CHAPTER 3

A Research Strategy for the Investigation of
Metaphors and Administrative
Behaviour

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Introduction

The purpose of this chapter is twofold: (a) to describe the research strategy used and (b) to indicate the relationship between that strategy and the assumptions implicit in the theoretical framework.

The chapter comprises three components. The first is essentially a rationale for the choice of a qualitative case study approach. The second is a description of the methods of data collection used. The third and final component comprises a discussion of issues relating to the validity and reliability of the data.

There is one general point concerning the choice of a research strategy which should be made at the outset of this chapter. Whilst much discussion pertaining to methods involves researchers in advocating *either* qualitative *or* quantitative methods, holistic *or* reductionistic approaches, the choice of an appropriate research strategy should be contingent on the specific research task at hand, that is to say, on the nature of the problem and the purpose of the study (Selltiz, Wrightsman and Cook, 1976, 90). Although this point appears so fundamental as to be beyond question, it can become obscured as zealous arguments are made on behalf of particular methodologies. A further important requirement is that the research strategy should be such as to accomplish the purpose of the study with "economy of procedure" (Selltiz, Wrightsman, and Cook, 1976, 90). These two fundamental principles have been kept in mind in selecting and planning the research strategy: the need for a strategy which matches the nature of the inquiry and which accomplishes its purpose in as economical a way as possible.

The Rationale for the Qualitative
Case Study Approach

This section reflects the writer's belief in the inter-dependence of theory and research. Any attempt at matching the research strategy to the task at hand must take into account the conceptual framework within which the problem is investigated. Of particular significance are the fundamental or core assumptions made about the nature of man and social reality, and the epistemological implications of these assumptions (Morgan and Smircich, 1980; Macpherson, 1987; Cuff, Sharrock and Francis, 1990). It is these assumptions which have influenced the choice of a qualitative mode of enquiry and, in particular, the qualitative case-study approach.

Core Assumptions

The problem investigated is such that the focus of inquiry is on *persons*, on the academic administrators - their metaphors for organisation and how they behave in relation to an important decision issue. Where the researcher asks the questions: what are the metaphors used by the administrative actors and how do they relate to their behaviour, she is asking questions about social actors in particular circumstances, how they see the world, the meanings they place on experience and events; she is asking questions about what they say and do.

Implicit in the theoretical framework is a view of the academic administrators as interpretive, sense-making individuals. In postulating that the ideas and metaphorical understandings held by the academic administrators shape their action and behaviour in the world, man is construed not only as a cultural being possessed of meaning and intention, but also as an active participant in the construction of his world. The point which must be stressed here, one which has implications for the research process and the role of the researcher, is that the individual is construed as essentially self-determining, not as a passive being subject to external forces.

There is a further aspect of the theoretical framework which must be emphasised. The central theoretical concept of metaphor combined with an array of insights drawn from the culture metaphor, has focused attention on

the subjective aspects of organisational life and experience. The idea of the organisation as seen through the eyes of different social actors, that is, from different and distinctive metaphorical perspectives has been stressed. Thus the notion of an objective and unitary social reality gives way, not simply to a 'perspective' reality, but to multiple realities. Smircich (1983, 161), following Hallowell (1955), on the concept of culture, states that "human actors do not know or perceive *the* world, but know and perceive *their* world through the medium of culturally specific frames of reference" (italics in original). As these words imply, social reality not only resides in the subjective realm of ideas, beliefs and meanings, there is a sense in which it is varied and even plural.

The nature of the phenomena investigated has also been considered in choosing an appropriate research strategy. Language, metaphors, and other symbolic forms, the intangible phenomena of consciousness, are higher-order abstract phenomena, as are thoughts, meanings and values. They are insubstantial phenomena which cannot be weighed or measured. It can be argued, moreover, that they are essentially holistic phenomena. As abstract, higher-order phenomena, they are apparent when an organisation is considered as a complex whole. They are not material, concrete features associated with the organisation's constituent parts.

Clarifying the Ontological Position

Lincoln and Guba (1985, 82-7), in their discussion of ontological assumptions, have outlined four positions, the four comprising "objective", "perceived", "constructed" and "created" realities. These four positions clearly reflect a 'subjectivist-objectivist' continuum. Sufficient has already been said to indicate that in the present study, it is the subjectivist end of the continuum that is emphasised.

This point can be clarified further. Social reality, as construed in the present inquiry, is not given exclusively by whatever is 'out there', but is reached through the mind. An analogy from the realm of art is useful in illustrating the study's assumptions about the relationship between the individual and reality. A work of art exists not as a fixed and static entity, objectively perceived, but is a composite, made up of the fixed object, the work itself and

the imagination of the viewer. Thus the point of the present discussion is to emphasise that social reality is interpreted here as a higher-order mental world, one in which thoughts, ideas and symbols, etc, are as meaningful, indeed more meaningful, than material, objective entities.

It is important to stress, however, the great complexity and ambiguity of social reality. Thus whilst the conceptual framework has emphasised the subjective aspects of social reality, it cannot be gainsaid that there is a sense in which social reality appears to have a paradoxical quality, seeming to be, as Reason (1988, 203) suggests, both 'given' and constructed. Reason notes, for example, the paradoxical way in which social actors appear to create their reality, and how, simultaneously, social reality has "an independent process which can surprise us" (Reason, 1988, 202).

This last point is consistent with Heisenberg's view of the nature of reality, as explained by Reason (1988, 201-02). Heisenberg maintains that man's thinking about the nature of reality has been characterised always by two extremes - at one extreme a purely subjectivist view and at the other a purely objectivist view. However, Heisenberg, according to Reason (1988, 202), advocates the need to maintain a tension between these two apparent opposites and in so doing is led to embrace a dialectical ontology. In distinguishing dialectics from dichotomy Reason (1988, 202) sheds further light on a dialectical ontology as follows:

> While a traditional logic would create a dichotomy, and argue that reality is either fully independent of us or fully dependent on us, a dialectical ontology would embrace the paradox of both these positions. Dialectics involves a recognition of the inseparability of two apparent opposites; and an exploration of the interplay between these interdependent poles...

Thus, for Reason (1988), dialectical thinking and experience involve the attempt to explore and understand "the interdependence, interpenetration, and in the end, the unity of the two poles." The writer accepts the notion of dialectics in describing the ontological position adopted, whilst emphasising the subjective side of the dialectic. Such dialectical thinking, recognising the paradoxical nature of social reality, seems especially appropriate to the

present study, a study which seeks to examine the relationships between metaphors and behaviour.

Epistemological Considerations

The view of social reality implicit in the theoretical framework defines the epistemological grounds of the study. These provide a clear contrast with the kind of epistemology inherent in more positivistic studies. Where the organisation is construed solely as an objective, material entity and where regularities are assumed to underly organisational behaviour, the researcher seeks to discover, that is uncover, the 'facts' of social life, describing and explaining them. The knowledge aspired to is universal in form, law-like propositions which purport to unify and explain the social world.

In this study, organisational reality has been characterised as a 'built' or constructed reality; to appropriate the language of Greenfield (1975) it is invented by human beings, a point which focuses attention on its subjective aspects. Where organisational reality is construed in this way, the appropriate epistemological goal is enhanced understanding (verstehen). Understanding, moreover, is achieved in large part through interpretation. That is to say, the researcher's role becomes one of 'reading' and interpreting social reality. On this point the words of Geertz are apt. Geertz (1973, 5) has linked the study of cultural phenomena with interpretation in the following way:

> Believing with Max Weber that man is an animal suspended in webs of significance he himself has spun, I take culture to be those webs and the analysis of it to be therefore not an experimental science in search of law but an interpretive one in search of meaning.

The centrality in the present study of a concept such as metaphor points to the need for the researcher to assume an interpretive role. To 'unpack' the meaning of the metaphors, for example, requires that they be interpreted and elucidated. This applies equally to that aspect of the problem concerned with what the adminstrators do.

There is another way of looking at the kind of knowledge developed by the study. The point has been made already that the inquiry focuses on the administrators as persons. Thus the kind of knowledge generated is akin to that which Polanyi (1958) describes as "personal knowledge." It is knowledge about people - their ideas and interpretations about the world and their behaviour in the organisation based on those ideas and interpretations.

The epistemological goals of the inquiry, as explained above, imply the need for a broadened view of the sources of knowledge. Where the research is focused on administrators as interpretive beings, the path to knowing can lie not only through intellectual, detached analysis of the kind associated with logical-empirical modes of inquiry, but also through non-rational, affective modes of knowing. There is, in particular, a need for insight into complex, qualitative characteristics. The researcher must 'see' as distinct from measuring or recording. The importance in the social domain, of knowledge so acquired, is reflected in Wirth's statement that "insight may be regarded as the core of social knowledge" (cited in Filstead, 1970, 4).

The theoretical assumptions of the study have other epistemological implications. The assumption that organisational reality is reached through processes involving sense-making and interpretation implies that knowledge, including scientific knowledge, is shaped or constructed. On this view, scientific knowledge involves not so much a recording or 'reading off' of meaning from the external world, rather it is made or constructed in the process of thinking about reality.

The essence of such a theory of knowledge has been well captured by Ortony (1993, 1) who notes that:

> Knowledge of reality whether it is occasioned by perception, language, memory, or anything else, is a result of going beyond the information given. It arises through the interaction of that information with the context in which it is presented, and with the knower's preexisting knowlege.

For Ortony then knowledge is shaped by existing ideas; moreover, scientific

knowledge, like any other knowledge, is not independent of context.

These statements in themselves indicate a certain view of research, a view that research is a social process which is carried out in a particular context. Further, a constructivist theory of knowledge collapses the distinction between knower and known, and implies the active participation of the knower in the act of knowing.

The researcher's view of man, social reality and knowledge constitute important grounds for the type of research strategy chosen. In emphasising an indeterministic view of the social world, the individual as a participant in the shaping of social reality, the way has been paved for a conception of the research process in which the researcher herself becomes a participant. The world view identified to this point conveys a complex sense of social reality. In sum, the social world is seen as a higher-order, holistic mental world, a world which shares the qualities found in life generally, that is, ambiguity, diversity and contradiction. It is clearly distinguishable from the more mechanistic world of Newtonian physics and unamenable to description or explanation in these terms. Thus the grounds are laid for the choice of a research strategy which rejects any identification of the social with the natural worlds.

The Need for a Qualitative Methodology

The world view described above is clearly congruent with the assumptions of the naturalistic, as distinct from the rationalistic, research paradigm. As explained by Owens (1991, 294), the term 'naturalistic' expresses a particular view of reality. In Owens's (ibid) words, this is "...essentially a phenomenological view - as differentiated from a logical-positivist view - of reality of the world." Hence the naturalistic research paradigm is by definition attuned to the holistic and qualitative phenomena of organisational life - phenomena which include language and metaphors.

Clearly the mode of enquiry best suited to the present study must be qualitative in nature. Moreover, it should be qualitative not only because it must allow the researcher to work with non-numerical data. It should be

qualitative in the sense of providing an "inner perspective" (Bruyn, 1970a, 317) on social life. Qualitative enquiry in this sense is oriented to understanding "human behavior and human experience from the actor's own frame of reference..." (Owens, 1991, 294). Such a methodology reflects an image of man as self-determining, as an interpreter of the social world. Bruyn (1970b, 287), referring to the phenomenologist and the participant observer, to those, that is, who use an 'inner perspective' approach, states:

> They are observing man in his concreteness and subjectiveness as opposed to the abstractness and objectiveness of the traditional empiricist and theorist, they are observing him as a social being with freedom and purpose as opposed to observing him deterministically as the product of external forces.

Such an 'inner perspective' approach, moreover, is integral to the Weberian tradition of understanding (verstehen) (Filstead, 1970, 4). In this tradition, the researcher's role is not that of the detached, impartial observer, searching for regular law-like relationships, but is, rather, one of an involved participant who endeavours to 'take the standpoint of the actor'. In the present study, only an approach which involves 'taking the standpoint of the actor' will allow the researcher to identify and understand the actors' metaphorical perspectives on the organisation.

Wirth's statements on methodology are also noteworthy for the way in which they link the kind of knowledge that is associated with insight or understanding with an 'inner perspective' methodology. Wirth (cited in Filstead, 1970, 4) states specifically that the need to gain insight, which he calls "the core of social knowledge," requires the researcher to be "on the inside of the phenomena to be observed....It is participation in an activity that generates interest, purpose, point of view, value, meaning and intelligibility as well as bias." For Wirth, as for Bruyn, active participation in the situation studied allows the researcher to take into account "the inner as well as the outer perspective of the subjects under investigation" (Filstead, 1970, 6).

An inner perspective methodology, as described by Bruyn and Wirth is, in essence, a qualitative methodology. Filstead (1970, 4) specifically identifies the Weberian tradition of understanding (verstehen) with qualitative methodology. And Filstead (1970), Merriam (1988), and Owens (1991) concur that a qualitative methodology is one which emphasises the elucidation of meaning, the importance of processes rather than outcomes, and the interpretation of the social world from the perspective of the subjects of the investigation. Whether the methodology is described as an 'inner perspective' or as a qualitative methodology, the principal point here is that it furthers the purpose of the present study by maximising the possibility of capturing the way the actors see the organisation. In maximising the possibility of representing perceived reality, such a methodology is responsive to the symbolic and interpetive nature of social processes.

The Appropriateness of the Qualitative
Case Study Approach

The discussion so far has suggested already the unsuitability of rationalistic research strategies to the problem being investigated here. Rationalistic research strategies such as the controlled experiment, or the quasi-experimental or survey approaches are inextricably linked to assumptions which identify the social world with the natural world. Such strategies, in providing an 'outer perspective' on social reality, encompass a deterministic view of man. Moreover, in construing the organisation mainly as an objective material entity, rationalistic procedures such as the survey method subtract from it the actors' own meanings, those qualitative characteristics which are so integral to the present study.

The methodological approach deemed most appropriate to the present task is the qualitative case study approach. Whilst opinion is divided on the philosophical assumptions underlying the case study design, a growing corpus of writers position the case study vis-a-vis the naturalistic, qualitative research paradigm. Writers such as Stake (1978, 1981), Foreman (1948), Hamilton (1981), Kemmis (1983), and Merriam (1988), to name but a few, have all characterised case study design in a way which suggests that it shares many of the characteristics of qualitative and naturalistic research.

Whilst noting that other writers such as Kenny and Groteleuschen (1980) hold an opposite view, Merriam (1988, 20,16) sees the nature of case study research as being "inextricably linked" to philosophical assumptions underlying the naturalistic, qualitative research paradigm. "The logic of this type of research", says Merriam, "derives from the worldview of qualitative research" (1988, 16).

There are certain specific features of the qualitative case study design which make it appropriate to the present study. These include its capacity to allow for directness of access to the social world, as well as access to subjective factors. In addition, case study research has specificity of focus and it has also been characterised as a heuristic and descriptive mode of inquiry. The relevance of these features for the present study are now discussed.

Directness of access to the empirical social world

The phenomena investigated here are such that they cannot be studied in isolation from the specific context in which they occur. Language in itself is an integral aspect of a specific cultural context. Thus it is clear that the methodological approach must be such as to allow human behaviour to be studied *in situ*. The case study design, insofar as it allows the researcher direct access to the empirical social world, fulfils this requirement.

Access to Subjective Factors

The qualitative case study design does not distance the researcher from the informants of study. It allows, for example, the researcher to talk informally with the actors thus enhancing the possibility of gaining access to their points of view. This is essential if the actors' metaphorical perspectives on the organisation are to be identified. Again, observations can be made of the actors as, for example, how they talk and behave at meetings relating to the issue of the introduction of higher degree programmes.

Heuristic

The heuristic characteristics of the case study design (Stake, 1978, 1981; Sanders, 1981) make it appropriate to the exploratory nature of the present study. It is a design which can allow for the emergence of new leads and

interpretations. Indeed it gives full expression to the idea of research as 'search'. In the present study, the parallel, concurrent investigation of *three* cases provides the researcher with the maximum opportunity for discovering new 'leads'. Obviously too a design which can be characterised as heuristic is suited well to achieving the epistemological aim of understanding.

Specificity of focus

Case study research has a specificity of focus (Merriam, 1988, 9) which allows for an intensive examination of the relevant phenomena - in this instance, the metaphors of the academic administrators and their behaviour relating to the introduction of masters' degree programmes. An advantage of this is that it can capture the vivid particulars of individual cases (Wilson, 1979; Stake 1981; Merriam 1988). This makes it especially appropriate to the study of cultural phenomena such as language. It also makes it well suited to a study which is focused on the administrators as persons - their language and behaviour.

There is a further advantage that results from the case study's specificity of focus. Such a design is suited to achieving "holistic description and explanation" (Merriam, 1988, 10). As Merriam notes, it is conducive to uncovering "the interaction of significant factors characteristic of the phenomenon" examined (ibid). It is thus able to provide a perspective which is quite the opposite from the survey design, the latter typically assessing "a few variables across a wide range of instances" (Merriam, 1988, 7). Whereas the latter approach fragments, the case study approach, somewhat as does a painting, sums up or synthesises. With reference to the present study, the strength of the qualitative case study approach is that it can allow, firstly, for the 'building up' of a picture of the metaphors in use by the academic administrators; secondly, it can allow for the 'building up' of a picture of their administrative behaviour in relation to a specific issue. The resulting two pictures might even be seen as constituting a kind of diptych or diorama. The juxtaposition of the panels or pictures should allow the researcher every opportunity to examine the nature of the relationships between the metaphors and the administrative behaviour. Indeed the final

picture that is traced may even be such as to allow some insight into the complex qualities of organisational reality as a whole.

Descriptive

Again, the case study approach can yield a richly descriptive account of the phenomena studied. It is in this way also appropriate to a study framed by the cultural perspective. That a rich description is the complement of cultural (and especially interpretive) studies has been highlighted by Geertz. Geertz (1973) has spoken of the need in such studies for "thick description" - description which can convey the meaning of phenomena such as language, norms, values, motives, traditions, etc.

Case study description can capture the vivid particulars of the data; it can preserve, as it were, 'the streaks in the tulip'. This makes the case study design most appropriate to the presentation of data on the administrators' language and behaviour, and especially to the former. As is well known, the case study account allows for the incorporation of excerpts from documents and interviews. This is a not unimportant point. Through the use of quotations, selected images and metaphors can be presented in the context of the speech acts in which they occur. Such an account which can allow an image or metaphor to be presented in context, must be considered superior to any presentation which simply lists the metaphors in tabulated form. When the images and metaphors are presented in the context of the relevant speech acts, their connotative associations can be conveyed; nuances of meaning can be preserved.

Moreover, case study description has important implications for the reader, in the sense that it can be *involving* of the reader (Stake, 1981, 36; Owens, 1991, 302-03). It is noteworthy, for example, that Stake (1981, 36) has argued that case study knowledge is more developed by reader interpretation.

In the present study, there is potential for the reader to be drawn into the experience of the three cases in a number of ways. As the metaphors are presented, the reader will have the opportunity to 'see' social reality through the eyes of the different actors, that is, as the subjects of the study see it.

Again, as the metaphors are presented, the reader's view of reality can change along with that of the actors. Thus the final account can invite reader participation, whilst conveying at the same time a sense of social reality as complex, varied and plural.

The Parallel, Concurrent Case Study Design

In the previous sections, the rationale for the qualitative case study approach has been presented. Some of the general features of the case study as a research design, together with their applicability to this study, have also been discussed (on pp.100-104).

It must be emphasised that the specific research design adopted in the present study is correctly described as the parallel, concurrent case study research design. As used in the present study, this design entails the parallel, concurrent investigation of three particular cases. The principal characteristics of this design have already been explained in Chapter One (p.19). The design is parallel in the sense that the same research procedures are used in the investigation of each of the three cases. The design is concurrent in that each phase of the investigation is carried out in respect of all three cases before the next phase is undertaken.

As was also emphasised in Chapter One (pp.20-21), and again on pp.101-102, the parallel, concurrent case study design is one which is conducive to discovery and therefore well suited to an exploratory study.

Data have been collected for the present investigation using three methods: (1) the semi-structured interview; (2) analysis of documents and (3) observations of meetings. Of these three methods, the first is the primary mode and it is given major emphasis in the discussion that follows.

Whilst consideration was given to conducting group interviews, this method was rejected. The group setting is much less conducive to identifying the individual administrator's metaphors, than is an in-depth interview conducted with a single informant.

In addition to the data collection procedures, this section includes a number of other topics. These topics concern aspects of the research such as the following: issues relating to access and entry; the use of the sequential mode of data collection; the informants; the data required to answer the research questions; and the sources of data. A brief discussion of the pilot study that was conducted, is also included here.

The reader's attention is drawn especially to the significance of the sequential method of data collection. The choice of this particular mode of data collection is very significant and has major implications for the study. In this section, as in the previous one, the assumptions underlying the study will be apparent. These assumptions have influenced not only the research design, but also the choice of the sequential mode of data collection, as well as the choice of the semi-structured interview as the major method of data collection.

Access and Entry

The researcher is a member of the institution which is the field setting of the study and is located within the School of Education. Her status in the present investigation, in terms of the 'insider-outsider' classification, approaches that of 'insider'. This is a factor which may have facilitated the gaining of access to the field. Few or no difficulties were experienced in this

area.

Permission to carry out the research was sought initially from the Dean of each of the three Schools (that is, the Schools of Arts, Education and Information Technology). Specific access was also negotiated with the fifteen remaining informants. This particular feature of the access phase bears out Burgess's (1984, 49) claim that there is not just one but multiple points of entry to the field. As part of the process of negotiating access, the researcher also requested permission to access any documentation that might be relevant to the research and to attend any meetings that might be held concerning the introduction of masters' degree programmes. The process of gaining access to documentation and meetings required the researcher to contact the informants on several occasions, bearing out Burgess's (1984, 49) point that the gaining of access can be a continuous process entailing negotiation and renegotiation.

During this intial phase of the investigation it was necessary to 'present' the study to the informants, but in a way which did not prejudice or bias the subsequent research. To do this, the researcher spoke with each informant and explained the main purpose of the study. In addition, certain key areas on which the research was to be focused were identified, as, for example, the behaviour of the informants in introducing the masters' degree programmes. The type of research strategy and methods of data collection were discussed also.

It is noteworthy that these early encounters with the informants have a significance which goes beyond the securing of permission to carry out the research. Already, at this initial point in the research, the tone of subsequent interactions is being established; the process of building rapport with the informants has commenced. Moreover, during these initial encounters, data are being derived and shaped (Burgess, 1984, 51). In this study, the initial encounters yielded clues as to how the informants perceived the researcher, as well as clues as to how they perceived each other. The researcher also gained an idea, albeit a somewhat general one, of the informants' modes of speech. These data were noted and taken into account when refining the interview schedule to be used.

The Sequential Method of Data Collection

Of the two basic modes of *data collection* used in field studies, the sequential and the parallel, it is the former that is used in the present study. There is an important distinction to be made between the two modes.

The parallel mode of data collection is exemplified in the use of survey and standardised interview procedures. It is characterised by a clearcut division between the phases of data collection and data analysis, all the data pertaining to the study being collected *prior* to the formal analysis of these same data. Since the parallel mode calls for the specification of the precise data required in advance of the commencement of data collection, it often accompanies the kind of preordinate research design associated with the rationalistic research paradigm and the hypothetico-deductive method.

The sequential mode (of data collection) contrasts with the parallel mode in that formal analysis of the data proceeds *concurrently* with their collection. The significance of this is that each phase of analysis can exert an influence over the selection of data to be collected subsequently. Put somewhat differently, each phase of data collection and analysis can incorporate insights yielded by the previous phases.

The significance of the choice of data collection methods for the research strategy cannot be over-emphasised. Whilst it is not essential that the sequential mode of data collection should accompany the parallel, concurrent research design, it is nonetheless the most *appropriate* method to accompany this particular design (Muscio, 1983, 58). The specific reasons for the choice of the sequential mode of data collection can be summarised as follows. The sequential mode contributes to a flexible, emergent research strategy which is consistent with the assumptions of the naturalistic research paradigm. Secondly, the flexibility associated with the method is appropriate to a study of an exploratory nature. It is a method which maximises the possibility of making unexpected findings; such findings can in turn yield new 'leads' in the research process. It is thus a method of data collection attuned to discovery. Thirdly, the thorough examination of data at repeated

intervals can be seen as enhancing the validity of the research, a point which is elaborated in a subsequent section of this chapter (on p.132).

The previous comments indicate some of the general principles guiding data collection and analysis. It has been emphasised, in particular, that data collection and analysis occur concurrently. A more detailed account of the precise methods of analysis used is presented in Chapter Four. Suffice it to note here, that with each phase of data collection and analysis, there is a progressive development of an inventory or catalogue of the main images, analogies and metaphors used by the informants. This inventory or catalogue is recorded on cards. Similarly, there is a gradual development of information on the main aspects of the administrative arrangements used for decision-making. This is also recorded on a card file. On the conclusion of each phase of data analysis, notes are made of topics, questions, etc, which warrant further exploration or development in subsequent phases of data collection. Important decisions influencing subsequent data collection are also recorded. As the data accumulate, matrices and tables are assembled as necessary. At any one time there may be a number of analytical schemes in place, their purpose being the organisation of the growing body of data.

Completeness of data is also an important consideration, especially with respect to the data collected on the administrative arrangements for decision-making. Incompleteness of data may be evident where there is a lack of specifics concerning an important issue or topic. This is usually the result of an informant discussing a matter in an overly general or broad way. Additional data must be sought in the event of incompleteness. The nature of the 'incompleteness' itself is usually sufficient to indicate the source from which additional data must be acquired. It must be emphasised also that there may arise the need for further clarification of certain points made by a particular informant. In such instances, the researcher returns to the informant in order to discuss the matter further - in effect, to gather more data.

The care taken to assess the completeness of the data, as they are collected and analysed, is another factor promoting confidence in the validity of the data.

Data Required

As the discussion of the sequential mode of data collection has indicated, there is no specification in advance of the *precise* data required. In accordance with the exploratory nature of the present study, the data required are specified at the outset in broad terms only.

Two major research questions focus attention on the matters concerning which data are required:

1. What are the metaphors for organisation and administration expressed in statements made by different groups of academic administrators?

2. What are the administrative arrangements for decision-making used by different groups of academic administrators, concerning the introduction of masters' degree programmes?

In order to identify the metaphors used, data comprising the spoken and written language of the administrators are required. It might be noted at this point that the researcher's strategy of identifying the administrators' metaphors through an analysis of their language is consistent with Lakoff's (1993, 244) view that "metaphorical language is a surface manifestation of conceptual metaphor."

The most obvious of the metaphors that need to be identified will be those used in the course of discussions about the nature of organisation and administration. Nevertheless, it is recognised that it may be necessary also to identify the metaphors which disclose an informant's concept of a university. An informant's metaphors for organisation and administration are likely to be linked inextricably to his metaphor for the university.

The second research question noted above requires the identification of data on the administrative arrangements for decision-making instituted for the purpose of introducing masters' degree programmes. It will be recalled (from p.14) that administrative arrangements have been defined in terms of (a) the administrative units involved (b) the functions of each unit and (c) the relations between administrative units. Thus, to discover the

administrative arrangements for decision-making, data are required on each of these three aspects of administrative arrangements.

Where the administrative units are concerned, data will be sought which will allow for the identification of both formal and informal administrative units. In this way a complete picture of the administrative units used for decision-making can be developed. Within each sub-culture it seems logical to seek data firstly on the formal units involved, before proceeding to the identification of informal units.

In order to identify data on the functions of the identified units, the term 'functions' requires clarification. Given that what is being examined are the administrative arrangements instituted for decision-making, the most obvious aspect of the functions of a unit could be said to be the decisions made by that unit. The way, however, in which 'functions' are to be characterised is an important issue. Whilst it might be possible to take 'functions', in the present instance, as comprising only 'decisions made', this may be too narrow an approach, given that the researcher is attempting to build a detailed picture of the administrative arrangements. It is proposed, therefore, that the functions of each identified unit will be discussed with reference to six characteristics. These include the following: composition, meeting activity, formality, decisions made, focal decision issues, and methods of making decisions. Data will be required, therefore, on each of these characteristics of the units identified.

The third component of the administrative arrangements are the relations between the administrative units. To discover these relations, data are required on such things as the types of decisions made by the different administrative units concerning the introduction of higher degree programmes. Data already discovered concerning the functions of the units may be relevant here.

Sources of Data

The sources from which the data are obtained follow from the statement of data required.

Since the language of the administrators comprises an important component of the required data, it is clear that this must be obtained from the informants themselves either by way of analysis of their speech acts, and/or through an analysis of their written statements. Documents produced by the administrators must therefore be considered as a possible source of data. In prospecting for documents pertaining to this aspect of the study (the identification of metaphors), the following types are of possible relevance:

(a) addresses given by the academic administrators (as, for example, the Deans) on ceremonial occasions. These may include inaugural addresses, graduation ceremony addresses, or school speech night addresses.

(b) minutes of meetings, memoranda, etc, including those pertaining to the introduction of masters' degree programmes.

It is noteworthy that few documents of the type mentioned in (a) above, were identified. Moreover, those mentioned in (b) above, yielded little in the way of metaphorical language. Thus the principal source of data concerning the metaphors are the speech acts of the informants.

The sources of data on the administrative arrangements are informants and documents. The specific issue investigated, namely, the introduction of masters' degree programmes, is used as a guide to the collection of documents. Two main groups of documents can be distinguished as follows:

(a) those produced by administrative units concerned with the introduction of the masters' degree programmes, for example, correspondence, memoranda, notices of meetings, minutes of meetings, position papers, concept papers, discussion papers, diaries of chairpersons of committees, etc.

(b) documents such as Academic Manuals, University Calendars, Annual Reports of individual Schools, organisational charts of individual Schools, planning documents relating to academic programme development within

individual Schools, etc. These are not only possible sources of useful background information. They may also provide useful information on official requirements for the introduction of new courses, together with information on the official responsibilities of committees associated with the introduction of such courses.

It is important to note that the discovery of relevant documents is made as the sequential process of data collection proceeds. This point in itself indicates that the informants themselves are important sources of information about relevant types of data, including relevant documents.

In summary, it can be said that the data required for this study are obtained from two basic sources: (a) informants and (b) documents.

The Informants

The informants are *all* the academic administrators in each of the three sub-cultures (that is, Arts, Education and Information Technology) who are involved with the introduction of the masters' degree programmes. The selection of all the informants involved with the particular issue is consistent with the cultural perspective. It cannot be emphasised too strongly that the informants do not comprise in any sense a sample. Thus the question of whether they are representative of any particular population is not relevant.

The informants number in total eighteen. They include four academic administrators from the Arts sub-culture, seven from the Information Technology sub-culture, and seven from the Education sub-culture. They are as follows:

Arts
Dean;
Associate Dean (Academic);
Associate Dean (Resources) and Head of Asian Studies Programme;
Head of Programme (Communications).

Information Technology

Dean;

Associate Dean (Academic);

Associate Dean (Resources);

Head of Programme (Commercial Computing);

Head of Programme (Analytical Computing and Applied Mathematics);

Head of Programme (Graduate Studies);

Head of Programme (Information Science).

Education

Dean;

Acting Associate Dean (Academic) and Head of Programme (Bachelor of Education);

Associate Dean (Academic);

Associate Dean (Resources);

Head of Programme (Graduate Diploma in Exceptional Children);

Acting Head of Programme (Bachelor of Education);

Head of Programme (Graduate Diploma in Teaching).

There is a larger number of informants from Education and Information Technology because the Master of Education and Master of Information Technology are wider in scope than the Master of Arts. The Master of Education is a generic master's course in education and all the academic administrators from the Education sub-culture are involved with its introduction. The Master of Information Technology encompasses the areas of Information Technology, Information Science and Applied Mathematics and Statistics. It also involves all the academic administrators from the Information Technology sub-culture. However, the Master of Arts, as first introduced, comprises a specialisation in Asian Studies. Since it was initially developed around one specialisation, only four academic administrators from the Arts sub-culture were involved in its introduction.

The decision to focus the study on informants from the Arts, Education and Information Technology sub-cultures or communities has been influenced by the nature of the research task. The academic administrators from these three sub-cultures represent, broadly speaking, branches of learning in the

humanities, social sciences, and technology. Especially when considered as disciplinary sub-cultures, the three provide a clear contrast. The choice of these three particular sub-cultures appears to allow ample scope for variations to occur in language and administrative behaviour. Initially it had been intended to include the Science rather than the Information Technology sub-culture; however, at the time of doing the research, planning for the introduction of a master's programme in Science had not commenced. In terms of achieving a contrast between the sub-cultures, little was lost by substituting the Information Technology for Science, since most of the informants have backgrounds in the discipline of science, although some have backgrounds in the discipline of commerce and management.

The Pilot Study

A pilot test was carried out on informants similar to the informants included in the main study. A total of six informants were involved in the pilot study, these being from the four sub-cultures of Engineering, Science, Management and Accounting.

The informants included one former Dean, three Acting Deans, one Acting Associate Dean (Academic), one Acting Associate Dean (Resources) and one Acting Head of Programme. More specifically, the informants were the Acting Deans of the Schools of Engineering, Science and Accounting; the former Dean of the School of Science; the Acting Associate Dean (Academic), School of Science; the Acting Associate Dean (Resources), School of Management; and the Acting Head of Programme (Electrical Engineering).

Seven interviews in all were carried out, six of which were approximately one hour in duration. There was one interview (conducted with the Acting Dean of Science) which was of half-hour duration by request.

This phase of the investigation was essentially a pilot testing of the interview sessions and it focused principally on that aspect of the research concerned with the identification of metaphors, although there were some questions addressed to the relevant informants concerning the administrative arrangements used in introducing the Master of Engineering

(Agricultural). At the time of the pilot study, the Master of Engineering (Agricultural) was the only master's programme in existence, having commenced in 1986.

A copy of the interview schedule used in the pilot study is included as Appendix A.

The pilot study was of value insofar as it exposed some of the issues and problems associated with collecting data on the language of informants. In particular, it allowed an assessment of whether any metaphorical language for organisation and administration could be elicited from the informants and the difficulties associated with doing this. It also exposed some of the issues that would need to be confronted in analysing the data. An awareness was gained, for example, of the extent to which metaphorical expressions pervade everyday language (for example, 'the bare facts'; 'going in the right direction').

One of the main benefits of the pilot test was that it provided clues as to the type of questions most effective in eliciting figurative language. This kind of knowledge provided a basis for the design of the interview schedules to be used with the informants of the main study. It assisted the researcher with her decision-making about the types of questions which she might pose to the informants.

There was one area in which the pilot was especially useful. It yielded data on whether (and to what extent) the informants from different sub-cultures might use the same or different metaphors. In other words, it allowed the researcher to assess whether or not she might be dealing with groups of informants who, whilst they were from different sub-cultures, would use the same metaphors for organisation and administration.

The pilot study also provided training for the researcher in the conduct of interviews. She gained experience in the skills required to establish rapport with the informants. She also gained experience in questioning and probing tactics. Most importantly, the researcher learned how to minimise or prevent the occurrence of bias. For example, she became aware of the

dangers involved in influencing or 'leading' the informant's responses in a certain direction. She learned to avoid using herself a particular metaphor (say, for example, the factory metaphor or the political system metaphor) thereby possibly biassing an informant's response.

The Semi-Structured Interview

<u>Appropriateness to Research Task</u>

The major method of data collection is an in-depth interview of the semi-structured or focused kind. Minichiello and his colleagues (1990, 87) describe in-depth interviewing as "...conversation with a specific purpose - a conversation between researcher and informant focussing on the informant's perception of self, life and experience, and expressed in his or her own words." This statement not only brings out the conversational, informal aspect of the in-depth interview, it points to an affinity between it and qualitatively-oriented case study investigation.

The semi-structured or focused interview is one type of in-depth interview, the other being the unstructured interview (Minichiello, et al., 1990, 89). The former is explained by Minichiello and his colleagues (1990, 92) in the following way:

> Essentially, this process [the semi-structured interview] entails researchers using the broad topic in which they are interested to guide the interview. An **interview guide** [emphasis in original] or schedule is developed around a list of topics without fixed *wording* or fixed *ordering* of questions. The content of the interview is *focussed* on the issues that are central to the research question, but the type of questioning and discussion allow for greater flexibility than does the survey-style interview. As with in-depth interviewing this may reduce the comparability of interviews within the study but provides a more valid explication of the *informant's* perception of reality [italics in original].

This description highlights the inherent flexibility of the semi-structured interview, a characteristic which differentiates it from standardised and survey-style interviews.

Flexibility is also a characteristic emphasised in Whyte's (1982) description of the "research interview." In distinguishing the research interview from the non-directive interview, Whyte (1982, 111) notes that "it is structured in terms of the research problem." He also remarks that

> The interview structure is not fixed by predetermined questions as it is in the questionnaire, but is designed to provide the informant with freedom to introduce materials that were not anticipated by the interviewer (Whyte, 1982, 111).

The research interview, as described by Whyte, is clearly similar to what Minichiello and his colleagues refer to as the semi-structured interview.

The explanation of the semi-structured interview provided by Minichiello and his colleagues, as well as that provided by Whyte, points to the reasons for its use in the present study. Its 'in-depth' nature allows for an intensive examination of the informants' language and behaviour. In this way it complements the case study research design. The flexibility inherent in this type of interview also makes it well suited to an exploratory study.

Again, unlike methods of data gathering associated with the rationalistic paradigm - as, for example, questionnaires or survey methods - the semi-structured interview is a direct rather than an indirect method of data gathering. It allows the researcher to gain first-hand knowledge of the social world. It is thus appropriate to qualitative enquiry generally and, in particular, to research that is focused on people.

The semi-structured interview, as a type of in-depth interview, can give priority to the informant's rather than the researcher's perspective on organisational reality. As Minichiello and his colleagues (1990, 92) comment, in comparison to the survey-style interview, it "provides a more valid explication of the *informant's* perception of reality" [italics in original]. Since the semi-structured interview enables the researcher to access subjective factors, it must be considered a method of data collection well suited to the identification of the informants' metaphorical perspectives on organisational reality.

There are other reasons why the semi-structured interview is appropriate to the identification of an informant's metaphors for organisation and administration. The informal and flexible nature of the semi-structured interview provides the informants with the opportunity to talk spontaneously, raising issues and topics of their own accord. In particular, it allows the informants to describe their perceptions of organisation and administration *in their own words.* Jacob (1987, 15), explaining Whyte's concept of the research interview, highlights this point when she notes that "the goal in informal interviews is to have the participants talk about things of interest to them and to cover matters of importance to the researcher in a way that allows the participants to use their own concepts and terms." A data-gathering method which is conducive to spontaneity and which allows the informants to use language that is natural to them, must be considered an appropriate vehicle in a study which attempts, in part, to elicit the informants' metaphors. The economy with which the semi-structured interview can accomplish this task is also a feature which makes it superior to any method that might involve direct observation.

There are at least two other factors which make semi-structured interviews appropriate to the present research task. As Jacob (1987, 15) notes, the way in which the researcher is defined by others, and the degree of rapport the researcher establishes with informants is important in interviews of an informal type. In this study, the interviewer's familiarity with the individual sub-cultures and with aspects of the subject under investigation, are factors which should assist her in establishing rapport with the informants.

In addition, the informants in the present study fit into Back's category of "the well-informed informant" (Back, 1960, 187). Thus they can be expected to make a positive contribution to the interviews. Since they are knowledgeable of the matters under discussion, they are able to contribute insights and information on specific issues. This is especially valuable in that part of the research that requires the identification of the administrative arrangements used for the introduction of masters' degree programmes.

Designing the Interview

There are no set rules, according to Minichiello and his colleagues (1990, 107), for designing and conducting in-depth interviews. The reason cited is that the socio-political and cultural context in which each interview takes place, varies. Whilst this may be true in a broad sense, there are, nonetheless, a number of factors which should be taken into account when designing interviews for a particular research task. These factors include (a) the purpose of the interview (b) the characteristics of the informants and (c) the characteristics of the interviewer.

In the present study, the purpose of the interviews is

(1) to elicit the metaphors which the administrators use in thinking about and discussing organisation and administration

(2) to ascertain information relating to the administrative arrangements instituted by the administrators for the purpose of introducing masters' degree programmes.

The informants participating in this study are, as already noted, consistent with Back's (1960) idea of the 'well informed informant'. They are both educated informants and also knowledgeable of the matters under consideration. As such, they can be expected to provide well-structured responses to questions asked of them. Most importantly, they can be expected to influence the course of the interview by introducing material not anticipated by the interviewer or by suggesting questions the interviewer ought to ask.

The practical implications of these characteristics for the design of the interviews are clear. The questions used must be framed in general, as distinct from specific, terms. They must be such as to encourage the 'well-informed informant' to discuss, in as spontaneous a manner as possible, his own perceptions of organisation and administration. They must ensure that the well-informed informant has sufficient freedom to make contributions to the interview.

The characteristics of the interviewer that have been considered when designing the interviews include the following: (a) the degree of familiarity of the interviewer with the subject matter of the investigation and (b) the degree of familiarity of the interviewer with the conduct of the interviews. Where the researcher is familiar with both these aspects, the interviews can be designed in a very flexible manner. In this study, the interviewer, through employment in the same institution as the informants, as well as through formal studies in the area of educational administration, has at least a general acquaintance with the issues and topics covered in the interviews. To some extent, she can 'speak the same language' as the informants. Moreover, as a result of the pilot study that has been undertaken, she has acquired at least some experience with the conduct of similar kinds of interviews. These characteristics of the interviewer are factors contributing to the decision to employ a highly flexible interview design.

There is another issue that can be raised here before considering the structure and style of the interviews. The way in which the interviewer is perceived by the informants is also important. As has been noted already (on p.105), the researcher's status in the eyes of the informants is most likely that of 'insider'.

There has been much debate about the relative advantages and disadvantages of a researcher's status - both as 'insider' and as 'outsider' (see, e.g. Merton, 1972). Here it is contended, that so far as the present study is concerned, the advantages of being an 'insider' outweigh any disadvantages. The researcher's 'insider' status, for example, may assist her in gaining rapport with the informants. A further advantage is that the interviewer is attuned, at least to some extent, with the language, meanings and concepts of the informants. This must be considered a decided advantage where a large part of the research is concerned with collecting and analysing the metaphors of the informants. Some further issues associated with the researcher's status as 'insider' are considered again when possible sources of bias are discussed (on pp.135-37).

Structure and Style of the Interviews

Whilst the interviews are loosely organised, there are, nonetheless, three parts that are clearly identifiable - the beginning, the middle and the end. As Schwartz and Jacob (1979) have noted, each of these three parts incorporates its own organisation.

The opening phase of each interview had several functions. It incorporated some explanation of the general nature of the investigation and, where applicable, some comments on the progress being made with the investigation. It included also an assurance of confidentiality, together with an assurance that any comments or information would not be used in such a way as to allow the identification of the informant. The informants were also assured that the research did not comprise, in any sense, an evaluation of the administrators' behaviour.

The opening phase was used also to set the tone of the interview and to build rapport with the informant. The importance of the interviewer's ability to develop rapport with the informant has been emphasised often (see, e.g. Whyte, 1982, 113; Jacob, 1987, 15; Minichiello, et al., 1990, 110). Bandler and Grinder (cited in Minchiello, et al., 1990, 110-11), moreover, have identified a model of communication which can contribute to the establishment of rapport. In this researcher's view, what is significant about Bandler and Grinder's model is that it points to the importance of having empathy with the informant.

Thus, in the interviews conducted here, the researcher attempted to converse with each informant in as empathic a way as possible. In the opening phase, she attempted to convey the idea of the interview as being essentially a *collaborative* undertaking. In particular, she attempted to convey a certain attitude - an attitude of being willing to listen to, and learn from, the informant.

There is one final point to be made about the opening phase. Following the advice of Taylor and Bogdan (1984), particular care was taken to avoid biassing the informant's perceptions and responses. Taylor and Bogdan's

advice on this important point, as explained by Minichiello and his colleagues, is that the researcher should avoid asking "directive questions when initiating the interview because this may predispose (bias) the informant's perception of what the researcher regards as important to talk about" (Minichiello, et al., citing Taylor and Bogdan, 1990, 112). In the interviews conducted here, the researcher took care to avoid bias when initiating the interviews and also throughout the interviews. As an example of this, she made every effort to avoid using a specific metaphor (such as the factory metaphor), thereby possibly predisposing the informant to a certain response.

The main or middle phase of the interview was characterised by elements of the recursive model of interviewing. This is a model which "relies on the process of conversational interaction itself, that is the relationship between *a current remark and the next one* [italics in original]" (Minichiello, et al., 1990, 112). One of its strengths for in-depth interviewing is that it allows the informants to express something of their uniqueness as individuals. It gives informants the widest possible scope to convey their interpretations of events and situations. Insofar as it does this, it is well suited to investigation which requires the identification of an informant's meanings (including the metaphorical meanings) for organisation and administration. Nevertheless, it must be said also that the recursive model is highly unstructured and can result in a meandering flow of talk that approaches something in the order of stream of consciousness. Given the purpose of the interviews being conducted here, it is less useful than a process in which the interviewer exercises *a degree* of control. Thus, whilst some recursively defined questioning took place, the interviewer, in keeping with the nature of the semi-structured interview, also influenced the flow of conversation in such a way as to keep it oriented to achieving the interview's purpose.

To assist in keeping the interviews oriented to their purpose, an interview guide was devised. This was used by the interviewer essentially as an "aide-memoire" (Burgess, 1984, 108). One version of the guide is included as Appendix B.

The questions of which the guide is comprised are broadly-based theme or

topic questions. It must be emphasised that they were not intended to be compulsory questions - questions which *must* be asked of each and every informant. Here the advice of Burgess, concerning the type of schedule appropriate for in-depth interviewing, was followed. For Burgess (1984, 107), an interview schedule is essentially a "topic list" and is used to suggest themes or issues that might be covered in an interview. Minichiello and his colleagues (1990, 115) also emphasise that "one of the most significant aspects of the use of interview schedules in in-depth interviewing is that there is no set of preconceived, structured questions." For these writers (that is, Minichiello and his colleagues), the interview schedule should be used to suggest "the kinds of themes, topics and questions that might be covered rather than any actual questions that might be used" (1990, 115). Moreover, in accordance with the principles governing sequential data collection, the interview guide was revised, where necessary, after each pair of interviews were conducted. This revision allowed for the incorporation of new material (themes, topics, questions, etc) which had come to light during the previous set of interviews.

Something of the type of questioning style and strategy used by the interviewer has already been indicated. The questions used were general - the questions being intended to "touch off" (Strauss and Schatzman, 1960, 208) the informant's account of his ideas, opinions or experiences. Specific questions were asked only as necessary, that is, when the interviewer required specific information which had not been included as part of an informant's general response. Specific, descriptive-type questions were used mainly in connection with that part of the investigation concerned with the administrative arrangements used for decision-making.

In conducting the interview, the researcher adopted a style based on the advice of Strauss and Schatzman (1960) and that of Whyte (1982). Strauss and Schatzman (1960, 208) speak of the use of "conversational gambits". And Whyte (1982, 111) has counselled research interviewers to listen more than they talk and to listen with a "sympathetic and lively interest." Whyte (ibid) also counsels interviewers to avoid interrupting "accidentally", to interrupt "gracefully" when necessary, and to interrupt only as part of a conscious plan.

So far as specific types of questions were concerned, it is noteworthy that certain purely descriptive questions were not useful in eliciting figurative language from the informants. An informant asked to describe his role, for example, tended to respond using instrumental language, interspersed here and there with technical terms (as for example, 'strategic plan', 'corporate plan').

There were certain questions much more effective in eliciting images and metaphors. One such question is the type that encourages the informant to respond with a story. Where a story is elicited, the informant can feel freed from the need to marshal an answer to fit a particular question. The resulting account may contain graphic details, vivid images, or simply the colourful idioms of everyday speech.

In an attempt to encourage an informant towards a story response, the interviewer sometimes would phrase a question as follows: "Tell me something about how you went about..."; or, "Tell me something more about that incident..." Where incidents or events in the past history of the institution were mentioned, the interviewer took the opportunity to prompt the informant into his own account of these events. The resulting stories varied from the humorous to the serious. The humorous accounts were characterised sometimes by the colourful idioms of vernacular speech. They are especially valuable insofar as they open a window on to the 'talk', the myths and the metaphors which, taken together, comprise the rich texture of everyday institutional life.

Questions which called for an informant to discuss his most positive and/or negative experience were also useful in eliciting a graphic account. As might be expected, accounts of negative experiences tended to be characterised by more graphic details and images than accounts of positive experiences.

Three other types of questions can be mentioned. Informants were sometimes asked to describe their own personal vision for their organisation. This question was posed in the hope that an informant might

couch his vision in metaphorical language. Again, informants were asked to compare their jobs (or their experience of their jobs) with something else. This question was sometimes effective in eliciting a revealing analogy.

Yet again, the interviewer occasionally used a form of devil's advocate question. This was used not only because it could lead an informant to disclose more of his perspective or position on some matter; such a question could also be effective in provoking the informant into the use of more forceful language. It can be argued that conflict situations are amongst those that are most likely to generate metaphorical language. The usefulness of the devil's-advocate-type question in calling forth some degree of forceful language may reflect this point.

As part of the interviewing strategy, and as recommended by Whyte (1982), Schatzman and Strauss (1973) and Minichiello et al (1990), a form of probing question was used where necessary. This could take the form of a nudging probe, a reflective probe or a mirror probe (Minichiello, et al., 1990, 124-26). The nudging probe was used to elicit more information, or simply as a way of encouraging the informant 'to go on'. The reflective probe involves the interviewer in rephrasing material and reflecting it back to the informant. It was used for the purpose of having the informant clarify or verify a point or points. The mirror probe involves a summarising by the interviewer of the conversation (or some segment of it). It was used to check the interviewer's own understanding of the substance of the discussion.

Both the reflective and the mirror probes have a similar value in that they provide a check on the interviewer's understanding of the information imparted. In particular, they provide a check on the interviewer's interpretation of the informant's meanings. Insofar as they do this, they help to ensure the collection of valid data.

In the concluding phase of an interview, the informant was shown a list of metaphors and was asked to identify which metaphor best fitted his own perspective on organisation and administration. The list used comprised the eight metaphors discussed in Morgan's *Images of Organization* (1986, 1997). More specifically, these included the metaphors of the organisation as

machine, organism, brain, culture, political system, psychic prison, flux and transformation, and instrument of domination.

This particular question coming at the close of each interview, proved a useful strategy. Sometimes it prompted an informant to elaborate on the reasons for his choice of a metaphor (or metaphors); sometimes he would offer a variant of a metaphor shown on the list; less frequently, he would offer a metaphor not shown on the list. It was a useful strategy also in that it allowed the researcher to check the metaphors identified from the remaining parts of the interview against the metaphor (or metaphors) selected by the informant from the list.

In closing each interview, a request was made by the researcher that she be able to speak with the informant again, if necessary. Given the style of the present research, it is appropriate for the researcher to return to the informant - either to discuss and clarify parts of the discussion or simply to obtain more information.

In all there were *nineteen* main interviews conducted, two of these being conducted with the Dean of Arts. The eighteen informants, as listed on pp.112-13, were interviewed. The interviews varied between sixty minutes and ninety minutes duration.

The data from these main interviews were supplemented by a number of less formal interviews. The contribution of the latter was twofold. Firstly, they enabled the interviewer to obtain additional details especially about the administrative arrangements used by the administrators. Secondly, they provided a check on the interviewer's understanding and interpretation of data already obtained.

Finally, before indicating the way in which the interviews were recorded, the interviewer's own estimate of the success of the interviews can be mentioned. As might be expected, the 'well-informed informants' spoke fluently, often copiously and sometimes very graphically. Moreover, they were willing to set aside more of their time if this were required. In the researcher's view, the interviews were successful in terms of achieving their

purpose.

Recording the Interview

A tape-recorder was used to record all interviews. In the semi-structured interview where the informant contributes much of the data, the use of a tape-recorder is, in the researcher's view, essential. Copious note-taking can have a distracting effect and can impede the interviewer's attempt to establish and maintain rapport with the informant.

Moreover, where the task involves identifying the metaphorical language used by the informants, a full and accurate record of each informant's speech is essential. Such a record ensures that any one metaphor can be interpreted in the context of the particular speech act in which it occurs. This is essential if the informant's meaning is to be gauged correctly. Again, the use of a tape-recorder means that the modalities of speech can be retained, as can the effects of pauses between words. These modalities and pauses are significant when the data are being analysed.

The main disadvantage of the tape recorder lies in its effects on the informant who may feel vulnerable or even threatened. In the present study, in order to mitigate any possible threatening effects, the interviewer placed the tape-recorder near the informant, indicating that he should feel free to switch it off if he so desired. This tactic can give the informant a sense of being in control of the tape and it seemed, at least in this instance, to be effective. It is noteworthy that only one informant actually switched off the tape and then only for a few minutes.

Meeting Observations

There were two methods of data collection complementary to the semi-structured interview, the first of these involving observations of meetings. The meetings observed were those concerned with the subject of the introduction of master's programmes. Data collected during these meetings were predominantly for the purpose of obtaining information on the second major aspect of the research - the administrative arrangements used in introducing the masters' programmes.

Notes were taken by the researcher at each of the meetings she attended. Six meetings were observed in Education, four meetings in the Information Technology sub-culture and one meeting in the Arts sub-culture.

The definition of 'functions' as comprising six characteristics (discussed on p.110), acted as a guide to the information collected. The observations of meetings were particularly useful for the information which they yielded about the main issues discussed by each administrative unit and the recommendations made by each unit. Whilst the meetings were not primarily for the purpose of identifying metaphors, the researcher attempted to make a note of any metaphors that were used. The difficulties associated with doing this confirmed the decision to use a tape recorder during the interview sessions.

Document Analysis

Analysis of documents is the second of the complementary methods of data collection. The document sources are described on pp.110-12. Of the documents examined, some addresses given by Deans on ceremonial occasions were analysed for the purpose of identifying metaphors. However, official documents, those comprising minutes of meetings, memoranda, etc, were not useful for identifying the metaphorical language of the informants. On the other hand, this particular group of documents (that is, official documents) were an important source of data on that aspect of the research concerned with administrative arrangements.

In this section, issues relating to the 'objectivity' of the research are discussed. Firstly, the question of what constitutes 'scientific methods' is addressed. Consideration of this question provides the researcher with the opportunity to refute any suggestion that the present research is 'unscientific'. The second and third topics of this section concern validity and reliability. The measures taken to ensure that the data collected are valid and reliable, are considered. The section closes with a discussion of two possible sources of bias - one arising from the researcher's status as 'insider' and the other arising from the characteristics of the informants.

Is the Present Research 'Scientific'?

A criticism sometimes made of research of the present kind is that it is 'unscientific'. Such a criticism, however, appears to be founded upon a narrow view of what constitutes science. If one were to hold, for example, that all sciences should be able to be mathematised, then the present investigation could be said to be unscientific. Ziman (cited in Muscio, 1983, 38) has presented a cogent argument that what constitutes scientific method cannot be defined with precision. For Ziman there are problems attendant upon almost any definition of scientific method. His position has been explained by Muscio (1983, 38) in the following way:

> In his [Ziman's] view, as in others, scientific investigation,
> as distinct from the theoretical content of any given
> branch of science, is a practical art and its goal is consensus
> of rational opinion over the widest possible field.

Ziman's argument implies that scientific investigation is by no means coterminous with experimental science. Essentially the same point has been made by Barratt who argues for a broad conception of what constitutes scientific research. Barratt comments that

Scientific research entails a number of varied procedures and activities, ranging from fairly loosely organized observations over a broad spectrum of naturally occurring events to rigorous experimentation contrived to obtain a reliable answer to a specific question (Barratt, cited in Muscio, 1983, 39).

For Barratt then, scientific research can encompass a wide range of activities. Muscio (1983, 39), explaining Barrett's position, notes that "...to be scientific a research activity need only meet those criteria that are relevant to the particular activity in which the researcher is engaged." Thus, in the light of both Ziman's and Barratt's arguments, the present study can be said to be as scientific as any other, providing it meets the criteria that are relevant to the activities which it comprises.

The subject of the nature of scientific investigation is linked closely with the notion of 'objectivity'. The latter is seen frequently as having two components, namely, validity and reliability (Minichiello, et al., 1990, 208). Objectivity is, nonetheless, a concept which is complex and controversial. On the one hand, 'objectivity' can be taken to refer to the knowledge produced by scientific investigation - in the sense that this is knowledge free from prejudice and bias. A number of writers (see e.g. Greenfield, 1975; Kirk and Miller, 1986), following Feyerabend and Kuhn, have questioned the extent to which any knowledge is, or can be, completely objective in this sense.

There is a second approach to 'objectivity' - an approach which seems consistent with Ziman's view that the goal of scientific investigation is consensus of rational opinion over the widest possible field. On this view, objective knowledge is essentially "shareable" knowledge and what is "shareable" knowledge is "defined by members of the academic community who are interested in such knowledge" (Minichiello, et al., 1990, 209). Minichiello and his colleagues (1990, 209) accept this second approach to objectivity and, following Kirk and Miller (1986), they proceed to characterise 'truth' as follows:

> Truth (or what provisionally passes for truth at a particular time) is bounded by the tolerance of empirical reality and by the consensus of the scholarly community (Kirk and Miller, 1986).

As Minichiello and his colleagues (1990, 209) go on to point out, if this "consensus" is accepted, then the "objectivity of a piece of qualitative research can be examined and evaluated in terms of its validity and reliability."

Validity

The subject of validity is one over which there is much contention. Minichiello and his colleagues (1990, 208), citing Kirk and Miller (1986), state that validity is "the extent to which a measurement procedure gives the correct answer, or a finding is interpreted in correct ways." Elsewhere (1990, 225), they define validity as "the extent to which a method of data collection represents or measures the phenomenon which it purports to represent or measure."

As the above definitions imply, any assessment of validity must take into account the soundness of the research procedures in terms of the purposes of the study. The methods of data collection, for example, must be appropriate to the research and they must represent adequately the phenomena investigated. In the present study, the researcher would argue that the use of the semi-structured interview, as the central mode of data collection, is a particularly appropriate vehicle for achieving the purposes of the study. Data collected using this method must be accorded a high degree of 'fit' with how the informants actually speak and behave.

The procedures used during the conduct of the interviews are also relevant to an assessment of validity. In the present investigation, these procedures involved the probing and cross-checking of the informants' comments. The value of such procedures is not only that they help to ensure 'complete' data; they also provide a check on the interviewer's own understanding of an informant's contributions. Again, they are procedures which can help to disclose discrepancies in an informant's data.

The use of the sequential method of data collection also has important implications for the validity of the data. This particular method involves the researcher in on-going examination and analysis of the data. This thorough scrutiny of the data at repeated intervals is a factor which strengthens confidence in their validity. Through using this procedure, the researcher can achieve the kind of 'closeness' to the data which Filstead (1970) sees as an important characteristic of qualitative enquiry. For Filstead, this 'closeness' to the data is a condition which contributes to a deeper understanding of social phenomena.

In pointing to the use of specific procedures and techniques for promoting validity, it is easy to overlook the significance of such factors as theoretical framework and rapport with informants. Kirk and Miller (cited in Minichiello, et al., 1990, 211), for example, in discussing validity, make the point that

> the sensitive, intelligent fieldworker armed with a good theoretical orientation and good rapport over a long period of time is the best check [on validity] we can make (1986: 32).

In the present study, the rapport which the researcher was able to establish with the informants laid a sound foundation for her attempts to gather data from them; in the researcher's view it contributed to the quality of the data obtained.

Schatzman and Strauss (1973, chap. 8, passim) provide a useful angle on the subject of validity when they emphasise that validity is essentially *acceptability* to a particular audience. But, as Schatzman and Strauss (1973, 134) also note, when validity is seen in this light, the field researcher confronts a special problem - the problem that qualitative data often lack the persuasive appeal of quantified data. The way around this particular problem, according to these writers, lies in ensuring that research procedures are made explicit and that sufficient evidence is provided for whatever conclusions are reached. In this way the "credibility" of the research is established (Schatzman and Strauss, 1973, 132-34).

In the present investigation, the researcher has attempted to ensure the credibility of the study by providing an explicit statement of the procedures used. In addition, in Chapters Five to Ten, the data themselves are provided together with the reasoning that has led to the conclusions reached.

Whereas Schatzman and Strauss emphasise the idea of acceptability, Kirk and Miller (1986) focus attention on the importance of avoiding the wrong kinds of question. Kirk and Miller (cited in Minichiello, et al., 1990, 210) have identified three kinds of errors that can make research invalid. These include: (1) believing a principle to be true when it is not; (2) rejecting a principle when it is true and (3) asking the wrong kind of question. They argue that it is the last of these - the asking of the wrong kind of question - that is the source of most of the validity errors in qualitative research. Minichiello and his colleagues (ibid), explaining Kirk and Miller's position, note that "a wrong question is one which is not understood by the informant or which is regarded by the informant as evidence of misunderstanding on the part of the researcher."

Kirk and Miller's observations focus attention on the need for careful planning of interviews. In the present study, in order to minimise the possibility of asking the wrong kind of question, considerable thought was given to devising the interview schedule for each set of interviews; in addition, the researcher subjected her own performance to review after each set of interviews.

Undoubtedly, the procedure which is considered to be the primary tool for enhancing the validity of qualitative data is triangulation - that is to say, "the use of multiple methods in the study of the same object" (Denzin, 1978, 294). In the present study, although the semi-structured interview was the primary method of data collection, data have been generated also through document analysis and through observations carried out during meetings. This conforms to the type of triangulation known as "between-method triangulation" (Denzin, 1978, 302). As Denzin (ibid) explains, "the rationale for this strategy is that the flaws of one method are often the strengths of another; and by combining methods, observers can achieve the best of each

while overcoming their unique deficiencies."

The specific advantages of triangulating the in-depth interviewing method, as has been done in this study, have been put well by Minichiello and his colleagues. These authors (1990, 211), citing Kirk and Miller (1986, 30), note that

> If understanding derived from the asking of of a question or series of questions in a conversation can survive 'the confrontation of a series of complementary methods of testing, it contains a degree of validity unattainable by one tested within the more constricted framework of a single method'.

Whilst Blaikie (cited in Minichiello, et al., 1990, 223) has argued that the practice of triangulation can result in the use of methods of data collection which are ontologically and epistemologically incompatible, this point is not relevant with respect to the present study. Methods of data collection which include analysis of documents and observations of meetings are, philosophically speaking, quite consistent with the semi-structured interview. At no stage, did the researcher use questionnaires or survey-style interviews.

Reliability

Reliability refers to "the extent to which a measurement procedure yields the same answer" (Minichiello, et al., 1990, 208). Reliability therefore implies repeatability. Whilst, in the area of qualitative research, the concept of validity has a ready applicability, that of reliability appears to be fraught with difficulties. According to Minichiello and his colleagues (1990, 212), it is sometimes "claimed" that the "major flaw" of qualitative research is "in providing and assessing reliability because of the difficulty of replicating such research." To overcome this problem, they advise that researchers should document carefully all decisions made during the research process. This appears to be similar to providing what Guba and Lincoln (cited in Owens, 1991, 299) have called an "audit trail." A record of the decisions made during an investigation can contribute to the possibility of replicating

the research.

However, it is Schatzman and Strauss (1973) who, in this writer's view, provide the most useful discussion of issues associated with the repeatability or reliability of field work. With reference to the question of whether an "independent observer" would "have seen or heard the same events and reached the same conclusions", they observe as follows:

> For the field researcher whose view of social reality is one of infinite complexity, the only germane question is, *Would an independent observer make conceptual discoveries that empirically or logically invalidate his own?* [italics in original] (Schatzman and Strauss, 1973, 134).

Schatzman and Strauss proceed to emphasise the importance of non-contradiction of evidence. They note that

> ...all independently developed data and analyses would necessarily be different. One or another analysis may be conceptually superior, but if any fails to contradict the original research, it must be regarded as supplementary or complementary (1973, 135).

As this statement indicates, only evidence that contradicts a hypothesis or proposition can be considered to be genuinely negative evidence. It is a statement that, in the domain of research, appears to reflect that first principle of metaphysics - the principle of non-contradiction.

The implications of Schatzman and Strauss's comments are clear. Muscio (1983, 82) has stated these implications well when he notes, following Schatzman and Strauss, that the field researcher should make every attempt to "guard against the failure to collect evidence that could contradict the conclusions that are reached." In this investigation the researcher has taken precautions to guard against just such a failure.

Possible Sources of Bias

The researcher's status as that of 'insider' was noted on p.105. There are both advantages and disadvantages associated with such status. It can be argued

that the researcher, as insider, has a degree of knowledge of the informants' context which places her in an advantageous position to collect and analyse data. Since she has at least some measure of 'in-group' understanding, she is likely to be attuned to the meanings and interpretations of the informants.

On the other hand, it can be contended also that 'insider' status is a potential source of bias. For one thing, the very knowledge which the researcher already possesses of the informants may result in her taking-for-granted meanings which should be probed further. Without doubt, however, the most important objection would be that the researcher is, as it were, 'inside the whale', hence her perspective may be overly subjective and personal.

Whilst it is conceded that there are hazards of this kind associated with being an 'insider', there are also ways of minimising these same hazards. The researcher can, for example, adopt a 'native-as-stranger' stance (Minichiello, et al., citing Simmel, 1990, 220). In the present investigation, such a stance has allowed the researcher to achieve an appropriate degree of distance, thereby reducing the risk of producing an overly subjective account.

A second source of potential bias lies in the informants themselves. To this point, they have been referred to as 'well-informed' informants. Nevertheless, it might be argued that their positions as senior academic administrators may dispose them to present an 'official' version of their roles and actions; similarly, it may dispose them to present themselves in an overly favourable light. Were this to occur, the authenticity of their statements (including the authenticity of the metaphors contained in these) would be in doubt.

Again, it is acknowledged that this is a possible source of bias. In offsetting or minimising such bias, the value of strategies already discussed, holds. These strategies have included the development of a favourable interpersonal climate as a basis for the interview procedures and the judicious use of probing-type and cross-check questions. In addition, there is the strategy of triangulation which, as employed here, has entailed the use of methods of data collection (document analysis and meeting observations)

complementary to the semi-structured interview.

Conclusion

The purpose of the present study is to examine the nature of the relationships between the metaphors used by the academic administrators and the administrative arrangements instituted for the purpose of making decisions about the introduction of masters' degree programmes. The writer would contend that the research strategy described in this chapter is the most appropriate for achieving that purpose. It is appropriate to the nature of the phenomena investigated and it is closely articulated with the study's theoretical assumptions.

A full summary of the conclusions pertaining to the study's methodology is provided on pp.166-67, after the methods used to analyse the data have been described. This is the one aspect of the methodology yet to be examined and it is to this subject that the writer now turns.

CHAPTER 4

Methods of Data Analysis

Introduction

The Process of Data Analysis

Analysis of Language
> Identifying the Metaphors
> Categorising the Metaphors
> The Development of an Analytic Framework
> The Problem of Identifying Predominant Metaphors
> Identifying the Most Prevalent Metaphors
> Identifying Similarities and Differences
> Recording the Data
> Displaying the Data

Analysis of Administrative Arrangements
> Identifying the Administrative Arrangements
> Recording and Displaying the Data
> on Administrative Arrangements
> Identifying Similarities and Differences

Analysis of the Relationships between the Metaphors
and the Administrative Arrangements

Difficulties Encountered in Analysing the Data

Conclusion

Introduction

In this chapter the methods used to analyse the data are presented. The chapter commences with a summary of the principal characteristics of the analytical process. The following topics are then discussed: the methods used to analyse the language for metaphorical content; the methods used to analyse the data on the administrative arrangements; and the methods used to analyse the relationships between the metaphors and the administrative arrangements. The main difficulties encountered in analysing the data are also summarised. The concluding statement incorporates the principal conclusions pertaining to the matters discussed in both Chapters 3 and 4.

The Process of Data Analysis

Data relevant to each case were analysed and data were analysed across the three cases. 'Cross-case' analysis was essential for the identification of similarities and differences between the three sub-cultures.

The sequential method of data collection employed in the present study was described in Chapter Three. Here it is necessary to reiterate that the process of data *analysis* was concurrent and interactive with the process of data *collection*. For example, preliminary analysis of data was carried out after each pair of interviews were held. Data collection and analysis were not only interactive, but also cyclical. Data from each of the cases were analysed in cycles, and cycles of analysis occurred across the three cases. In all, there were many cycles of analysis before a 'saturation' point was reached - a point where the researcher was satisfied that little more was to be gained from any further analysis.

The specific types of analytical activities which occurred included those of data reduction, data display, and conclusion drawing and verification (cf. Miles and Huberman, 1994, 10-12). These activities, and the activity of data collection itself, formed an "interactive, cyclical process" (Miles and Huberman, 1994, 12).

In sum, the continuous cycles of data collection and analysis that were carried out represent a process that is consistent with Miles and Huberman's description of the nature of qualitative data analysis. These authors speak of such analysis as being a "continuous, iterative enterprise" (Miles and Huberman, 1994, 12).

Analysis of Language

In this section are described the analytical methods used in identifying the metaphors of the academic administrators. In order to illustrate these methods, some examples of analysis have been included. This section also includes a discussion of such problems as those associated with the identification of predominant or 'dominant' metaphors.

Identifying Metaphors

Analysis of the language for metaphorical content began with an examination of the typed interview transcripts. This early round of analysis was aimed at ascertaining which units or items of analysis to begin recording. During this round a highlighter pen was used to underline any figurative language occurring in the data.

It was during this phase that the researcher became aware of how heavily laden everday language is with what are essentially 'dead' metaphors or nearly 'dead' metaphors (as, for example, 'upon arriving'; 'we can tie down'; 'figuring out the future'; 'in the right direction'). As Koch and Deetz (1981, 6) point out, some metaphors are so basic to our way of conceptualising experience that there may be little to be gained in recording them. Thus a

decision was made to eliminate such basic metaphorical expressions from the process of analysis. The goal became one of isolating only those expressions having direct relevance to the purpose of the study. This meant in effect that metaphors that were central to the way in which the subjects conceptualised and construed academic administration and organisation were to be isolated.

Metaphors are often the principal carriers or vehicles of themes. Hence one possible way of accessing them is to note the major themes in the data and then the images and metaphors contained within those themes. Such an approach has the added advantage of ensuring that the images identified can be related readily to their context. Perusal of the interview data revealed that the subjects used metaphorical expressions to conceptualise and describe (a) the role of the university, (b) the role of the academic administrator and (c) the nature of an academic organisation. In a sense these constituted very broad themes in the data and it was these themes which contained the images and metaphors most relevant to this research.

The decision to record language relating to the role of the university was not made without considerable thought. At first the intention was to record only metaphorical language about the role of the academic administrator and the nature of an academic organisation. However, it became obvious that an informant's understanding of the role of the university was closely related to, indeed shed light upon his understanding of the role of the academic administrator. Similarly, his understanding of the nature of the academic organisation was closely related to his conceptions of the university and the role of the academic administrator. The three themes were closely interwoven in the data. Thus the final decision was to take as the basic unit of analysis those speech acts which contained metaphorical expressions about (a) the role of the university, (b) the role of the academic administrator and (c) the nature of an academic organisation. To take certain speech acts as the basic unit of analysis made much more sense than taking grammatical forms such as adjectives, verbs or nouns. Grammatical forms cannot be equated with metaphorical expressions.

In isolating specific metaphors and images the researcher kept in mind the

definition of a metaphor, as given on p.14 of this study. The literature had consistently emphasised that metaphorical thinking and expression involved 'seeing' one entity in terms of another. It is a process of 'seeing as'. Therefore, in making judgments about the metaphorical content of the language, the researcher found it helpful to interrogate the data using questions such as the following: What does the language used suggest that the university is being seen as? What does the language used suggest that the academic organisation is being seen as? From what perspective is the role of the academic administrator being seen? To whom or to what is the academic administrator being compared?

The following examples are included to illustrate the way in which the language was analysed.

> Fundamentally a senior academic administrator is a facilitator [the metaphor - facilitator]. A senior academic administrator must manage the university in such a way financially, intellectually, academically, politically; a senior administrator must manage the university in order to facilitate the achievement of the legitimate goals of the staff and students [the metaphors - manager, facilitator].To realise that..is to make an important point. Essentially the role is that of a facilitator [the metaphor - facilitator].

> I think that ....it would be difficult not to slip into the same sort of mode yourself and just .. dish up the hash browns in a lecturer's sort of situation [the image - dish up the hash browns; the metaphor - the lecturer as one who dishes up the hash browns] where you can stand out there and just..run off the platitudes..because..that's what everyone wants so that they can reproduce the thing and you can put ticks on them and that sort of thing. There is..you know..everyone's quite happy for that to happen.

> The significant role of the university is as a translator....as an interpreter, translator of the disciplines [the metaphor - the university as interpreter and translator of the disciplines] so given the disciplines ought to be developing, and our understanding of the disciplines and our understanding of issues ought to be developing, then I think the significant role of the university in the education sense is to translate that for

others to learn, to pick up, to carry on ... [the metaphor - the university as translator of the disciplines]

I think I brought the School of ...to the attention of a lot of people simply because I was very active off campus, and I think that it worked that, you know, people were very conscious of the School of ...they spoke well of it, and a lot of that was that I was the public image selling a good product - [the metaphors - the academic administrator as salesman; as public relations expert; the metaphor - university learning as product] I'm not just saying it was me- I had a good product to sell, [the metaphor - university learning as product; the metaphor - academic administrator as salesman] and there was a lot of commitment from staff. I would think these were my major achievements.

I think it is a senior managerial position. And I think academic managers have a lot in common with the managers of other organisations [the metaphor - the academic administrator as manager]. This university, as you probably know, is a corporate member of the Australian Institute of Management and there aren't many universities which are. And we..we take that seriously...

Let's compare it with a postage clerk, where you simply stamp things in, and write postage on it, and then you send it back to the dead letter box...[the metaphor - the academic administrator as postage clerk; the image - the dead letter box]

I felt at that point quite negative, quite humiliated, and I felt really the job wasn't worth having. I felt it was wrong. Again, it [the replacement incident] reinforced feelings and perceptions that I have from time to time that being the Head of Programme - the expression I use when I am in my more cynical mood is 'cigar store Indian'; [the metaphor - the academic administrator as cigar store Indian] somebody to be propped up as a kind of store-front thing, [the metaphor - the academic administrator as business 'front'; as facade] because after all Heads of Programme appear in prominent roles from time to time, and who are wheeled out [the image - wheeled out; the metaphor of the machine] by the Dean as sort of - to new groups of students, to parents of students, and so on...

It must be stated that the procedure of isolating the metaphors and images was considerably more complex and far less tidy than most of the above examples might suggest. Phrases containing figurative language and descriptive words were often used in conjunction with the central metaphors. In the sixth example given above, the phrase "the dead letter box"extends the metaphor of the academic administrator as postage clerk. It also adds considerable nuance to it. For the kind of interpretation that is contained in Chapters Five to Eight of this study, it was considered important to note such images.

In any given speech act, moreover, there were frequently a number of expressions manifesting what Koch and Deetz (1981, 7) call a "main" metaphor, but which the researcher would prefer to call a root or generative metaphor. These expressions are also referred to by Koch and Deetz (1981, 9) as "entailments" of a main metaphor. One such expression in the examples given above is the phrase 'wheeled out'. This expression can be seen as an 'entailment' of the machine metaphor. Similarly, the image "grist to the daily mill" which occurs in the language of Subject 1 can be seen as an 'entailment' of the machine metaphor. Words such as "power-house", "finetuning", "friction" are likewise 'entailments' of the machine metaphor. On the other hand, "growth", "needs", "nurturing", "environments", "warm environments" are 'entailments' of the organism metaphor. "Balancing act" is an 'entailment' of the circus metaphor, whilst "agendas", "manouevring", "games" are 'entailments' of the political system metaphor.

To illustrate further this point, consider the following examples:

> people have <u>pressure on them</u> <u>to get money in</u> - <u>at the other end</u> they would like <u>to see products out of it</u>. People are encouraged <u>to go for grants</u> totally unrelated to what they do. People who <u>get grants</u> then <u>run around</u> trying to do it... It's an odd way of using money and of trying <u>to produce</u> worthwhile research.

The expressions underlined in this passage can be seen as 'entailments' of the producer metaphor and, at a still deeper level, of the machine metaphor.

Or again, consider the following:

> we put them in <u>at one end,</u> give them a <u>regulation</u>
> <u>number of hours</u> and a <u>regulation number of books</u> to
> read, give <u>a</u> <u>regulation grade,</u> <u>pass them out at the other</u>
> <u>end</u> and <u>get</u> <u>them into the work-force</u>. And that's <u>nice</u>
> <u>and efficient if we can count them</u>. And er..all that sort
> of thing. I think that there's a fair bit of that sort of
> pressure there.

The phrases and images here are 'entailments' of the factory metaphor, and some might argue, of the military metaphor. At the most fundamental level they are 'entailments' of a machine metaphor.

The following example is included to illustrate the complexity of a particular speech act and the corresponding complexity of the analytic task:

> I think that what you should do now is, as I said, have a
> differentiated research <u>profile</u> and <u>thumb the ones</u>
> which are going to bring the university <u>the best credit</u>
> and the best students and the best staff, but just don't
> interfere with other people who've got substantial
> research to get on with. So if they want to do the
> curiosity <u>stuff,</u> which has no use to anything and <u>costs</u>
> <u>nothing,</u> that's fantastic, let them go: but if they [those
> undertaking curiosity research] wanted huge resourcing
> I think I'd start to ask questions about whether that's
> what the university could <u>best profit from,</u> and that
> sounds awful because it's talking about the university,
> rather than <u>the growth of the disciplines</u>. I think at this
> stage of our development we can't pretend that w'ere
> going <u>to make disciplines grow substantially</u> so we've
> got to really look at <u>the shape of the university</u>. Maybe
> in 50 or 100 years time this would be a different
> university, and it may be a major sort of theoretical
> university, who knows.

Here there are a number of "nested" metaphors (Koch and Deetz, 1981, 7) with research being seen as a material object ("stuff") and as an economic entity (something which might cost or profit the university). Similarly, the university is seen as an institution whose activities must be considered in cost/benefit terms (the university as business); and as an institution in which knowledge 'grows' (the university as organism). In the above speech

act, different areas of discourse overlap and metaphorical expressions, manifesting different root metaphors, criss-cross and inter-twine. At the same time the physical connotations of the language used are noteworthy. Phrases such as "thumb the ones"; "the curiosity stuff"; and "the shape of the university" suggest a very material attitude and perspective on the part of the speaker.

In analysing the proliferation of expressions that are 'entailments' of a main or root metaphor, a procedure outlined by Koch and Deetz was followed. Koch and Deetz (1981, 7) describe a procedure in which the many specific expressions are "sorted into coherent groups." They note that "through repeated sorts, patterns of metaphors emerge, clustering around recurring 'main' metaphors." (Koch and Deetz, 1981, 7) That is to say, by grouping related expressions the underlying root metaphors can be discerned. The following are examples of groups of expressions isolated, each of which manifests an underlying root metaphor.

Organisation as Machine
"So if I nailed anything down"
"Trying to steer a path through conflicting pressures"
"Part of the traditional mould of higher education"
"The grist of their particular daily mill"

Organisation as Organism
"So that's again nice feedback to get"
"They don't grow in that environment"
"A warm responsive environment is absolutely crucial"
"If they don't, they don't survive"

What is noteworthy here is that most of the metaphors identified in this particular way were *organisational* metaphors. Specific expressions of the kind noted above, reflected or manifested metaphorical conceptions of an organisation, more so than they did conceptions of, say, a university.

Categorising the Metaphors

Three Main Groups

Once individual metaphors and images were isolated, the issue arose of how they should be categorised or classified. An initial categorisation was made according to the three major groups of metaphors identified in the data. These groups have already been referred to and are as follows: (a) metaphors for the role of the university, (b) metaphors for the role of the academic administrator and (c) metaphors for the academic organisation.

The Question of Further Categorisation

A crucial question remained of whether or not, within each of the three main groups, any further categorisation would occur. Was it necessary, for example, to treat as the one metaphor, individual metaphors having the same or similar meanings?

Four metaphors for the role of the university - 'university as institution preserving, disseminating and creating knowledge', 'university as translator and interpreter of the disciplines', and university as 'fountain of knowledge' and university as 'temple of knowledge' - provide a useful illustration of this issue. The first metaphor could be seen as being inclusive of the last three. Hence it was conceivable that the last three could be subsumed under the heading for the first.

The possibility of placing individual metaphors under the heading for one more inclusive metaphor, if it were pursued, also raised another question. Should the array of metaphors used, say for the university, be collapsed into root or generative metaphors - metaphors such as those of the machine and the organism? It is conceivable, for example, that university as factory and university as producer could be reduced to the machine metaphor.

Finally, a decision was made against using one heading for a number of metaphors that were related in meaning. To place individual metaphors under the name of one broader metaphor had the disadvantage of losing the sense of the metaphors as they were actually used. Connotations of

meaning and the nuances associated with particular metaphors were lost by such a procedure.

Similarly, a decision was made against collapsing the individual metaphors for the university and the role of the academic administrator into root metaphors. To reduce distinctive metaphors to a list of root metaphors again seemed to sacrifice the uniqueness of each metaphorical expression. It seemed to come very close to transforming the data into *invented* (as distinct from observed) metaphorical categories.

Thus the metaphors were retained in a form identical with that in which they occurred in an informant's language. It is for this reason that some which are closely related in meaning are listed separately in the tables included in Chapter Eight. To list the individual metaphors as they occurred in the language has the undeniable advantage of allowing for greater *specificity* of information about metaphorical usage. In addition, it gives the reader a much better sense of the nature and quality of the academic administrators' speech milieu.

There is one further grouping or categorisation which requires comment. Of the three main groups of metaphors identified, those identified for the role of the academic administrator contained the widest range of metaphors. Moreover, it was obvious that, within this particular group, qualitatively different types of language were used for the role of the academic administrator. In addition to the somewhat abstract conceptual metaphors used for the role of the academic administrator, there were images and analogies of a more concrete and colourful nature. These had a very strong affective dimension being expressive of an informant's lived or felt experience of the role. Thus the group of metaphors for the role of the academic administrator was further divided into two sub-groups: (a) conceptual metaphors and (b) experiential imagery.

After classifying the various metaphors contained in the first of these sub-groups - the conceptual metaphors for the role of the academic administrator - three generic metaphors were identified, each of which implied a distinctive role orientation. These three metaphors were the

academic administrator as manager, as curriculum developer, and as academic leader. The individual metaphors classified under the heading of the manager metaphor - easily the largest group - were then further arranged within groups according to the particular school of management theory which they reflected.

The Development of an Analytic Framework

An important analytical task was the development of a framework for organising information about the metaphorical language. The framework proposed comprises four dimensions. These include: (a) metaphors, (b) users of metaphors, (c) extent of use and (d) context.

The first dimension refers to the individual metaphors used, as for example, the metaphors used for the university. The second dimension refers to the individual informants who use a particular metaphor. The third dimension refers to the extent to which a metaphor is used by a subject and the fourth dimension refers to the type of context in which a particular metaphor occurred.

Obtaining information about the third dimension - extent of use - entailed counting the number of times an informant used a metaphor. Due, however, to the nature and volume of the raw data, it was sometimes difficult to obtain an exact count of this. Therefore an estimate was made of whether a subject used a metaphor 'frequently', 'to some extent', 'seldom', or 'never'. Where, however, a particular metaphor or image was especially noteworthy because of the frequency with which it was used, an attempt was made to count the number of times it occurred.

The fourth dimension mentioned above, namely, that of context, was considered especially important. Individual informants might use certain metaphors in a positive sense and others in a negative sense. An informant's use of a particular metaphor in a negative sense might exceed his use of another metaphor in a positive sense. At the very least, an indication needed to be made of whether a metaphor occurred in a positive or negative context. A failure to indicate this could entail the risk of

distorting an informant's meaning.

Initially, consideration was given to excluding the metaphors used in a negative context, but something seemed to be lost if this were done. Both types of usage (positive and negative) are integral to an informant's pattern of metaphorical use and both types shed light on his meanings for academic administration and organisation.

It goes without saying that the use of the terms positive and negative are only a very broad indication of context. To gain a full sense of the way in which a metaphor is used, the speech act containing the metaphor must be examined. This is one reason why the discussion included in Chapters Five to Seven, a discussion which includes an extensive use of quotations, is considered to be so important.

There were only two classes of metaphors for which type of context and extent of use were not indicated. The distinctive nature of the experiential imagery was such that the use of the headings 'positive' and 'negative' appeared to be unnecessary. Again, for those metaphors that were selected by informants from a list of published metaphors, the question of context was inapplicable. Similarly, an indication of extent of use was unnecessary for these two groups of language. The experiential images tended to occur only once and the question of extent of usage was inapplicable with respect to the metaphors that were chosen from the published list.

It is worth noting that, in the development of an analytic framework, the inclusion of a fifth dimension was considered. This was the degree of importance attached to a particular metaphor by a subject. The researcher did in fact make notes about this feature. Whilst extent of use may constitute something of a guide to the degree of importance attached to a particular metaphor, in the researcher's view, it is not an absolute guide to this aspect. If future work of this same kind were to be carried out, the researcher would consider incorporating this feature - that is, degree of importance attached to a metaphor - as a separate dimension within the analytical framework.

The Problem of Identifying Predominant Metaphors

After analysing the language, it was found that most informants used more than one metaphor. This occurred with respect to each of the three main categories of metaphors identified above - that is, those used for the role of the university; those used for the role of the academic administrator; and those used for the academic organisation. Of only two informants could it be said that they were close to using just one metaphor within each of these categories.

The use of more than one metaphor made for difficulties in determining what is sometimes referred to as an informant's 'dominant' metaphor, or his most 'favoured' metaphor. One possible way of determining this is to count the number of times a metaphor is used. The metaphor that is used most for, say, the role of the academic administrator, might be considered the subject's 'dominant' one in this area.

In the researcher's view, however, counting instances of use is not an effective method. Such an approach omits consideration of an informant's meaning and emphasis when using a particular metaphor. Is a metaphor that is used only slightly more than another, to be considered any more 'dominant' than the other?

Moreover, even if meaning and emphasis is taken into account, the problem remains that some informants may use several metaphors with somewhat similar degrees of emphasis. To add to the complexity, these same metaphors may come from different spheres of organisational discourse. Surely these various metaphors must be taken into account, if an accurate picture is to be gained of the informant's metaphorical usage.

For these kinds of reasons, the attempt to isolate a single 'dominant' metaphor for each informant was abandoned. On the basis of the data analysed here, it is contended that it is much more meaningful to speak of an informant's leading metaphors, than it is to speak of his 'dominant' metaphor. Indeed the attempt to determine a single 'dominant' metaphor

may carry the danger of distorting an informant's perspective on academic organisation and administration. The result could be more misleading than it is informative or illuminative.

The aim of the analytical process thus became one of disclosing as fully as possible the range of metaphors used by each informant. The type of context in which a metaphor appears (whether positive or negative), the extent of use of a metaphor, provide the clues to an informant's leading metaphors. The issues considered here, moreover, reinforce the researcher's view that the inclusion of a dimension 'importance attached to a metaphor' may warrant consideration if future work of this kind were to be undertaken.

There is no doubt, however, that the problem of identifying metaphors and, in particular, the problem of identifying an informant's leading metaphors, is an area that warrants further investigation. The literature greatly understimates the difficulties associated with these tasks and the complexities associated with metaphorical expression generally. It too often implies, for example, that a subject will have one single, fairly readily identifiable metaphor for organisation and administration, or a single 'dominant' metaphor. Moreover, it provides no guidance on how to identify this metaphor.

Identifying the Most Prevalent Metaphors

The task of identifying the most prevalent metaphors (the metaphors that occurred most) was considerably easier than identifying each informant's predominant metaphor. Once the metaphors and their users were isolated, the informants using each metaphor were counted. The metaphors used the most were identified as the most prevalent metaphors. This procedure was used to determine the most prevalent metaphors within each sub-culture and also across the three sub-cultures.

Through a similar process of counting and addition, the informant using the most metaphors could be identified.

Identifying Similarities and Differences

The identification of similarities and differences was aided by two tools. These included (a) the classified card file which constituted the main file of data on the metaphorical language and (b) the matrices that were assembled to display the data. These tools, and their use in the identification of similarities and differences, are discussed in the following two sections.

Recording the Data

Descriptive phrases containing images and metaphors were recorded on 125 x 200mm. index cards. Coloured cards were used to facilitate access to data according to the three cultural sites. For example, pink cards were used in recording the language of informants from the Arts sub-culture; green cards in recording the language of informants from the Information Technology sub-culture; and blue cards in recording the language of informants from the Education sub-culture.

The card indexes so compiled were arranged by subject, the subject headings used corresponding to the three broad groups of metaphorical language noted above. For each cultural site, there were thus three subject indexes: an index of the metaphors used for the role of the university; an index of the metaphors used for the role of the academic administrator; and an index of the metaphors used for the nature of an academic organisation.

Within each of these three main categories, the cards were sub-arranged by informant (that is, subject). The language of any one informant thus appeared in three places. Given that three sub-cultures were involved and there was no inter-filing of cards across sub-cultures, a total of nine card indexes resulted.

The following comments are intended to illustrate the way in which the data of one informant (namely, Subject 1) were recorded. All of the images and metaphors for the role of the university used by Informant 1, were transferred to a pink card (or cards) carrying the heading Metaphors for the Role of the University in the top left-hand corner and the sub-heading Informant 1 (Dean of Arts). In a similar fashion, all of the images and

metaphors for the role of the academic administrator used by the same informant were transferred to a pink card (or cards) carrying the heading Metaphors for the Role of the Academic Administrator in the top left hand corner and the sub-heading Informant 1 (Dean of Arts). The process was repeated for this same informant's language relating to the nature of an academic organisation.

Since the card indexes thus developed were arranged according to broad subject or class, the result, overall, was a type of classified index. If research of a similar kind were to be undertaken in the future, consideration might be given to compiling additional card indexes. One of these could be arranged alphabetically by the individual metaphors and the other could be arranged according to the user or informant (Informant 1, Informant 2, etc). The indexes thus developed would allow direct access to information about the language of informants by (a) main subject area, (b) name of metaphor and (c) user or informant.

Work was commenced on the compilation of these additional indexes. The magnitude of the task, however, was such that it was dropped. Hence the classified index described above constituted the main file of data. Not a great deal was lost by not having an index arranged by individual informant. Data on the language of each informant could still be retrieved reasonably quickly, but an index arranged according to individual images and metaphors would have been a useful supplementary index.

As the metaphors were recorded, notes or annotations were added to the cards. Information was recorded on those dimensions of the analytical framework described on p.149. This information identified the user of each metaphor; the extent to which an informant used a metaphor; and the kind of context in which the metaphor occurred. Annotations were also made about the degree of importance which an informant appeared to attach to a metaphor. In addition, a note was added which allowed the researcher to locate an image or metaphor (or other expression) on the original interview transcript. This note provided the number of the transcript and the page on which the expression occurred. A similar procedure allowed for the location of those expressions which were identified from written documents.

Whilst the classified card file was the main vehicle for storing information about the metaphorical language, it also assisted the task of identifying similarities and differences between the metaphors used. To facilitate the process of discovering similarities and differences across the cases, the cards from each cultural site were interfiled. That is, the cards recording the metaphors for the university used by the administrators from the Arts sub-culture, were interfiled with the corresponding cards from the Information Technology and Education sub-cultures. This procedure was carried out for the other groups of metaphorical language - that is, the metaphors used for the role of the academic administrator and the metaphors used for the organisation. The use of different coloured cards to represent each sub-culture facilitated the process of drawing comparisons.

Displaying the Data

Matrices were the principal tool used for displaying the data. The development of matrices was an evolving process. From being at first somewhat crude in nature, the matrices became increasingly refined. The matrices served a number of purposes. They displayed the data graphically and economically. In addition, they assisted decision-making at various stages of the analytical process.

Initially, the matrices were assembled on outsize sheets of paper. Each of the main categories of metaphorical language (the metaphors for the university, the role of the academic administrator and the academic organisation) were represented on a matrix. Down the vertical axis of each matrix were listed the informants. These were indicated by number, 1-18, and grouped according to cultural site. Along the horizontal axis were entered the following headings: Metaphors; Images; Analogies; Other Descriptive Phrases.

The outsize sheets of paper resulted in large cells which allowed detailed information to be entered. Within each of the cells, a shorthand note was made of the specific metaphors, images, etc used by a subject. Against each of the metaphors, images, etc, other notes were added. The abbreviations F

(frequently); Tse (To some extent); Slm (seldom); and N (never) were used to indicate the dimension 'extent of use'. The signs + or - (positive, negative) were entered to indicate the dimension 'type of context'. A note was added also to indicate the perceived degree of importance to the user: for example, 'of much importance'; 'of some importance'; 'of little importance'.

These large and rather primitive matrices constituted a kind of map of the figurative language used by the subjects. They provided a useful overview of this, including an overview of important aspects of usage. From the matrices, a picture began to emerge of the similarities and differences between the identified metaphors.

The next set of matrices were constructed so as to allow for a more fine-grained display of the data. Whilst on the first set, very broad headings were used along one axis, these were replaced on the next set of matrices by the range of individual metaphors and images.

These matrices were assembled on A3 sized sheets of paper. The informants were again designated by number and grouped according to their cultural site. However, this time the informants were displayed along the horizontal, as distinct from the vertical axis of each matrix. The individual metaphors and images were displayed along the vertical axis. Two sub-headings 'Positive' and 'Negative' were also inserted along the vertical axis. This allowed for a grouping of the metaphors according to the context in which they occurred. The cells of each matrix were then used to indicate the dimension 'extent of use of a metaphor', the appropriate abbreviation (F; Tse; Slm; or N) being inserted in each cell.

In all then, within the three main areas of metaphorical language, the final matrices incorporated the dimensions of the analytical framework described on p.149. That is, the matrices displayed the metaphors used; the users of each metaphor; the extent of use of a metaphor by an informant; and the type of context in which the metaphor occurred.

It must be emphasised that the matrices were not simply a means of displaying the data graphically and economically. They aided the drawing of

conclusions about aspects of the language - especially the range and distribution of the metaphors. Insofar as they provided a conspectus of the identified metaphors, they facilitated the recognition of similarities and differences between the metaphors used. They were particularly useful in enabling the researcher to compare metaphorical usage across the three sub-cultures.

On the other hand, it must also be said that the matrices are limited in the extent to which they can convey the informants' meanings. They are not a substitute for the kind of elucidation of the metaphors that is contained in Chapters Five to Seven. In preparing the discussion contained in these chapters, the writer was aided by the classified card file. This file allowed her to locate quickly on the interview transcripts the speech acts which formed the context of individual metaphors and images. The examination of these speech acts paved the way for the kind of commentary that is contained in Chapters Five to Seven.

Analysis of Administrative Arrangements

This section includes a discussion of the analytical methods used to identify the administrative arrangements for the introduction of masters' degree programmes.

Identifying the Administrative Arrangements

In isolating the administrative arrangements used for decision-making about the introduction of masters' programmes, the definition of the term provided the key to the analysis. It will be recalled from pp.14-15, that administrative arrangements have been defined as comprising the following: (a) the administrative units involved; (b) the functions of each administrative unit; and (c) the relations between the administrative units. This definition provided not only a sharp focus for the collection of data on

the administrative arrangements, it also provided the framework for the analysis of the data.

The first component of the framework noted above are administrative units. These were taken as the unit of analysis. The data were reduced firstly to those administrative units that were concerned with decision-making about the introduction of masters' programmes.

The units that were isolated were then sorted into groups, with two groups being identified - those that were formally established and those having a more informal status. The first of these groups was by far the largest and this group was sorted again, this time into three categories. These included a category containing units such as boards, a category containing committees, and a category identified as 'other'. The third of these contained, for example, individual academic administrators.

Once the administrative units had been identified, the task of isolating the functions of each unit (the second component of the framework), commenced. Here the six aspects of 'functions', as identified on p.110, guided the analysis of data. Thus, for each administrative unit that had been identified, the data were reduced further to items of information on the following: composition; meeting activity; degree of formality; focal decision issues; decisions made; and methods of making decisions. That is to say, in this particular round of analysis, each of the six aspects noted above became in turn the unit of analysis.

After identifying the focal decision issues addressed by the administrative units, together with the decisions made by them, the administrative units were placed into categories, with four main categories being distinguished. These included: (a) units which were responsible for a range of decision areas, as, for example, course development committees; (b) specialist groups concerned with decision-making about the content of units; (c) task groups or ad hoc committees (those established for some specific purpose); and (d) other units.

It is worth noting at this point, that analysis of the functions of the

administrative units was a sizeable, as well as a cyclical, exercise. For each unit identified, six analytical tasks were involved. Each of these tasks in itself might require several rounds of analysis. Again, the data on certain functions sometimes required some form of categorisation. Take, for example, the decisions made by the course development committees. Analysis of the decisions of the Education and Information Technology course development committees resulted in a wide range of very specific decisions being identified. These decisions were then sorted into three main areas: (a) decisions about curriculum matters; (b) decisions about staffing resources; and (c) decisions about resources other than staffing.

The third component of the analytical framework involved identifying the relationships between the administrative units. Identification of these followed the identification of functions. It will be recalled (from p.15) that, as part of the detailed definition of the term 'administrative arrangments', three types of relations between administrative units were distinguished. These included sequential, parallel and hierarchical relations, all of which have been defined on pp.15-16. The nature of the relationships between the administrative units identified in each of the three sub-cultures, was determined in accordance with these definitions. The relationships so determined were then represented diagrammatically.

Recording and Displaying the Data
on Administrative Arrangements

As with the data on language, coloured index cards were used to record the data on the administrative arrangements. As each administrative unit was identified, for example, it was entered on an index card and a note was added which briefly described its nature and purpose. A note was also added which indicated those pages of the interview transcript where information about the unit occurred.

A similar procedure was used to record the data on the functions of units. The course development committee used in the Arts sub-culture can be taken as an example. Items of information about the composition of the course development committee in Arts were transferred to an index card

headed Course Development Committee (Arts) - Composition. Items of information on the five remaining aspects of the functions of this particular committee were recorded in a similar way. This procedure was repeated for each remaining unit that had been identified. It is probably self-evident that more extensive data were recorded on the functions of some units - the larger committees, for example - than on others.

The data were displayed using a combination of matrices and tables. A matrix, for example, was assembled to display the data on the administrative units used in the three sub-cultures. Along the horizontal axis were listed headings indicating the three sub-cultures, whilst along the vertical axis were displayed the range of administrative units identified. In the cells thus formed, the inclusion of a tick or a dash indicated whether or not the unit occurred in a particular sub-culture.

The researcher had proposed the assembling of a single matrix which displayed all of the data on the administrative arrangements used in the three sub-cultures. This was not feasible because of the range of units identified and the array of functions that were identified for *each* administrative unit. It became obvious that comparative data about certain functions of specific administrative units were displayed best using tables. Thus data on, for example, the composition of the three course development committees were illustrated using a table format. Similarly, a table was used to display the decisions made by the three course development committees.

Identifying Similarities and Differences

The task of identifying similarities and differences involved a number of cycles of analysis during which comparisons were made of the arrangements used in the three sub-cultures.

The making of comparisons was aided by (a) the main card file on which items of information had been recorded about the various components of the arrangements used; (b) the development of an additional card file on which points of comparison were recorded; and (c) the matrices and tables

used to display the data.

Firstly, the index cards containing items of information on the same components of the administrative arrangements were interfiled. For example, the cards containing information on the administrative units used in the three sub-cultures were interfiled. The same procedure was followed in comparing the functions of those units that were common to two or three sub-cultures. For example, the index cards containing information on the composition of the course development committees in Arts, Information Technology and Education, were interfiled. This procedure was repeated for the five remaining functional aspects of the course development committees. For all other aspects of the administrative arrangements, a similar procedure was used.

The interfiling of the cards facilitated the reaching of conclusions about similarities and differences. The conclusions thus reached were then recorded on an additional set of index cards. The composition of the course development committees can again serve as an example. A card was compiled under the heading 'Course Development Committees - Composition'. On this card notes were recorded about the similarities and differences in the composition of the three course development committees. The same procedure was repeated for the other aspects of the administrative arrangements.

In addition to the card files, the matrices and tables served as useful tools in the drawing of comparisons. These greatly facilitated the reaching of conclusions about similarities and differences across the three sub-cultures.

Finally, the principal conclusions reached about the major points of similarity and difference were transferred to a further set of cards. This file provided a summary version of the key similarities and differences between (a) the administrative units used; (b) the functions of the units that were common to two or three sub-cultures; and (c) the relations existing between the identified units. These summary cards, augmented by the more extensive card files and the matrices and tables, provided the basis for the discussion that is included in Chapters Nine to Ten of this study.

*Analysis of the Relationships between the Metaphors
and the Administrative Arrangements*

The final task of analysis entailed relating the metaphors to the administrative arrangements. Firstly, however, it was necessary to clarify what would be seen as constituting 'a relationship'.

The relationships that might exist could be, conceivably, both of a positive and a negative kind. Here the data were examined for evidence of both kinds. A positive relationship was said to exist if a metaphor were reflected clearly in the administrative arrangements. A negative relationship was said to exist if a metaphor were not reflected clearly in the administrative arrangements. Moreover, relationships that were remote or obscure were excluded from the analysis. The nature of the research task required a focus on the identification of clear, direct relationships.

With these points established, the data relevant to each of the three sub-cultures were examined in turn. Each major group of metaphors used (that is, the metaphors for the university, the role of the academic administrator, and the organisation) were examined systematically against the data on the administrative arrangements. That is, they were examined in relation to the data on (a) the administrative units (b) the functions of each unit and (c) the relations between the administrative units.

To identify the relationships, the researcher worked from the matrix diagrams, tables and card files that had been developed during the process of identifying the metaphors and the administrative arrangements. The metaphors recorded were checked against the files containing the data on the administrative arrangements.

In order to record the data about the relationships that were identified in each sub-culture, three new card files were commenced. In each instance

where a relationship was identified, the specific metaphor that was reflected in the administrative arrangements was noted, as well as the particular aspects of the administrative arrangements to which the metaphor was related. Each instance of a positive relationship was recorded. In addition, a number of relationships that were clearly of a negative kind were noted. It was not essential however, to record *every* existing instance of a negative relationship.

The possibility of compiling matrices to display the relationships identified was also considered. Initially, three matrix diagrams were proposed, one for each sub-culture. Along the vertical axis were to be listed the metaphors used and along the horizontal axis, the administrative arrangements used. A fourth, very large matrix diagram was also proposed which would combine the former three. However, it was difficult to summarise all the information on the administrative arrangements on any one matrix diagram. This was because the information identified on the functions of each administrative unit existed in six areas or along six dimensions. Separate matrices which related the metaphors used to *each* administrative unit (and its functions) would have been necessary. Partly for this reason, a decision was made against proceeding with the matrices. The principal reason, however, for abandoning the matrices was that they were not found to be very useful at this point of the analysis. They were limited in the extent to which they could convey meaningful information about the relationships identified.

Once the specific relationships had been isolated, an analysis of these was made. The relationships were analysed to establish *whose* metaphors (that is, which informants' or subjects' metaphors) were related, in a positive way, to the arrangements. The relationships were also analysed to establish whether or not it was the most *prevalent* metaphors in a particular sub-culture that were related positively to the arrangements. Again, the relationships were analysed to establish whether a positive or a negative relationship existed between the *leading* metaphors of the various informants (or subjects) and the administrative arrangements. Metaphors that might reasonably have been expected to be related positively to the administrative arrangements, but which were not so related, were noted.

Instances where a relationship was *contrary* to what might have been expected were likewise noted.

The differences that had been distinguished between the administrative arrangements in the three sub-cultures were again examined. In conjunction with this, the metaphors were reviewed to consider whether those used might have provided clues to the existence of these differences.

For each of the three cases, a conclusion was drawn about the kinds of relationships that occurred. Again, with respect to each case, a conclusion was drawn about the degree of predictability of the administrators' behaviour, given the metaphors used. The findings about the relationships occurring in each of the three cases were then compared.

A point worth noting is that the focus on administrative arrangements proved to be a fertile ground for the identification of relationships between metaphors and administrative behaviour. In particular, the data on the functions of administrative units yielded many useful clues about these relationships.

Difficulties Encountered in Analysing the Data

The main difficulties experienced in analysing the data have been referred to in the foregoing discussion and will only be summarised here. The analysis of the language of the informants for metaphorical content presented the main difficulty. It posed a much greater difficulty than did the analysis of the administrative arrangements.

Everyday speech is pervaded by metaphors. Hence, even in a relatively small speech act, it can be difficult to disentangle and isolate the individual metaphors. Moreover, the same metaphor can be used in a variety of ways by different informants. Hence some attempt must be made at recording the meaning with which a particular metaphor is used. In the researcher's view

it makes little sense to simply list the metaphors used.

Again, there is the problem of identifying a so-called 'dominant' metaphor for any one informant. The research carried out here shows clearly that an administrator is likely to use more than one metaphor for organisation and administration.

Because of the problems listed above, much time was involved in working out a strategy for the analysis of the language. The framework finally used was the product of much thought, as well as of trial and error. It is noteworthy that studies of the subject of metaphor in the fields of organisational science and educational administration give little or no assistance to a researcher who is attempting to identify the metaphors of administrators.

Finally, some mention should be made of the sheer size of the analytical task. Sufficient has been said to indicate the time-consuming nature of the task of analysing the language for metaphorical content. The semi-structured interviews yielded a great deal of data. One interview transcript would comprise many individual speech acts, all of which required analysis. However, analysis of the administrative arrangements, whilst being comparatively simpler, was also a large task. This was particularly true of analysing the functions of the various administrative units identified.

Moreover, since three cases were involved in the research task, many cycles of analysis were required. There were cycles of analysis of data from each case and these were then followed by cycles of 'cross-case' analysis.

The writer is conscious that the account given here of the analytical procedures implies that the process was a somewhat neat and tidy one. It probably suggests that solutions to analytical problems came readily to hand. In reality, the process was considerably more 'messy' than this account suggests. Much trial and error was involved and much time was spent in reflecting on the problems encountered. In a very real sense, what was done finally, was something which 'came about'.

Conclusion

This chapter completes the discussion of methodological issues and procedures. The appropriateness of the research strategy to the purpose of the study, a point noted at the end of the preceding chapter, is reiterated here.

Overall, the research strategy used can be described as multi-faceted, each component contributing to its overall effectiveness. Of particular significance are the qualitative case study research design, the sequential method of data collection and the use of the semi-structured interview. These elements of the strategy provide a highly effective way of obtaining valid data on subjective phenomena such as the administrators' metaphorical interpretations of organisational reality. They are similarly effective as a means of obtaining valid data on the administrative arrangements used. In all, these elements of the strategy have allowed for both an intensive and a comprehensive examination of the phenomena studied.

Quite apart from the appropriateness of the principal characteristics of the research strategy to the investigation, there are a number of other clearly identifiable features which contribute to the researcher's confidence in the validity of the data. One such feature is the supplementing of the semi-structured interview through the use of document analysis and observations of meetings - in effect the triangulation of the methods of data collection. This tactic has allowed the researcher every opportunity to discover data that might contradict the conclusions being drawn in the course of the research.

Other factors relevant to validity include those relating to the selection of informants, the characteristics of the informants and the characteristics of the researcher. The selection, in each of the three sub-cultures, of *all* the informants associated with the introduction of masters' programmes, has contributed to the 'completeness' of the data. The relevant characteristics of

the informants are that they are 'well-informed' informants able to speak fluently about their conceptions of organisation and administration, their activities and their visions for organisation and administration. They are also knowledgeable about the matters discussed, such as the administrative arrangements used in introducing the masters' programmes. Of the interviewer, it can be said that, as an 'insider', she has a measure of familiarity with the informants' setting and some familiarity with the matters under discussion. These are characteristics which have helped her to establish an effective inter-personal climate in the interview process. Such a climate is not unimportant to the attempt to obtain valid data using the semi-structured interview.

It is also important to note that, in conducting the interviews, possible sources of bias have been taken into account and a conscious effort made to prevent or minimise the occurrence of such bias.

In addition, the analytical methods used have been made explicit in the present chapter. These methods are both rigorous and comprehensive and they must be acknowledged as enhancing the credibility of the research.

In the light of the above points, it is contended here that the data generated must be assigned the status of valid data. The research strategy employed can itself be seen as an appropriate pathway to valid knowledge about the problem investigated.

With the discussion of the methodology of the study now completed, the writer turns to the first of four chapters in which the metaphors of the informants are discussed.