



1402782232

**SWP 27/89 THE POLITICAL ANATOMY OF DECISION
MAKING**

JOHN HENDRY
Lecturer in Strategic Management
Cranfield School of Management
Cranfield University
Cranfield
Bedford MK43 0AL
United Kingdom

Tel: +44 (0)1234 751122

Fax: +44 (0)1234 781806

The political anatomy of decision making

by

John Hendry

**Cranfield School of Management
Cranfield, MK43 0AL, UK
Tel: 0234-751122**

November 1988

ABSTRACT

In recent years there has been considerable interest in organizational decision making viewed as a political process. Although there is now a substantial body of literature devoted to this theme, however, much of it is rather vague and lacking in specificity as to the nature and elements of the political process. It also remains largely unconnected to the literatures on cognitive, cultural, and other social and psychological perspectives on the decision making process. In this paper we draw on an in-depth study of decision making in the British nuclear power reactor development program to explore the detailed anatomy of the politics of decision making, and to indicate its linkages with cognitive, cultural and other related elements.

Political perspectives on organizational decision making

The idea of analyzing the organization and its decision making processes from a political perspective goes back at least to Crozier's (1964) study of bureaucracy. Championed through the 1970s by Pettigrew and Pfeffer, it has found increasing support in the last decade. Following the work of Pfeffer and Salancik (1974) on the politics of university budget decision making, Pfeffer (1981) has given a detailed and thorough analysis of the sources and uses of power in organizations. In a series of in-depth longitudinal case studies of organizational change processes, Pettigrew (1973, 1977, 1985, and Mumford & Pettigrew, 1975) has repeatedly emphasized the political nature of both organizational decision making and the related implementation process.

Elsewhere Farrell and Peterson (1982), Gray and Ariss (1985), and Mintzberg (1985) have all emphasized the through and through political nature of organizations. Fahey (1981) has observed that strategic management decision processes are characterized by a high degree of political activity. And Kotter (1986) has argued that the development and use of political power is the central function of management. Hickson and others (1986), in a large scale study of 150 decision making case histories, have again highlighted political activity as one of the central features of the observed processes, and this conclusion has also been drawn from a diverse range of case studies by Welsh and Slusher (1986), Wilson (1982), Graham (1986), and Hendry (1988).

Focusing on the implementation of strategic change, Greiner (1986) has noted the importance of top management politics in determining the feasibility or otherwise of proposed change processes, while Guth and Macmillan (1986) have drawn attention to the power of middle managers not only to delay, mitigate or redirect implementation processes, but to sabotage them altogether.

The departmental politics of strategic decision making, and in particular the sources of departmental power, have been analyzed by Hambrick (1981) and Jemison (1981, 1984), while MacKenzie (1986) has analyzed the exercise of power through committees. Narayanan and Fahey (1982) and Nielsen and Rao (1987) have analyzed the emergence of power in dominant coalitions.

A political perspective is also implicit in the literature on innovation champions and the implementation of new technologies (Schon, 1963; Chakrabarti, 1974; Roberts, 1968, Leonard-Barton and Kraus (1985); Quinn and Mueller, 1963; Burgelman, 1983), and in that on inter-departmental conflict, especially in the context of product innovation (Gupta and others, 1985, 1988; Souder, 1987, 1988; Walton and Dutton, 1969; Seiler, 1963, LaPorte, 1967; Lawrence and Lorsch, 1967; Rubinstein and others, 1976; Souder and Chakrabarti, 1980).

Finally, two major process studies of strategic change, while themselves emphasizing the rationality of the processes observed, have also served to confirm their political nature. Drawing on the longitudinal case studies of Miller and Friesen (1980, 1984), in which strategic change decisions were observed to occurring revolutionary clusters interspersed by long evolutionary periods of incremental change, Mintzberg (1987, and Mintzberg and McHugh, 1985) described the incremental phase of development in overtly political terms, with the decision makers managing a continuous series of emergent potential strategies. Building on this work, but more especially on Quinn's (1980) in-depth study of the strategic decision process, again characterized by incrementalism, and on his own in-depth study of the strategic process in a single firm, Johnson (1987, 1988) again emphasized the political nature of the decision making process.

There can be little doubt, in the light of this literature, that the political perspective on organizations and their decision making processes is an important one. If it is to be operationalized so as to

be useful as well, however, it needs to be expressed in terms of clear frameworks of analysis, and there has so far been relatively little progress in this direction. The studies of particular aspects of the politics of organizational decision making do not share any common framework. And much of the more general work has been distinctly vague, as the writers have been content to point out, or sometimes merely to imply, the political nature of the process being described without any detailed analysis of the how the political activity arises or what form it takes. Only Pfeffer (1981) has attempted a comprehensive analysis, and though illustrated by empirical case studies this remains a predominantly theoretical study. Despite Pfeffer's own call for further empirical work to test and fill out his own provisional conclusions, moreover, his framework has remained virtually untested and indeed unused by more recent studies.

In a recent detailed study of organizational decision making in the British nuclear power development programme in the 1950s, however, Hendry (1988) highlighted the political nature of the decision making process observed and analyzed it in terms of the elements of political context and of political activity. In this paper we shall summarize that analysis and compare and combine it both with the framework provided by Pfeffer and with the more specific insights of some of the other writers in the field.

Cognitive, cultural, and group psychology perspectives

A second weakness of the literature on organizational politics is that it is almost entirely unconnected to the other substantial bodies of research that have been developed, as it has, in qualification of or opposition to the traditional rational (whether synoptic or incrementalist) interpretations of decision making.

Interest in the cognitive aspects of decision making can be traced back to the pioneering work of Simon (1947, and March and Simon, 1958) and Lindblum

(1959) on satisficing and "muddling through". Noting the human impossibility of a comprehensive analysis of a complex problem in which all possibly relevant information was absorbed and processed, both authors emphasised the importance of the sequential comparison of limited alternatives in the decision making process. Simon also noted the use of established repertoires as alternatives for choice in familiar situations, and the tendency for decision makers to concentrate on the discovery of satisfactory alternatives, rather than searching for optimal ones.

In recent years there has been a renewed surge of interest in such cognitive influences on decision making. Gioia and Poole (1984) and Lord and Kernan (1987) have applied script theory (Schank and Abelson, 1977) to an organizational setting, describing how familiar or conventional stimuli are interpreted not as what they are but in terms of the inferred scripts or sequences of events with which they are habitually associated. Dutton and Jackson (1987) have drawn on cognitive categorization theory (Rosch and Lloyd, 1978) to show how the complexity of the stimuli with which decision makers are bombarded is handled by a cognitive process of selection and grouping in terms of meaningful labels. Kiesler and Sproull (1982) have explored the characteristics and fallacies of managers' environmental analyses predicted by social cognition theories. And Schwenk (1984) and Duhaime and Schwenk (1985) have also discussed the use of such cognitive simplifying processes in strategic decision making in general and the making of acquisition and disposal conditions in particular. Grinyer and Spender (1979), Huff (1982) and Johnson (1986) have highlighted the use of simplified frameworks for decision making in the form of industry or firm "recipes".

Building on a literature on the psychology of decision making under risk (Tversky and Kahneman, 1981; Kahneman and Tversky, 1979; Payne and others, 1980, 1891), Crum and Derkinderen (1986) have drawn attention to the universal tendencies to either ignore or overestimate the

probability of very unlikely events, and to overvalue the elimination of small risks as against the lessening of large ones, in the strategic decision making context. Barnes (1984) has also explored a variety of cognitive biases on risk evaluation.

The effect of these cognitive influences on strategic decision making appears to be particularly marked when perceptions of risk interact with the use of categories. Dutton (1986) has drawn attention to the way issues perceived as "crisis" or "non-crisis" issues are handled in very different ways by decision making teams, and Dutton and Jackson (1987) have explored the strategy-making implications of the cognitive categories of "threat" and "opportunity". Crum and Derkinderen (1986) have noted that decision makers tend to be more concerned about negative than about positive outcomes of their decisions, and have analyzed their tendency to avoid risks when seeking gains (opportunity behaviour) but accept them when seeking to avoid losses (threat behaviour), distinguishing in the latter case between the "losses" associated with accepted failure and the "costs" associated with an ongoing but as yet unresolved failure. A number of writers have also noted the tendency toward risk-seeking behaviour when faced with the perception of losses (Staw and Ross, 1978; Fox and Staw, 1979; Staw, 1981; Bowman, 1982; Brockner and others, 1986; Whyte, 1986).

If cognitive effects on decision making were universal, then in some sense they would provide no real challenge to the traditional rational view of strategic decision making. But they are not of course. Quite apart from the fact that people may to some extent overcome the limitations by being aware of them, there are also important personal differences. In the context of risk behaviour, Brockner and others (1986) have analyzed the process of entrapment, by which people become increasingly committed to a failing or ineffective course of action, in terms of the relationship between different types of feedback and personal self-identity. And Greenberger and Strasser (1986), analyzing people's need to maximise their perceived

control over the environment and their tendency to seek to continue balancing their perceptions even when the reality diverges from them, have noted the importance of this need in influencing decision making behaviour.

More generally, Hambrick and Mason (1984) have noted the influence of age on strategic choices. Guth and Tagiuki (1965) have stressed the immense importance of personal values as determinants of strategy. And Kets de Vries and Miller (1984) have identified the neurotic styles of top executives as important determinants of their strategic choices. Mitroff (1983) has developed the Jungian notion of archetypes to explore how decision makers are influenced by the social images they create of themselves, their institutions and their environments. Building on a tradition of laboratory based psychological categorization, Henderson and Nutt (1980) have used Meyers-Briggs indicators (themselves based on Jungian categories) to link decision makers' behaviour with cognitive style. And Taggart and others (1981, 1985) have expanded this approach to embrace a range of cognitive measures correlated in terms of EEG readings.

Strategic decision making is also subject to cultural influences, and while the literature on this is often unspecific it is nevertheless compelling. At the broadest level Hayes and Abernathy (1980) draw attention to the pervasive influence of American managerial ideals and what they term the gospels of pseudo-professionalism on what is considered important in the strategy making process, how this process is conducted and what kinds of decisions are made. Argyris (1983) argues that people are socialised in early life to reason in ways that may be appropriate for relatively simple problem-solving but are counterproductive for solving the complex, difficult and threatening problems characteristic of strategic decision making; and that unaware of this they create organizational conditions that inhibit effective decision making, and organizational cultures which reinforce and perpetuate these conditions. At the level of individual corporations,

Thompson and Wildavsky (1986), drawing on the work of the anthropologist Mary Douglas (1973), present a typology of organizational cultures, each associated with a characteristic style of information processing and decision making. Gunz and Whitley (1985) use case studies to illustrate the effect of corporate culture on the response to external economic stimuli. And Daft and Weick (1984) explore how an organizations intrusiveness in respect of its environment and the social assumptions it makes about its environment affect its strategic decision making.

While developing a typology of organizations, Thompson and Wildavsky also stress that each organization should itself be seen as a pattern of suborganizations with contradicting organizational cultures, and the notion of a unified corporate culture, so pervasive of the popular literature, is also challenged strongly by others. Gregory (1983), Riley (1983) and van Maanen and Barley (1985) all argue from empirical evidence that organizations should be seen as systems of multiple integrated subcultures, and this reinforces the point made by Dean (1974), Hayes and Abernathy (1984), Jemison (1981, 1984), and Hambrick and Mason (1984) that different subunits of the organization also exert cultural influences on strategic choice. Functional departments in particular are characterised by different values, time horizons, and perceptions of relative importance, and also reflect the different cultural environments with which they interact. Depending on the relative dominance of the functions in the culture and politics of the firm, these subcultural characteristics will be reflected in varying proportions in the strategic decision making process.

Perhaps the most thorough analysis of the corporate culture and its effect on decision making processes is that provided by Schein (1985), who also demonstrated how cultural phenomena arise out of group phenomena. And other writers too have indicated how decision making is conditioned by group effects. Janis (1972) and Janis and Mann (1977) have made a strong case for a conflict theory of

decision making in which the process is directed primarily by participants' responses to the stress generated by the decisional conflicts that arise in any difficult and consequential decision situations. In individuals these responses include problem avoidance and paralyzing hyper-vigilance. In groups they result in the phenomenon of "groupthink", in which retaining the approval of other members of the team becomes more important than finding a good solution to the problem in hand. Weick (1969) also notes the tendency of organizations to be solution rather than problem oriented, accepting any solution rather than looking for the best one, and Schweigger and others (1986) have reinforced the importance of this conclusion. In a series of laboratory tests they found that decisions achieved by consensus and characterized by the satisfaction and agreement of the decision makers and their willingness to continue working as a team were of poorer quality than those characterized by argument and dissent.

Given this wide variety of cognitive, cultural and behavioural influences on the strategic decision making process, and given too that decision makers are not generally aware, or at least fully aware, of the influences (as Isenberg (1984) points out, senior managers tend to respond intuitively as well as rationally to problem situations), one might expect that the decision making process itself would be characterized by the non-rational resolution of conflicting influences: that it would, in other words, be a political process. In fact, however, the political literature makes virtually no reference to the cognitive, cultural and group effects referred to here, no do writers on these effects make any connection between their own work and that on the politics of decision making. Where the different approaches are discussed in the same breath (e.g. Johnson, 1987; Morgan, 1986), the implication is that they represent alternative viewpoints, which may perhaps be usefully superposed, but which are effectively independent.

On the basis of our case study we shall

however argue here that the different approaches are intimately related. In particular we shall argue that the political process is dependent on the existence of certain cognitive, cultural and group effects, and that these effects require a degree of political activity for their resolution.

The case history: nuclear power reactor development in Britain

Between the end of the Second World War and 1959 the United Kingdom Atomic Energy Authority and its predecessor organization investigated seriously eleven different reactor designs as candidates for inclusion in the British civil nuclear power programme. One of these was the magnox reactor originally developed for military plutonium production which turned out to be a useful power producer as well and formed the basis of the first phase of the nuclear power programme. Of the remaining ten, six had already been rejected by 1959, including the pressurized water reactor (PWR) which formed the basis of the American programme, which had, for a substantial period in the mid-50s, occupied pole position in the British programme, and which has since been reintroduced into the British programme at the expense of the AGR in the mid-80s. One was carried through to an experimental reactor on a prolonged time scale as part of a European project, having been effectively rejected for the British programme. One was carried through to the prototype stage in the late 1960s as an insurance policy. The remaining two were effectively selected as future product lines and given development priority: the Advanced gas-cooled reactor (AGR), which duly became the mainstay of the power programme in the 1960s and 1970s, and the fast reactor, which remained until very recently the favoured approach to nuclear power development in the longer term.

Although the continued rejection of the PWR design in the 1960s became a matter of national political debate (Williams, 1980), these development decisions, which effectively determined the outcome of that

political debate, are generally portrayed as technical ones, based on a combination of technological and economic (corresponding in this context to market) factors. The AGR has always looked a strange choice on these criteria, however, and the choice of the fast reactor, beset by persistent safety and other development problems, has also looked increasingly open to question. The question addressed in the case study, therefore, was how the development decisions actually came about.

The study was conducted as part of an officially sanctioned history of the UKAEA, and benefitted from full access to all archival and other documentation both in the organization itself and in related government departments. Because of the public nature of the body, this documentation was extensive, and included correspondence, working reports and committee minutes at all levels of the decision making process. An extensive interview programme was also conducted. The results of the study, and the detailed analysis underlying the brief summary given here have been published in detail in a working paper (Hendry, 1988). The principal conclusion reached was that the decision making process observed had relatively little to do with either technology or economics, as would be expected on a purely rational interpretation, or with any combination of these, but an awful lot to do with organizational politics. If we adopt Pfeffer's definition of organizational politics as "involv[ing] those activities taken within organizations to acquire, develop, and use power and other resources to obtain one's preferred outcomes in a situation in which there is uncertainty or dissensus about choices", the decision making process was a process of organizational politics. It consisted primarily in a process of manoeuvring and negotiation between individuals and interest groups, in which the wider interests of these individuals and groups and their overall power relationships were every bit as important as their views on the matter in question.

The elements of this political process were many, but some of the main ones were

easily isolated. They could be classified into elements of political context and elements of political activity, and the former group could be further subdivided into elements of preference and elements of relationship.

There were five apparent elements of preference. The first was of course an objective technical element, which even when it was not dominant (and it was rarely dominant) was almost always present to some extent. Some options were quite simply technologically impossible, while others were of proven feasibility. Some options were clearly preferable to others either on technological or economic grounds or even on both together. One material, for example, may have had all the qualities of another one, with additional qualities as well, with fewer drawbacks and at a lower cost. In such circumstances decision making was usually fairly straightforward (though it was not always entirely free of more subjective elements), and much of the nuts and bolts decision making in the reactor development programme was predominantly of this kind.

Even when there was a clear technological preference, however, there was no guarantee that this would correspond to an economic preference or vice versa, and while some technological alternatives could be reduced to economic considerations this was often not feasible in practice, even though it might be in principle. Moreover, in any reasonably complex design process the technological options did not usually lend themselves to objective choice. Each option had attractions incommensurable with those of its rivals; each had unknown properties and implications; each individual choice interacted with a host of others; and there were often aesthetic and other design considerations too. The decision process therefore depended on a host of other subjective preferences, and these operated at personal, group, and divisional levels, as well as intruding from outside the organization altogether.

The existence of strong personal preferences was amply evidenced in the case study, and it was clear also that such

preferences were often strong enough to override substantial "objective" arguments against them.

The case study also revealed the presence of group preferences. Almost all the reactor project teams developed strong preferences in favour of the reactor types on which they were working, while other groups such as a small policy department and a reactor safety group also developed distinctive sets of preferences.

While small group effects were clearly observable in the case study, it was the larger scale cultural preferences of the divisions of the organization that appeared most dominant. In many contexts the preferences of the R&D, engineering, and where appropriate the headquarters administration divisions, could be almost guaranteed to differ, irrespective of the technical arguments to hand.

Besides all these preferences internal to the organization, there were also important external preferences. Like any organization, the UKAEA had external as well as internal stakeholders, or constituencies to which it was in varying ways responsible. And these stakeholders often had technological preferences that were only marginally related to the technological decision criteria used inside the organization. Private firms favoured the prosecution of whatever reactor projects they might themselves be able to participate in or benefit commercially from. Government preferences were strongly influenced by the political credit to be gained from alternative initiatives, and by such things as the possibilities for European collaboration.

All these different types of preferences were elements of the political context of the decision making process, and so too were the different relationships in terms of which contrasts between preferences were organizationally embodied. Interpersonal relationships were clearly important, and took many forms. In many cases the conflicts arising from contrasting preferences could be resolved, but in others they could not. The conflicts

between some of the key R&D staff were never resolved nor even brought to the fore, but operated as a passive constraint on communication and debate. This severely limited the potential for the formulation and implementation of any coherent policy with significant repercussions on the ways in which the cultural preferences of the R&D division entered into the decision making process. Within the AGR design management team in the engineering division there were unresolved, open but repressed conflicts, which distorted all aspects of technological debate and severely limited the decision making procedures available to the team. Before the formation of the UKAEA (before which the atomic energy project had operated within the civil service), the conflict between the charismatic directors of the R&D and engineering divisions was largely of the passive type, but once they were forced into frequent contact through a committee system introduced with the new organization the conflict became open and active, again with important consequences for the decision making process.

Finally the organizational handling of intergroup and intercultural relationships was also important. In the case of the relationship between the R&D and engineering divisions, for example, the organizational structure resulted in the different preferences of the two divisions finding expression very largely in the dialogue between their leaders, in which it was compounded by their own interpersonal conflict. Other groups, in contrast, were able to interact without encountering interpersonal problems, and in some cases there were even strong personal ties between rival interest groups. All this affected the ways in which preferences were presented and debated, the processes by which decisions were reached, and the types of decisions that resulted.

The elements listed above make up the political context of the decision making, but our the case study also revealed another set of elements relating this time to the political activity itself. These elements appeared to fall into two classes,

one concerned with the process of decision making through committees, which in this particular study provided in principle the medium for all decision making; and the other concerned with the ways in which decisions were effectively made outside the committee context.

Within the committees, two modes of decision making were apparent. In the top UKAEA committees, the model appears to have been that of political satisficing. Faced with two rival experts and no real means of judging between them on technical grounds, the chairman tended to seek a decision pattern that would favour both sides equally, so that while neither was pleased with the result both could be satisfied. Where there was a clear weight of technical opinion he would attempt to incorporate it, but his main concern appears to have been that of coping with the politics rather than deciding on the technology. On the non-technological matters of defence and international relations with which he was primarily concerned as chairman, it should be said, his approach was much stronger and more issue-oriented, but the political element remained. Outside the top committees, in a technical programme committee, in various high level working parties and in the individual reactor development committees, the dominant approach to decision making was one of attempted optimization, in which the chairman sought, however vainly or however blindly, to analyze the complex of preferences of all kinds surrounding an issue and reach an objectively best technical decision.

Of course, both these approaches lent themselves to manipulation, and it is that political manipulation which emerged from the study as one of the most significant elements of the political activity. The top management committees could be manipulated by the careful timing of proposals, and by the use of dummy proposals, and it was clear from the study that the engineering division in particular were masters of this art. Since they were convinced of their own position, and since there was nothing whatsoever to be said in favour of a decision dictated purely by

political compromise, this manipulation was, moreover, quite reasonable and arguably quite justifiable. Manipulation of the other committees could be and was achieved by the time-honoured practices of loading the committee with supporters, overloading it with evidence, the use of false or fictional authorities, and the timing of proposals to coincide with the natural peaks and troughs of project confidence. And both types of decision process were susceptible to the lobbying of apparently unbiased committee members to win their support.

Outside the committee framework, two elements of political activity were particularly noticeable: the use of an effective veto, and the use of external influences. The use of external influences was practised most visibly by the director of the R&D division, whose connections in government and official circles were often more potent than his influence within the organization. No matter how much political control he could exert over his subordinates, the chairman could not easily resist a request from the Prime Minister or the Foreign Office. The use of an effective veto, on the other hand, was the main weapon of the director of the engineering division, and of all the elements of political activity observed it was probably the most potent. In the end decisions tended to go the way of the engineering division for the very simple reason that there was no means of forcing them to undertake a project they did not wish to. And by concentrating their political activity on establishing and maintaining their responsibility for the most advanced stages of any reactor development project they were able to ensure that all such projects could, if they wished, be abandoned.

The sources and elements of the political process

The case study analysis was intentionally conducted without reference to any theoretical framework for the analysis of political activity in organizations, and the framework outlined above was in fact

developed before the author had met with the work of Pfeffer (1981). It is clear, however, that Pfeffer's analysis of the sources, strategies and tactics of power in organizations could have been applied to the case study.

As sources of power, Pfeffer lists resource provision, uncertainty coping, being irreplaceable, being in a position to affect the premises, agenda or information input to the decision making process, representing a consensus, and possessing political skills. As indicated in table 1, all these sources were encountered in the case study.

Similarly with strategies and tactics, Pfeffer lists the selective use of objective criteria, the use of an outside expert, controlling agendas, forming coalitions, whether internally or externally to the organization, the use of committees, and the use of cooptation to influence the positions of key actors. Again, as indicated in table 2, all these could be observed in the case study.

Whilst confirming the elements of Pfeffer's analysis, however, the study also suggests some modifications to it. In respect of the sources of power, control over the boundaries of the organization, identified by Hambrick (1981) and Jemison (1981, 1984) as a key source of departmental power in organizations, was also important in the context of the case study. Its effects were not explicitly prominent, but it was clearly highly valued by the divisions, each of which sought control over channels of communication with industry, the electricity authorities, raw materials suppliers, and government.

In respect of the strategies and tactics of power, the use of an effective power of veto, or more generally of the power of non-cooperation, emerged from the case study as by far the most significant and effective tactic or strategy. This observation is mirrored, moreover, in one of the few other case studies of organizational decision making to have been carried out in comparable depth, that by Graham (1986) on RCA's videodisc

development.

Finally, and in our view crucially, Pfeffer's framework contains nothing corresponding to our "elements of political context". This is partly because Pfeffer's focus is on power rather than on politics, and partly perhaps because the context is taken for granted. But a clear statement of the elements of context is in our view essential if we are to arrive at a clear and useful framework for the analysis of the political process in organizations. The political process depends upon the existence of political units, be they individuals, groups or cultures, with differing sets of preferences. It also depends on how these units are organizationally related to each other. Only after we have identified the units, their preference differences and their relationships, can we begin to analyze how the differences are resolved in terms of the sources, strategies and tactics of power. It therefore seems worthwhile bringing together Pfeffer's framework, with the modifications suggested above, with the appropriate aspects of the framework developed in our case study, within a single structure for the analysis of the politics of organizational decision making. This we have done in figure 1.

Links between perspectives

A second important reason for including in our framework the elements of political context is that they provide a means of relating the political analysis with analyses of cognitive, cultural and group processes.

Within the context of the case study we were not able to explore in detail the origins of the personal preferences we observed. In general, however, such personal preferences would appear to lie in the social context of individual development, and in particular in people's education, training and work experiences. Drawing on the cognitive literature summarized above, it would also appear that the ways in which they become established and the force which they acquire may also have psychological

origins. The presence of unconscious cognitive simplifying processes may serve to weld together elements of experience into hardened preferences, and once established in the unconscious the interaction with archetypal elements may serve to further insulate them from contrary experiences and arguments.

Cognitive processes such as these are not in themselves political, but nor can the processes of political negotiation be fully understood without reference to them. In particular the processes by which individual preferences are maintained must clearly be related closely to the processes by which they dominate, are changed, or are overridden within the political arena.

The same is true of the processes by which group preferences are formed, as described by Schein (1985) and others. As groups develop the shared experience and bonds formed as part of the development process lead to a psychology in which loyalty to the group and to what it stands for becomes an important determinant of decision making. In a technical context the group's technical preferences become fixed, and questions of group survival and prestige become every bit as important as those of technical merit, and often more so. What is important to the group is then reflected in their political attitudes, manoeuvres and negotiations.

The same comments apply also to cultural preferences. According to Schein (1985), the effects of organizational cultures may be seen as development of those of groups, and within our case study this was certainly the case. The characteristic preferences of the R&D and engineering divisions were very much those of their founding groups. As the organizations grew these preferences were transmitted to newcomers (themselves selected and self-selected in accordance with the established cultures) through their leaders and customs, and through the reinforcement of supporting arguments. But whereas group preferences tended to be fairly specific, often tied to the project and technological concerns binding the groups together, the cultural preferences of the divisions were

more general. These were concerned, as one might expect, with social and professional values, but also with such matters as the role of private industry, the philosophy of design development, and the strategy for comparing and evaluating alternative options, all of which played key roles in the decision making process.

As with the elements themselves, so with their relationships. For whereas a purely rational model of decision making might have little room for interpersonal or intergroup relations, political activity is of its nature concerned intimately with such things. In general, politics simply cannot exist without people, groups, preferences and relationships. Any analysis of it must consequently be related to the analysis of these things.

BIBLIOGRAPHY

ARGYRIS, C., "Productive and counterproductive reasoning processes", in SRIVASTVA (1983), 25-57.

BARNES, J.H. jr, "Cognitive biases and their impact on strategic planning", Strategic Management Journal, 5 (1984), 129-137.

BOWMAN, E.H., "Risk-seeking by troubled firms", Sloan Management Review, 23(4) (1982), 33-42.

BOWMAN, E.H., "A risk-return paradox for strategic management", Sloan Management Review, 21(3) (1980), 17-31.

BROCKNER, J., and others, "Escalation of commitment to an ineffective course of action: the effect of feedback having negative implications for self-identity", Administrative Science Quarterly, 31 (1986), 109-126.

BURGELMAN, R.A., "A process model of internal corporate venturing in the diversified major firm", Administrative Science Quarterly (1983), 223-244.

CHAKRABARTI, A.K., "The role of champions", California Management Review 17(2) (1974), 58-62.

CROZIER, L., The bureaucratic phenomenon (Tavistock, 1964).

CRUM, R.L., and DERKINDEREN, F.G.J., "Conceptual development of strategic decision models", in MCGEE and THOMAS (1986).

DAFT, R.L., and WEICK, K.E., "Towards a model of organizations as interpretative systems", Academy of Management Review, 9 (1984), 284-296.

DEAN, R.C., "The temporal mismatch: innovation's pace vs. management's time horizon", Research Management, May 1974, 13-15.

DOUGLAS, M., Natural Symbols: Explorations in Cosmology (Vintage, 1973).

- DUHAIME, I.M., and SCHWENK, C.R., "Conjectures on cognitive simplification in acquisition and divestment decision making", Academy of Management Review, 10 (1985), 287-295.
- DUTTON, J.E., and JACKSON, S.E., "Categorizing strategic issues: links to organizational action", Academy of Management Review, 12 (1987), 76-90.
- DUTTON, J.E., "The processing of crisis and non-crisis strategic issues", Journal of Management Studies, 23 (1986), 501-518.
- FAHEY, L., "On strategic management decision processes", Strategic Management Journal, 2 (1981), 43-60.
- FARRELL, D., and PETERSEN, J.C., "Patterns of political behavior in organizations", Academy of Management Review, 7 (1982), 403-412.
- FOX, F.V., and STAW, B.M., "The trapped administrator: effects of job insecurity and policy resistance upon commitment to a course of action", Administrative Science Quarterly, 24 (1979), 449-471.
- FROST, P.J., and others, eds, Organizational Culture (Sage, 1985).
- GIOIA, D.A., and POOLE, B.P., "Scripts in organizational behavior", Academy of Management Review, 9 (1984), 449-459.
- GRAHAM, M., RCA and the Videodisc (Cambridge University Press, 1986).
- GRAY, B., and ARISS, S.S., "Politics and strategic change across organizational life cycles", Academy of Management Review, 10 (1985), 707-723.
- GREENBERGER, D.B., and STRASSER, S., "Development and application of a model of personal control in organizations", Academy of Management Review 11 (1986), 164-177.
- GREGORY, K.L., "Native-view paradigms: multiple cultures and culture conflicts in organizations", Administrative Science Quarterly, 28 (1983), 359-376.
- GREINER, L.E., "Top management politics and organizational change", in SRIVASTVA (1986), 115-177.
- GRINYER, P.H., and SPENDER, J.C., "Recipes, crises and adaptation in mature businesses", International Studies of Management and Organization, 9(3) (1979), 113-123.
- GUNZ, H., and WHITLEY, R., "Managerial cultures and industrial strategies in British firms", Organization Studies, 6 (1985), 247-273.
- GUPTA, A.K., and others, "The R&D-marketing interface in high technology firms", Journal of Product Innovation Management 2(1) (1985), 12-24.
- GUPTA, A.K., and WILEMON, D., "The credibility-competence connection at the R&D-marketing interface", Journal of Product Innovation Management, 5 (1988), 20-31.
- GUTH, W.D., and MacMILLAN, I.C., "Strategy implementation versus middle management self-interest" Strategic Management Journal 7 (1986), 313-328.
- GUTH, W.D., and TAGIUKI, R., "Personal values and corporate strategy", Harvard Business Review, September-October 1965, 123-132.
- HAMBRICK, D.C., "Environment, strategy and power within top management teams", Administrative Science Quarterly, 26 (1981), 253-276,
- HAMBRICK, D.C., and MASON, P.A., "Upper echelons: the organization as a reflection of its top managers", Academy of Management Review, 9 (1984), 193-206.
- HAYES, R.H., and ABERNATHY, W.J., "Managing our way to economic decline", Harvard Business Review, July-August 1980, 67-77.
- HENDERSON, J.C., and NUTT, P.C., "The influence of decision style on decision

making behavior", Management Science, 26 (1980), 371-386.

HENDRY, J., "Technological decision making in its organizational context: nuclear power reactor development in Britain", forthcoming 1988.

HICKSON, D.J., and others, Top Decisions: Strategic Decision Making in Organizations (Basil Blackwell, 1986).

HUFF, A.S., "Industry influences on strategy reformulation", Strategic Management Journal, 3 (1982), 119-131.

ISENBERG, D.J., "How senior managers think", Harvard Business Review, November-December 1984, 80-90.

JANIS, I.L., and MANN, L., Decision Making: A Psychological Analysis of Conflict, Choice and Commitment (Free Press, 1977).

JANIS, I.L., Victims of Groupthink (Houghton Mifflin, 1972).

JEMISON, D.B., "The importance of boundary spanning roles in strategic decision making", Journal of Management Studies, 21 (1984), 131-152.

JEMISON, D.B., "Organizational versus environmental sources of influence in strategic decision-making", Strategic Management Journal, 2 (1981), 77-89.

JOHNSON, G., Strategic Change and the Management Process (Basil Blackwell, 1987).

JOHNSON, G., "Rethinking incrementalism", Strategic Management Journal, 9 (1988), 75-92.

JOHNSON, G., "Managing strategic change - the role of strategic formulae", in MCGEE and THOMAS (1986).

KAHNEMAN, D., and TVERSKY, A., "Prospect theory: an analysis of decision models under risk", Econometrica (March, 1979), 262-291.

KETS DE VRIES, M.F.R., and MILLER, D., "Personality, culture and organization", Academy of Management Review, 11 (1986), 266-279.

KETS DE VRIES, M.F.R., and MILLER, D., "Neurotic styles and organizational pathology", Strategic Management Journal, 5 (1984), 35-56.

KIESLER, S., and SPROULL, L., "Managerial response to changing environments: perspectives on problem sensing from social cognitions", Administrative Science Quarterly, 27 (1982), 548-570.

KOTTER, J.P., "Why power and influence are at the very core of executive work", in SRIVASTVA (1986).

LaPORTE, T.A., "Conditions of strain and accommodation in industrial research organizations", Administrative Science Quarterly 12(2) (1967), 21-38.

LAWRENCE, P.R., and LORSCH, J.W., "Differentiation and integration in complex organizations", Administrative Science Quarterly 12 (1967), 1-47.

LAWRENCE, P.R., and LORSCH, J.W., Organization and Environment: Managing Differentiation and Integration (Harvard Business School, 1967).

LEONARD-BARTON, D., and KRAUS, W.A., "Implementing new technology", Harvard Business Review, November -December 1985, 102-110.

LINDBLUM, C.E., "The science of 'muddling through'", Public Administration Review, 19 (1959), 79-88.

LORD, R.G., and KERNAN, M.C., "Scripts as determinants of purposeful behavior in organizations", Academy of Management Review, 12 (1987), 265-277.

MACKENZIE, K.D., "Virtual positions and power", Management Science, 32 (1986), 622-

MARCH, J.G., and SIMON, H.A., Organizations (Wiley, 1958).

- MCGEE, J., and THOMAS, H., Strategic Management Research: a European Perspective (Wiley, 1986).
- MILLER, D., and FRIESEN, P.H., "Momentum and revolution in organizational adaptation", Academy of Management Journal, 23 (1980), 591-614.
- MILLER, D., and FRIESEN, P.H., Organizations: A Quantum View (Prentice Hall, 1984).
- MINTZBERG, H., and McHUGH, A., "Strategy formation in an adhocracy", Administrative Science Quarterly, 30 (1985), 160-197.
- MINTZBERG, H., "The organization as a political arena", Journal of Management Studies, 22 (1985), 133-154.
- MINTZBERG, H., "Crafting strategy", Harvard Business Review, July-August 1987, 66-77.
- MITROFF, I.I., and MASON, R.O., "Stakeholders of executive decision making", in SRIVASTVA (1983), 144-168.
- MITROFF, I.I., "Archetypal social system analysis: on the deeper structure of human systems", Academy of Management Review 8 (1983), 387-397.
- MITROFF, I.I., Stakeholders of the Organizational Mind (Jossey-Bass, 1983).
- MORGAN, G., Images of Organization (Sage, 1986).
- MUMFORD, E., and PETTIGREW, A., Implementing strategic decisions (Longman, 1975).
- NARAYONAN, V.K., and FAHEY, L., "The micro-politics of strategy formulation", Academy of Management Review, 7 (1982), 25-34.
- NIELSEN, E.H., and RAO, M.V.H., "The strategy-legitimacy nexus: a thick description", Academy of Management Review, 12 (1987), 523-533.
- PAYNE, J.W., and others, "Translation of gambles and aspiration level effects in risky choice behavior", Management Science, 26 (1980), 1039-1069.
- PAYNE, J.W., and others "Further tests of aspiration level effects in risky choice behavior", Management Science, 27 (1981), 953-958.
- PETTIGREW, A.M., "Strategy formulation as a political process", International Studies of Management and Organization, 7(2) (1977), 72-87.
- PETTIGREW, A.M., The Awakening Giant: Continuity and Change in ICI (Basil Blackwell, 1985).
- PETTIGREW, A.M., The Politics of Organizational Decision Making (Tavistock, 1973).
- PFEFFER, J., and SALANCIK, G.R., "Organizational decision making as a political process: the case of a university budget", Administrative Science Quarterly, 19 (1974), 135-151.
- PFEFFER, J., Power in Organizations (Pitman, 1981).
- QUINN, J.B., and MUELLER, J.A., "Transferring research results to operations", Harvard Business Review, January-February 1963.
- QUINN, J.B., Strategies for Change: Logical Incrementalism (Irwin, 1980).
- RILEY, P., "A structurationist account of political cultures", Administrative Science Quarterly 28 (1983), 414-437.
- ROBERTS, E.B., "A basic study of innovators: how to keep and capitalize on their talents", Research Management, July 1968, 249-266.
- ROSCH, E., and LLOYD, B., eds, Cognition and Categorization (Erlbaum, 1978).
- RUBINSTEIN, A.H., and others, "Factors influencing innovation success at the

- project level", Research Management 19(3) (1976), 33-37.
- SCHANK, R.P., and ABELSON, R.P., Scripts, Plans, Goals and Understanding: An Enquiry into Human Knowledge Structures (Erlbaum, 1977).
- SCHEIN, E.M., Organizational Culture and Leadership (Jossey-Bass, 1985).
- SCHON, D.A., "Champions for radical new inventions", Harvard Business Review, March -April 1963.
- SCHWEIGGER, D.M., SANDBERG, W.R., and RAGAN, J.W., "Group approaches for improving strategic decision-making: a comparative analysis of dialectical enquiry, devil's advocate, and consensus", Academy of Management Journal, 29 (1986), 51-71.
- SCHWENK, C.R., "Cognitive simplification processes in strategic decision-making", Strategic Management Journal, 5 (1984), 111-128.
- SEILER, J.A., "Diagnosing interdepartmental conflict", Harvard Business Review, 1963, 121-132.
- SIMON, H.A., Administrative Behavior (New York, 1947)
- SOUDER, W.E., "Managing relations between R&D and marketing in new product development projects", Journal of Product Innovation Management, 5 (1988), 6-19.
- SOUDER, W.E., and CHAKRABARTI, A.K., "Managing the coordination of marketing and R&D in the innovation process", in DEAN and GOLDHAR (1980).
- SOUDER, W.E., "Effectiveness of nominal and interacting group decision processes for integrating R&D and marketing", Management Science 23 (1977), 595-605.
- SOUDER, W.E., Managing New Product Innovations (Lexington, 1987).
- SRIVASTVA, S., and others, eds, Executive Power: How Executives Influence People and Organizations (Jossey Bass, 1986).
- SRIVASTVA, S., ed., The Executive Mind (Jossey-Bass, 1983).
- STAW, B.M., and ROSS, J., "Commitment to a policy decision: a multi-theoretical perspective", Administrative Science Quarterly, 23 (1978), 40-64.
- STAW, B.M., "The escalation of commitment to a course of action", Academy of Management Review, 6 (1981), 577-587.
- TAGGART, W., and ROBEY, D., "Minds and managers: on the dual nature of human information processing and management", Academy of Management Review, 6 (1981), 187-195.
- TAGGART, W., ROBEY, D., and KROECK, K.G., "Managerial decision styles and cerebral dominance: an empirical study", Journal of Management Studies, 22 (1985), 175-192.
- THOMPSON, M., and WILDAVSKY, A., "A cultural theory of information bias in organizations", Journal of Management Studies 23 (1986), 273-286.
- TVERSKY, A., and KAHNEMAN, D., "The framing of decisions and the psychology of choice", Science (January, 1981), 453-458.
- VAN MAANEN, J., and BARLEY, S.R., "Cultural organizations: fragments of a theory", in FROST and others (1985).
- WALTON, R.E., and DUTTON, J.M., "The management of inter-departmental conflict: a model and review", Administrative Science Quarterly 14 (1969), 73-84.
- WALTON, R.E., and DUTTON, J.M., "Organizational context and inter-departmental conflict", Administrative Science Quarterly 14 (1969), 522-542.
- WEICK, K., The Social Psychology of Organizing (Addison-Wesley, 1969).
- WELSH, M.A., and SLUSHER, E.A., "Organization design as a context for political activity", Administrative Science

Quarterly, 31 (1986), 389-402.

WHYTE, G., "Escalating commitment to a course of action: a reinterpretation", Academy of Management Review, 11 (1986), 311-321.

WILLIAMS, R., The Nuclear Power Decisions: British Policies 1953-1978 (Croom-Helm, 1980).

WILSON, D.C., "Electricity and resistance: a case study of innovation and politics", Organization Studies, 3 (1982), 119-140.

Table 1

Pfeffer's sources of power: Case study examples

| | |
|--|---|
| Resource provision | Headquarters administration controlling budget allocations. Engineering division responsible for fissile material production. |
| Uncertainty coping | Reactor safety groups. Engineering division responsible for large scale testing and development. |
| Being irreplaceable | Heads of R&D and engineering divisions. |
| Affecting decision premises, agenda or information input | Committee chairmen. |
| Consensus | Tightly controlled engineering division compared with free debate and open differences in R&D division. |
| Political skills | Head of engineering division. Headquarters chairman of reactor policy committee. |
| <u>Other sources of power</u> | |
| Control over organization | R&D division links with boundaries: government and industry. (Hambrick, 1981; Jemison 1981, 1984) |
| | Engineering division links with electricity authorities. |

Table 2

Pfeffer's strategies and tactics

Selective use of objective criteria

Use of outside experts

Controlling agenda

Use of coalitions and

Cooptation

Committees

Other strategies and tactics
(Hendry, 1988, Graham, 1986)

Use of effective power of veto or non-cooperation

Case study examples

Pervasive at all levels, especially when deciding between alternative reactor types.

R&D division use of American information.

Used effectively by Engineering division director.

R&D division coalition external constituencies building with headquarters, government, and the press.

Used by engineering division to divide R&D division. Attempted use by reactor project teams.

Headquarters use of inter-divisional committees.

Main strategy of engineering division.

Figure 1

| | | | | |
|------------------------|--|----------------------------------|--|-----------------------|
| Political units | Individuals | Groups | Divisions or departments | |
| Preferences | Individual preferences | Group preferences | Cultural preferences | Objective preferences |
| Relationships | Interpersonal relationships | Inter-group relationships | | |
| | | Formal (committee) relationships | Informal relationships | |
| Sources of power | Being irreplaceable Political skills Affecting decision premises etc | | Consensus Uncertainty coping Resource provision Control over boundaries | |
| Strategies and tactics | Selective use of objective criteria Use of outside experts Controlling agenda Use of coalitions and external constituencies Cooptation Use of committees Use of effective power of veto or non-cooperation | | | |