than pointing to the responsibility of senior executives to help educate subordinates. More specifically, he emphasised their duty to set the context in which subordinates are required to articulate their knowing and offer it for scrutiny by wiser counsel. Others, too, have underlined the importance of social and dialectical processes in the development of wisdom. Kolb (1983) and Feldman (1986) for example, argued for a supportive, but stimulating organizational environment that requires, monitors, critiques and rewards attempts to learn 'on the job', especially when abstract qualities of envisioning and planning are involved.

Kolb posited four stages in problem management of which executives should be aware and be proactive towards. He associated each with a specific executive role, namely the leader (problem selection), detective (problem definition), inventor (solution definition) and co-ordinator (solution implementation). Quinn (1988) offered a somewhat more extensive, but otherwise similar typology of so-called 'master-managerial' roles.
All these sources would presumably subscribe to Schon's (1983, 283) observation that:

'a theory of education for reflection-in-action ... would take us well beyond the scope of this (text)'.

Still, recent empirical work by McCall, Lombardo and Morrison (1988) offered guidelines on such a theory. They noted the significance of timely experience (for example, holding responsible positions early in one's career), the value of having to cope with pressure and adversity, and of continuing to seek challenging and opportunity-laden situations throughout one's career. This appears to sum up Hamish Dean's attitude very neatly.

There is an obvious link here with a broadly stated concept of emerging leadership skills. With some notable exceptions (eg. Barnard, 1938; Bennis & Nanus, 1985; Pettigrew, 1992; Vroom & Yetton, 1973), the writer has found the concepts of leadership presented in the literature rather unhelpful, often lacking analytic leverage or disappointingly prescriptive and value laden in tone. Bennis (1983), however, provided a short descriptive tour de force of economy and insight into the range of skills a leader needs. Whittington (1993) also presented a balanced account of what he called strategic leadership, drawing on Czarniawska-Joerges & Wolff (1991) to make the point that leaders are conventionally perceived differently from managers and entrepreneurs, being portrayed as inspirational, charismatic, performers with strong convictions and ideologies.
The evidence of this study is that the knowing of an effective executive - whether we construe it in terms of leadership skills or otherwise - is multi-faceted and not amenable to simplistic explanation. Rather, the argument is advanced that without making prior value laden assumptions or assertions about quality of performance, executive knowing can usefully be explored by the knower and the researcher (in the broad sense of personal counsellor or organizational developer). Using a variety of relatively non-technical approaches, these exploratory processes can assist the self-awareness of the knower by exposing significant aspects of what is tacitly known. When the researcher collaborates with the knower to this end, he enables the executive as well as others to discuss, review and learn as part of a continuing, reflective process. Whilst arguably still at an early stage of theoretical understanding, this kind of activity is held to be a valid and potentially valuable contribution to the development of managerial wisdom and therefore organizational expertise in the strategic domain.
BIBLIOGRAPHY


Campbell, D. (1975) "Degrees of Freedom" and the Case Study', Comparative Political Studies, 8, 178-193


Czarniawska-Joerges, B. & Wolff, R. (1991) 'Leaders on and off the Organizational Stage', Organization Studies, 12, 4, 529-46


Hall, R. (1976) 'A System Pathology of an Organization: the rise and fall of the old Saturday Evening Post', Administrative Science Quarterly, 21, 185-211


Jick, T. (1979) 'Mixing Qualitative and Quantitative Methods: triangulation in action', *Administrative Science Quarterly*, 24, 602-611


Karpik, L. (1972) 'Les Politiques et les Logiques d'Action de la Grande Entreprise Industrielle', Sociologie du Travail, 1, 82-105


Miles, M. (1979) 'Qualitative Data as an Attractive Nuisance: the problem of analysis', Administrative Science Quarterly, 24, 590-601


Strategic Management of Technological Innovation.
Chichester: Wiley


Rosch, E., Mervis, C., Gray, W., Johnson, D. and Boyes-Braem, P. (1976) 'Basic Objects in Natural Categories', Cognitive Psychology, 8, 382-439


Shrivastava, P. & Grant, J. (1985) 'Empirically Derived Models of Strategic Decision Making Processes', *Strategic Management Journal*, 6, 97-113


Zadeh, L. (1965) 'Fuzzy Sets', Information and Control, 8, 338-353
APPENDIX I

Semi-structured interview guide/schedule

Preamble. I am a lecturer in management and business studies. I am currently investigating how effective managers tackle the successful development of their firms over time.

My special interest is in proprietors who are involved in small, but growing firms. I'd like to know how the firm has evolved and changed since its formation; something of how and why its managers have acted as they have; and how they see themselves managing in the future.

My primary purpose is to understand as much as I can about what makes for effective and successful management in these circumstances, so that ultimately I can generalise my findings into advice for other managers embarking on similar kinds of venture.

To do this I would like in confidence to ask you a number of questions about your firm, your perceptions about your style of management, and the actions you deem to be important in developing the firm. I would like to tape record the discussion so that I make sure I do not miss important points.

I will use the tape for analysis afterwards, but the detail on it will remain strictly confidential and will neither be made public, nor discussed with other members of the firm. The first stage of my analysis will be to transcribe the tape into a typed document, a copy of which I will send you if you wish.

I am undertaking this enquiry because I believe much can be learned about effective management styles and skills by talking with effective managers, and this ultimately will be for the benefit of others. There is no financial reward involved for me in so doing.

1. When and how did the firm come into being?

2. What was your own role (if any) in this? How and why did you get involved when you did?

3. Can you clarify the part played by colleagues and/or other key players in the formation and development of the firm?

4. Please pin-point and describe the most important (milestone) events in the development of the firm upto the present time.

5. What is your present role and position in the firm?
6. Can you tell me a little about your work experience and education prior to the events you have described.

7. To what extent has this experience related to the contribution you have made and are making to the development of the firm? Some illustrations here would help.

8. Can you now explain in some detail what the firm currently does?

9. What do you see as the firm's main strengths and skills? What are your reasons for saying this?

10. Please tell me about the business environment in which the firm operates.
    (Probe gently for views about competition, rate of change, hostility, complexity etc.)

11. What changes do you expect in your business environment in the foreseeable future?

12. At the present time do you see opportunities in the business environment? If so, what are they, and how is the firm responding to them?

13. Do you see threats in the business environment? If so, what are they, and (how) is the firm responding to these?

14. To what degree does your firm offer unique or differentiated products or services in relation to other suppliers, and/or appeal to special customer groups?

15. In broad terms, why do you feel the firm has been successful so far?

16. In what ways are you defining success here? Do you monitor specific performance factors regularly, and if so, what are they?

17. To what extent do you think the success of the firm is the deliberate and conscious result of decisions and actions taken by the firm's managers?
    (Seek illustrations).

18. Turning to the internal organization of the firm, please comment on how you operate, for example, the division of responsibilities, number of staff, processes of reaching decisions etc.

19. What do you think it is that motivates you to continue to develop the firm? Are your colleagues motivated by the same things?
20. Continuing in a reflective mode, can you explain your style and philosophy of managing the firm. More specifically, what kind of "levers" can you/do you pull in order to make things happen, not only today or tomorrow, but in the longer term too?

(Without overt prompting, attempt to explore attitudes to planning, setting objectives, adaptiveness, risk taking, desire for change, use of power/authority, attempts to promote shared beliefs and views about the way to compete and behave etc.)

21. Can you give me some (more) examples of what you mean here?

22. What about your colleagues? Are their outlooks similar to yours in these respects? Does this mean you are able to work effectively together in practice?

23. In organizing your time, what do you regard as your major ongoing priorities? Do you find it possible and/or proper to delegate any of these?

(Without overt prompting, attempt to explore whether these are externally or internally oriented, eg. building external networks of contacts versus improving internal procedures etc.)

24. Looking ahead, do you expect any major changes to the position of the firm in relation to its markets and the business environment? Specifics would be helpful.

25. Do you expect any changes in your style of managing in the future? Specifics would be helpful.

(End of formal questioning)

A final question in relation to my enquiry, please tell me which (if any) of the following you would agree to my doing:

* A follow-up interview with you after I have considered your comments today
* Similar interviews with some of your colleagues
* Spending time in the firm as an unobtrusive observer watching how things are done
* Examining documents and records on a confidential basis for the purpose of clarifying details of the firm’s progress.
* Organising a joint discussion on topics of mutual interest to you and other colleagues using material that I can provide.