

THE OPERATIONAL DEFINITION OF MANAGERIAL ROLES

by

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## SUMMARY

This study aims for the first time to operationalise managerial behaviour and to produce a set of empirically-based statements of the differences in behaviour which determine managerial effectiveness or failure.

Both the Management and Behavioural Science Schools have been singularly unsuccessful in doing this, and the work begins with an in-depth review of the main philosophies in each.

The various sub-schools of managerial thought, including the writings of Learned et al (1969), Uytterhoeven (1973) and Newman and Logan (1976) are examined. It is found that whereas this school has made solid and valuable advances on the level of technique, on the strategic or overall policy level the teaching is normative, not based upon empirically validated principles, and is couched in Fayollian terms.

The review of the Behavioural Science School begins with an outline of the work of Mayo et al (1927) and ends with the findings of Levine (1973) and Greene (1975) who demonstrated only a reciprocal causation between productivity and satisfaction under the influence of the leader variable.

The various leadership theories are described from the early works of McGregor (1960), Likert (1961), Blake and Mouton (1964), to the later contingency models of Fiedler (1967) and Vroom and Yetton (1973). These too, are found to be prescriptive. The later Path-Goal theory of House (1971) which advocates "utmost flexibility" has only been partially validated by Orpen (1977).

The only common thread found running through the various approaches of the management and behavioural science schools is that of 'role', and further impetus is given to a preliminary notion that one might integrate the knowledge from the various schools (and synthesise a better understanding of what it is that the manager does) by exploring the role concept when the writers belonging to the Social Systems School are examined: amongst these are Katz and Kahn (1966), Kast and Rosenzweig (1970) and Hunt (1972). All of them see the organisation as an open social system with the manager as central to a larger role system around which operates the other sub-systems. Although largely theoretical it is certainly a more accurate and complete representation of organisational reality.

Building on the findings of earlier empirical researchers including Sayles (1964), Mintzberg (1968) undertook an observational study which culminated in a statement of managerial work in terms of 10 Roles: Three Interpersonal (Figurehead, Leader, Liaison), three Informational (Monitor, Disseminator, Spokesman) and four Decisional (Entrepreneur, Disturbance Handler, Resource Allocator and Negotiator).

The validity of the Role Set as well as Mintzberg's contention that all managers perform all ten roles in the performance of their work has been confirmed by Chorán (1969), Costin (1970), Gingras (1977), and indirectly, by Stewart (1976).

Mintzberg's later empirical work on strategic decision-making (1976) and policy formulation (1978) supports the findings of cognitive researchers working in the area of information processing and is at variance with much of the accepted management views on strategy: decisions are arrived at by progressing through successively limiting cycles and policy is disjointed, fragmented and broadly speaking, consists of waves of change and continuity.

An evaluation of the empirical literature suggests that management of the organisation is effected not by formal planning and overall objective definition, but by on-going reformulation of strategy in the light of (monitored) information about the results of prior implementation. This monitoring is done by the manager and is part of his role behaviour.

As the success of any company can be measured in terms of the results of its strategy implementation, the conclusion is drawn: role performance influences strategy formulation and implementation and conversely, implementation influences role performance.

The preliminary contention is then made: the success or failure of any organisation will be mirrored in the role behaviour of its chief executive.

A pilot study by observation and diary analysis of the activities of 2 men was undertaken as a preliminary test of the validity of this statement as well as to isolate the more crucial roles in Mintzberg's Role Set. At the same time, a set of assumptions was developed (Appendix 2) whereby any given managerial activity could be apportioned to one of the 10 roles. The results showed a strong correlation between time spent in the Leader and Monitor roles and indicated that the latter was pivotal to managerial success.

A composite financial index consisting of six balance sheet ratios was used to select the sample for the main study: Developed by a firm of Stockbrokers, the Risk Rating (RR) is a score out of 100 given on the basis of weighted analysis of these ratios. A high RR denotes low risk and a low RR denotes high risk. The measure has over the past 5 years shown excellent practical validity in predicting the failure of companies scoring a RR of 30 or less.

Listed shares having a RR of 70 or more and 30 or less were matched into pairs according to industry sector and sphere of activity. Cooperation to participate in the study was obtained from chief executives heading Clothing, Food, Pharmaceutical and Steel companies. Thus 4 pairs of Successful and Unsuccessful subjects were isolated.

Using this basis of selection and the system of role activity categorisations developed earlier, it was hypothesised:

- H1 Successful managers spend more of their time in direct leader role activity than do Unsuccessful managers.
- H2 High Leader and total Monitor role activity are a feature of Successful managers.
- H3 Internal monitor role activity is higher for Successful than for Unsuccessful managers.

- H4 Within the monitor role, Successful managers receive more unsolicited information from within their own organisations, and
- H5 Successful managers spend more of their time in external information gathering than do their Unsuccessful counterparts.

Data was collected from the executives by means of an expanded diary method. In a record covering 5 working days, they specified starting and stopping times, type of activity, its nature or purpose and the participants. The time taken for each work activity was recorded to the nearest 5 minutes. After-hours activities were listed separately.

Preliminary analysis 'costed' each activity into time and apportioned it to a particular role according to the assumptions derived earlier. At the same time, the monitor role was split to distinguish between internal and external informational input and that which was solicited or unsolicited. In this way, the total working time of the managers was accounted for and expressed as percentages spent in each of the 10 roles. The mean time for the S and US group for each role was then calculated. The results were treated statistically, first to a Hotelling's Square analysis which produced a  $T_{calc}$  value of 408,045. This was found to be significant at the 0,05 level when compared to a  $T_{crit}$  value of 17,361.

Individual t-scores showed the results for Total Leader (8%:2%) and Total Monitor (31%:12%) significant at the 0,01 level and Unsolicited monitoring (4%:0,4%) significant at the 0,05 level.

The scores for Total external (14%:4%) and Total internal (17%:9%) monitoring were found to be not significant.

Hypothesis 2 was tested by calculating a combined t-score for Total Leader and Total Monitor. The  $t_{calc}$  for the S group was over 4 times less than for the US group. The result for both was significant at the 0,01 level. On the basis of these results, H1 and H4 were accepted. The validity of H2 was very strongly confirmed. H3 and H4 were rejected.

It was concluded that the successful manager indulges in more Leader activity (motivation and staffing), monitors more, and receives more unsolicited information from his subordinates than does his unsuccessful counterpart. Further, Leader and Monitor role performance are inextricably linked and are central to managerial effectiveness.

The work characteristics, philosophies and performance in other roles were then analysed by inspection and several commonalities were identified:

The S managers all presided over a decentralised formal structure and actively practised delegation of responsibility, the US group were highly centralised and resisted delegating - in some cases overtly. The S group encouraged team decisions, the US group did not. The S managers spent less time in Resource Allocator (13%:35%) and Disturbance Handler (2%:8%) activities than the US.

The successful managers spent twice as much time in the Entrepreneurial role (11:6%) than the US group and were twice as active in developing a network of outside contacts via Liaison (17:9%).

As the total external and total Monitor activity was not significantly different (rejection of H3 and H5), as time spent in Disseminator role was almost identical (5,04%:5,22%), and as the total net working time for each group was also similar (8,25 and 7,51 hours per day respectively), there is a strong inference that the type and quality of dissemination for each group is different: that the S manager is a more skilled communicator of information.

From these findings and from further derivative argument, a number of propositions were generated which advance a profile of the effective manager as a man who delegates responsibility for decisions to teams of subordinates, motivates them, and exhibits a high degree of flexibility in his leadership style. He constantly scans his internal and external environment, makes adjustment, initiates improvement projects, and develops outside contacts. The quality of his dissemination is good and he maintains open channels of communication via the Monitor role.

The conclusion is reached that successful policy-making by the organisation and the result of strategy implementation - its overall effectiveness - cannot be divorced from managerial role behaviour: that each is part of the other.

After further argument, the overall conclusion is drawn that organisational psychology and organisational theory have reached the same stage in their knowledge and should be treated as a single discipline.

## INTRODUCTION

"Psychology is, broadly speaking, the science of the mind. Art is the doing and Science is the understanding how to do, or the explanation of what has been done. If we are able to find and to express the psychological laws upon which the art of advertising is based, we shall have made a distinct advance, for we shall have added the science to the art of advertising."

\* Walter Dill Scott

Address to the Agate Club, Chicago, 20 December 1901.

With these words the new 'science' of industrial psychology was born with Scott (a disciple of Wundt) the founding member. It inherited principles from the learning, personality, and later clinical areas of psychology, and its activities proceeded through salesmanship, recruitment and selection until in 1919 it in turn spawned personnel psychology.

Meanwhile Frederick Taylor's time and motion studies which had begun in 1895 led to more sophisticated analyses of the physical work environment and found common ground with industrial psychologists in the aim of better selection of personnel. Engineering psychology came into being.

With the divorce of James Cattell's statistically-based psychometrics from the mainstream after World War II, industrial psychology continued with this fit-the-man-to-the-job and the job-to-the-man approach throughout the 1950's, but there were increasing problems - problems which were multiple both in number and nature.

Although industrial psychology had overcome the hurdle of being an 'applied' science rather than a 'pure' one (knowledge for its own sake and not for the practical use of man) it was nevertheless regarded as a science and had thus inherited a rigid adherence to a concern only with empirical observable fact. And because of this researchers were experiencing difficulties of (1) replication due to organisational and human complexity, (2) artificiality of the laboratory setting, (3) control of variables and (4) more serious, multiple causation because their methodology did not cater for this eventuality at all.

Then there was the question of significant findings in other disciplines: Sociological findings of status, norms, roles, which became the basis of social psychology and of the Hawthorne Studies (from which derived industrial sociology) were all relevant to the study of human behaviour in the work environment. And yet how could industrial psychology accommodate inputs from disciplines such as anthropology and sociology which did not have (were not 'disciplined' by) a scientific method?

Perhaps most serious of all was the result of industrial psychology's own endeavours: The focus had always been on individual differences (what effect will this particular situation have on him? Or when considering the group as a whole, what change will this cause on each of them?) and the organisation itself was merely regarded as the reservoir of information - of data. But due to the psychologist's systematic and scientific approach, the more he discovered the more he was drawn inward toward the dynamic complexities of the organisation itself. And in order to refine already-gained knowledge (to make 'truth more true') as well as to learn more he found himself forced to come to grips with organisational structure and functioning: a task for which his methodology simply did not equip him.

Still the industrial psychologist struggled on within the confines of his straitjacket through the 50's and into the 60's, grounded in his repertoire of man-job - job-machine. The advent of general systems theory made no greater impact than is exemplified by Gilmer when he suggests that because of his varied functions the industrial psychologist should be renamed the 'human factor specialist' (1961:363)

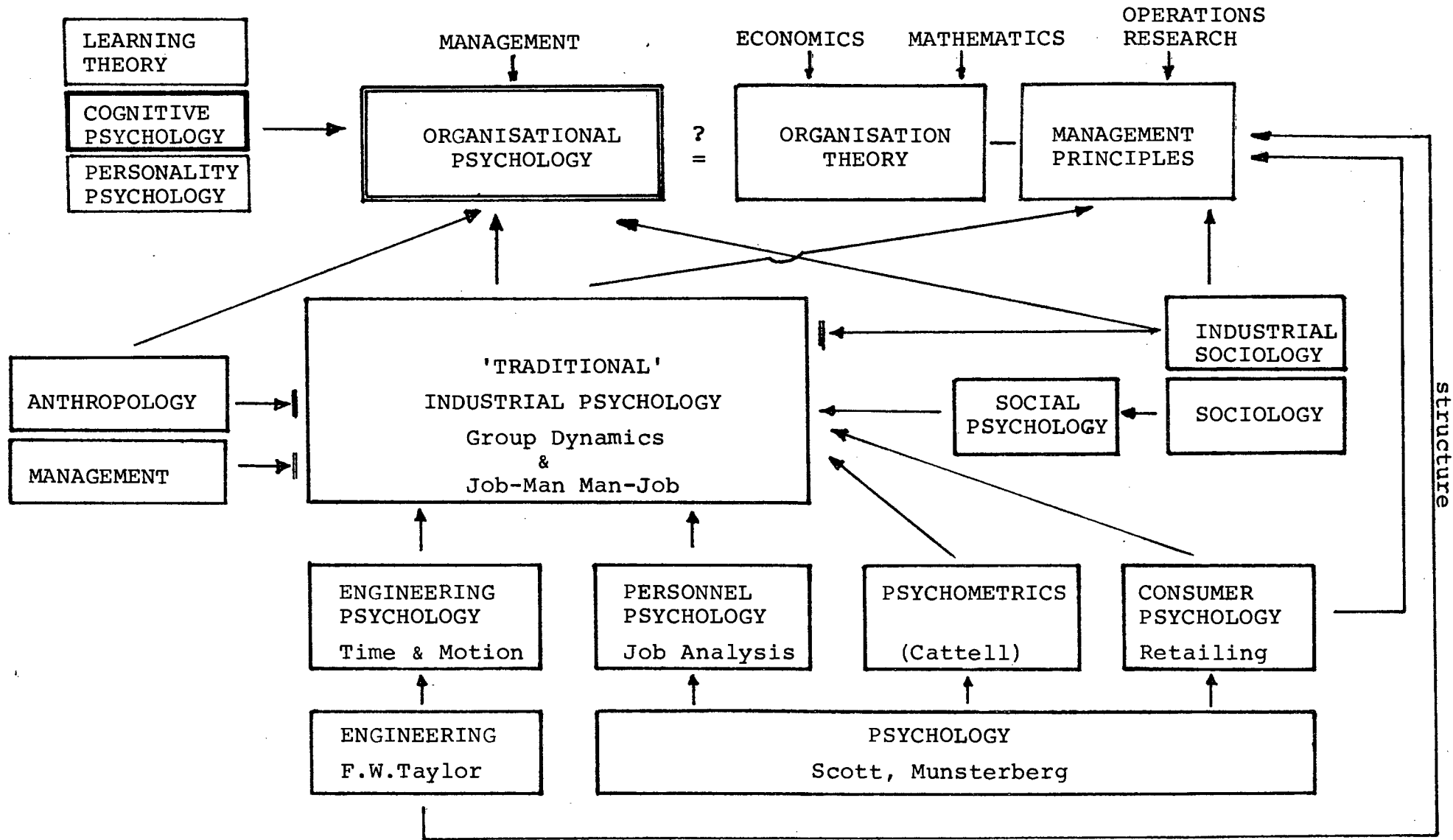
Then in 1965 the voice of sanity was heard for the first time when Edgar Schein proposed that if the organisation was indeed a complex social system, then "it must be studied as a total system if individual behaviour within it is to be truly understood" (1965:3). And so industrial psychology in its turn gave birth to organisational psychology. It would be useful to here briefly review the principles and approach of this field. Organisational psychology:

1. views the organisation as a single psychological entity in dynamic co-existence with its environment
2. thus recognises that a factor outside of the organisation can have an effect upon the individual in it (the industrial psychologist does not)
3. integrates the microscopic and reductionistic approach of the industrial psychologist with the macroscopic approach of the sociologist which ignores psychological dynamics, and therefore overcomes the weakness of both
4. is entirely functional. It attempts to look at the social system in terms of structure and process and function
5. is wholistic in that it seeks to understand the relationships between the component units
6. recognises the traditional areas of interest of the industrial psychologist but regards them as part of the truth, not all of it. Organisational psychology thus includes all industrial psychology. It is an extension of it
7. thus recognises that theory building must take place on the level of the social group process, and in relation to the needs of individual employees, and with the interaction between the individual and the system
8. adopts as its methodology a belief that it can generate its own explanatory data from observation and test its own theories of humans in the work environment

Simultaneously with the growth of organisational psychology there has been a build-up of a body of knowledge which calls itself organisation theory. Pugh (1966) defines organisation theory as "the study of the structure and functioning of organisations and the behaviour of groups and individuals within them" (cited in Howell, 1976:13) which is hardly distinguishable from its psychological equivalent. This is illustrated diagrammatically in Figure 1. Blocked arrows show where the import of relevant knowledge from other disciplines has been stopped by the traditionalists. The difference comes though in the type of researcher which has been attracted to the field.

FIGURE 1

THE HISTORICAL ROOTS OF ORGANISATIONAL PSYCHOLOGY



Because organisational theory is now so wide it has invited research and theoretical input from sociologists, political scientists, management workers, in fact from writers of almost every behavioural science discipline.

If researchers had embraced this new approach then organisational psychology would by today have a number of useful findings standing to its credit and would be well on the way to enjoying the status of a mature field of endeavour. Unfortunately it has neither. The eclecticism combined (one feels sure) with the encroachment on a preserved domain have driven many researchers deeper into the mechanistic myopia of traditionalism. One example will suffice here. Schultz (1973) is quite certain that:

"industrial psychology involves the application of the methods, facts, and principles of the science of human behavior to man at his work. (page 6) and again:

"when an industrial psychologist observes the behavior of man at his work he does so objectively, dispassionately, and systematically" (page 12)

As we shall see, other eminent writers demonstrate only a limited realism. The field today lies fragmented, directionless, and one could say in disarray.\* Some elements remain ignored or under-utilised insofar as they have not been incorporated into human relations teachings. There are many loose ends : Workers research particular areas without taking cognisance of findings in directly related fields. Early findings are dismissed as invalid and research takes on a pattern of replication upon replication in a frenetic scramble to publish. And with each turn of the wheel workers dig deeper into an ever-decreasing number of variables - to little effect.

The whole field has completely lost sight of its objective. Let us recall Scott's words: He said that Art was the doing and Science the understanding of how to do or of what had been done. Well the manager (at whatever level) has been successfully practising his art for the last 75 years. He does.

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The South African Psychological Association in recently defining its policy says it will "follow the rule of thumb that Industrial Psychology is what 'Industrial Psychologists' do" - PSYGRAM, 1977,17(1),21.

What progress has the 'science' of psychology made in the meantime towards understanding how it is that he does it? What if we pose some very simple questions? What if we were to ask: What does a manager do? Why did he do what he did? Would we be rewarded with an answer, a partial explanation, even a tentative proposal? The answer is sadly, no. The whole field would be mute.

Even organisational psychology which defined its parameters over 10 years ago has failed to produce any sort of unified, working, or practicable explanation of organisational functioning.

It is towards this end that this study is directed.

PART ONE

THE TRADITIONALISTS

A Prescription

The approach to the study of managerial work by the Schools of Management and Behavioural Science have been very different. In this section we review the work in each and assess their contribution to our understanding of what managers actually do.

circa 1927 - 1977

CHAPTER 1THE MANAGEMENT SCHOOLSIntroduction

The first attempt to delineate managerial process and functioning was made by Henri Fayol in 1916 when he told us:

"To manage is to forecast and plan, to organise, to command, to co-ordinate and control."\*

Since then literally thousands of works on management theory have been written and the whole field is today confused by what one author calls the state of 'jungle warfare.' There are contradictions in the meaning of words - even to the extent of what management theory is - and disagreement as to what methodology should be adopted for studying it.

A venture into the jungle is doubly unrewarding. For not only does one not find the answer to the simple question "what do managers do?", but one also exits from the maze at exactly the same place that one entered:

"Managing is so complex that . . . we need to divide up the whole activity into parts. The total task of management can be divided into four elements: organizing, planning, leading and controlling."  
(Newman, Summer and Warren, 1972:12)

Notwithstanding the confused state of the literature it is possible to identify various approaches which have become delineated. In order to understand why it is that we cannot glean a better answer to our questions it is necessary to briefly outline the philosophy of each.

---

Cited in Pugh et al (1977:57).

## THE MANAGEMENT PROCESS SCHOOL

The founders of this school were of course Henri Fayol and Frederick Taylor. Later contributions came from Luther Gulick and Lyndall Urwick who expanded on the writings of Fayol and thus gave impetus to their further acceptance.

This school is variously referred to in the literature as the operational school, the principles approach and the school of classical theory. The fundamental belief is in the universality of the management process. Adherents to this approach seek first to identify the functions of management and then to distill these functions into principles and hence build a theory of management from that. Management theory is in turn looked upon as a way of organising experience so that practice can be improved through research, empirical testing of principles, and proper teaching of fundamentals. Further, they base their analysis of management on a set of fundamental beliefs amongst which is the firm conviction that much can be learnt from analysing the practical management experience:

"long experience with managing in a variety of enterprised situations can be grounds for distillation of basic truths of principles having a clarifying and predictive value in the understanding and improvement of managing" (Koontz and O'Donnell, 1968:36)

And so if this school attempts to analyse practical management in terms of what managers actually do, then logically it should after some 60 years be able to provide us with an answer. It cannot. Whilst many of the original concepts from this school such as pyramidal form, the scalar principle, unity of command, and span of control are still used by us (and thus have applicability when talking about organisation structure), this school can do no more than provide us with general guidelines as to the functioning of the management process.

Newman et al's (1972) work is quoted above. His later book co-authored with Logan and with the impressive title of 'Strategy, Policy, and Central Management' is in summary a checklist of questions which the aspiring manager must ask himself - a list of instructions that he must follow in order to analyse the outlook for a company, design the strategy, establish the policy, and build the organisation:

"with strategy, policy, and organisation decided the stage is set. Actual achievement, however, awaits the action . . . Substantial amounts of time are necessary for this make-happen effort" (1976:10)

The following quotation will give the reader some idea of the tone in which the book is written. Under the heading 'Distinctive Task of Central Management' we read that:

"members of central management have supervisory duties just like every executive. They must guide, motivate, and control their immediate subordinates and they will have some ordinary tasks like signing papers or greeting visitors . . ." (1976:403)

Nowhere are we told how these functions are to be performed.

#### THE EMPIRICAL SCHOOL

This school analyses management by a study of experience. By analysing case studies the student of management can learn from others' past mistakes. There is often little attempt to draw generalisations but merely to transfer the experience to the student. In a sense then the empirical school is similar to the operational school.

Unofficially this school might be termed the 'policy by case study school' and it is characteristic of writers out of Harvard. In its pure form the case study method is theory-free. But more lately there has been a trend to introduce discussion based upon theory as a preface to each set of cases which are organised into groupings according to which topic is being dealt with. Typical of this type of work is Learned et al's 'Business Policy', and in the introduction they state:

"The choice of objectives and the formulation of policy to guide action in attainment of objectives depends upon many variables unique to a given organisation and situation. It is not possible to make useful generalisations about the nature of these variables or to classify their possible combinations in all situations. Knowledge of what, in general, policy is and should be is incomplete as being conclusive." (1969:4-5)

The main emphasis of the book is on strategy formulation and implementation and the authors identify three main aspects of leadership:

- (1) as the architect of strategy where "to be a leader in the activities of searching out and analysing strategic alternatives and finally making or ratifying decisions among competing choices, the general manager must be an analyst" (page 760)
- (2) as the implementer of strategy where he must supply leadership: "the chief executive finds himself in the role of mediator and integrator. That is, he must deal with conflict among special interests . . . He must balance the desirability of uniformity against the requirements for flexibility" (page 761)
- (3) as a personal leader where "different kinds of personal leadership may be characterised in various ways, ad infinitum . . . The effort to relate personality traits to executive effectiveness is no longer pursued as naively as it once was. Business leaders generally are likely to be characterised by such qualities as drive, intellectual ability, initiative, creativeness, social ability and flexibility" (page 764)

The essence of the authors' advice is that "the manager must play multiple roles to adapt his leadership to the changing requirements of the situation" (page 763). But apart from the roles mentioned above we are not told what other roles make up the multiple set that the manager must use nor are we told exactly how it is that he should perform in them.

Also out of the Harvard School is Uytterhoeven et al's 'Strategy and Organisation.' A somewhat later work, it takes care to point out in the first paragraph of the preface that general management skills are not only required by the chief executive but are also needed by executives at functional operating levels. In other words it is a book about management in general. More particularly for our purposes:

"The text is oriented to the practitioner, describing a conceptual framework for strategic and organisational action. It is not intended to be a theory of the firm. Rather, as an operational guide, its purpose is to help in application" (1973:v)

It thus promises not only to answer our question of what managers actually do, but to give us an operational description of exactly how they do it. How closely does the fact match up to the promise? Well, the authors see general management this way:

"General management is not an exact science. Those striving for clarity, purity, and certainty will never acquire a general management point of view. General management is fuzzy, complicated and imprecise. Balancing the many elements of the total company equation requires trade-offs, compromises, and accommodations .... General management skills, therefore, are not just analytical, they are judgmental and political as well."  
(1973:4-5)

After having been promised so much we are soon disappointed. The value though in the Uytterhoeven work lies in the way that they conceptualise the general management function: They see it as consisting of two broad roles - the manager as Strategist and as Organisation Builder. And each of these role categories requires the possession of certain skills. As strategist he needs the skills of identification, prediction, evaluation, innovation, and decision-making. These skills are combined with a number of elements of the firm and together they comprise the "strategic process."

In his role as organisation builder the manager is seen as facing the task of (1) "Building and constantly adapting his organisation to the demands of his strategy, (2) ensuring that his strategy takes into account organisational constraints, and (3) recognising the organisational inputs which influence the strategic process" (page 72). (And in this respect goes beyond Learned et al who do not see a reciprocating influence upon strategy). As builder the manager is seen as taking action in order to translate a paper strategy into reality:

"Organisational action focusses on how he manages. Typically the general manager uses three tools:

- (1) he acts as architect to the use of organisational structure
- (2) he manages the various systems which have been designed ... and
- (3) he manages through his direct dealing with people.

The general manager uses these three tools simultaneously." (1973:78)

The rest of the text is an amplification of how these tools should be used at various levels in the organisation. Altogether an extremely valuable work from many points of view but it simply does not tell us how the practising manager actually manages even though it purports to do so.

### THE DECISION-MAKING SCHOOL

In classical economics the assumption is made that when faced with a decision the manager will act in a formal systematic and rational ('based upon reasoning') manner. Further, the assumption is made that he has complete knowledge of all the alternatives open to him and that he can order or rank the consequences of choosing each of these alternatives. He thus merely evaluates the consequences and chooses the best one. (Miller and Starr, 1967)

From this early view of economics the decision theory school of management has grown up. Gaining tremendous impetus from the development of the computer over the last 25 years, this school tends to see decision-making as the central focus of management with the other variables of management theory surrounding it.

The decision theorists, together with their colleagues the operations researchers in the mathematical school, have given us models of just about every conceivable process. However, these are of programmed decisions whereas most of the decisions facing the manager are unprogrammed. In other words it is not possible for him to know all the alternatives open to him simply because the open environment in which he works contains too many variables. The basic assumption of the decision school is a closed system:

"The most commonly used and accepted analytical framework for choice behavior or decision-making in organisations is the closed decision model . . . Many of the widely accepted decision models in management science assume a kind of administrative rationality similar to that prescribed for the ideal rational man. These models are structured in closed frameworks. They are closed because they give little weight to the environment of the decision-maker and to the complexity of the act of choice as such" (Alexis and Wilson, 1967:149-150)

### The Carnegie Group

In contrast to the economist's view of decision-making there are those of  
\* Herbert Simon and his co-workers James March and Richard Cyert who together formed what has become known as the Carnegie Group based at what is now Carnegie-Mellon University.

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Herbert Simon is a management writer turned cognitive psychologist and his work will again be discussed in Part 3. Taken as a totality, the work of Simon, March, and Cyert take a social systems approach to the firm. To the extent that their views on decision-making have been accepted by many (not all) management writers, their work is discussed here as well.

Firstly, there is no doubt in Simon's mind as to where decision-making fits into the whole scheme of management. He views the two as being synonymous:

"I shall find it convenient to take mild liberties with the English language by using decision-making as though it were synonymous with management." (1960:1)

But whereas he sees all management activities as comprising decision-making, he does not see it in the economists' terms. Their model was that of an economic man who in his dealings with a complex world selected a course from all those available to him in order to maximise his returns. Simon and his colleagues maintain that this is not possible due to the manager's own cognitive limitations - that there are limits to human rationality. In other words, maximisation is not possible. The manager does not seek to maximise profit but merely to make adequate profit.

Looked at another way choices are made by the manager not to maximise objectives but rather to satisfy constraints. In other words, they 'satisfice' rather than maximise.

These limits to the manager's rationality coupled with the (maintained) impossibility of his knowing all the relevant factors in the environment pertaining to a particular problem led Simon (1966) to postulate that the individual would seek to so construct his environment that he would approach as close as practicable to rationality but that he could not attain it: his rationality was 'bounded':

"Our world is a world of limited, serial information processors dealing with complexities that, for all practical purposes, are infinite in comparison with their information-gathering and computing powers. It is a world peopled by creatures of bounded rationality. Because we cannot simultaneously attend to everything that is potentially relevant, we must have processes that determine the focus of attention." (cited in Mintzberg, 1978:5 In Print)

Most decisions which the manager has to face are complex. They are unprogrammed in that most of them are novel and unstructured in that there is no obvious single 'right' method for solving the problem. This can either be because the exact situation has not been faced before or because the decision to be taken is particularly important. Simon proposes a basic framework consisting of three steps for the decision-making process:

"The first phase of the decision-making process - searching the environment for conditions calling for a decision - I shall call intelligence activity (borrowing the military meaning of intelligence)  
 The second phase - inventing, developing, and analysing possible courses of action - I shall call design activity.  
 The third phase - selecting a particular course of action from those available - I shall call choice activity. (1960:2)

Closely allied to the decision-theory school is that of the mathematical school - the operations researchers who sometimes call themselves "management scientists." Broadly speaking this group believe that if management or organisation or planning or decision-making is a logical process (and here they lean heavily towards the traditional concepts of rationality) then it can be quantified and expressed in mathematical symbols. From these symbols and relationships models can be built. Thus the focus of this school is on modelling of the various decision processes which are expressed in terms of the desired goal.

The computer has aided these analysts tremendously in their work. It has helped them to produce an almost endless number of models and programmes, some of which are highly complicated. But because the computer is so closely associated with the work of the operations researcher and because so many people stand in awe of this machine, it has also helped in the production of a certain cult which has grown up around the analysts' work. This cult makes it appear at times as if mathematical modelling is synonymous with the whole area of management. It is not.

Firstly, most of the work of the operations researchers deals with programmes of structured decision-making where all the constraints are known, the variables can be quantified, and the problem is a recurring one, whereas most of

managerial decision-making is (as we have seen above in discussing Simon's work) unstructured and novel. Secondly, where the operations researcher has attempted to build models of unstructured decision processes he has made the basic assumption that all the constraints can be quantified. They cannot be. Thus OR modelling of this type simply does not reflect reality.

There is no doubt that the operations researcher has been and is of tremendous benefit in that he has given the manager a number of highly useful techniques (such as PERT, CPM) which can be used by him for the production of information, but the end result of using one of these processes remains just that - information - and it does not constitute a decision by itself. The manager still has to make the choice. It does not necessarily follow that he is going to automatically base his decision upon this isolated piece of information (what about all the other considerations?).

## The Newer Approaches

### The Eclectic Schools

Advocates of this approach deem it 'eclectic' because it consists of the best of that which is 'selected' from a variety of other disciplines - psychology, anthropology, mathematics, economics - impinged upon traditional principles philosophy.

An excellent example of this type is Summer and O'Connell's 'Managerial Mind' (1973) principally because of the excellent theoretical papers reproduced before each set of cases. These are both non-directive and cover a wide variety of concepts. However there is no attempt at theory construction and management's functions are again prescribed.

Most recently, there is George Terry's 'Principles of Management' in which he presents what he calls the 'Modified Management Process School' which takes "the best from what is available in management thought and works it into a single theory moulded around the process framework as the central core" (1977:39). This is very useful as far as it goes, but we know that we cannot look to this school for the answer to our question when we read the definite statement that:

"These (people, ideas, resources, and objectives) are basically what a manager works with, but not what one does, which . . . are the fundamental functions of planning, organising, actuating, and controlling" (1977:5)

### The Management Information System (MIS)

This seems to be a convenient place to discuss the form and structure of the management information system as advocated by the formal management schools. Although not constituting a school or separate body of thought in its own right it is necessary that we discuss these approaches to its structure in order that we can re-evaluate it in the light of empirical evidence to be presented in Part Three.

Figure 2		Important activities of each fundamental function of management			
<i>The work of the manager</i>					
<i>Planning</i>	<i>Organizing</i>	<i>Actuating</i>	<i>Controlling</i>		
1. Clarify, amplify, and determine objectives.	1. Break down work into operative duties.	1. Practice participation by all affected by the decision or act.	1. Compare results with plans in general.		
2. Forecast.	2. Group operative duties into operative positions.	2. Lead and challenge others to do their best.	2. Appraise results against performance standards.		
3. Establish the conditions and assumptions under which the work will be done.	3. Assemble operative positions into manageable and related units.	3. Motivate members.	3. Devise effective media for measuring operations.		
4. Select and state tasks to accomplish objectives.	4. Clarify position requirements.	4. Communicate effectively.	4. Make known the measuring media.		
5. Establish an overall plan of accomplishment, emphasizing creativity to find new and better means for accomplishing the work.	5. Select and place individual on proper job.	5. Develop members to realize full potentials.	5. Transfer detailed data into form showing comparisons and variances.		
6. Establish policies, procedures, standards, and methods of accomplishment.	6. Utilize and agree upon proper authority for each management member.	6. Reward by recognition and pay for work well done.	6. Suggest corrective actions, if needed.		
7. Anticipate possible future problems.	7. Provide personnel facilities and other resources.	7. Satisfy needs of employees through their work efforts.	7. Inform responsible members of interpretations.		
8. Modify plans in light of control results.	8. Adjust the organization in light of control results.	8. Revise actuation efforts in light of control results.	8. Adjust controlling in light of control results.		

Source: Terry (1977:35)

With the advent of the computer the management information system was initially held to consist of electronic data processing (EDP). Nowadays it is generally recognised that data processing is merely one of the basic tools or inputs to the total information system. What then is an MIS?

Writers concerned with this area of management are mainly operations researchers and again a cult has developed to the effect that information system (MIS) is synonymous with decision-making - even with management itself. The title of Ross (1970) is 'Management by Information System' (could it be that we will find our answer here?), and inter alia he examines information as it affects each of the major functions of planning, organising, and controlling. No further detail on the management process itself is offered and all data pertaining to both the internal and external environment of the organisation is held to be quantifiable and able to be fed into the information system. Figure 3 shows this in diagrammatic form.

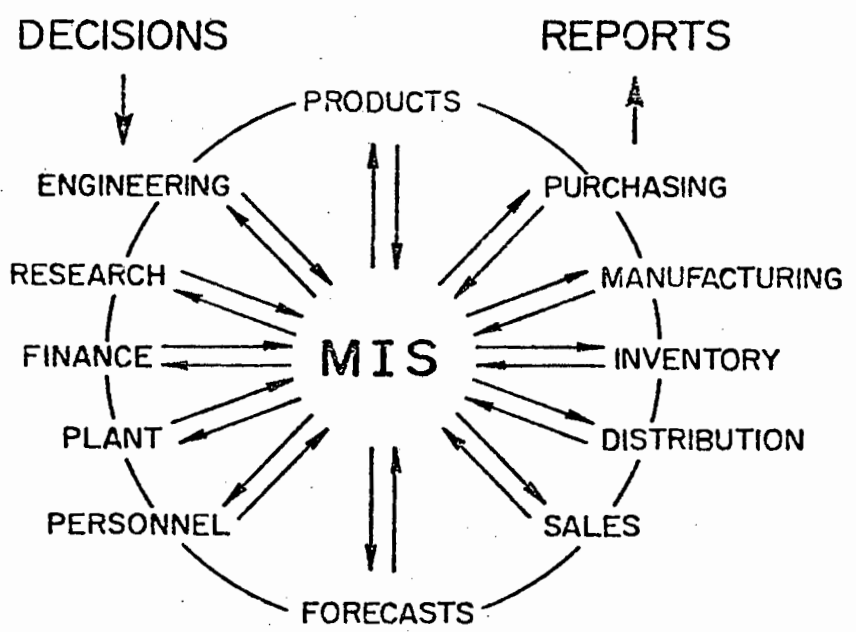
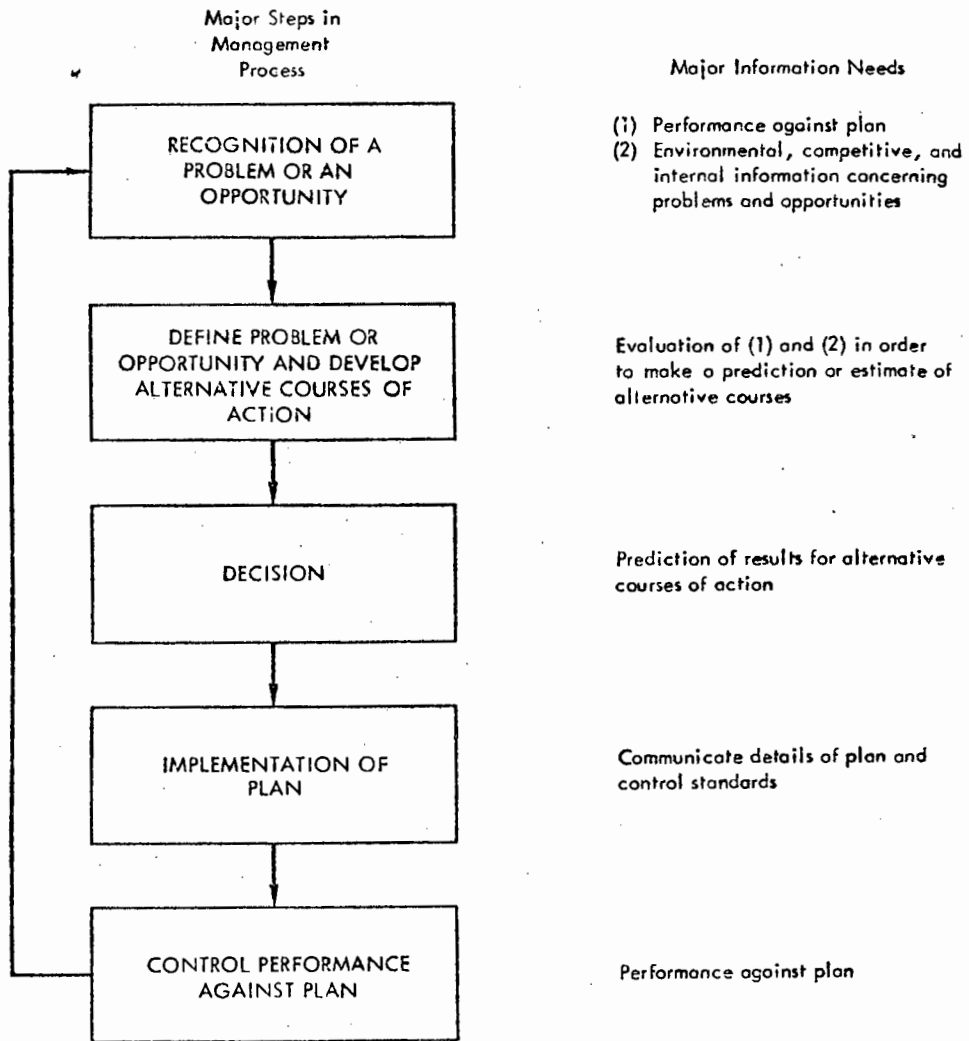
But one does learn how to set up the "information-decision system", what processing methods to use, where to locate it within the organisation, and how to protect the manager from information overload by only providing him with information relevant to his decisional needs. The MIS has proved tremendously useful - indeed indispensable - in today's modern organisation on the operational and tactical levels. But on the strategic (managerial) level it is only an aid to decision-making and a monitor of the consequences of the decision once it has been made. It can tell us little of the management process itself nor of managerial decision-making. The name "information-decision system" is an unfortunate misnomer.

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A recent work by Prince (1975) contains a small but not insignificant change: The analyst is urged to approach the information problem not from the standpoint of a tool, but to ask himself: 'What process is being observed?' (page 29)

FIGURE 3

TWO CONCEPTIONS OF THE MIS



Sources: Ross (1970:108) and Martino (1969:35)

In summarising the contribution of the traditional decision-making, operations researchers, and management information theorists towards a cohesive theory of managerial functioning, the following quotation of Herbert Simon is particularly pertinent:

"Except in matters of degree (e.g., the operations researchers tend to use rather high-powered mathematics), it is not clear that operations research embodies any philosophy different from that of Scientific management . . . no meaningful line can be drawn any more to demarcate operations research from scientific management or scientific management from management science" (1960:14-15)

### The Empirical School

The work of the empirical school which is founded on a belief in empirical analysis based upon observed reality forms the basis for Part Three.

CHAPTER 2THE BEHAVIOURAL SCIENCE SCHOOL

The revolution in the study of organisations away from the formal structure to the study of the human aspects of organisational life began with the Hawthorne Experiments. In reviewing the work of the many researchers who have contributed to this body of knowledge I should like, at risk of boring the reader, to begin with a brief outline of Elton Mayo's work.

The first part of the Experiments were conducted in the Relay Assembly Test Room between 1927 and 1932, although the findings were only published by Roethlisberger and Dickson in 1939. In manipulating the work conditions and periods in the Relay Room, Mayo and his co-workers found that output (productivity) rose to progressively higher levels regardless of how bad they made the work conditions. They concluded that the reason for the high morale (satisfaction) was that the girls felt special because they had been singled out for a research role. This selection showed that management thought them to be important. They developed good relationships with one another and with their supervisor because they had considerable freedom to develop their own pace and manner of work, and the social contact and easy relations (communication) amongst the girls made the work generally more pleasant.

In reviewing this stage of the Experiment Homans (1941) says that the girls reported that the work "was fun" and that in the absence of the old supervisory control they could work freely and without anxiety. The events recorded in the Bank Wiring Room (which formed the second part of the Experiment) showed that if a worker is asked to accommodate himself to changes which he does not initiate then: (1) these changes deprive him of the meaning and significance which he attaches to his work, (2) frustration and an almost irrational exasperation is developed by the individuals who then (3) band together to protect themselves' from management 'up there.'

Mayo and Roethlisberger conclude that this part of the Experiment showed that because of the social customs which had developed amongst them, the employees were unable to accommodate themselves to the rapid technical innovations which were introduced.

Of course the Hawthorne Experiments had originally not been designed to study group dynamics but they showed that such groups were continually being formed amongst workers. In each a complex set of forces is at work and these findings drew the attention of theorists and practitioners to the importance of the informal system.

In 1950 George Homans published his book 'The Human Group' which inter alia reviewed all the findings of the Hawthorne Experiments and proposed a system whereby the dynamics of the group could be analysed as an open system. Detailed analysis and discussion of this model is out of place here but I would merely point out that he shows a number of background factors (inputs) into the group and that two of the consequences (or outputs) are productivity and satisfaction of the group at large and the individuals within it. Since publication of Homans work as well as that of Cartwright and Zander (originally published in 1953) practically every aspect of the workings of human groups has been investigated. Researchers have concentrated on status mobility absolutes and congruence, power, the effects of leadership as well as structural characteristics. Hare (1962) in his 'Handbook of Small Group Research' lists 2000 such works.

The next work of significance was performed by Jasinski who in 1956 investigated the questions of satisfaction and communication amongst automobile assembly line workers. He found that increased opportunity to communicate correlated significantly with job satisfaction (interest).

This was followed by Zalesnik, Christensen and Roethlisberger (1958) who studied aspects of group membership in relation to satisfaction and productivity in a manufacturing company. One of their findings was that both productivity and satisfaction were related to group membership in that regular group members tended to be satisfied and to conform to productivity norms and to management expectation.

The original Assembly Line finding that general supervision was associated with high productivity was confirmed by Katz, Maccoby and Morse's research in a life insurance company in 1950. They found that a close or punitive style of supervision resulted in a high productive output. Similar research was conducted by Day and Hamblin in 1964 but in addition they were able to link productivity, satisfaction and supervision. Low productivity and dissatisfaction were positively correlated with a punitive supervisory style.

An index of group cohesiveness was developed by Seashore (1954) and administered to a group of men working for a heavy machinery company in an effort to find a relationship between their cohesiveness, anxiety, and productivity when measured against the background of how much trust the groups had in management. The major conclusion was that greater group cohesiveness is associated with less anxiety, with higher productivity when confidence in management is high, and with lower productivity when this confidence is lacking. In other words there was a positive relationship between cohesiveness, productivity, and satisfaction (meaning trust of and support in management) and the absence of anxiety by the group.

About this time some workers began to question the direction in which human relations research was going. They felt that in the same way as traditional scientific management had over-emphasised the importance of the formal system and structure, so the present work was beginning to over-emphasise the importance of the informal or psycho-social system. In an attempt to link the two, workers such as Trist and Bamforth (1951) working out of the Tavistock Institute developed a limited open system of organisation in which they attempted to link the social with the technological. In their coal-mining studies they arranged the formal structure of work so that it was physically impossible for the men to form meaningful informal relations and so satisfy their emotional needs. Freedom of communication was also severely curtailed. As could be predicted by earlier studies, the new technology (mechanical mass production) caused productivity to drop under these circumstances.

Meanwhile other workers had concentrated on the individual within the organisation. Possibly the best example is Abraham Maslow\* whose 'Motivation and Personality' appeared in 1954. This emphasis on the individual's hierarchical needs led to talk of "people versus pyramids" - the individual's satisfaction in conflict with the dictates of the formal organisation - and a curious development began to take place in the literature. This development is best illustrated by highlighting the work of two writers, Chris Argyris and Warren Bennis.

Argyris (1957) draws heavily on the findings of traditional psychology as well as the work of Maslow. He says that aspects of structure such as unity of command, span of control, and hierarchy merely served to "compound the felony" of making the individual feel inadequate and that individuals within an organisation are asked "to produce under conditions tantamount to psychological failure."

Further, if these formal structures are to remain and if the individual is striving for a level of self-actualisation (Maslow) then conflict between the organisation and the individual is inevitable. He dismisses the human relations movement as a "fad" and does not see it as the answer to resolution of this conflict. His is therefore a pessimistic view. He asks:

"How is it possible to create an organisation in which the individuals may obtain optimum expression and simultaneously in which the organisation itself may obtain optimum satisfaction of its demands?" (1957:156)

Elsewhere he accepts the conclusion of the Hawthorne Studies (that increased productivity is a function of improved human relations) when he says that "the research by Mayo, Roethlisberger and Dickson presented concrete evidence showing that productivity and human relations were intimately tied up. Poor human relations, wrote the authors, creates low production." And he goes on to suggest three possibilities which, whilst not solving the dilemma, might enhance the work and lead to greater potentiality. These are (1) job enlargement,

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McClelland (1953), Herzberg (1966), and Gellerman (1963) also deserve mention here.

(2) employee-centred leadership (precisely what the human relations movement stood for) and (3) reality<sup>\*</sup> leadership.

In contrast to this pessimistic view Bennis presents a viewpoint which might be described as 'qualified optimism.' Identifying with other writers such as Abraham Zaleznik, Mason Haire, Herbert Simon, and Alvin Gouldner (whom he calls 'the revisionists'), he says that their viewpoint is held mainly as a result of new research findings and "some reality considerations":

"In general they share a common concern for revising the native, unsubstantiated, and unrealistic aspects of the human relations approach without sacrificing its radical departure from traditional theory. The revisionists then, recognised clearly that organisational theory must take into account such factors as purpose and goal, status and power differentials, and hierarchy" (1966:69-70)

And almost in answer to Argyris' question, Bennis says that "it is my contention that effective leadership depends primarily on mediating between the individual and the organisation in such a way that both can obtain maximum satisfaction" (1966:66)

### Open Systems Theorists

Kenneth Boulding's general systems theory had appeared in 1956. Now, prompted by this work and by the writings of the revisionists, a number of authors proposed theories of open system models for organisations. We have already seen those of George Homans as applied to the group and that of Trist and Bamforth. The two social psychologists, Katz and Kahn, in 1966 published their overlapping role set<sup>\*\*</sup> in which they see roles as the "building blocks" of the "contrived" social system. In fact these two writers almost seem to

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\* It is interesting to note that Mason Haire (1959a) defines 'reality leadership' as "flexible leadership tailored to the situation, not too directive, not too non-directive, not too employee-centred, but firm where it should be firm."

\*\* Roles and the role system in organisation are discussed in Chapter 5.

be echoing Bennis' words when they suggest that the psychological approach had generally ignored or had not dealt effectively with the facts of structure and social organisation. They, like Kast and Rosenzweig (1970), use systems concepts to develop an integrated model to try and overcome the short-coming.

All these models have in common an acceptance that the organisation does not exist in isolation but rather is part of a dynamic environment and that the sub-systems within the organisation are all mutually interactive. All also seek to combine the informal and formal - indeed all organisational phenomena - into an integrated whole or gestalt. They are however merely models or perspectives - ways of viewing the organisation - rather than precise experimental predictions as to how it will behave. They are theories.

#### INTERIM SUMMARY

Perhaps we could pause at this stage and summarise the empirical findings of the early human relations researchers up to the middle 1950's. These findings can be condensed into a number of short statements:

<u>Hawthorne</u>	Interaction opportunity (communication) and productive output are both positively correlated with satisfaction
<u>Homans</u>	Both productivity and satisfaction are outputs of group interaction
<u>Jasinski</u>	Communication is related to positive job satisfaction
<u>Zalesnik</u>	Both positive productivity and satisfaction are features of cohesive groups
<u>Seashore</u>	Increased cohesiveness is associated with high productivity when confidence in management is high.

In addition a belief in open systems theory would carry with it an acceptance that there are environmental, technological, and leadership factors which would affect various aspects of organisation functioning. Any degree of attention to the revisionistic thinking would lead us to consider the situational variable.

From these findings alone we might conclude that group satisfaction, communication, cohesiveness and productivity are all related to one another in some way.

In completing this section of the review I should like to mention the work of the sociologist Gouldner who first published his theory of the Norm of Reciprocity in 1960. In essence this states that neither the organisation (management) nor the worker is there to be exploited by the other but rather that both inherit rights and obligations: Each is under a tacit unwritten psychological contract. This he calls the norm of reciprocity which must remain stable if the organisation itself is not to be undermined: - "Social System Stability, then, presumably depends in part on the mutually contingent exchange of gratifications. That is, on reciprocity as exchange." (1975:237).

More importantly for our purposes he takes pains to point out that this functional reciprocity is not equal: "While the survival defined as the extreme case of a complete lack of reciprocity may be rare, the larger class of unequal exchanges, of which survivals are a part, is frequent. The tacit conception of survivals as entailing no reciprocity led the early functionalists to neglect the larger class of unequal exchanges" (1975:233).

## THE LATER RESEARCHERS

What empirical studies and findings have there been in the last 15 years?

Logically one would expect that the work of the early theorists would have been built on. Unfortunately things were not that simple. Interest in the area was running high and the number of research findings had literally exploded. Locke in 1969 counted over 4000 articles and at the same time noted that "the understanding of the causes of job satisfaction has not been advanced at a pace commensurate with research effort."

In addition there was another unhappy development: no agreement could be reached on the exact meaning of 'satisfaction.' The literature tried to distinguish between 'overall job satisfaction' and satisfaction with a particular facet of the job. There were definitions that talked about 'direct affect ratings' and those which were statements about the causation of satisfaction. Wanous and Lawler (1972) reviewed 9 different operational definitions of job satisfaction. At the same time they noted that both theory and research were needed to detail the relationships between the different ways of measuring satisfaction and 'the number of independent and dependent variables.'

1970 marked a turning point in the job satisfaction research when Locke published a paper in which he argued that both satisfaction and dissatisfaction were properly conceived of as the outcomes of action, but the effect of performance on satisfaction is viewed as a function of the degree to which performance entails or leads to the attainment of the individual's important job values. Locke acknowledged that emotions such as satisfaction and dissatisfaction were important incentives to action in that they entailed approach and avoidance tendencies, but he did not see them as determining action. He rather postulated that performance was the direct result of the individual's specific task or work goals and that these goals were in turn determined by the individual's values, knowledge and beliefs in the context of the situation as he understands it.

Locke's work was theoretical but from this conceptual analysis Nathanson and Becker (1973) were able to derive three hypotheses which they tested on 103 physicians working in clinics. The correlational data supported the hypotheses and indicated that Locke's analysis was substantially correct. But these findings - the pattern of association between satisfaction and performance - were the result of testing a professional group of people where the individual has internalised a well-defined set of job values. Would the findings hold true for non-professionals, for workers on lower levels?

In a study conducted into the relationship between contingent and non-contingent rewards, job satisfaction and task performance, Cherrington et al (1971) proposed that there was no inherent relationship between satisfaction and productivity and that the relationships between these two variables were dependent performance-reward contingencies. (This hypothesis in direct contradiction to the findings of Zaleznik et al in 1958). However, significant positive correlations were found between satisfaction and productivity whilst the correlations for non-contingent rewards were significantly negative.

Hamner and Harnett lent further support to Locke's 1970 theory when in 1974 they examined the effects that goals have on performance and the effects that this performance has on purported levels of satisfaction in a structured task under competitive conditions. Their results indicated that the most immediate and direct motivational determinant of task performance was the subject's goal. Both satisfaction and performance were found to be strongly related to the point where a person exceeds his goal or his 'reference person's' outcome. This reference person is normally a person performing the leadership role.

#### RESEARCH INTO THE CAUSALITY OF THE SATISFACTION-PRODUCTIVITY RELATIONSHIP

In 1974 Wanous obtained data from 80 female telephonists and conducted a causal-correlational analysis of the job satisfaction and performance relationship. The results of the various cross-lagged and dynamic correlations, although

positive for overall job satisfaction and performance, did not clearly indicate the direction of the causality. When job satisfaction was split into extrinsic and intrinsic components the data suggested that performance caused intrinsic satisfaction (satisfying higher needs) and that extrinsic satisfaction (the reward system) caused performance. This aspect of the study supported the view already held by Porter and Lawler (1968), Locke (1970) and Sutermeister (1971), namely that performance was a much stronger cause of satisfaction than was the reverse.

Wanous tentatively concluded that the data was in general agreement with a reciprocal causation view of satisfaction and performance, and this in turn was in agreement with the findings of Greene (1973) who had investigated this direction of causal influence in the relationship between merit pay satisfaction and performance. The hypotheses that merit pay caused increased productivity was not supported, but Greene's results had suggested the possibility of a reciprocal causation between satisfaction and productivity.

Reflecting similar concern for the lack of understanding of the causes of performance Staw (1975) stated that the research supporting most organisational theories was based upon correlational data and contained "hypothesised independent variables which can either be the cause of performances, the effects of performance, co-variates of third variables, or the result of a network of reciprocal causation."

Staw held the view that the resolution of the "ambiguity in causal inference is one of the most pressing problems in the field" and thus set out in his paper a general alternative interpretation of the correlational findings which were said to link perceptual or questionnaire methods to the data on performance. He postulated that organisational participants possess theories of performance just as organisational researchers do and that these respondents will use their knowledge of performance as a cue by which they attribute characteristics to themselves, to their work group, and to their organisation as a whole. According to this attributional hypothesis, self-report data on organisational characteristics may actually represent the consequences rather than the determinants of performance.

Staw tested this alternative interpretation in an experiment in which knowledge of the group performance was a manipulated independent variable and the result indicated that this independent variable affected the level of influence, the cohesiveness, as well as the communication, motivation and openness to change attributed by members to their work group.

At about this time it became apparent to these researchers that if they were to progress further in their investigation of the relationship between satisfaction and productivity then they would have to consider leader behaviour as well. (Naturally). Also, work on the leadership variable itself was beginning to generate data on satisfaction and productivity. This in turn had caused the satisfaction-productivity workers to re-examine their own work and realise that the research findings (which we have reviewed above) had been conducted under varying situational conditions and that they had by-and-large taken the form of an examination of the relationship between differing leadership styles, moderated by a variety of variables on either satisfaction or performance.

And so Kerr et al (1974), noting that the Ohio State Leadership Studies<sup>\*</sup> had been criticised on the grounds that they lacked a conceptual base and had failed to take the situational variable into account, published an article in which they reviewed the published literature involving the leader behaviour dimensions of 'Consideration' and 'Initiating Structure.' They concluded from their review that amongst the variables found by researchers to significantly moderate the relationship between leader behaviour, satisfaction, and performance were, inter alia, (1) the subordinates need for information (2) the job level (3) the subordinates expectations of leader behaviour (4) the perceived organisational independence (5) the leader's similarity of attitudes and behaviour to managerial style of higher management (6) the presence of external stress and (7) the degree of autonomy.

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The Ohio State Leadership Studies concepts of 'Consideration' and 'Initiating Structure' are reviewed in Chapter 3.

And in a review of similar consideration, initiating structure and organisational criteria, Kerr and Schriesheim (1974) noted that the knowledge concerning the nature of causality between leader behaviour predictors and satisfaction, morale, and performance was still far from complete because 'we still know almost nothing about the conditions under which leader behaviour is the cause of subordinate outcomes and those where leader behaviour is largely the result.' They also said that the static correlational analysis which had been continually utilised by all but a few of the studies was not in their opinion an adequate technique to shed further light on this issue.

No doubt prompted by this explicit self-doubt as to the direction in which the research was progressing, Greene (1975) investigated the direction of the causal influence in the relationships between the leader and follower variables in order that he might possibly answer questions such as : Does a manager's leadership style (in particular consideration and initiating structure) have greater effect on his subordinates' performance and satisfaction or is the opposite direction of causality stronger? To what extent are the relationships between these variables reciprocal in nature?

In a somewhat mammoth study Greene administered a Leader Behaviour Description Questionnaire to 103 first-line managers spread over three organisations. Simultaneously 2 subordinates of each manager completed a 4-item Work Satisfaction Questionnaire. Two subordinate peers rated each subordinate's performance, and these measures were taken on three separate occasions one month apart. The results of the cross-lagged correlations on consideration and subordinate satisfaction indicated that the 'consideration-causes-subordinate-satisfaction' co-efficients were relatively strong, significant, and considerably stronger than the corresponding 'satisfaction-causes-consideration' co-efficients. The static correlations were consistently of a lesser magnitude than the cross-lagged.

Greene concluded that his study provided indications that consideration caused subordinate satisfaction and that conversely, subordinate performance caused both leader consideration and structure across conditions. When the relationship between initiating structure and subordinate performance was moderated by consideration, there was evidence of reciprocal causation.

By implication then we have a circular causal relationship where satisfaction is generated by achieving performance goals, which in turn are determined by the individual knowledge, values and beliefs in the context of the situation as perceived by the subordinate.

The reciprocal cause-and-effect relationship suggested by Wanous (1974), and Greene (1973) and supported by the work of Levine (1973) and Greene (1975) had been confirmed.

The wheel had turned full cycle.

## CHAPTER 3

### THE LEADERSHIP THEORISTS

#### Introduction

In reviewing the leadership literature one is immediately struck by the lack of consensus as to just what it is that these theorists are studying and the meaning of the words that they use to describe their work: Definitions are myriad and words such as 'influence', 'power', and 'authority' are used with an abandon which leaves the reader in no doubt that they are indeed not sure of exactly what they mean.

Fiedler cites nearly a dozen different definitions and concludes that a leader is 'the individual in the group given the task of directing and co-ordinating task-relevant group activities or who, in the absence of a designated leader, carries the primary responsibility for performing these functions in the group' (1967:2).

Leadership is defined by Davis as 'the ability to persuade others to seek defined objectives enthusiastically. It is the human factor which binds a group and motivates it towards goals' (1972:100). Katz and Kahn conclude that 'leadership appears in social science literature with three major meanings: as the attribute of a position, as the characteristic of a person, and as a category of behaviour' (1966:301) and they cite the five types of power outlined by French and Raven (1950) as being the means by which he exerts this influence.

One can thus see that leadership, although a vague concept, must be created and sustained by that person who is in a position to exert influence over others. He may be in a position of formal or informal authority. Leadership can

therefore be looked upon as 'followership.' Three elements are involved: the leader himself, the led, and the particular situation.

### THE PERSONALITY TRAIT THEORISTS

The earliest investigations into the nature of leadership was by the trait theorists who sought to isolate those characteristics which separated the effective from the ineffective manager. It is of course strictly incorrect to call these researchers theorists as their work generally resulted in the compilation of long lists of characteristics. Nor did they investigate leadership as such but rather management: all their investigations were performed on practising managers and executors.

Beginning with the work of Bernard (1926) and prompted by the results of the Hawthorne Experiments of 1927 and the subsequent publication of 'Management and the Worker' by Roethlisberger and Dickson (1939), this approach has attracted many proponents to its ranks. No doubt they have been encouraged by the rise of the entrepreneur and the growth of big business in America as well as the continued acceptance by military commanders of this type of prescription. Indeed, in reading the lists of supposedly effective traits one gets the picture of a combination between a power-mad business tycoon and a somewhat egotistical fearless fighter.

The earlier work tended to concentrate on physical characteristics but the conclusion is that no universal physical trait can be described:

"The general consensus today is that leaders cannot be identified by whether or not they are tall or short, fat or skinny, blonde or brunette, black or white. Although many individuals who are physically big or strong seem also to have an awesome mystique associated with their person, such characteristics should not properly be envisioned as prerequisites of leadership ability" (Sikula, 1976:120)

Turning their attention from the physical to psychological variables, this school suggested traits such as honesty, loyalty and ambition. They were in turn attacked by other researchers who showed that good leaders often did not

possess high degrees of these particular traits: a person did not have to be loyal or intelligent or ambitious in order to be a good leader (manager).

Although over a hundred 'essential' traits of the successful leader have been identified, no consistent relationship has been found between these trait descriptions and leadership behaviour (Sank, 1974:423). In examining extensive reviews, Fleishman et al (1955) assert that "one is struck by the diversity of personal traits which distinguish leaders from non-leaders. Moreover, traits imputed to leaders in one study often characterise non-leaders in another study. The general result of this one-sided approach to leadership has been to demonstrate the absence of consistent general traits." (underlining mine)

Work by two later researchers in this field merit specific mention: Ghiselli (1959) produced a list of key traits consisting of 'intelligence', 'initiative', 'supervisory ability', 'self-assurance' and 'perceived occupational level' (the latter referring to where on the socio-economic scale a person sees himself as belonging). Ghiselli has been able to show that these traits are possessed in different measure by leaders at different levels in the organisation.

More recently Rupert (1967) conducted an international survey amongst leaders of commerce in Britain, the United States and South Africa by simply asking his select sample to write to him outlining those characteristics which they felt were essential in a top management position. From these missives he constructed a leadership check-list (most of which is predictably the same as earlier work) but two features stand out: for the first time there is mention of 'the need for flexibility' and a strong consensus that the development and maintenance of open channels of communication are necessary.

Generally the trait theorists have not produced very clear-cut results because they have not considered the whole leadership environment: they consider one part (personal traits) and ignore the group that constitutes the followers and the situation. The conclusion reached by the trait theorists themselves is that traits which are important in some situations are not important in others. Sikula says that "personality and sometimes even physical traits often

identify leadership ability in some environments but such characteristics are not universal in all situations" (1976:122).

## THE BEHAVIOURAL STYLE THEORISTS

### One-Best-Way Theories

The theories of McGregor, Blake and Mouton, Reddin and Likert have been referred to by Stogdill (1974) as the Humanistic Theories because they view the worker in the organisation - which is by nature structured and controlled - as being a motivated organism. They therefore see the function of leadership in terms of providing freedom for the individual to realise his own motivational potential for the fulfilment of his own needs whilst at the same time contributing towards the accomplishment of organisational goals.

Douglas McGregor (1960) classifies managers according to two basic leadership styles, Authoritarian and Egalitarian, which he calls respectively Theory X and Theory Y. Theory X is based on the assumption that people are passive and resistant to organisational needs. Theory Y assumes that people already possess motivation as well as a desire for responsibility and therefore attempt to arrange organisational conditions to facilitate the fulfilment of their own needs whilst directing their efforts to achieve organisational objectives.

McGregor sees Theory X assumptions (a legacy of Taylor's Scientific Management) as outdated and no longer applying to Western man who lives in democratic societies with rising standards of living and an increasing level of education. His Ideal Manager holds to a Theory Y assumption and will thus structure the work situation to the mutual benefit of the employees and the organisation (this prescriptive approach of McGregor's reminds one in particular of the work of Chris Argyris).

Likert's (1961) approach to leadership is based on his view that management of the human component of the organisation is the manager's most important task because everything else depends upon how well this task is accomplished.

He identifies four leadership styles ranging from System 1 (exploitative) System 2 (authoritarian) System 3 (consultative) and System 4 which he labels the participative approach. Using his Organisational Profiles which relate to various organisational characteristics, individual managers can plot the effect of the respective power styles on organisational effectiveness. He concludes that the participative style is the best approach to leadership.

"System four is appreciably more complexed than other systems. It requires greater learning and appreciably greater skill to use it well but it yields impressively better results which are evident whenever accurate performance measurements are obtained" (1967:46)

Blake and Mouton (1964) have conceptualized leadership in terms of a 9,9 Managerial Grid on which Concern for People represents one axis and Concern for Production the other. They identify 5 management styles which are placed on the Grid. Four of them have come to have the common names of Humanist, Autocrat, Compromiser and Abrogator and their Ideal Leader is one who consistently displays the highest regard for both people (process) and production (structure).

### Criticism

One general criticism which can be levelled at all the One-Best-Way Theorists is that to varying extents they fail to take account of the situational variable which must exist in any leadership environment. McGregor, in proposing an 'either - or' choice, is simply being unrealistic when one thinks of the different situations which a manager has to face in any given day.

For this reason it is often felt that Blake and Mouton's ideas are a somewhat better proposition than McGregor's because they point out that there are not two extremes to the type of leadership styles (the manager is not faced with an either-or choice) and he may thus be high on both production and employee emphasis at the same time.

However, the 9,9 style assumes that conflict between employees and organisational objectives are not inevitable, whereas such conflicts are present in any organisation. The Grid attempts to attack this problem first by presenting a behavioural model of the 9,9 manager (one who uses candour, teamwork and participation) to construct a framework of mutually agreed-upon goals and secondly, by providing a detailed step-by-step strategy for helping managers to learn how to use the 9,9 style.

These explanations have not been sufficient to satisfy opponents of the Blake and Mouton model. Gordon, in a very fair and objective evaluation of the Grid states:

"In the matter of conflict resolution, i.e. how decisions are made, how power is distributed, how open people are with each other, Blake has made a very important contribution to management thinking. If all Blake had offered was a framework that would be the end of it but he went one better than that. He devised the first most complete package for those who wished to study OD" (1970:44)

Concerning the training programme, Gordon feels that Blake and Mouton have offered a framework that is too stringent - that the time spent on debates boils down to one of five arguments - and he says that this is so because the instruments of the training course and the time pressures ensure that the discussion seldom deviates from the group itself. In other words one is forced to choose from amongst one of the given styles. If what Gordon says is true then it could be said that participation in Grid training results in a certain element of brainwashing: that the Grid restricts peoples' thinking so that they end up espousing the same ideas as one another. One of the desirable behaviours of the 9,9 style is open and candid communication and Gordon feels that this can certainly not be achieved by a restrictive set of ideas to refer to: "the indoctrination is infectious . . . (the subject) feeling himself under intense pressure, conforms" (1970:52).

A few theorists have attempted to modify the Grid concept in order to overcome its critics. The most prominent of these is Reddin (1970) who has merely added a time dimension. The best manager now becomes the 9,9,9 because of his maximum concern for production and people and because this dual concern is consistent or lasts indefinitely through time instead of being temporary. Although this improves the Grid concept slightly it does not alleviate Gordonism nor does it begin to approximate to the real life situation of the manager.

Likert's theory had been empirically tested inter alia by Butterfield and Farris (1974) who tested System 4 on 13 Brazilian development banks and found that although the employees were most satisfied with a participative group management system, the theory of management systems measured by the Organisational Profile was only partially supported.

This finding is not surprising when one considers that in certain situations (and when dealing with certain people) it may be necessary to employ the autocratic type of power style. It is essential that a leader realises the limitations of the participative style so that he does not use it regardless. Both autocratic and participative styles have advantages and disadvantages to their usage. Whilst the former are obvious we can perhaps list briefly some of the disadvantages of participation in certain situations: It can be enormously time-consuming and therefore inefficient. Some managers use participation as a way of avoiding responsibility and use of this style can degenerate into a complete loss of managerial control. In addition, employees resent the invitation to offer recommendations in those situations where such recommendations cannot be implemented or where their knowledge patently precludes them from making a meaningful contribution.

#### THE THEORY OF DAVIS

Davis (1972) has also attempted to synthesise and integrate much of the literature pertaining to power styles of leadership into a four-fold classification system of autocratic, custodial, supportive, and collegial.

TABLE 1		COMPARISON OF VARIOUS LEADERSHIP THEORIES			
	Autocratic	Custodial	Supportive	Collegial	
Depends on:	Power	Economic resources	Leadership	Mutual contribution	
Managerial orientation:	Authority	Material rewards	Support	Teamwork (integration)	
Employee orientation:	Obedience	Security	Performance	Responsibility	
Employee psychological result:	Personal dependency	Organizational dependency	Participation	Self-discipline	
Employee needs met:	Subsistence	Maintenance	Higher-order	Self-realization	
Performance result:	Minimum	Passive cooperation	Awakened drives	Some enthusiasm	
Morale measure:	Compliance	Satisfaction	Motivation	Commitment to task and team	
Relation to other ideas					
McGregor's theories:	Theory X		Theory Y		
Maslow's need-priority model:	Physiological	Security	Middle-order	Higher-order	
Herzberg's factors:	Maintenance	Maintenance	Motivational	Motivational	
W. H. Whyte's thesis:		Organization man			
Blake and Mouton's managerial grid:	9,1	3,5	6,6	8,8	
Motivational environment:	Extrinsic	Extrinsic	Intrinsic	Intrinsic	
Motivational style:	Negative	Mostly neutral on job	Positive	Positive	

Source: Davis (1972:498)

He has thus incorporated the theories of McGregor, Blake and Mouton, as well as the need hierarchy of Maslow (1954) and the two-factor theory of Herzberg (1966). But unlike Likert, Davis has a matrix of terms and phrases that correspond to one of the four types of power styles which he has termed 'depends on.'

The relationship between Davis' theory and other leadership ideas is shown in Table 1.

The advantage of Davis' system is that the various power styles of leadership can be compared, contrasted and analysed with reference to what are currently considered to be important concepts such as teamwork, self-realisation, participation and maintenance of group process etc.. It thus has value. But it still does not deal adequately with the situational variable so that it can be applied to the real world problems of the manager.

#### OHIO STATE LEADERSHIP STUDIES

The Ohio Studies - work at the University Bureau of Business Research began in the late 1940's and continued up until approximately 1965. Numerous books and many articles have been written on the research findings of this group. It is therefore not possible to present anything like a comprehensive review of this work but much of it shows a common methodology. This consisted of three basic steps:

1. An extensive list of statements was compiled. Frequently this was in excess of 500 items and was designed to cover all the aspects of the job which was to be studied. These statements came from many different sources including job descriptions, management literature, the subjects themselves as well as the personal experiences of the researchers.
2. Questionnaires. The list of statements was administered to the subjects and each statement was presented in a Semantic Differential form.
3. Isolation of basic factors. The questionnaires were then analysed statistically (usually by factor analysis) and sets of related answers were collected and grouped together.

This research method was used over the years to study many different types of managers from supervisors to military personnel to labour union leaders, and the aspects of the jobs have ranged over responsibility and authority, into personal activity, job satisfaction, and managerial style. A typology of managerial functions was compiled (initially of 14 functions and later reduced) but these functions were always expressed in Fayollian terminology such as planning, co-ordination, evaluation, etcetera.

\* Perhaps two of the Ohio Studies merit more detailed consideration. Those of Fleishman (1953) and Hemphill (1959 and 1960).

Fleishman started off with a list of 1800 statements which he then reduced to 150. From these he distilled 9 dimensions of leadership behaviour (integration, communication, production emphasis, representation, fraternisation, organisation, evaluation, initiation, and domination). After a first administration in which he found that the items on the questionnaire lacked independence, Fleishman readministered it to a number of groups of subjects: 300 airforce crew members were asked to describe their commanders, 220 foremen were asked to describe their supervisors, and 394 workers were asked to describe their foremen. The results were then factor analysed and Fleishman came to the conclusion that 'practically all variations could be accounted for by . . . two major dimensions' (1953:4).

Consideration, or the extent to which the leader was considerate of his workers' feelings. This reflected the 'human relations' aspects of group leadership.

Initiating Structure which reflected the extent to which the leader facilitated group interactions towards goal attainment. He was said to do this by planning, communicating, scheduling, criticising and trying out new ideas (1953:2).

The title of Fleishman's (1953) paper is "The Description of Supervisory Behavior" and therefore one eagerly anticipates some sort of enlightenment as one patiently reads through the description of the mammoth list of items, the administration to hundreds of subjects, and the detailed (statistically pure and correct) analysis of the data, only to be told at the end that all work can be described in terms of 'consideration' and 'initiating structure.'

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See also Fleishman et al (1955), Fleishman and Harris (1962). Further, Woodward's (1958) findings on production processes which were confirmed by Fleishman and Peters (1962).

A more recent study is that by Hemphill (1959 and 1960) who began by compiling a list of 1500 statements culled from the literature, from interviewing executives, and by extracting terms from job descriptions. From these statements he selected 575 of them and this revised list of statements was administered to 96 executives in 5 different firms who were spread over 3 levels (upper, middle and lower management). They were asked to rate the extent to which each statement applied to their job. Responses from 93 of the original sample were evaluated against each other and no statistically significant differences or similarities amongst the 5 companies or across the 3 levels could be found. Similarities only began to appear when responses from subjects occupying 5 functional areas were separated. In other words people occupying the same functional position appeared to show similarities. Hemphill then performed a factor analysis and from this isolated 10 'clusters of statements' or different types of jobs. He then tabulated the 10 factors against the three management levels and the 5 functional areas.

His findings indicated that upper management tended to rank highest on items such as human affairs, planning and broad power, whilst the lower levels were more concerned with work supervision and technical products and markets regarding the functional areas. R and D appeared strong on staff services, planning, technical products, and services, whilst manufacturing and sales were strong on business control.

In an even later study Mahoney, Jerdee and Carroll (1963) of the University of Minnesota used the Ohio classification to study 452 managers by interview. The subjects studied came from a wide range of company types and covered supervisors to presidents. They were asked how they allocated their time amongst the 8 categories of supervision, planning, co-ordinating, evaluating, investigating, negotiating, staffing, and representing.

The results showed that 50 per cent of their time could be accounted for by performance in the first three functions.

Generally speaking there has been little interest shown in the Ohio Studies outside of that band of disciples which has seen fit to carry on with this line of research. Considering the amount of time, expenditure and effort which have gone into them for so many years it is indeed a pity that their results could not have been more meaningful.

But Fleishman's (1953) over-simplistic reduction to the two factors of consideration and initiating structure sparked an avalanche of research. And notwithstanding Campbell et al's remarking that:

"The many studies using questionnaires and checklists for rating and describing managerial job behavior led, through factor analysis, to just two basic dimensions of managerial behavior. Certainly, this must be an over-simplification of the characteristics and full range of behaviors demanded by managerial jobs!" (1970:85)

this type of research became an unfortunate and unwanted legacy - a legacy which persists right up to the present day.

### Criticism

Two severe criticisms can be identified:

#### 1. The Choice and Terminology of the Statements

Whilst the statements to be administered were very numerous they were always expressed in the vague traditional terminology of 'function' inherited by Fayol. Also, very little care went into the actual choice of statements. They were collected from almost every conceivable source but with very little regard for what aspect of managerial work might have been left out: There was no check as to whether the list was complete. The managerial subject was therefore forced into responding to a list of statements which (according to his mind) might not have described all that <sup>\*</sup>he did and was expressed in terminology with which he might not have agreed.

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See the Diary Studies in Chapter 6.

## 2. Methodology of Administration

There was no way in which the Ohio Researchers could check that the data which they got from the managers was correct because what it reflected was the managers perception of the job rather than the job itself. In other words there is a vast difference between what he actually does and what he thinks he does.\*

### THE SITUATIONAL THEORISTS

In an attempt to overcome the criticism of 'it depends' levelled at the behavioural theorists, contingency models of leadership have been generated by Fred Fiedler and by Vroom and Yetton.

### FIEDLER'S CONTINGENCY MODEL

Fiedler's model is by far the most widely known and it holds that the effectiveness of the leader is contingent upon (1) the leader's motivational pattern and (2) the degree to which the situation gives the leader power and influence.

Fiedler and his associates worked out a leadership motivation measure which they called the 'esteem for the least preferred coworker' or LPC for short. In very simplified terms the person who describes his least-preferred coworker in relatively favourable terms is held to be basically motivated and to have close interpersonal relationships with others. By contrast, the person who rejects someone with whom he cannot work is basically motivated to accomplish or achieve on the task and he derives satisfaction from being recognised as having performed well on the task. In other words he is a 'task-motivated person' (1967:46).

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There is empirical evidence for this : See inter alia Burns (1954), Horne and Lupton (1965), and Stewart (1976).

### Classifying The Leadership Situations

In trying to find a solution to the problem of 'what style when?', Fiedler devised a method that has the underlying assumption of leadership being essentially a work relationship involving power and influence (1974:119). The argument put forward for this assumption is that it is easier to be a leader when one has complete control than when one's control is weak and dependent upon the goodwill of others. Therefore Fiedler classified situations in terms of how much power and influence the situation gives to the leader and identified these situations on the basis of three variables: Leader-member relations- which he felt was the most important of the three (1967:143) - Task-structure and Position-power.

Using this classification Fiedler then roughly ordered the groups as being high or low on each of these three dimensions.

The practical implications of the theory for organisations suggest three approaches to getting the job done: Firstly, the leader's Position-power can be changed by giving him more or less power depending on his style. Secondly, the Task-structure could be altered to fit his style or thirdly, the Leader-member relations could be modified by either increasing or decreasing the homogeneity of the group.

### Criticism of the Model

Fiedler's model has possibly generated more heated debate and criticism (both on methodological and non-methodological grounds) than any other.

First to enter the debate were Graen et al (1970) who analysed the model and its supporting research from both a strategic and procedural prospective. They concluded that although antecedent probability based upon previously published reports appeared to be greater than zero, the evidential probability approached zero and thus cast grave doubt on the plausibility of the contingency model as a whole.

Fiedler, who had admitted that there were problems with the model when he originally published it (1967:148) now leapt to defend his theory (1971) against Graen's attack. He pointed to specific precautions that must be taken if the validity of the model was to be accurately assessed. As a result of the specificity of his outlined precautions, Ashour (1973b) charged Fiedler with redefining the model in a 'method-bound-fashion' in order to protect it from the evidence of its invalidity.

Ashour (1973b) in a comprehensive paper refuted the model on methodological and empirical grounds. He analysed Fiedler's (1971) cumulative results using Fisher's method of combining correlations. These results indicated that 6 out of 8 situational conditions failed the validity test. Ashour thus concluded that the empirical evidence bearing on the model had produced 'contradictory results most of which lacked statistical significance and suggest that the model requires examination and monitoring of leaders' behaviour and group behaviours in different situational conditions, investigation of possible intervening linkages, as well as the possibility of short and long-term influences of different situational variables on the different linkages' (1973a:353). He further suggested that larger samples be used so as to clarify the lack of statistical significance.

The most recent and methodologically rigorous study of the Model has been by Vecchio (1977) who used 48 four-man groups of airforce enlisted personnel to conduct an examination of the validity of group performance predictions generated by the model. The results of univariate and multivariate analyses of variance for a 2+2+2+2 factorial design failed to support the model. Vecchio concludes that it might not be valid.

#### THE VROOM AND YETTON MODEL

In order to increase the number of situational variants Vroom and Yetton (1973) developed a model which is somewhat similar to Fiedler's, but rather than use somewhat vague concepts such as 'participative' and 'democratic' leadership styles they distinguished seven behavioural approaches to decision-making which

they believed had the potential for producing different outcomes under various conditions. They are therefore able to logically derive some 14 distinct kinds of problems which are presented in the form of a decision tree.

It is meant to have practical implication for the manager in that he can diagnose any problem facing him, ask questions in the correct sequence in order to define the problem, and to select the appropriate set of behaviours.

### Comment On The Contingency Models

Besides the comments which have been noted above, the contingency models can be criticised on other grounds which although not empirically validated are nevertheless no less significant.

Both the Fiedler and Vroom-Yetton models vastly over-simplify the situation which the real world manager must face and overcome in the effective performance of his task. No manager can classify his problems into 8 (or 14) types. The combinations and permutations - the situational variants - are almost countless. In addition the Vroom-Yetton model is purely prescriptive. It describes what manager should do in various circumstances and does not begin to answer the question of what he should do in the event of not achieving the desired result.

We can therefore safely conclude that the contingency models do not provide for effective leader role behaviour or effective task accomplishment. Davis (1972) summarises the situation very well when he says:

"As society has learnt more about leadership it has become increasingly evident that strong leadership is a result of effective role behavior. Leadership can be shown by a person's acts more than by his traits. Traits influence acts, but so do followers, goals, and any environment in which the act occurs. It follows that organisational leadership is role behavior which unites and stimulates followers towards particular objectives in particular environments" (1972:104)

## PATH-GOAL THEORY

The theories on leadership which we have considered up to now have all centred around the leader's effectiveness. But because of the lack of progress in this direction and also because of contradictory findings (particularly on leader consideration and initiating structure), House (1971) returned to Valence-expectancy theory\* of motivation and attempted to adapt it to leader behaviour. This they called the Path-Goal Theory of Leadership. It is similar to VIE theory in that it is based upon various situational factors.

Briefly Path-Goal Theory holds that (1) leader behaviour is acceptable and satisfying to subordinates insofar as they see it as instrumental in achieving their goals and (2) leader behaviour helps to motivate the subordinates to the extent that it makes pay-offs (rewards) contingent upon performance and thus assists the subordinates in achieving this good performance, mainly by reducing job-role ambiguity in the subordinate.

Another branch of Path-Goal Theory sees leadership as the independent variable and subordinate attitude and behaviour as the dependent variable. Leader consideration has been shown to be positively related to subordinates' satisfaction when performing highly structured unambiguous tasks but less related to satisfaction under conditions of uncertainty - where the task is unstructured. This finding is consistent with Path-Goal predictions. However, the relationship between leader initiating structure and subordinate satisfaction was more positive under conditions of high task structure than under conditions of low task structure. This contradicts the basic Path-Goal Theory (Stinson and Johnson, 1975).

It can be seen that Path-Goal Theory closely resembles both the Fiedler and the Vroom-Yetton models of leadership in its structure but differs chiefly in terms of the variables that it considers to be more important in the postulation of the underlying processes through which these variables operate. It appears to be less explicit than the Vroom-Yetton model but more explicit than Fiedler.

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For a discussion on the nature and limitations of Valence-instrumentality-expectancy (VIE) theory, see Vroom, V.J., 'Work and Motivation', New York: Wiley, 1964, in Huse and Bowditch (1977:101-105) and Lawler, E.E., and Suttle, J.L., 'Expectancy theory and job behavior', *Organisational Behaviour and Human Performance*, 1973, 9, 483 in Howell (1976:54-62).

From the findings of House (1971), Stinson and Johnson (1975) as well as others, Orpen (1977) argues that "the prediction that the more structured the task the more positive the relationship between consideration and satisfaction, will hold for subordinates with strong and weak needs for independence and achievement." He goes on to generate four additional hypotheses suggested by the Path-Goal model:

1. "Under unstructured task conditions the relationship between consideration and subordinate satisfaction will not differ significantly for subordinates with strong needs for achievement and independence and for subordinate with weak needs.
2. Under structured task conditions the relationship between consideration and subordinate satisfaction will not differ significantly for subordinates with strong needs for achievement and independence and for subordinates with weak needs.
3. For subordinates with weak needs for achievement and independence the relationship between consideration and subordinate satisfaction will be significantly more positive under structured task conditions than under unstructured task conditions.
4. For subordinates with strong needs for achievement and independence the relationship between consideration and subordinate satisfaction will be significantly more positive under structured task conditions than under unstructured task conditions." (1977:23)

Orpen then tested these hypotheses by means of a questionnaire containing the various measures administered to 156 low-level managers spread over 4 manufacturing firms.

The predicted effect was only shown to hold true under structured task conditions, whereas initiating structure was positively related to satisfaction under unstructured conditions" irrespective of individual differences.

This is very reminiscent of Fiedler's original (1963) finding which showed that under unstructured conditions where group member relations were good (Condition 3) a directive style of leadership was called for because in its absence "the group is likely to fall apart and the leader's active intervention and control can keep the members focussed on the task."

## CHAPTER 4

### AN INTERIM EVALUATION

The reader will have noticed that the information in preceding Chapters has been presented with very limited comment and (largely) only that criticism which appears in the literature has been discussed. This has been deliberate.

Because it is obviously not possible to discuss all the literature I have attempted to pick out some of that which is relevant to the topic and at the same time to convey a 'feel' of the philosophy predominating and the type of work being done in each. Whilst there has been a selection this has in no way been done to 'fit the case': on the contrary, the concentration has been on the mainstream and the principal works in each school.

How then can we evaluate the contribution to our knowledge of managerial functioning?

#### The Management Schools

Great strides have been made by the management school even in very recent years, and as a result the manager has many more sophisticated (and much needed) tools at his disposal to help him in his work. However, the really solid progress has all been on what might be called the level of technique - marketing, finance, operations research - where quantification is easier. But this type of useful knowledge always stops just short of the actual management process itself.

And in their rush to quantify everything (data fever) a certain objectivity has been lost. The computer remains an 'intellectual moron' in that it can only deal with numerical data and yet the majority of information which management needs for decision-making is non-numeric in nature. Not only is it unquantifiable but it remains just a 'feeling'. Some of it is not even describable. Whilst the decision school has given us tremendous aids to management it cannot ever be a substitute for a management process. Schoderbek puts it well:

"There is to date no single system in operation that is truly integrated for complete management control .... management needs not only internally generated data but also all kinds of externally generated data (political, economic, social, legislative and the like)." (1971:311)

While integrated management has not yet arrived neither has integrated systems. The prescriptive attitude of what 'ought to be' is such that they do not even ask how it is in fact done. No attempt is made to check the relevance of what is prescribed, they ignore the complex reality of the manager's world and, besides the long and often impressive list of 'how to' steps, there is no theory building. Galbraith sums it up:

"Few subjects of earnest inquiry have been more unproductive than study of the modern large corporation. The reasons are clear. A vivid image of what should exist acts as a surrogate for reality. Pursuit of the image then prevents pursuit of the reality" (cited in Mintzberg, 1977a:4)

This preoccupation with prescription has resulted in two other severe and crippling barriers to further knowledge about the management process. Firstly, it has ensured that managerial functions go on being described in vague Fayollian terms which have thus become enshrined as part of the grand plan. Why? Koontz and O'Donnell:

"This pattern (of classification of managerial functions) avoids artificial terminology, so that students and business men need not learn new definitions - rather, they may be forced to use terms with greater precision. It is also hoped that managers, using common terms with ordinary meanings, will be encouraged to adopt an increasingly scientific approach to their important task ... The most useful method of classifying managerial functions is to group them around the activities of planning, organising, staffing, directing and control. This classification is a helpful and realistic tool for analysis and understanding." (1968:47) (underlining mine)

Secondly, although the management schools have progressed insofar as they have for many years included basic behavioural science findings\* within their framework - motivation, informal group functioning, communication - the overall approach sees these findings minimised and relegated to a poor second place. Acceptance is limited to the extent to which they fit the prescription and as a result advances in this area are ignored. Learned et al:

"We have made room, to be sure, for the general manager's personal values, aspirations, and sense of social responsibility and in this respect we have gone beyond traditional organisational theory" (1969:759)

It does indeed seem strange that the management school which is (by definition) so close to the real world does not venture out into the marketplace to find out how it is done, but should rather be content to pontificate from its lofty perch on the sidelines.

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\*Sayles and Strauss' 'Human Behaviour in Organisations' (1966) first published in 1960 is a good example of a text in this area.

### The Behaviourist and Human Relations Schools

The section on human relations has been similarly brief. It is just not possible to review some 50 years work and do justice to all of it. I have thus had to be selective. For example, research on job evaluation, wage and salary administration and many other aspects of personnel psychology such as training and development have not been dealt with. Findings in this area have been practically useful and have thus found some degree of acceptance in managerial practice.

The work of the last 15 years on productivity and satisfaction was presented in some detail in order to follow the trend of the research as well as to compare these findings with those of the 'classical' research in this area. How do they compare?

We have seen how the Mayo/Roethlisberger studies represented a breakthrough in organisational theory by identifying the existence of the informal structure. Their findings on the nature and inter-relatedness of various aspects of group dynamics and leadership behaviour were confirmed by subsequent workers (Zaleznik, Seashore and others) until by the late 1950's after publication of Homans' work a store of knowledge around the satisfaction-productivity-cohesiveness-communication axis had been built up. This later research was all conducted in organisations and the importance of the leadership behaviour variable with its attendant power and authority considerations was never lost sight of. Still later there was at all times a consideration of the environmental variables such as structure and technology. In short the experimental condition was treated in an open system manner. As a result much of this early research came to be accepted by the management school and in turn the importance of the informal structure had some impact upon organisational life and functioning - although as Feldberg says:

"The majority of behavioral scientists would themselves be the first to admit that universal acceptance of many of even the most basic concepts is lacking . . . Behavioural science's contributions to the business world are often, at best, speculative; it is not, therefore, surprising that some business executives regard behavioural scientists' proposals caustically." (1975:150)

In contrast, the later researchers simply denied reality by studying the two variables of productivity and satisfaction in isolation. Only much later (circa 1970) did it become apparent to them that they would have to include the leadership variable if their research was to proceed further. Even then they 'compounded the felony' (to borrow Argyris' terminology) when many of the workers concentrated on either satisfaction or productivity. The findings on communication and cohesiveness were in the majority of cases incidental to the main stated purpose of the research. Finally, not all of this research (particularly in the area of group dynamics<sup>\*</sup>) was conducted within an organisational setting.

This latter point merits special consideration. For what is true of diads and triads in a laboratory setting cannot simply be transferred on a macroscopic level to an organisation in the expectancy that the findings are going to hold true. The results of such experiments might have some use for social psychologists but their value to the organisational psychologist is almost nil. They do not contribute very much to our knowledge of organisational functioning. Let me substantiate this by briefly considering the subject of lateral communication:

Everyone knows that communication takes place between departments in an organisation at all levels. Communication is not only upwards and downwards but also across. This we might look at as a 'fact' of organisational functioning. Modern organisation theory accepts this and calls it lateral communication. Further,<sup>\*\*</sup> many empirical studies within organisations have shown that more communication takes place laterally/horizontally than it does vertically.

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\* Two Chapters in Cartwright and Zander (1960) are entitled "Communication in Experimentally created hierarchies" and "power relations in three-person groups."

\*\* For instance see J. Galbraith (1973) 'Designing Complex Organisations, as well as the work of the Researchers discussed in Chapter 6.

As a result of this lack of perspective the researchers are morassed in a sea of findings and a confusion of definitions. One cannot help but be struck by the incessant bickering which goes on in the literature.

Because of all this the state of findings is almost the same as it was 15 years ago. I truly believe that the period 1960-1975 will go down as being the least productive in the history of behavioural science.

### Leadership Theories

In the beginning the behavioural style theorists were switching the emphasis away from what a leader is and attempting to answer the question what does the leader do? We will see that they were unsuccessful in this because the inflexibility of style advocated by these workers did not provide for the changing situational variable in which the leader finds himself. Whilst these theories might not have been able to solve the riddle of leader effectiveness, they did shed a lot of light on the issue. They provided us with a very useful descriptive vocabulary and Blake and Mouton's theory in particular became widely used as a training tool. They called the attention of practising management to behavioural styles which if employed would improve human relations and can thus be thought of as an adjunct to the early human relation findings. In addition they have been accepted by the management school and by the more progressive practising manager.

The existence of the category of the "depends on" in Davis' theory (originally published in 1967) more or less coincided with Fiedler's model which he published in the same year. Detailed consideration of Fiedler's work with its 8 situational variants as well as the Vroom-Yetton model with 14 led to the conclusion that the number of choices available to the leader to deal with the circumstances operating at the time were too narrow. In short one is left after reviewing all this research only with the knowledge that leadership consists of the three elements of leader, led, and situation, the correct 'stance' or behaviour for the leader to adopt in order to be effective depends upon the situation, and this in turn depends upon the particular combination of environmental variables operating at any one time. This combination is

theoretically infinite. How then can a leader ensure that he is effective?

The path-goal theory of House (1971) which looked like a promising avenue for leadership research when it was first proposed has generated a number of hypotheses, only some of which had been validated by the very latest research.

Reviewing more than 5000 studies of leadership research which had been undertaken in the last 40 years, Stogdill (1974) suggests that "some topics and research designs have been overworked while other important questions remain relatively unexplored." He also notes that there has been "wasteful repetition of testing shopworn hypotheses accompanied by a general disregard for negative results": Negative results which, considering the nature and direction of the research and the findings to date, I would suggest might hold more promise than the positive ones - a case of the least likely hypotheses being of most worth.

We have seen that the earlier theorists set out to propose theories of leadership effectiveness in order that they could better understand managerial effectiveness. Later theorists have confused the two. This is incorrect, for although there is some disagreement as to what leadership is, there is agreement as to what it is not. Leadership is not managing. Kast and Rosenzweig say that:

"Emphasis on co-ordinating task-oriented group activities seems to indicate that leading is synonymous with managing. Typically, however, management is considered to be a more broadly based function including activities other than leading." (1970:321)

Davis is even more definitive in isolating managerial functions from leadership:

"Leadership is a part of management, but not all of it. A manager is required to plan and organise\*, for example, but all we ask of the leader is that he gets others to follow . . . Leadership is the ability to persuade others to seek defined objectives enthusiastically. It is the human factor which binds a group together and motivates it towards goals. Management activities such as planning, organising, and decision-making are dormant cocoons until the leader triggers the power of motivation in people and guides them towards goals." (1967:96)

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In the same way as Human Relations has influenced Managerial School thinking, so the influence has been reciprocated. Hence Davis' Fayollian terminology which as we have seen are not functions but 'vague statements of objectives.'

And if we bear in mind the open system (which the organisation is) then the managerial subsystem is generally spoken of as pervading all the other subsystems. Its influence is felt everywhere and at all levels. Katz and Kahn say that "the managerial subsystem interpenetrates the other subsystems" (1966:211) and that "the managerial subsystem and the structure of authority are inseparable" (1966:203).

But the effective manager (and leader in this case) gives orders. He decides what should be done according to the way he perceives the ever-changing environmental circumstances at a particular time. This would seem to indicate that effective management and effective leadership requires the utmost flexibility.

It also means that a strong leader could be a weak manager - because he is weak in planning or some other managerial duty that is required of him. Thus the strong leader might motivate his group to accomplish goals but not in a direction that would serve organisational objectives.

This in turn suggests something which is even more foreign to the human relations leadership theorists, namely that the prescription for effective management could include making decisions (and giving orders) which might be detrimental to group relations from time to time. Is it possible that after so many years of accepting that a leader should never perform any act which would harm relations with his members but should rather at all times behave in a manner which will foster these leader member relations, we should find that the key to effectiveness forces us to advocate a transgression of this code? Fiedler has this to say on the subject:

"The effectiveness of the leadership act is not dependent on the leader-member relations, rather it depends upon the appropriateness and wisdom of the suggestion or order which the leader has given. There is no reason to believe that the well-liked leader will give better or wiser orders and directions than the less-liked leader."  
(1967:31)

To boil the question down to its fundamentals, are we as human relationists more interested in the liking or the effectiveness: is it more important that we isolate and promote those conditions under which people will co-exist liking one another as much as possible, or is it more important that we seek to produce a set of psychological variables which impinge upon people in their working environment in order that we might better help the organisation to reach its goal. The answer is obvious.

But then how do we reconcile these new thoughts with the stated intention of every Humanistic theorist, namely the development of effective as well as cohesive organisations? The purists will see a conflict, the pessimists such as Argyris would say that it was not feasible. But if we truly accept the reciprocal cause and effect relationship between satisfaction and productivity then it should not be difficult to see that leadership action which from time to time appears to be detrimental to group relations will in the long run feed back as a positive influence - providing that it is effective, goal-attaining, and thus productive.

This would entail rejection of the type and direction of the research presently being done because it is unlikely to produce any meaningful results: Research which to date has told us a lot about what the manager 'ought' to do but very little about what managers actually do do, research which has focussed on what makes a man effective in a particular kind of position, research which has begun to confuse leadership with management (and thus has lost sight of its own original objective), and finally research which is badly lacking a more eclectic approach.

Stogdill (1974) states that the only way to move towards a general theory of leadership effectiveness and away from the "bewildering mass of findings testing shopworn hypotheses" is to generate "a considerable amount of empirically valid research." He feels this is critically needed. At the same time he believes that a theoretical model of the contingency type is a hinderance rather than a help to the development of the field of leadership, and that this critically needed information can only be produced by "feeding new combinations of variables into research designs (that have been) demonstrated to be effective."

What both the management and behavioural science schools are trying to do is of course to marry - to integrate - the formal (structural) component of the organisation with the informal (human relations) aspect - each from its own limited perspective. The traditional school cannot deny the existence of the informal dynamic and tries to integrate it into its from-the-top-downwards viewpoint. The human relationists look from the bottom upwards and strive for a similar result. Both fail.\*

The state of our knowledge about managerial work remains poor and there is little we can learn from the accepted body of literature. Between the management school and real world functioning there is a gap which prescription cannot bridge, and the gulf between it and the state of behavioural science explanation is a yawning chasm.

But in these apparently so different approaches is there no common element? Is there no thread to be followed in the hope of greater clarity?

On re-examination we find that each sub-school or approach has concentrated on just one part, one aspect, of management and in each (without fail) there appears the single common word: role. In the next Chapter we look at the open system theories and further explore the possibility of using the role concept as a vehicle for integration.

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This is because as we shall see in Chapter 6, integration simply cannot be achieved this way.

PART TWO

IN LIMBO

CHAPTER 5THE SOCIAL SYSTEM SCHOOL

There remain those theorists who see the organisation neither from the limited structural viewpoint of the management scientist nor from the limited individual viewpoint of the behavioural scientist, but rather as an integrated open system in which they strive to take all the variables into account.

The body of writers who adopt this approach is large and they come from many disciplinary backgrounds. They do not all agree on the composition of the groups (or 'systems') of variables to be included, their relative importance, or on the dynamics of the interaction between them. Some writers draw actual models of organisational functioning whilst others merely present the variable interactions verbally. Parsons (1951), Bakke (1959), and Leavitt (1965) are included in this school. There is James Thompson's (1967) classic 'Organisations in Action' and more recently Kast and Rosenzweig (1970) and Huse and Bowditch (1977) are just some examples of this type of theorist. The work of March and Simon\* (1958) has already been discussed briefly.

At this point I should like to consider two of these models in a little more detail - one comes from psychology, the other from the management stable.

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It is a measure of the worth of these writers that they can rightfully be placed in at least 3 Schools: Their work is both detailed and pervasive.

### Katz and Kahn's Overlapping Role Set (1966)

These eminent social psychologists believe that the only way to overcome the weaknesses of both the micro and macro approaches to organisational functioning is to combine the psychological findings with sociological concepts (which have been 'translated' into micro concepts) within an open systems framework. They say that this can be done because in general the two levels are dealing with the same type of fact about human behaviour.

They view the organisation as a 'contrived' social system - insofar as it is man-made and does not exist naturally - consisting of the patterned activities of a number of individuals. These activities are complementary or interdependent with respect to some shared outcome.

The point is made that the maintenance of process within the system as a whole not only depends upon energy import but also upon the communication flows within it. The simplest example of this flow is negative feedback which returns in a cyclic manner to provide renewed energy input.

Three major components of the social system are identified: (1) Norms or standards of expectation which prescribe and sanction the (2)\* role or standardised pattern of behaviour of the people in a given functional relationship and (3) values or ideological justifications and aspirations of the individual. These social components form the bases for integration of the various sub-systems within the total organisation. Five of these are identified.

1. Production or technical (process of material)
2. Supportive (procurement)
3. Maintenance (availability of human resource)
4. Adaptive (responses to environmental stimuli)
5. Managerial (insuring a co-ordinated pattern of behaviour amongst individuals)

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\* For a discussion of the basic concepts of Role Theory in Social Psychology see for example Roger Brown (1966:154) or Secord and Backman (1964:451)

\*\* These may together be compared to Edgar Schein's concept of an 'Adaptive-Coping Cycle' (1965:97ff)

These sub-systems are not in a serial or hierarchical relationship to one another but are rather dynamically interlocked and interdependent. Also, each individual in the organisation acts (behaves) in response to the other members of his role set. Because of this, the total organisation is seen as an overlapping set of roles.

### John Hunt's Integrated Role System

This model differs in several respects from the one above. Hunt draws on a great number of empirical findings and theoretical works from a wide variety of disciplines, but he is essentially a management writer who leans heavily towards application. In fact he is quick to state in the preface that:

"Model building is of little purpose if there is no transfer to reality . . . and most of what I know about organisations has come from discussing research findings with the practitioners" (1972:x)

Hunt's conception is one in which the environmental inputs feed into a unit comprising four sub-systems: formal structure, informal structure, individual needs, and the technology. Central to the unit is a role system which in its turn is governed by four integrator variables:

#### Action

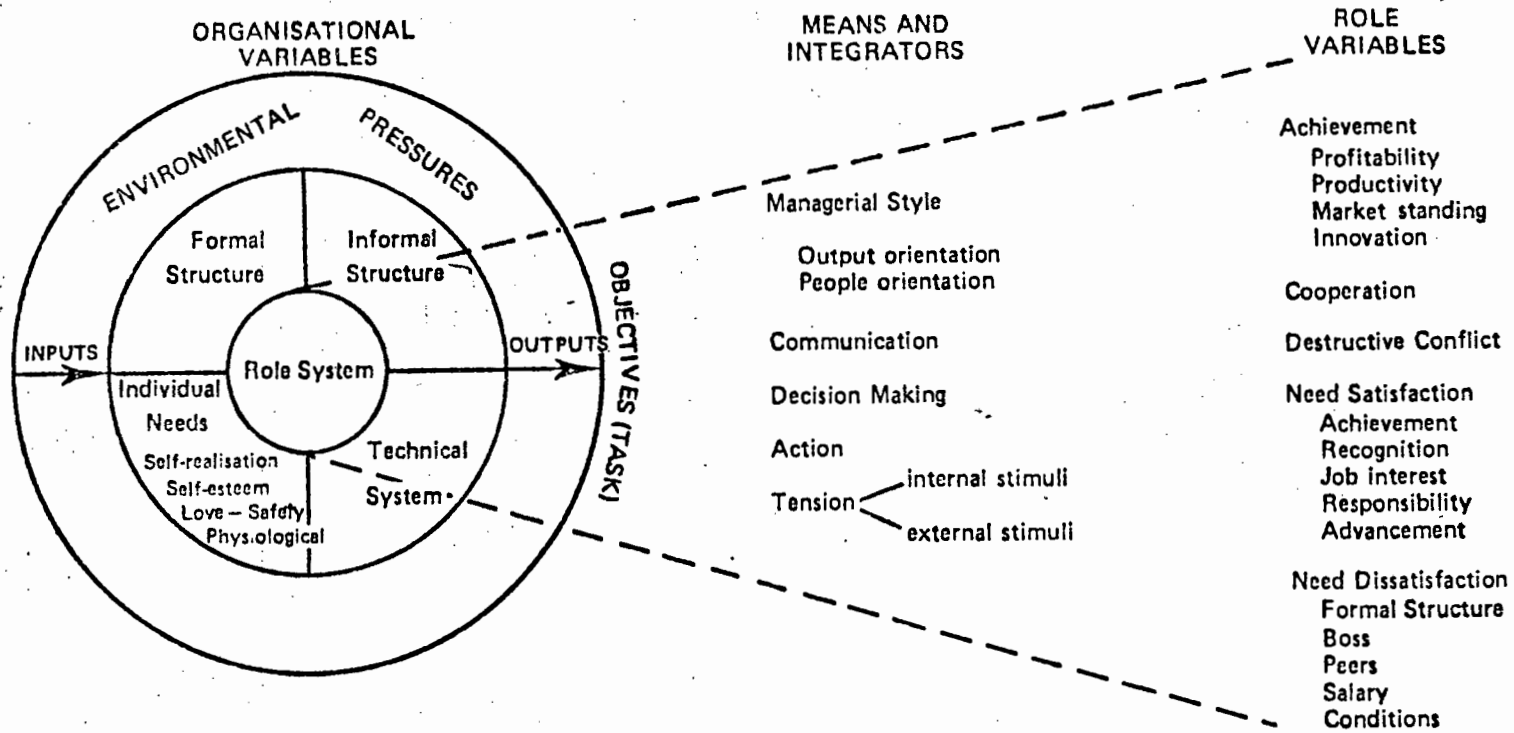
This refers to that part of the individual's role performance which contributes to the goals of the organisation. Some of it may be prescribed, some might be unspecified. It includes informal problem-solving, creative thinking, indeed any action which contributes to organisational survival.

#### Communication

This is the means by which the members' roles are interlocked. Hunt sees "three interlaced networks." One network approximates the formal structure, another links informal relationships, and a third links members and non-members in the environment. As structure is a process of sharing values, then structuring can occur only where communication makes the transmission of values possible (1972:24).

FIGURE 4

THE INTEGRATED ROLE SYSTEM OF HUNT



Source: (1972:422)

### Decision-Making

Decision-making is seen as the vital link between environment, structure, people, and output. Decisions must be made where the values, expectations, or attitudes of members pose alternative courses of action or conflict.

### Tension

This term is used to describe the frustration of an individual's needs. Hunt feels that unless the values of a formal structure are sufficiently tension-producing then the member might not make any effort to comply with requirements and expectations because tension is "the energiser" (or stimulant to action). Finally he states that "without any tension human systems would cease to exist" (1972:25).

### The Means of Integration

The means by which the role system is integrated is by the managerial or leadership style. In other words the leader role is central to the whole system. (Figure 4).

Of course, open systems is a framework rather than a theory as such and as a result does not readily lend itself to <sup>\*</sup>hypothesis generation but it does provide us with a theoretical perspective which helps to integrate the many diverse aspects of organisational functioning.

And in spite of the completely different origins and orientations of these two theories - one entirely theoretical, the other based upon research findings - we can isolate a number of pertinent commonalities. Both theories hold that:

1. Role structure is crucial to the organisation's process. For Hunt roles are central and 'communication is the life-blood.' Katz and Kahn conceive of roles as the 'building blocks' and - to carry on the analogy - communication is then the 'cement' which holds them together.

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Regression analysis done on the results of surveys of 50 firms has validated certain propositions which Hunt made concerning changes in individual variables such as satisfaction and conflict as a result of manipulating other elements of the model (formal and informal structure, technology). The model in its entirety has not been empirically validated. (1972:385)

2. Even the objectives (roles) of the system are determined by on-going interaction with the environment - a view very different from that of the prescriptivists. Only through continuous information feed-back can the organisation determine whether it is moving toward attainment of its goal.

It therefore follows that strategy must continually be altered (shifted) in the light of information received. This information is of two types (1) concerning the performance of the sub-systems - how well they are functioning as a single unit - within the process and (2) from the environment at large.

Since the manager is the integrator (Katz and Kahn) and is seen as the central co-ordinator to the system (Hunt) one can reason that the extent to which a manager monitors both internally and externally is going to be a strong determinant of his and his organisation's overall effectiveness.

## PART THREE

### THE NEW THINKERS

#### Some Empirical Underpinning

In this Section we review studies of managerial work and specialised aspects of it which have an empirical basis. The title does not refer essentially to recent work: the research covers

circa 1951 - 1977

CHAPTER 6MANAGERIAL WORK : CHARACTERISTICS AND CONTENT

It would seem that to find out about managerial work - what it is that managers actually do - the most logical thing to do would be to ask them. We have already seen in Chapter 3 how the Ohio Researchers did this by way of questionnaire and interview with very limited success. We now consider the work of another group who used the diary method in their studies.

THE DIARISTS

The first significant empirical study of this type was done by the Swede, Sune Carlson who in 1951 studied nine Swedish managing directors. In the introductory Chapter he outlines what he hoped to achieve in the study :

"The purpose of this study has been neither to develop any normative rules as to how executives should behave, nor to describe their "typical" or "average" behavior. But by studying a series of individual cases I have hoped to find certain common behavior patterns and some general relationships which characterize these patterns."  
(cited in Mintzberg, 1973:202\*)

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\* Material on the Diarists (with the exception of Stewart (1967 and 1976) as well as the work of Ponder (1957), Guest (1956), Jasinski (1956) and Landsberger (1962) is extracted from Mintzberg (1973:202-209) and Sayles (1964:33-40)

Over the next 20 years Carlson was followed by a number of other diary researchers. Many hundreds of subjects have been studied at a number of different levels in the organisational hierarchy. The subjects have ranged from senior managers to shop foremen and the focus of interest of the studies has ranged over different aspects of managerial work. The period of time of the study has varied from one day to one month.

However all of these diary studies share a common methodology: The subject has either been provided with a precoded diary pad similar to the one used by Carlson (reproduced below) or they were asked to record their responses under a number of predetermined headings. Now this procedure can be criticised on a number of grounds: firstly, one is asking for the manager's perception of how he does his job rather than finding out about the job itself - and managers have been shown to be poor estimators of their own activities. Secondly, the headings under which the diarists sought information were almost invariably expressed in traditional terminology of "function" which are precisely those categories about which one is trying to develop new information. In other words this method of precoded diary page can only produce information (for example about time distribution) when the job factors are known. The methodology can be criticised then on almost exactly the same grounds as the Ohio Studies can. Mintzberg puts it well when he says that one cannot make the subject the researcher: He cannot be "expected to translate complex reality into meaningful abstraction." (1973:222)

Rather than discuss the work of each diarist separately I have extracted the main findings and looked for corroboration or commonalities between them. In addition, the methodology of the diarists is contrasted with that of later researchers in summary form and presented in Table 2. However, before moving on to a discussion of these findings we must differentiate between two different types or categories of managerial work and so explain the title of this Chapter.

FIGURE 5	SUNE CARLSON'S DIARY PAGE		
<p>Date: <u>3/11 49</u> Telephone: In <input type="checkbox"/> Out <input type="checkbox"/></p> <p>Time: <u>10:45 - 11:05</u></p> <p>Place (other than own office): _____</p> <p>Person: _____</p>			
<p>Manuf. dir. <input type="checkbox"/></p> <p>Works man. A <input type="checkbox"/></p> <p>Works man. B <input checked="" type="checkbox"/></p> <p>Organ. dir. <input type="checkbox"/></p>	<p>Comptr. <input type="checkbox"/></p> <p>Account. <input type="checkbox"/></p> <p>Sales dir. Swed. <input type="checkbox"/></p> <p>Sales dir. exp. <input type="checkbox"/></p>	<p>Adv. dir. <input type="checkbox"/></p> <p>Pers. dir. <input type="checkbox"/></p> <p>Assistant <input type="checkbox"/></p> <p>Secr. <input type="checkbox"/></p>	
A. Question handled		Kind of action	
<p>Finance, legal <input type="checkbox"/></p> <p>Accounting <input type="checkbox"/></p> <p>Buying <input type="checkbox"/></p> <p>Production <input checked="" type="checkbox"/></p> <p>Product research <input checked="" type="checkbox"/></p> <p>Sales <input type="checkbox"/></p> <p>Personnel <input type="checkbox"/></p> <p>Public relations <input type="checkbox"/></p> <p>Organiz. planning <input type="checkbox"/></p> <p>_____ <input type="checkbox"/></p> <p>_____ <input type="checkbox"/></p> <p>_____ <input type="checkbox"/></p> <p>Private <input type="checkbox"/></p>		<p>Getting information <input checked="" type="checkbox"/></p> <p>Systematizing information <input type="checkbox"/></p> <p>Taking decisions <input type="checkbox"/></p> <p>Confirming or correcting decisions of others <input type="checkbox"/></p> <p>Giving orders <input type="checkbox"/></p> <p>Advising, explaining <input type="checkbox"/></p> <p>Inspecting, reviewing <input type="checkbox"/></p> <p>Executing <input type="checkbox"/></p> <p>_____ <input type="checkbox"/></p> <p>_____ <input type="checkbox"/></p> <p>_____ <input type="checkbox"/></p> <p>Personal development <input type="checkbox"/></p>	
B. Question handled		C. Question handled	
<p>Development <input checked="" type="checkbox"/></p> <p>Current operations <input type="checkbox"/></p>		<p>Policy <input type="checkbox"/></p> <p>Application <input checked="" type="checkbox"/></p>	
Source: Mintzberg (1973:22)			

### Work Characteristics

It we seek information from the manager on questions such as 'where does he work' or 'with whom does he work' or 'what media does he use' (for example does he write a lot or use the telephone) or 'with what sort of people does he liaise' or 'how long does he spend doing a particular job' or 'how long does he spend performing a certain activity', then we are asking questions which refer to the characteristics of his work.

### Work Content

If on the other hand we seek to enquire what activities the manager carries out and why he does so (we enquire the purpose of his carrying out a particular action) then we are enquiring about managerial content, and it is only the answer to this type of question which can lead us to any sort of meaningful (empirically based) statement of managerial functioning or role. It is only in this way that we will get away from the vague traditional list of "functions" such as analysing, planning, co-ordinating and so forth. In addition (and probably most important) it is only in this way that we will be able to build up any sort of theory about managerial work in general.

It is therefore obvious that the diarists concentrated on managerial characteristics. Nevertheless they provided us with a number of novel and interesting findings.

In an effort to depart from the self-reporting method of the diarists some researchers began to study their subjects directly. These early observationists either used the method of random sampling where the subject is briefly observed say once every two hours (Wirddenius 1958) or minute-by-minute observation. Here the period of observation varied between a single day (Guest and Jasinski, 1956) and a period of 16 hours spread over 4 months (Ponder, 1957). All of these studies whether by random sampling or continuous observation were of foremen with the exception of Landsberger (1962) who studied middle managers.

TABLE 2

## RESEARCH METHODS USED TO STUDY MANAGERIAL WORK

METHOD	SUBMETHOD	ADVANTAGES	DISADVANTAGES	RESEARCHER
QUESTIONNAIRE AND INTERVIEW		Simple Easy analysis Large sample possible	Very unreliable: Relies on subjects' own perception of time usage Empirical evidence that managers are poor estimators of their own activities	Ohio State Studies: Fleishman 1953 Hemphill 1959 Stewart 1976 -
SELF-ESTIMATE OF TIME AND ACTIVITY				Mahoney, Jerdee and Carroll 1963
DIARY	Predetermined Headings or Precoded Diary Pad	Large sample possible Easy analysis Time inexpensive	Limited scope and content Only time distribution between known job factors can be determined Managers' interpretation of the categories varies	Carlson 1951 Burns 1954 + 1957 Copeman et al 1963 Dubin and Spray 1964 Horne + Lupton 1965 Stewart 1967
	Random Activity Sampling or Minute-by-Minute (Predetermined Headings)	Similar to diary method	Similar to diary method	Guest 1956 Jasinski 1956 Ponder 1957 Wirddenius 1958 Landsberger 1962 Kelly 1964 + 1969
OBSERVATION	Unstructured	Method is purely inductive Researcher can ask questions of the subject	Anything approaching replication is impossible Selective perception by the researcher	Sayles 1964 Hodgson, Levinson and Zaleznik 1965
	Structured	Induction coupled with the structure of systematic recording Detailed comprehensive record Consistent standard possible Both work characteristic and content can be studied	Observer may be excluded from confidential meetings Observer presence effect Sample size very limited Very time-expensive	Mintzberg 1968 Choran 1969

Two other research methods are described in the literature: (1) Secondary Sources where the data to be analysed must be very comprehensive and (2) Critical Incident. In both, the researcher has no knowledge of what data is missing.

Sources: Mintzberg (1973), Stewart (1967) and Stewart (1976)

All of these researchers recorded the activities of their subjects into predetermined categories in much the same way as the diarists had, and so it was not possible to develop any new categories or dimensions of understanding of what it is that the manager did or what the manager's job entailed from them. Thus the advantages and disadvantages of this method over that of the diarists are the same (see Table 2) and "the only real difference was that recording was done by the researcher instead of the manager." (Mintzberg, 1973:227)

We can now review the main findings of the researchers with which we have dealt so far in this section :

Carlson (1951) was the first to report that most of the managers' time was spent in the company of other people. He commented that the time spent alone was "too little for sustained thinking." Kelly's finding that two thirds of the manager's time was spent with other people (1964 and 1969) compares very closely with that of Stewart (1967) who found that 60% of the time was spent in discussion. Here we also have the findings of Burns (1957) whose sample of senior and middle managers had a discussion time of 42 - 80% whilst Horn and Lupton's (1965) middle managers spent most time talking "face-to-face."

Ponder (1957) comments on the considerable discontinuity in the manager's job and Dubin and Spray (1964) report that his time is spent on many different activities. Stewart summarises the effect of the interruptions and the discontinuity when she said in a later study (1976) that the manager has "no time to think."

It is perhaps the communication patterns which result from this interruption that are most interesting: Because of the amount of time spent in discussion one is not surprised at the findings of Carlson (1951) and Horn and Lupton (1965) that communication is by informal and verbal means rather than written. In fact Stewart (1967) reports that 43% of the discussion was informal. But contrary to the hallowed "truth" that communication in an organisation proceeds from the top down and from the bottom up in a vertical

fashion, Burns (1957) found that more time was spent by the manager in lateral communication than in talking to his immediate subordinates:

"The accepted view of management as a working hierarchy on organisation chart lines may be dangerously misleading. Management simply does not operate as a flow of information up through a succession of filters, and a flow of decisions and instructions down through a succession of amplifiers." (cited in Stewart, 1967:14)

Landsberger (1962) goes even further than this and states that in his opinion the chain of command is actually "cross-wise" whilst Dubin and Spray (1964) found an increasing tendency for the higher level manager to spend his time in horizontal relationships. Thomason (1966), commenting on the results of studies carried out by his students, concludes that "the communication structure may look .... like a patchwork quilt of centres and lacunae .... with a cyclic pattern of communications extending down the hierarchy." (cited in Mintzberg, 1973:206)

(As early as 1951 Carlson reported that in his opinion one of the greatest difficulties which the manager had in performing his job was in "keeping himself informed." One can thus at this stage ask to what extent is the communication pattern as found by these researchers a matter of choice: Conscious development by the manager in order to try and overcome this difficulty).

And so before we are tempted to dismiss the work of the diarists and early observationists either because they studied characteristics and not functions or because their predetermined categories were in "vague and old-fashioned terms of functions", or for any other methodological reason, we must remember that their findings exploded many of the "myths" of managerial functioning. These misconceptions which Sayles (1964) refers to as "the old wives tales of management theory" have been taught and accepted and are still held to be true. We should also note that all these findings have been confirmed and substantiated by later Researchers to whose work we now turn.

## STUDIES IN UNSTRUCTURED OBSERVATION

### The Work of Leonard Sayles

The first attempt to break away from the stereotyped categories which had bedevilled all the descriptions of managerial work up to this point was made by Leonard Sayles in his study of 75 middle and lower managers in a single division of a large American corporation.

Sayles simply "lived", observed, and recorded in as purely an inductive manner as he could. On the first page of his book 'Managerial Behavior' (1964) he explains:

"The field work was conducted by techniques of anthropological studies: The researcher endeavours by living within a culture for extended periods of time to comprehend significant relationships and attitudes - even those which may depart from his predispositions and expectations" (vii)

It was not possible for him to analyse this data in the normal sense of the word simply because there is not one piece of empirical evidence reported. Again he explains:

"We make no pretence of having conducted a scientific experiment, so we are not proposing scientific hypotheses backed by systematically collected validating data. Rather, we have looked and pondered for a long time and then developed a scheme of analysis, by which we mean simply that minimum number of concepts that would "explain" what was happening. Thus our study goes beyond mere description" (viii)

Sayles was interested in the relationships and inter-relatedness of the various managerial acts and the "scheme of analysis" which he describes provides us with several new dimensions of understanding of the complexity of management. He proposed that managerial work could be described in terms of three "categories of activity." These he calls programs.\* He sees the manager as:

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Sayles uses the term 'Program' in preference to 'Role.' This preference is shared by Mintzberg who however points out: 'Role is a fuzzy concept. Program is a better concept, but it demands a greater understanding of the subject than we now have (1973:266).

1. A participant in external work flows
2. A leader
3. Monitor

### 1. PARTICIPANT

Sayles lists thirteen patterns which he was able to discern from his observations and from these he categorises seven relationships which the manager has with people who are <sup>\*</sup>outside of his immediate responsibility. In other words they are peers rather than subordinates.

Trading Relationships: The manager enters into "buying" and "selling" arrangements with other members of the organisation. In order to get his own work done he has a large number of "customers" and a wide variety of "terms of trade" to negotiate.

Work Flow Relationships: These refer to the contacts which he must make concerning the work which precedes or succeeds that which is carried out in his own department.

Service Relationships: Many organisational facilities are centralised and so the manager must give service or support to other divisions in order that they can get their own work done. Similarly, he receives such services from other departments.

Advisory Relationships: This refers to the giving of advice to the manager by (staff) experts.

Auditing Relationships: Refers to the receipt of information by the manager about matters which he has neither the time nor the skill to evaluate for himself. He thus relies on other specialists to act as "his eyes and ears."

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By 'external' Sayles means outside of the normal hierarchical (vertical) reporting relationships, i.e. lateral communication.

Stabilisation Relationships: He must maintain adequate contact with those other people in the organisation who are in a position to limit or curtail his own decisions in order to secure the best for his own division. He here acts as a lobbyist.

Innovative Relationships: Groups such as research and development which represent the extreme of professionalisation in the organisation are usually totally divorced from the normal line function and the manager must maintain contacts with these groups in order to provide for the future of his department or organisation.

In outlining these work-flow relationships Sayles stresses that their maintenance is extremely time-consuming and depends more upon negotiation than on the employment of any sort of authority. Furthermore the need for their existence in the first place is "because of the division of labour imposed on the modern organisation. The manager rarely controls all the resources needed to do whatever has been assigned to him (i.e. he and his subordinates together do not have all the pieces required to make a whole unit of work)" (1964:58)

## 2. LEADER

Sayles' manager engages in activities which relate to his subordinates in a hierarchical (vertical) fashion as opposed to the horizontal or lateral relationships which we have described above. Thus the manager (1) directs the activities of his subordinates (2) responds to subordinates who are seeking aid or support and (3) intervenes on behalf of the subordinates in their relations with other parts of the organisation. Sayles admits that his view of the leadership role is somewhat "narrow" (page 53).

## 3. MONITOR

It is in the description of the Monitoring Program what we gain a new perspective of managerial work. The manager is seen as constantly scanning the sum total of both his internal and external relationships looking for the

situations which require his intervention. Six inter-related stages of Monitoring activity are described:

1. Methods of detecting disturbances in the work systems in which the manager participates
2. Development of criteria for evaluating the significance of disturbances that are detected
3. Patterns of corrective action to be applied and the assessment of their effect
4. Detection of continuing (resistant) sources of disturbance in the work systems and their analysis
5. Formulation of strategies of organisational or structural change to cope with these
6. Implementation and validation of these structural modifications (pages 53-54).

Sayles stresses that in his opinion monitoring is not a question of quantifiable results but rather measurement of the progress of the work through the total system.

This study is therefore remarkable not only for its unique methodology but also because for the first time we have some formal appreciation of just how complex the manager's job is. Sayles sees the total organisation as:

"A dynamic system of mutual inter-dependence . . . and the manager must first be able to identify (its) structure. In other words he must do more than recognise that everything depends upon everything else." (page 56)

This theme is developed throughout the book until, in discussing action interventions by the manager which are necessary if the organisation is to cope with changes in its external and internal environment, he summarises the managerial job thus:

"The manager's objective, then, is not a static system of human relations, Rather, he is seeking a dynamic type of stability, making adjustments and readjustments to both internally generated and externally imposed pressures. By these responses to variations in the environment, he hopes to maintain a moving equilibrium.\*

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This conceptualisation is very much akin to Schein's (1965) theoretical notion of the maintenance of an Adaptive-Coping Cycle.

## STUDIES IN STRUCTURED OBSERVATION

### THE WORK OF HENRY MINTZBERG

Mintzberg's work was prompted by seeking answers to exactly the same sort of question with which we have been concerned up to now: questions such as "what does a manager do?" "what activities does he indulge in?" "what is the purpose in his doing so?" In examining the work of the Diarists and early Observationists he noted that content was assumed and so only evidence of work characteristic resulted from these studies. Sayles' research broke away from these artificial structural constraints and produced new and valuable findings about work content, but the methodology was so loose that replication was impossible. More important, this meant that Sayles' method would not lead to development of a theoretical framework which could subsequently be validated and refined.

Mintzberg was essentially interested in studying content of the managerial job (rather than the man) and isolating similarities rather than concentrating on differences. This meant that his research had to be "inductive because the purpose was to describe what we did not know . . . comprehensive to capture not what might interest me . . . , but the whole job of managing . . . And intensive in that it had to probe deeply."  
(1973:230-231)

What follows is a summary of the methodology which led to the development of Mintzberg's Ten-Role Set as well as his further comments on the use of structured observation (see Box).

#### Methodology

The subjects were the chief executives of five organisations each engaged in a completely different sphere of activity: Manager A was the chairman of an international consulting firm, Manager B was the president of a firm producing high technology industrial products, whilst Manager C was a hospital director. Manager D headed a firm producing consumer goods and Manager E was a School Superintendent.

Preliminary to the observational data collection Mintzberg collected information about the organisation, about the manager, and about his usual pattern of activities from his diary. In this way he familiarised himself as much as possible with the manager's whole environment and the people with whom he was likely to interact during the period of observation.

Each manager was observed for one week and during this time two types of data were collected. The first of these was "anecdotal" in nature - interesting or critical incidents were described in detail and copies of actual correspondence were collected. These anecdotes were not only for purposes of interesting illustrations but "were used to facilitate coding and to develop and support some of the theory." (page 232).

#### COMMENTS ON THE USE OF STRUCTURED OBSERVATION

"The study used structured observation but with one important distinction from previous uses. The categories were developed during and after observations. An attempt was made to describe the "purpose" of each of the events observed in the words that seem appropriate at the time of observation. The formal categorisation was carried out at a later time, when all data were in and when there was time to do it carefully. This approach retained the basic advantage of the diary method - systematic recording of field data - but also maintains the flexibility to develop content categories inductively." (page 25)

"Such an approach can offer the best of both worlds - the inductive power of observation coupled with the structure of systematic recording." (page 227)

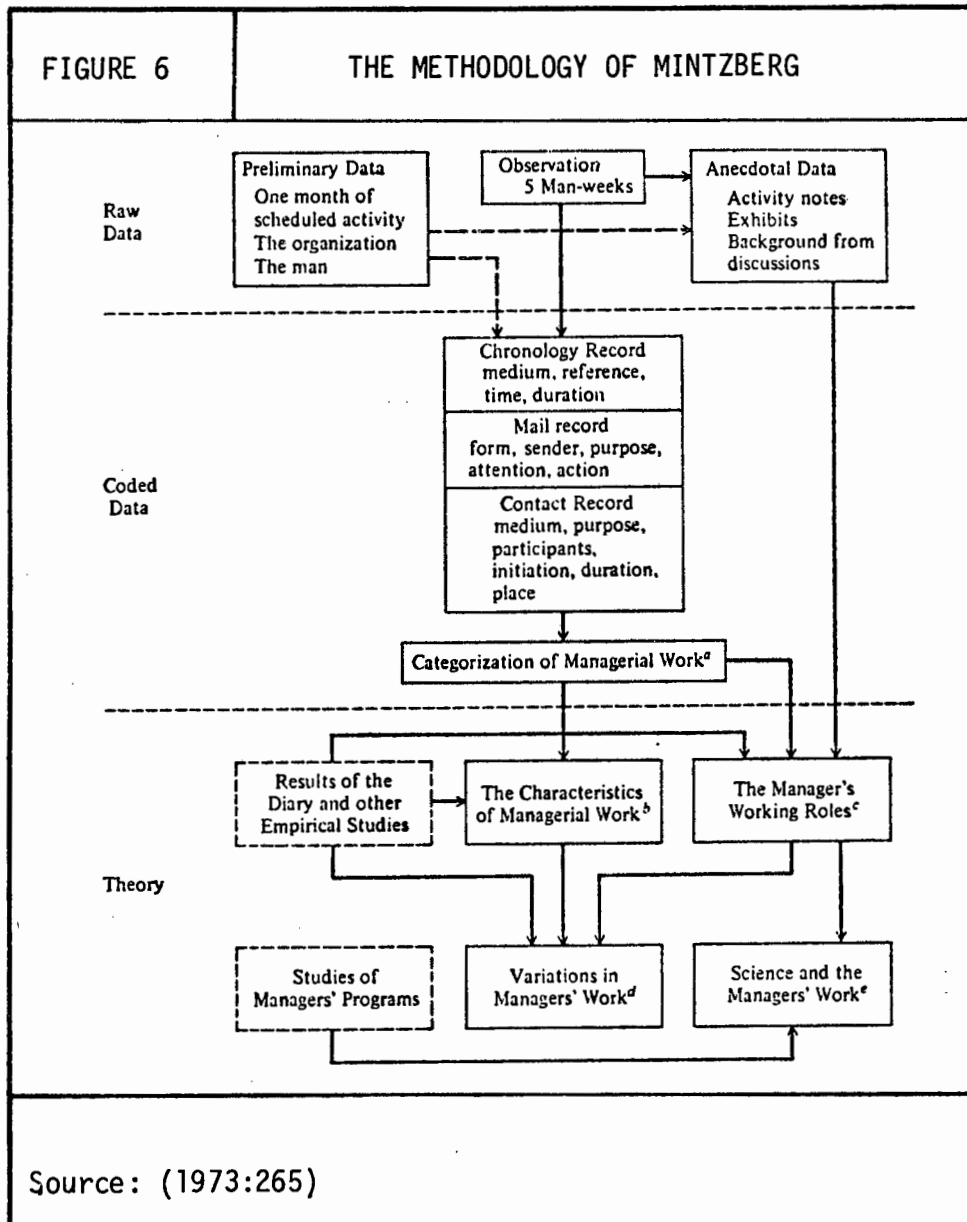
"This method necessitated walking a tight-rope between using structure and excluding it. Too little structure would have resulted in an inability to record much of the important data, tabulate the findings, and reproduce the research. Too much structure could have led to the problem inherent in diaries - an inability to develop an understanding of the things we knew nothing about." (page 231)

"I straddled two objectives - the provision of clear description to the general reader interested in understanding managerial work, and the establishment of a scientifically valid framework for further research. One objective required simplicity, and the other precision. I achieved some of each, at the expense of each." (page 266)

The second type of data collected was "structured" and three types of record were used to capture this data: (1) the Mail Record described all incoming and outgoing mail, the sender, its purpose or nature, as well as the action taken. (2) the Contact Record accounted for each verbal contact which the manager had. This might be a scheduled or unscheduled meeting, a telephone call, or interaction whilst on a tour. Again the purpose was recorded as well as the participants, who initiated the activity, the place where it happened, and its duration. (3) the Chronology Record contained cross references to the Mail and Contact records and noted the nature and sequence of each of the activities for every minute of the working day.

During the initial recording on all three of these records activities and occurrences were noted down in whatever words seemed appropriate at the time: no attempt was made at this stage to develop any sort of consistent terminology. Each evening entries on each of the three records were tabulated and again during this initial rewriting no categorisation took place. It was only when the research was finished that all the records were written and re-written and an attempt was made to produce "accurate, tidy, and concise categories" (page 233). Analysis of the Chronology and Mail record resulted in categories of information which produced much new evidence about the manager's work characteristics: besides obvious things such as the total number of hours worked, Mintzberg was able to compute the amount of time he spent working at his desk, how many telephone calls he made and of what duration, and the number of scheduled meetings in which he took part.

It was essentially the analysis of the Contact and Mail Records which were responsible for the categorisation of the manager's work content. By constantly questioning why the manager engaged in a particular activity - by asking the purpose in his attending a meeting or talking to a subordinate - a collection of categories began to appear. The analysis was repeated for 368 verbal contacts and for 890 pieces of mail, and this categorisation of purpose led to the statement of managerial roles. The entire methodology is illustrated in Figure 6. Mintzberg states:



"It should be noted that the essence of the inductive process is in the successive iterations of the processing of raw field data - recording, tabulating, coding and re-coding, analysing these results - until meaningful conceptualisations appear." (page 233)

From the Mail Record twelve categorisations of purpose emerged and from the Contact Record there were thirteen "a few of which parallel directly those of the mail analysis" (page 249).

Regarding the characteristics of managerial work, Mintzberg outlines six categories (see Box) some of which the manager is forced into, others which he chooses. All of these characteristics are supported by the findings of the Diarists which we reviewed earlier in this Chapter.

### THE TEN-ROLE SET

The result of this painstaking and exhaustive analysis was a statement of managerial functions in terms of 10 roles which Mintzberg saw as falling into three groups: Interpersonal, Informational, and Decisional. From his position of formal authority the manager derives a unique status and the combination of his authority and status places him in a position of command regarding the development of interpersonal relationships within the firm. Performance of the interpersonal roles (Figurehead, Leader, Liaison) in turn place him in a unique position of having access to information. In carrying out the informational roles (Monitor, Disseminator, Spokesman) he gains information and this information together with his authority and status place him at the very centre of the organisational system in which decisions are to be made. In performing these roles (Entrepreneur, Disturbance Handler, Resource Allocator, Negotiator) he commits the resources of the organisation.

A short description of each of the roles follows. Mintzberg's propositions about the nature of the roles is contained in Appendix 1.

#### Interpersonal Roles

##### Figurehead ( \* inside and outside)

Because of the manager's formal authority and status he must represent the organisation on formal occasions. He must therefore attend ceremonies, make speeches, and receive important visitors. He is also charged with the responsibility of attending to completely inconsequential requests from outsiders who believe that they will get the best attention by going to the head man.

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Refers to whether the particular role is performed inside or outside the organisation.

Within the organisation he must attend to various routines such as signing legal documents and cheques.

### Leader (inside)

If leadership involves the relationships between the leader and the led, then in his leader role the manager is responsible for the production and maintenance of the organisational climate. In general then, the leader role involves bringing about an integration between individual needs and organisational goals so that an efficient cooperative unit will result.

In relating to subordinates he guides, motivates, encourages, criticises, and praises. This includes solving employees' personal problems as well as requesting them to carry on with (follow up) work where the intent is not work production but rather encouragement and motivation. It also includes a 'special class' of staffing: hiring, firing, training, and promoting.

Concerning work procedures or operations, the manager fulfils his leadership role in checking to see what is going wrong, identifying problems in need of attention, and generally identifying procedures which in some way require change.

In describing the leader role, Mintzberg readily concedes that leadership permeates almost all activities and that the manager often performs a leadership function when he is engaged in activities which have other basic purposes - to transmit information or to make strategic decisions (page 61).

### Liaison (outside)

The Liaison role refers to the manager's build-up of a web of horizontal relationships with a wide variety of groups outside the organisation. This he does in a variety of ways and with many different types of groups and people - some directly related to his organisation's activities and others not.

## MANAGERIAL WORK CHARACTERISTICS

### 1. Much Work At An Unrelenting Pace

The Manager has little free time during the day and rarely has breaks. Almost every minute of every working day is accounted for by some activity - even coffee and lunch are taken during working sessions. More important, because of the open-ended nature of his job, the manager is never in a position to say "I have finished" and so he can never escape from it. He takes work home, or has duties after hours, or finds himself thinking about it.

### 2. Activity Characterised by Brevity, Variety, And Fragmentation

The vast majority of the manager's activity are of very brief duration. The work is fragmented and interruptions are frequent. Half of the activities were completed in less than nine minutes, and only 10% took more than an hour. Apart from a few minor exceptions, no sequence in the pattern of activities could be found: "It cannot be argued that mornings differ from afternoons that certain activities took place at special times of the day or that certain days of the week differed from others." (page 31)

Because of the constant pressure the manager is not able to spend much time on any one issue. But there was also evidence that to some extent at least this fragmentation of his workload was of his own doing and that he preferred the brevity.

### 3. Preference for Live Action

The manager prefers the current, the specific, the ill-defined and the non-routine activities. He thrives on current information (gossip, hearsay, speculation and "scraps" of information). For this reason attention to his mail is regarded as a chore because the information that it contains is old and the immediate feed-back element is lacking.

In scheduling his time he shows a concern for the definite, the concrete, and the specific rather than the general issue. "The pressure of the job does not encourage the development of a planner, but of an adaptive information manipulator who works in a stimulus-response environment and who favours live action." (page 52)

#### 4. Attraction To The Verbal Media

The manager's job can be seen as consisting of a mixture of verbal and written contacts. He has 5 media to choose from: mail (written), telephone (verbal), unscheduled meetings (informal and verbal), scheduled meetings (formal and verbal) and tours (observational). The manager shows an obvious preference for the three verbal media by spending 67% of the activities and 78% of his time in verbal exchange. The informal means of communication - telephone calls and unscheduled meetings - are used to transmit pressing information and to deliver informal requests. Scheduled meetings are only used for formal information exchange and requests mainly involving a number of people. The manager shys away from written media - be they external mail or internal memoranda:

"Unlike other workers, the manager does not leave the telephone or the meeting to get back to work. Rather, these contacts are his work ... The manager's productive output can be measured primarily in terms of verbally transmitted information" (page 44)

5. Between his organisation and a network of contacts the manager communicates with three groups of people - his superiors, his subordinates, and a group of outsiders. He can be seen as standing between his own organisation and a network of these outside contacts. Communication with people outside the organisation consumes up to one half of his time. There is thus a strong indication that "contacts between managers and outsiders have been underestimated (as to time allocated) and oversimplified in the traditional literature." (page 44). Time spent with subordinates consumes between 33% and 50% of the manager's time whilst he only spends some 10% of his contact time with superiors.

Subordinates request authorisation, information, and advice from the manager but they also bring him a great deal of "instant communication" which he needs as part of his internal information system. Thus the manager interacts with a wide variety of subordinates. These communication lines did not correspond with the formal lines on the organisational chart, and there was some evidence that the manager actually encouraged subordinates to communicate with him directly - again bypassing formal channels.

#### 6. Blend of Rights and Duties

The literature traditionally gives us two views of the manager. One as conductor - as the chief executive he is in control of his own affairs - and the other as puppet - he is the only man in the whole organisation whose complete time is at the disposal of and controlled by others. The manager's job is therefore seen as a blend of rights and duties. But the study suggests that there are two areas where he can exercise choice: It is his right to control initial decisions, but once taken he incurs an obligation to carry out the associate activities. Also, he has choice in determining those activities in which he must engage - he can take advantage of his obligations by, for example, obtaining information when forced to perform a certain activity. In short, he has the opportunity to turn his disadvantages into advantages.

He may attend conferences or join external boards where he will make and maintain social contact with his peers. He may also indulge in public service work and attend social events where he will again build useful relationships. The purpose of indulging in this activity is to build a sufficient number of contacts which will provide him with information and also with sources of access and influence which would otherwise not be open to him. The manager thus links his organisation to a large number of outside individuals and groups by performance of the liaison role.

### Informational Roles

#### Monitor (inside and outside)

In order to perform his job adequately the manager must apprise himself of events taking place both within his organisation and in the wider environment. He must gain information about internal and external events and so build up a 'store of knowledge' in order that he will be able to coordinate the activities of the various units within his organisation and guide the total organisational effort in a way which is in keeping with the external events. His place in the organisation puts him in a unique position to do this: Whilst he knows less detail about each of the specific operations within his organisation, he alone is the one who knows about all functions. This internal information comes to him in the form of formal reports and memos along the usual channels, but also (as we have seen) a tremendous amount of it is in the form of an ad hoc input via informal channels.

We have also seen that the manager encourages and prefers this verbal informational input in the form of gossip and 'scraps' of information.

His information about events external to his firm come to him from competitors, clients, and suppliers and as a result of contacts made in performance of his liaison role.

Monitoring is then information-gathering which the manager does from a wide variety of both external and internal sources.

Disseminator (inside)

From the vast amount of information which reaches the manager he must sort out that which is relevant and that which can be ignored as being either incorrect or of no use. Two types of information are transmitted: factual (those pieces of information which the manager has decided are correct) and value (statements of either his or somebody else's preference which must be transmitted to subordinates).

Thus from the vast amount of information reaching the manager from both outside and inside sources he must decide who in the organisation can make use of this information and he must disseminate it to the appropriate part of the firm in a form which (in his judgment) best suits it.

Spokesman (outside)

In contrast to the disseminator role which focusses on the transmission of information inside the organisation, the spokesman role focusses on transmission of relevant information to the outside world. Because of his unique access to information he is looked upon as an expert not only in the functioning of his own organisation but in many cases as a spokesman for the industry (or sector) in which his organisation is involved. Thus the manager must inform the Board of Directors, Suppliers, Customers, of information relevant to them. He may perform a lobbying function on behalf of his firm (or the industry in which it is involved) with the Government, Trade Organisations, or merely the public at large. In all these activities he is speaking as an expert and is informing these groups of his organisation's plans, policies, and performance.

Decisional RolesEntrepreneur (inside)

Through performance of his monitor and liaison function the manager is constantly scanning the wider environment looking for opportunities for and threats to his organisation. Within the organisation itself he looks for opportunities for improvement. In those areas which he considers to be a 'problem' the manager then decides that it may be necessary for his organisation

to take action (to change in some way) in order to exploit the opportunity or to avoid the threat. He therefore introduces an 'improvement project' which refers to 'a sequence of activities designed to improve a particular organisational situation (exploit an opportunity, solve a problem)'. The manager may decide to delegate responsibility, to supervise the work himself, or to authorise others to do so whilst retaining responsibility for the  
\* choice-making phase of the project himself.

The entrepreneurial role then, sees the manager initiating and designing programs of controlled change and it involves those activities 'where the manager makes changes of his own free will' in advance of a pressing necessity to do so.

#### Disturbance Handler (inside)

In this role the manager deals with situations which have been brought about wholly or partially due to circumstances beyond his control. In contrast to the entrepreneurial role where he acts in a pro-active way to initiate change of his own choosing, disturbance handling is reactive, as he steps in to correct situations which have already arisen. He attends to crises. These crises can be as a result of unforeseen events or of problems previously neglected which should have been attended to. Generally they are of one of three types: disagreements or inabilities involving subordinates, exposure difficulties between one organisation and another, and threats of resource loss. As disturbance handler, 'the manager acts because he must . . . A disturbance occurs, a correction is necessary.'

#### Resource Allocator (inside)

In this role the manager is deciding where his organisation must expend its efforts. This is 'the heart of the organisation's strategy-making system' for through it the manager determines which departments or activities will grow and which will diminish. Besides the allocation of the more obvious resources such as manpower, material, time, and equipment the manager also makes decisions involving the organisation's reputation and, probably most

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The Decision-making roles in relation to Simon's (1965) trichotomy of Intelligence, Design and Choice phases are discussed further in Chapter 8.

important of all, the allocation of his own most precious resource, his personal time. This will determine what gets attention and what does not. In deciding what is to be done the manager, by assigning work to his subordinates, in effect programs their work. Resource allocation is closely linked with the entrepreneurial role particularly where the manager authorises actions on improvement projects which are being supervised by his subordinates. In this case he is adding his approval to decisions already taken by his employees. Budgetting forms a large part of resource allocation in that the manager is constantly bombarded with a series of requests for authorisation and he must allocate the scarce resources of the firm amongst competing units which require them for widely differing purposes.

#### Negotiator Role (outside)

This refers to participation by the manager in non-routine negotiations with outside organisations, groups, or individuals. On these occasions the manager is essentially trading the resources of his organisation for the resources of the opposing party. Examples of this activity are takeovers, mergers, acquisitions, and contract negotiations of one sort or another.

This role is a hybrid insofar as it contains elements of three other roles: The manager participates in these discussions because, as Figurehead his presence adds credibility to the proceedings. As Spokesman he represents his organisation's information and value system to outsiders. But most important, as Resource Allocator, the manager has the authority to commit organisational resources: He alone has the authority to commit resources without reference to any superior.

The strength of Mintzberg's work is that "each role is observable although some activities (such as those pertaining to leadership and negotiation) may be accounted for by more than one role. And all the observed contacts are accounted for in the role set" (page 57). Thus no action in which the manager takes part has to be excluded because it cannot be accommodated by the theory. Mintzberg therefore is able to claim that all managers perform all ten roles and conversely that any given job can be described

in terms of the ten-role set. However, in making this claim he emphasises that:

'These ten roles form a gestalt - a whole. In essence, the manager is an input-output system .... (and thus) .... one cannot arbitrarily remove one role and expect the rest to remain intact' (page 58).

The set of roles incorporates all the findings of the Diarists and Observationists. It contradicts none of these empirical findings but rather underscores and adds to them the dimension of relational and wholistic meaning. More specifically, we find an empirically-based role description of managerial work which is in keeping with the theoretical frameworks of advocates of the Systems School such as Katz and Kahn (1966) and \* Hunt (1972) which were discussed in Chapter 5.

It builds on the roles described by Sayles, confirms the importance of roles such as entrepreneur and negotiator (previously ignored or considered non-managerial), it dispels a number of myths such as the upward-downward interaction pattern and highlights the importance of horizontal and lateral communication. In doing this it emphasises just how narrow the focus of the Traditionalists has been.

Thus the greatest significance of Mintzberg's Role Set is that for the first time since publication of Fayol's work in 1916 we have been provided with an alternative statement of managerial functions.

#### Validation of Mintzberg's Work

We have seen that Mintzberg's work is based upon the observation of the chief executives of large companies. In other words, the type of job (top management) and the size of the organisation were held constant. In spite of this one of the fundamental claims which Mintzberg makes about his role set is that, whilst forming a gestalt, it is universal: All managers in all types of organisations at all levels perform all ten roles.

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The theories of Mintzberg and Hunt are unrelated: the former completed his empirical work for a Ph.D. dissertation in 1968, the latter in 1969. They were unaware of one another's existence prior to publication of their works in 1973 and 1972 respectively.

However, in spite of the restricted nature of his sample, he has good grounds for making this universal claim: Firstly, his subjects were drawn from both the public and private sector. Secondly, his theory was developed with all other pertinent research on managerial work very much in mind. Thirdly, his results - the actual observational data - corroborated rather than contradicted the empirical work of the Diarists (whose work had been done at many levels and in many types of industry) as well as that of the early Observationists. These researchers had found more similarities than differences in managerial work.

But whilst he had reasonable grounds for making this claim, what evidence do we have for the universal applicability of the role set? Will the job of manager of a small organisation differ from that of a large one, and if so, how? What differences will there be between a manager of a public organisation and that of a private one? How, if at all, will a middle manager differ from a supervisor in terms of role performance emphasis? In short, to what extent has Mintzberg's work been validated?

In developing his 'Contingency View of Managerial Work' Mintzberg analysed work differences in terms of the similarities and identifies 4 'nested' sets of variables, the interaction of which will together produce a given manager's role requirements and basic work characteristics. These will in turn determine a single manager's work:

1. Environmental Variables: the organisation itself - its size (large or small), its industry, and the sector in which it operates (private or public).
2. Job Variables: the level in the hierarchy and the function which is supervised.
3. Person Variables: individual differences - the manager's values, personality, and personal style.
4. Situational Variables: changes in the work behavior over time. These can be periodic (annual budget preparation or year-end accounting) or of a longer cyclical nature as when a period of entrepreneurial change (mergers and acquisitions) is followed by leadership stability (consolidation).

TABLE 3		RELATIVE DIFFERENCES IN ROLE PERFORMANCE AND WORK CHARACTERISTIC BETWEEN MANAGERIAL JOBS				
VARIABLES		CHARACTERISTICS	ROLE EMPHASIS	ROLE DE-EMPHASIS	REASON	RESEARCHER
SIZE	LARGE	More formality Scheduled and unscheduled meetings Varied external contacts	Liaison Figurehead Spokesman		Co-ordination is more difficult There is more 'Professionalism'	Mintzberg (1968) Stewart (1967) Stieglitz (1970) Stewart (1976)
	SMALL	Brevity of activity and fragmentation of work Very informal media of communication Unscheduled meetings	Leader Entrepreneur Informational: Monitor and Disseminator	Liaison Figurehead	Concern for internal operational issues Lack of staff	Choran (1969)
SECTOR	PRIVATE	Informal communication Brevity, variety and fragmentation	Monitor		Instant information needed to cope with competitive and unstable environ.	Mintzberg (1968) Burns (1967) Stewart (1967)
	PUBLIC AND SEMI-PUBLIC	More time spent in formal activity and scheduled meetings  Less brevity, variety and fragmentation More continuity	Liaison Spokesman Negotiator  Liaison Spokesman Monitor Disseminator	Entrepreneur  Disturbance- Handler (Entrepreneur)	Political issues involved result in committee conserv. Less competitive and more stable environment Adherence to rules and procedures Slow-moving internal environment: Less competition & more stability	Mintzberg (1968) Costin (1970)  Gingras (1977)
LEVEL	MIDDLE MANAGERS & SUPERVISORS	Concern with daily operating problems Brevity + fragmentation increases	Monitor Disturbance- Handler Negotiator	Figurehead	Concern with the maintenance of work-flows	Sayles (1964) Guest (1956) Martin (1956) Chapple and Sayles (1961)
FUNCTION	LINE PRODUCTION	More time with subs. Fragmentation + variety Recurrent trouble-shooting	Decisional: Disturbance- Handler and Negotiator	Figurehead	Concern with the maintenance of work-flows	Stewart (1967) Stewart (1976)
	STAFF SPECIALIST	More time spent alone: Less variety, more routine Horizontal and lateral communication patterns	Informational: Monitor and Spokesman Liaison Negotiator	Figurehead Leader Disturbance- Handler Resource Alloc.	He is an 'expert' serving as a nerve- centre between his clients and other experts (his staff)	Stewart (1967) Mintzberg (1968) Stewart (1976)

The evidence from a number of sources of differences in managerial jobs is summarised in Table 3. These relate mainly to the job itself - level and function - as well as size and sector. The reader will notice that although we are here interested in isolating differences of (functional) managerial role performance, a number of work characteristics appear in the Table. This is because characteristic and content (or function) are inseparable because each depends upon the other.

Four of the studies mentioned in the Table are of particular importance in evaluating the validity of Mintzberg's roles because they are to a greater or lesser extent based upon his work: Irving Chorán (1969) attempted a partial replication of Mintzberg's work amongst the chief executives of small companies, whilst Andre Costin (1970) and Andre Gingras (1977) used the Role Set as a basis for their research. Rosemary Stewart (1976) used data generated by the Mintzberg study in her investigation of a variety of different jobs. These four studies are discussed below.

#### The Work of Irving Chorán (1969)

Chorán's study at the same time served as a validation of Mintzberg's methodology and provided us with much new information about managerial behaviour. In contrast to Mintzberg's chief executives of large companies, Chorán chose to study the Presidents of three small companies - a producer of industrial chemicals, a manufacturer of consumer cosmetics and a restaurant operator.

The object of the study was to answer questions such as Do managers' roles and activities differ between large and small companies? How much time does a manager of small firms spend in his various activities? Which are his predominant roles and activities? What additional activities and roles (if any) does he perform? In summary, what does a manager of a small business do?

Mintzberg's methodology and analysis was exactly duplicated with these subjects who were each observed for a period of two days. Analysis also paralleled that of Mintzberg and on the basis of the results obtained, Chorán concluded that the managers of small firms perform all ten roles and that their work showed the same characteristics (brevity, preference for live action and verbal media) as had been described for managers of large firms.

However, against the background of similarity, a variety of very interesting differences both in characteristic and content could be seen. Compared to the chief executive of a large company, the small firm president engaged in many more activities per day. This meant that the fragmentation and discontinuity of his work was greatly accentuated and the brevity of his contacts was very pronounced. The increase in the number of activities was not in scheduled meetings but rather in unscheduled and ad hoc contacts with subordinates and outsiders. The small firm manager showed a greater preference for informal contacts - particularly in his use of the telephone.

Most of the contacts made by the small company manager were for the express purpose of receiving and transmitting information. Mintzberg's description of the manager as a 'nerve centre' is underlined by Chorán's manager who showed a distinct appetite for instant communication gathering (monitor). Once gathered, 76% of the contacts which the manager made were for the purpose of passing along this 'hot' information (disseminator). The manager spent most of his time in his office either on the telephone or in unscheduled meetings. Scheduled meetings, when held, were of extremely short duration.

Not only did the managers do the same things, but in many cases the proportion of their activities were similar. They all interacted mainly with subordinates, suppliers and customers - in contrast to the managers of large companies who interacted with directors, peers and other outsiders. Thus the figurehead and liaison role although performed by the small firm manager does not have as great an importance as it does for the manager of the large firm.

Whilst the chief executive of the large company spends much of his time coordinating the activities of subordinates to whom he has delegated responsible tasks, the manager of the small firm is far closer to the operating level and must therefore be in possession of more detailed information on a wider variety of subjects. He spends more time making tours, motivating and encouraging his staff (leader) and seeking information on inventory levels, orders received, and the state of work in progress. The only way in which he can accommodate this wide variety of activities into the number of hours in the working day is to adopt an informal mode of operation, and above we saw evidence of this in a number of unscheduled meetings and short telephone calls. Choran concludes that the leader and information processing roles (within the firm) are more significant for the manager of a small firm.

Another way of looking at this is to see the manager of the large firm with his diversified outside network of contacts, increased formality, and formal meetings as being 'professional', and the manager of the smaller firm with his greater informality, restricted network, and ad hoc meetings as being more 'entrepreneurial': a view shown in a study by Stieglitz (cited in Mintzberg 1973:107) who polled 48 chief executives and found that the heads of large firms thought of themselves as being 'professionals' whilst the managers of the small firms saw themselves as 'entrepreneurs'.

This difference between managers of large and small firms in the degree of formality is not so much a matter of choice but of necessity. The manager of a small firm simply does not have subordinates at his disposal to whom he can delegate important tasks. His work within the organisation therefore takes on a more multi-faceted appearance. Choran states that this gravitation of the small firm manager towards operator roles is simply due to the 'limited availability of human resources' (lack of delegation). This view had been proposed by Rosemary Stewart in her earlier book when she stated:

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Additional information comparing the results obtained by Mintzberg, Choran, and myself is presented in Chapter II.

"Managing in a large company has important differences from managing in a small one. For instance, both the amount of specialisation and the type of contact with staff will vary." (1963:66)

In overall summary we can conclude that the managers of both large and small firms perform similar work<sup>\*</sup> and that the differences both in characteristic and in role performance are more a matter of degree or emphasis than in real content. More particularly, Chorán's study adds weight to Mintzberg's work, helps to validate the existence of the ten-role set, and at the same time highlights the differences between management of a large and small firm.

#### The Work of Andre Costin (1970)

We recall that Mintzberg's sample of chief executives was a mixture of private and semi-public (education and health) subjects. And that he found that the liaison, spokesman, and negotiator roles were apparently more important for the latter group than for the business man at top level. Costin set out to ascertain whether this held true with managers at lower levels.

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Related to this, Chorán describes 2 additional roles which he saw his small-firm managers performing: Specialist and Substitute Operator. The manager acts as Specialist when he performs a particular function in addition to that of his job as manager. He does this when he believes that he is the most capable person in the organisation to undertake this function. Examples cited by Chorán are implementation and subsequent operation of an inventory control system and acting as the purchasing agent for supplies (this role thus has improvement project or entrepreneur overtones). He acts as substitute operator when some sort of crisis necessitates it. Examples here are absenteeism of a key employee, or any situation where an extra hand is temporarily needed. This role therefore has very strong Disturbance Handler aspects to it.

He accepted the existence of the ten-role set and constructed a questionnaire which was designed to monitor the frequency with which a given manager performed each of the 10 roles in the set. For example, in extracting information about the disseminator role he asks how much time the manager spends 'passing on information from outside your organisation to your subordinates.'

The questionnaire was mailed to 500 middle managers in business and government, and 100 replies from each group were subjected to a paired correlational analysis. Firstly, all the respondents from both groups were able to describe their job in terms of all the ten roles. Secondly, there was no significant difference between the two groups in their rating of their importance of 9 of the 10 roles. Thus it appeared that the relative importance of the Liaison, Spokesman, and Negotiator roles in the public organisation was more a feature of top management than middle or lower management: at the middle management level this difference had disappeared.

The one exception to the role similarity of jobs was in performance of the entrepreneurial function. The manager in the public organisation which is operating in a more stable and less competitive environment than his private sector counterpart has less need of involvement in improvement projects and innovation in general. Costin summarises this part of his study thus:

"It may be concluded that the roles which managers are called to perform are qualitatively and quantitatively similar . . . However, the activities of the two groups differ in one critical respect . . . A significantly greater proportion of businessmen are involved in a more active search for new ways to involve their organisations and in improvements which they can bring to their organisations." (1970:39)

And because the public manager exists in a relatively stable environment he has less need of instant and up-to-date information than the private manager and therefore makes less use of informal communication channels. This force towards greater formality is added to by the fact that the public manager is dealing with issues which involve the public interest - which Mintzberg describes as more 'politically sensitive'. The whole communication flow and subsequent decision-making is therefore more ponderous.

Rosemary Stewart (1976)

This analysis involved investigation of 16 jobs covering a variety of functions across 3 levels in a number of companies using a questionnaire-and-diary. The development of this instrument followed a number of stages: initially data on job characteristics from her earlier study (1967) as well as from a number of other authors was collected and a questionnaire was improvised. Here Stewart relied heavily upon all the data not only on job characteristic but also that on function developed by Mintzberg (1973).

Validation of the questionnaire was accomplished by means of discussions with pilot interviewees, comparison with known job descriptions, and by discussion with students at managerial courses. Lastly, the questionnaire was given to managers 'in comparable jobs' to test for differences. This testing and retesting for reliability naturally caused a number of changes to be made, and after 14 different versions of the questionnaire had been written the final form was agreed upon. A sample page of this is reproduced in Figure 7 below.

The questionnaire was designed as a diary for self-completion by the manager, and the methodology followed was, briefly, to have him complete it over a three-week period. This self-completion was reinforced by one of the researchers in the team observing the manager for 3 days in the 3-week period. A different day of the week was chosen for observation in each of the 3 weeks: "This had the merit of giving us a potentially wider sample of the manager's work and of acting as a check on his diary keeping . . . it had the demerit of providing no continuity of observation." (page 152)

A comparison was made between the self-recording on the diary and the observational data. The main difference found here was that managers tended to be bad estimators of their own time expenditure: "we discovered a common tendency to underestimate the amount of time spent with other people, or conversely to overestimate the time spent on paper work." (page 153) Finally, the results were analysed manually.

FIGURE 7

SAMPLE SHEET FROM ROSEMARY STEWART'S QUESTIONNAIRE

TIME

No. 100% of the time  
 1 2 3 4 5 6 7  
 Mid.

21. How much of your time is spent on tasks that anyone else in the job would have to do?

(e.g. supervise staff, see customers, attend meetings, meet visitors, interview job applicants, write reports, prepare budgets, carry out specific technical tasks.)

If you score below 6, what do you do that would not have to be done by anyone else in the job?

.....  
 .....  
 .....

22.\*Does your job require you to respond to the problems, requests, or instructions of others?

23.\*Thinking of the activities of your day, how far can these be dealt with using the procedures, or generally recognized methods, of your profession/organization?

Comments .....

24. a) If you have a serious problem are there people (e.g. boss, colleagues, specialists) whom you can consult?

These questions are also on a 7-point scale, but please answer in terms of Importance; the extent to which it is a significant aspect of the job, so:

- 1 = No, not at all.
- 2 = Marginal importance, applies to a small and unimportant extent.
- 3
- 4 = Midpoint, moderate importance in the job.
- 5
- 6 = Important, a significant characteristic of the job.
- 7 = Very important, a major characteristic of the job.

IMPORTANCE

Relationships

No. Yes very.  
 1 2 3 4 5 6 7  
 Mid.

25. In your job do you have to actively seek the cooperation of people inside the organization over whom you have no authority? (Exclude bosses.)

Examples .....

26. In your job are you involved in trade union or staff association negotiations?

27. In your job do you personally have to bargain with people external to the organization? (that is try to get better terms for a service or product you are buying or selling)

Example .....

28. In your job must you deal with people outside any part of the organization whose job objectives conflict with those of your job? (Exclude customers, suppliers and trade union officers.)

If so, please give examples .....

From the analysis 12 types of contact pattern and 4 types of work pattern were identified. The contact patterns (which referred to the amount and nature of internal versus external contact that a given job holder had) categorised the jobs by level, whilst the work patterns (in terms of characteristics such as fragmentation of work, time span of problem solving, recurrence of job activity) were analysed by function.

Generally all the results supported the findings of earlier work including that of Mintzberg. None contradicted it. This statement is true for level, function, and the size of organisation as shown on Table 3 above. For instance on the managerial level we find the predicted brevity, variety and 'fragmentation' of work pattern. A type of activity which Stewart calls 'the grasshopper method.' Further, Mintzberg's contention that the manager actually prefers this method of working and will therefore allow himself to be interrupted in order to receive 'instant' information (that his preference is for 'moving media') is borne out:

"Managers typically switch their attention every few minutes from one person or subject to another . . . The explanation . . . seems to be that many managers find it easiest to deal with each problem as they think of it. Our observations show that the amount of fragmentation was, for some of the managers, more a reflection of their personal style than of the demands of the job." (page 38)

As we shall see in the following section, Miss Stewart does not regard Mintzberg's roles as being a useful conceptualisation of managerial work, and yet in discussing the results of the study a terminology is developed which very closely parallels the role categorisation. For example she speaks about the manager "dealing with disturbances" and of his work being characterised by "interruptions for trouble-shooting." Both of these are disturbance handling. Her top managers are "concerned with the design of systems and with their modifications." This is entrepreneurship. They have demands placed upon them to develop a set of external contacts: they have a "need to develop personal relationships and to establish goodwill". . . . as well as to maintain good "public relations." This is all performance of the Liaison role. There is also a demand for "bargaining" (negotiator role). There is naturally also a recognition of the manager's need to indulge in monitoring activity: "the manager monitors to ensure that the targets are being met". . . (page 44).

### The Study of Andre Gingras

Further information about the work of managers in public organisations is provided by a recent study by Gingras (1977). After spending some considerable time on a detailed review of Mintzberg's work and exploring a number of possible avenues for further research, Gingras finally reaches the conclusion that:

"Thanks to Mintzberg, viable and valid classification (of managerial work) have been established ... and it would be better to now collect as much data as possible in this area in order to validate, invalidate, or alter the conclusions given by Mintzberg." (page 58) And "It would be better to take the existence of these roles and their viability in a managerial context as given, to operationalise them and to test their importance amongst various types of managers and in various types of organisation." (page 59)\*

Gingras decided to use a questionnaire consisting of three parts, each of which contained a different type of question: The first was designed to test the manager's conception of his function or role in the organisation and was of the true/false type. The second tapped the managers' time employment - the amount of time he spent performing each of the ten roles in the set. Here definitions of certain terms were included "to facilitate response and to assure uniformity with Mintzberg's research." The third section of the questionnaire was of a semantic differential type and was designed to detect the frequency of performance of some of the activities - to gain information on certain of the characteristics such as brevity, variety and fragmentation.

After a pretest validation to exclude ambiguities, the questionnaire was submitted to 136 subjects who came from a dozen ministries in the Quebec Provincial Government. These respondents were selected so as to balance

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The original of this work is written in French. Whilst I am only in possession of a partial translation, I have no reason to assume that it is in any way inaccurate.

the sample between directors and heads of services of small and large missions who were engaged in both staff and line functions. The data from 71 returned questionnaires (representing a return rate of 51%) were first coded and then analysed by means of a 'statistical program for the social sciences' (SPSS) computer package.

In analysing first of all the characteristics of the public manager's work, Gingras notes that 'at first sight' the same kind of task as Mintzberg's manager is performed but that there is less brevity and fragmentation, more continuity and consistency, and that each activity lasted longer. This he ascribes to the bureaucratic aspect of public organisations which also prescribes a greater formality on the manager's task, and effectively prevents him from working on 'what is moving.' Thus his communication contacts are less verbal and more written in the form of letters and internal memoranda.

However, what the public manager actually does is not what he would like to do: Gingras reports that the data indicates that the manager would prefer to make more use of informal communication media such as telephone calls because of "swiftness and efficiency" but the more formal communications such as written memoranda and scheduled meetings are "forced upon him because of the structure of the organisation." Here the findings of Costin are strongly confirmed.

The public manager is also seen as being a central figure in a network of contacts but "we must emphasise that this network of contacts is mostly dominated by contacts with intra-organisational activity " (page 99). In other words the public manager spends more of his time in information processing relating to matters within his own department than does the private sector manager. And it is in Mintzberg's work characteristic of rights and duties that the public manager appears to differ most from his private counterpart. The conclusion is that the public manager's work can still be seen as being a blend of rights and duties but that the rights and duties are different ones.

And what of the content of the public manager's work? What about his role performance? Gingras sees him performing the Figurehead role only infrequently (as when asked to speak on behalf of his organisation) but this performance as almost incidental ("accidental") to his total managerial function. On the other hand the public manager is seen as "fully" performing his Liaison role. It is in his role as Leader that the public manager appears to encounter the most difficulty in performing an adequate interpersonal function: Because of the formal set of rules and regulations "prescribed by the bureaucratic organisation", the public manager does not get much opportunity to exhibit leadership and appears to perform the Leader role "occasionally." Further, it seems that "this role is more often played in front of peers or subordinates and very rarely in front of hierarchical superiors" (page 102).

Gingras sees the public manager as quite 'fully' performing all three information processing roles. It is a pity though that having given us fairly comprehensive information and comment with regard to the characteristics of the monitoring media, he does not go into more detail in describing each of the Monitor, Disseminator, and Spokesman roles. In this section, beyond seeing the public manager as "a sort of catalyst and agent of information" (equivalent to Mintzberg's Nerve Centre) and saying that "the actual expansion of the management information system in public administration proves it" (a statement open to considerable criticism) he gives us no further information on these roles.

Both the internal and external environment of the public organisation manager is stable relative to that of a private firm and few unexpected situations occur. Therefore, although there are sometimes crises to be dealt with, the importance of the Disturbance Handler role diminishes for the public manager. In keeping with the lesser importance of the interpersonal roles, his Resource Allocation more frequently involves material and financial resources rather than those to do with people\* because the public organisation proceeds with a "natural rhythm."

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The validity of this statement is open to question: Amongst the predominant characteristics of public (bureaucratic) organisations are assigning work to subordinates, programming it, and continually authorising actions taken. All these Resource Allocation activities involve people.

In summary, Gingras provides us with some additional insights into managerial work in public organisations. In doing so he confirms the existence of all ten of Mintzberg's roles - with the possible exception of entrepreneur - and here the results are in keeping with those of Costin. Both Gingras and Costin see the public manager as being more 'formal', more 'professional', and (because of the organisational environment) having less necessity to initiate change.

### CRITICISM OF MINTZBERG'S WORK

Henry Mintzberg's description of the Role Set as well as the other findings and postulations contained in the 'The Nature of Managerial Work' have found wide international acceptance in the relatively short time since publication. The text has formed the basis for management and professional seminars, is used in training programmes, and the theory has been published in one form or another in a large number of journals. It is probably true to say that the closer the leader is to the 'coalface' of management, the more enthusiastic has been his reception of the work - no doubt because he recognises it as the most accurate theoretical model or set of statements reflecting what he actually does: This in contrast to the many 'How To' prescriptive texts on management.

At the same time Mintzberg's work had attracted some criticism. Two of these critiques - from widely differing quarters - deserve comment: Paine and Naumes' 'Strategy and Policy Formation' is in many ways an excellent book. It is certainly refreshing in that it attempts to integrate the various prescriptive and descriptive approaches to policy-making and to develop a hierarchy of the elements. It also expresses reservations concerning the validity of Mintzberg's work.

The authors quote Campbell et al (1970) as saying that what we do not have but what we need is "a set of fundamental dimensions to describe or measure ... job behaviors." (1974:115)

Firstly these latter authors belong firmly in the Behavioural Science School which we reviewed in Chapter 2. Secondly, although they are critical of the Ohio Studies approach and regard the 2-factor description of managerial behaviour (Initiating Structure, and Consideration) as manifestly adequate,

"Certainly, this must be an oversimplification of the characteristics and full range of behaviours demanded by managerial jobs." (1970:85)

they completely ignore the field findings of Leonard Sayles (1964) and somewhat arbitrarily go on to evolve a 4-factor schema of individual autonomy, position structure, reward orientation, and consideration: A description which one might contend is an equal oversimplification even when seen in the light of just Sayles' field descriptions.

More particularly, it is hard to understand why Paine and Naumes avoid even naming Mintzberg's roles when extracts of much of his other work are discussed at length, and the subject of managerial roles is dealt with in several places in the text. Whilst the authors recognise the need for more empirical research, mention of Mintzberg's (1973) work is confined to a footnote.

Perhaps the reason is that for all their seeming objectivity and eclecticism, they remain basically normative in their approach. They speak of 'what should be' and further appear to want descriptive theory to fit in with the main body of normative theory:

"Advances in field research would probably be aided and abetted by advances in normative theory. Better normative and descriptive content is needed for policy prescriptions." (1974:20) (underlining mine)

Thus the results of empirical studies such as those of Mintzberg which do not dovetail with descriptive dogma (and even contradict some of it), are relegated to the background.

Finally, in discussing the various descriptive approaches (inter alia, March, Simon, Mintzberg) Paine and Naumes say that: "they may be criticised as either not testable or not yet adequately tested." (1974:19)

We might simply ask whether any prescriptive theory has ever been 'testable' or 'tested'.

The second criticism comes from Rosemary Stewart. In the previous section we reviewed her latest book, 'Contrasts in Management' (1976) and saw how she avoided using any of the role descriptions. This is because her philosophy about managerial behaviour differs in two fundamental respects from that of Mintzberg and she therefore questions the usefulness of his findings:

Firstly, she does not believe that research should be oriented towards producing a general theory about managerial work but should rather concentrate on isolating differences. In an earlier work she stated:

"The diversity of a manager's job reduces the value of generalisations about his functions" (1967:67),

and in summarising her latest work:

"The research has shown the extent of the differences between managers' jobs in terms of demands. This should help to shift the focus of interest from the traditional generalisations about managerial work to a recognition of the importance of understanding the differences in such work." (1976:155)

Secondly, in direct contradiction of Mintzberg, she does not believe that all managers perform all ten roles and she regards the role descriptions themselves as being too wide:

"We tried during the observation to use, as one method of analysing the manager's activities, the roles described by Mintzberg. We found it too difficult to identify the roles unambiguously for them to be useful in our analyses." (page 153) (She does not say why) And

"The relative importance of the roles differs greatly in different jobs: They do not apply in all managerial jobs." (page 123)

Now we have seen in reviewing the work of Chorán (1969), Costin (1970) and Gingras (1977), that there is every indication that all managers do indeed perform all ten roles in the course of their work - although there is a differential role emphasis (as originally postulated by Mintzberg). Also, none of the research reviewed (including that of Stewart) contradicted any other piece of work.

We come then to a subtle but important point: In her ultimate summary Stewart emphasises that :

"Some of the differences (contact types and work pattern types) identified cut-across function and level" (page 155)

And so, if the differences are found across level and function and job type (as they are), are we not in fact talking about basic similarities?

### Evaluation

At the same time as we have reviewed work based upon the Ten Role Set in order to gain confirmation of the validity of Mintzberg's theory, we have seen a comprehensive picture of managerial work in different types of organisations at different levels and in different functions begin to emerge. Aided by Stewart's (1976) study, we find an increasing and decreasing relative importance of certain roles between different types and sizes of organisation. Within a particular organisation there are many similarities across level and function, and as we move up and down the hierarchy within the private firm two roles (Figurehead and Disturbance Handler) pursue a reciprocal importance (Figure 3).

Most important, there are no contradictory findings either in the characteristics or the content of managerial work. What we are looking at are differences imposed upon a tableau of similarity.

It would appear that what Mintzberg says when discussing jobs at different levels is generally true: "Although I have found no support for the contention that managerial jobs . . . differ in kind, there is considerable evidence that they differ in orientation" (1973:110).

My own experimental study takes off from this point in the sense that it is based upon an investigation of Mintzberg's Role Set, and we shall refer again to the work of Mintzberg, the Diarists, and Sayles in discussion of the results which follow. But before presenting this work I should like to discuss some empirical evidence from a number of other areas which directly and indirectly bear upon and support Mintzberg's findings.

The first of these is work done in the area of cognitive psychology.

## CHAPTER 7

### THE COGNITIVISTS

Although we have up to now discussed various approaches to different aspects of organisational functioning, they have all had one thing in common, namely a macroscopic approach. I should now like to briefly outline the work of research done on the micro level: the work of the cognitivists. Their findings, particularly in the area of information processing, will form the basis for a re-examination of managerial information-decision-making processes in the following chapters.

#### Introduction

Cognitive psychology as a recognised area within the main body of psychology has a relatively short history - something of the order of 20 years. It is a somewhat amorphous and ill-organised field consisting of loosely-connected groups of information whose subject matter includes everything from social psychology through to neuropsychology.

In contrast to the behaviourist who would contend that the physiological pattern of the reflex arc explains the stimulus-response relationship, the cognitive theorist supports the idea that there is some mediating force between stimulus and response which is much more complex than a simple arc. The "image" or sum total of past experience is often cited as the mediating force. The difference between these two positions is illustrated by Tolman (1948):

"(The Brain) is far more like a map control room than it is like an old-fashioned telephone exchange. The stimuli which are allowed in are not connected by just simple one-to-one switches to the outgoing responses. Rather, the incoming impulses are usually worked over and elaborated in the central control room into a tentative cognitive-like map of the environment. And it is this tentative map indicating routes and paths and environmental relationships which finally determine what responses if any the animal will finally release." (cited in Kast and Rosenzweig, 1970:346)

Thus the cognitivist tries to account for how people behave in terms of mental (cognitive) processes which are present at the time that the behaviour takes place. He therefore (again in contrast to the behaviourist) views motive as a cognitive event rather than a biological one.

An individual's cognitive or personal value system is affected by his physical and social environment, his physiological structure and processes, his wants and goals, and his past experiences. The cognitive psychological approach attempts to take all these into account. Its approach is thus eclectic and as Joynson stresses, it is anti-reductionistic:

"Cognitive theorists accept cognition on its own level: behaviourists try to reduce it down to something else. The behaviourist approach to concepts, for example, asks how the subject learns to make a common response to superficially dissimilar objects. The cognitive approach asks how the subject categorises the world of the senses and brings order out of chaos" (1972:9)

And so cognitive psychology's competitor, behaviourism, tends to characterise mental operations as extremely simple one-to-one relationships of stimulus and response. The opposing view of the cognitivist is put by Broadbent in terms which have applicability in our study of managerial work:

"The fashion of recent years has rather been to think of each sensory event as affecting a complex of interacting processes many of which were already in progress before the stimulus arrived. These processes may transform the information about the stimulus into another form, leave it temporarily aside and then take it up later, abstract certain features from it and neglect others, use it to modify an internal representation of the whole outside environment, manipulate this symbolic model of the world to represent events distant in space or time, start a movement or control it once initiated, and generally operate upon this stimulus rather than merely react to it by producing the response." (1971:191)

In the same way as other approaches to the study of psychology have been criticised, so too has the cognitive one: the behaviourists assert that it is too mentalistic, the rationalistic researcher that it is too data-bound, and the phenomenologist attacks it for even attempting to formulate laws because every individual is unique and thus generalisations inferred between them cannot be held to be true. One gathers that cognitive psychology is a compromise. Pylshyn (1974) sums it up when he says that "cognitive psychology has rather self-consciously steered a middle ground in which the formal aspect of the computer furnishes the conceptual structures around which empirical observations are organised." And so the cognitivist tends to avoid formal models and is generally sceptical of formal experimental method which would allow him to investigate the content of mind but not the mental process. Because he is so interested in the latter he tends to value everyday observation.

### Cognitive Theories

Leon Festinger broke new ground with his theory of cognitive dissonance in 1957. And in 1960 Miller, Galanter, and Pribram published their Test-Operate-Test-Exit or TOTE theory which supported the cognitive theorist outlook on behaviour. The TOTE unit incorporates the notion of feedback control and suggests that the operations which an organism performs are constantly guided by the outcomes of the various acts. He continually tests the situation for congruity or incongruity. If congruity exists then no further action is called for. If, however incongruity exists, then some operation is invoked. The individual makes tests repeatedly in order to indicate whether or not the operation should continue.

The important thing here is the postulation of a continual testing or monitor: an incremental rather than an overall method of functioning. Further, it appears from the TOTE model that decisions are made at all levels and that they are both conscious and unconscious.

The overall scheme involves the employment of three stages or concepts:

- Image : all the accumulated organised knowledge that a person has about himself and his environment
- Plan : a rough sketch of some course of action (strategy) as well as more detailed operating procedures (tactics)
- Execution: carrying out a plan step-by-step, completing one part and then moving to the next. This may involve overt action or only the collecting and/or transformation of information (1960:16-18)

Thus for the first time we have a hint of the pervasiveness of decision-making and how a basic feedback or decision unit can be used to describe all behaviour on continua of programmability or unconsciousness.

In the previous section we mentioned valence-expectancy theory of motivation as it applied to the path-goal of leadership. This, as well as goal-setting theory and equity or exchange theory are examples of cognitive theories of motivation which can be contrasted with the more "humanistic" content theories of Maslow, McGregor and McClelland.

What of empirical studies, especially those of use to us in decision-making in particular and managerial work in general?

The development of the digital computer in the late 1950's allowed for the simulation of individual human thought processes. Van Der Geer (1966) outlines the early history of simulation programs: Newell and Simon first entered this field in 1960 with the development of their general problem-solver program. They were followed by Hovland (1960), Langery (1962), and others until Winegrad (1972) formulated a computer program which physically manipulated objects. Thus a valuable stock of analogies or heuristic devices was built up with work being done by psychologists, engineers, and mathematicians, amongst others.

But almost all of this work focussed on fabricated situations such as the playing of chess and solving of mathematical problems. In most of this work the researchers elicited formal protocols or verbalisations of conscious thoughts from their subjects as they went about making their decisions, and

these protocols were then analysed to build up the computer programs. They were apparent simulations of the mental processes which were being used by the subjects. The validity of the programs was then tested by having both the person and the computer make a similar decision with new data. If both produced the same result then it was concluded that a thought process had been described accurately.

But cognitive psychology does not only consist of computer simulations. As Neisser puts it: "the occasional and analogic use of programming concepts does not imply a commitment to computer 'simulation' of psychological processes." (1966:9)

There are a vast number of studies in the cognitive sphere the findings of which are valuable in explaining how the manager functions in his job: How he perceives his organisational world, the limits to the input storage and retrieval of information, and, most importantly, what effect this has on the decision-making function.

In 1961 Vogel and Bogen cut through the corpus callosum of a 48-year old epileptic who thus became the first human to have the two hemispheres of his brain entirely separated. Subsequent investigation by Sperry (who had some years earlier performed the same operation on a cat), Gazzaniga, as well as other researchers, confirmed something which had been believed by Eastern philosophers and written about by Western authors for centuries: that the left and right hemispheres of the brain were responsible for entirely different thought processes. They operated in a completely different mode and were not merely carbon copies of each other in the same way as other duplicated organs of the body.

The method of operation of the left hemisphere is linear or sequential and is thus responsible for logical thought. This contrasts with the right hemisphere which operates in a diffuse manner and processes information in a wholistic fashion. Levy-Agresti (cited in Bogen, 1969), in discussing data collected from one of her patients says that the right hemisphere "is specialised for gestalt perception, being primarily a synthesis in dealing with information input."

This means that we have considerable evidence for the existence of two completely different ways of thinking. It also means that almost all of the knowledge - taken in the general sense of the word - that we have about human behaviour is based upon left hemisphere thinking, simply because the psychologist, in seeking to be logical and scientific, has used the logical left side of his brain with which to interpret the data. Thus, whilst we know something about left-sided functioning, we know almost nothing about the right. Bogen (1969) feels that "we have barely scratched the surface of a past unknown" and goes on to say that :

"The rules or methods by which appositional thought is elaborated on 'this' side of the brain (the side which speaks, reads and writes) have been subjected to analyses of syntax, semantics, and mathematical logic, for many years. The rules by which appositional thought is elaborated on the 'other side' of the brain will need study for many years to come." (cited in Ornstein, 1973:111)

Below is a Table of Dichotomies as they have appeared in the writings of general literature, philosophy, and as they have been described by researchers of split-brain animals and humans.

The concept of right-sided or innovative thought is discussed further in Chapter 8 when reviewing empirical work on strategic decision-making.

TABLE 4	DICHOTOMIES OF THE BRAIN	
Suggested by	Left	Right
I Ching	Light	Dark
Many Sources	Intellectual	Intuitive
Bruner	Rational	Metaphoric
C.S. Smith	Atomistic	Free
Hobbes	Directed	Free, unordered
Bateson and Jackson	Digital	Analogic
Bacon	Argument	Experience
Jung	Causal	Acausal
Radhakrisnan	Rational	Integral
Anderson (1951)	Storage	Executive
Humphrey and Zangwill (1951)	Symbolic,	Visual,
	propositional	imaginative
Milner (1958)	Verbal	Perceptual,
		non-verbal
Semmes et al (1960)	Discrete	Diffuse
Bogen and Gazzaniga (1965)	Verbal	Visuo-spatial
Levy-Agresti, Sperry, (1968)	Analytic, logical	Gestalt
	Synthetic	
Bogen (1969)	Propositional	*Appositional
Source: Compiled from Bogen (1969) and Ornstein (1972:83).		

Bogen does not define 'appositional', but says that "it implies a capacity for apposing or comparing of perceptions, schemes, engrams, etc., and very little else." (in: Ornstein (ed.), 1973:111).

### Information Processing

It is said that written data remains just that - raw and meaningless - until it has been 'worked' in some way so as to become relevant to the problem at hand. Only then does it become information. So it is with both visual and auditory stimuli which are the 'raw data' of our information processing system.

Tachistoscopic research has shown that visual stimuli 'assist' and make them available for processing after the stimulus has terminated. This stage of cognition is called iconic memory (Neisser, 1966:15). But this visual impression is subject to very rapid decay and must be coded into meaningful elements whilst the stimulus is still active. Because of this decay factor and because the coding is meaningful only in terms of the subject's past experience, much is lost in this stage.

Once processed, the elements are stored in short-term memory which is again subject to fading-decay if not reinforced. Short-term memory also has a limited storage capacity. (Miller, 1956).

Auditory input is subject to a corresponding echoic memory, and as long as it lasts "the listener can select portions of its contents for special attention." (Neisser, 1966:199). Hence a filter is at work, the selection being a function of the listener's experience as well as his needs or wants at that time. Some authors also here refer to 'psychological noise' by the receiver. For example, Broadbent (1962) assumes that the hypothetical filter can be "tuned" by the receiver to any "channel." (cited in Neisser, 1966:208)

Again the selected, filtered, encoded material is passed to short-term memory - what Neisser calls the "active verbal memory" - which is "also the medium used for the storage of information recoded from the visual input" (1966:219).

A CRITICISM OF COGNITIVISM

"Even today many psychologists (in attempting to apply information theory to psychology) continue to theorise and to report data in terms of 'bits.' I do not believe however that this approach was or is a fruitful one. Attempts to quantify psychological processes in informational terms have usually led, after much effort, to the conclusion that the 'bit rate' is not a relevant variable at all . . . The 'bit' was developed to describe the performance of unselective systems. A telephone cannot decide which portions of the incoming message are important.

Human beings behave very differently and are by no means passive or neutral towards the incoming information. Instead they select some part for attention at the expense of others, recoding and reformulating them in complex ways.

(And so) Although information measurement may be of little value to the cognitive psychologist . . . computer programming has much more to offer. A programme is not a device for measuring information but a recipe for selecting, storing, combining, recovering, outputting and generally manipulating it . . . This means that programmes have much in common with theories of cognition." (Neisser, 1966:7-8).

What happens then when a person is subjected to too much information in a given time? Miller (1960) identifies seven types of dysfunctional behaviour:

- (1) Omission: failing to process some of the information
- (2) Error: Processing information incorrectly, (3) Queuing: delaying during periods of peak-load in the hope of catching up during lulls, (4) filtering: neglecting to process certain types of information according to some scheme of priorities, (5) approximation: cutting categories of discrimination (blanket and non-precise way of responding), (6) employing multiple channels, using parallel channels as in decentralisation and (7) escaping from the task. (cited in Katz and Kahn, 1966:231).

And so information overload can lead to increasingly maladjusted behaviour and ultimately to psychological failure. But whilst in a state of overload, the manager may not even try to use all the information at his disposal. Driver and Streufert (1969) found that subjects in a situation of overload use less information in decision-making than do those with an optimum amount of information. In other words, more information is not necessarily better. They found that there was a "curvilinear relationship between input complexity and the output of the optical cortex in the brain so that beyond the upper limit the brain uses less and less information as more and more is provided" (cited in Mintzberg 1975:13). But if as Shannon best told us in 1948, "information is choice", how does a person use the information at his disposal to choose between alternatives? How does he decide?

### Decision-Making

In Chapter 1 we briefly considered the work of Herbert Simon and his fellow Carnegie researchers March and Cyert. Simon's (1965) trichotomy of decision-making behaviour (intelligence activity, design activity and choice activity) was discussed as well as the concept of 'bounded rationality.' This work more properly belongs in this section, for Simon has been working in the cognitive sphere for many years and his findings in this area have important implications for our understanding of management activity.

Mintzberg says that "it is not a coincidence that Simon came to cognitive psychology from management: in his former work he saw the need to understand human cognition at its root if a sophisticated understanding of managerial decision-making was to be developed." (1977a:12)

Probably the most definitive work in this field is Newell and Simon's (1972) book on Human Problem Solving. They analyse three types of human problems, namely cryptarithmic, symbolic logic, and chess and draw upon this empirical data to construct a theory of problem-solving. They argue that human problem-solving can be understood by describing (1) the task environment in which it takes place (2) the problem space - the space that the problem solver uses to represent the environment (3) the task itself and (4) the knowledge about it which he gradually builds up.

One of their essential findings is that complex problems are sub-divided by the problem-solver into smaller sub-processes so that the subject can then apply general problem-solving programmes and so deal with each sub-piece. He selects his programmes from a standard repertoire and thus the unstructured problem is broken down to the point where his own standard programme is employed to solve it. These standard programmes are used by the problem-solver on more than one type of problem: they are adaptable. In explaining the behaviour of the problem solvers Newell and Simon state:

"We discover that their flexibility - their programmability is the key to understanding them. Their viability depends upon their being able to behave adaptably in a wide range of environments. A proper understanding of the intimate interdependence between an adaptive organism and its environment is essential to a clear view of what a science of an adaptive species can be like." (1972:870)

"We reveal the true simplicity of the adaptive system, for as we have seen, we need postulate only a very simple information processing system in order to account for human problem solving in such tasks as chess, logic, and cryptarithmic. The apparently complex behavior of the information processing system in a given environment is produced by the interaction of the demands of that environment with a few basic parameters of the system - particularly characteristics of its memories." (1972:870)

They thus propose an "inner" and an "outer" theory of problem-solving: The "inner" theory relating to the fine structure - the detail - as well as the errors, confusions and wrong explorations. The "outer" theory consisting of the main gross results of the problem-solving exercise.

From what we have said about information processing with regard to individual differences, one would expect that each human approaches a problem-solving situation in his own unique way. Newell and Simon disagree. They explain differences amongst individuals in terms of learning and development, the content of their long-term memories determined by their own culture, education, socio-economic class, experience, etc. But they observed a certain "source of commonality among human problem-solvers"- namely the characteristics of their task-environments: "If we put several humans in the same problem situation, if they have the same goals, and if they have sufficient ability to solve the problem, then many features of their behavior are given the same shape by the task environment." (1972:865)

They also argued that as all humans have a few universal structural characteristics such as nearly identical memory parameters "these commonalities produce common characteristics of behavior among all human problem-solvers." (1972:864)

### Summary

Cognitive psychology is complex in that the field is ill-defined and in seeking to answer more applied needs it synthesises many of the previously arbitrarily separated areas of more traditional psychology. It does not see the need of necessarily having to maintain a position of strict objectivity and might advance explanations which are not immediately verifiable by traditional means.

This "anti-empirical trend" (Broadbent, 1970:87), has brought criticism from the behaviourist in particular. But as we have already seen, their empirical methods have not shed much light on organisational functioning.

It is precisely because the cognitivist has been prepared to adopt this somewhat eclectic stance that his work is so valuable to us in explaining aspects of decision-making and of strategy formulation. These subjects are discussed in Chapter 8.

In particular, the cognitive findings on information processing form the basis of our understanding of the manager's monitor and disseminator role activity. The relationship between role behaviour and strategy formulation is examined in Chapter 9.

Finally, the argument in favour of the cognitivist is put quite bluntly by Posner et al who state:

"The human information processing system is so adaptable that its mechanisms cannot be specified by empirical study, at least not with the methods available in psychology."

This thought is returned to in discussing the implications of the study in Chapter 14.

## CHAPTER 8

### INFORMATION AND DECISION-MAKING

We saw in Chapter I how the traditional approach to decision-making viewed the manager as acting 'rationally' by choosing the best alternative course of action, all of which are known to him. He was seen to be in possession of all relevant information. The vast prescriptive literature which has grown up around this notion deals with routine decisions - decisions which are repetitive and refer more to the operating level of the organisation.

In contrast to these programmed decisions we know that the type of decision which the manager has to face is unprogrammed or unstructured. It is highly complex and open-ended and there is no 'correct' or 'best' solution. Some unprogrammed decisions are entirely novel and must be especially designed to fit the particular set of circumstances, others have not been encountered in quite the same form before.

How then does the manager go about making these decisions? And what empirical evidence do we have of these processes?

#### PROGRAMMING THE UNPROGRAMMABLE

Evidence from the cognitivists was that faced with a complex situation, the individual broke the available evidence down into smaller and smaller fragments until they were of a size that we could deal with them: He programmes the problem into familiar structured elements which are then executed sequentially. March and Simon told us a long time ago that:

"The processes themselves are made up by aggregating very large numbers of elements, each element, taken by itself, being exceedingly simple. In an age of electronic computers this fact - if it is a fact - should not surprise us, for this is exactly the way in which a computer operates: It performs intricate and elaborate mathematical computations, but it performs them by executing sequences of enormous length of elementary steps, where each such step is no more complicated than adding one and one to get two. We are not arguing that human brains are necessarily like computers, but simply that complex processes can be aggregated from simple elements." (1958:178)

In this way the individual problem-solver overcomes his own cognitive limitations, and he then proceeds to take short-cuts by choosing solutions which are not optimal but satisfactory. Thus we can infer from the work of Newell and Simon (1972) and others that unprogrammed decisions are programmable and that there is an underlying logic or structure to the whole decision process.

Carrying on the analogy between managerial work and computer programmes, Klahr and Leavitt (1967) described an 'Executive Programme' in which they saw the executive looking outside the programme (or organisation) and receiving information as well as looking inside the organisation in order to maintain control over its sub-programmes: The manager (1) detects by checking what is to be done and what still needs doing (2) interrupts by stopping one sub-programme and starting another (3) monitors by making sure that no errors have occurred or are threatening (4) allocates resources to the appropriate routines (departments) and (5) coordinates by making sure that when sub-parts of the activities are completed the results are fed to the next stage of the process. Finally, he (5) does 'housekeeping' by inspecting and cleaning up unused areas to make them available for new information. These housekeeping routines initiate and finalise the loose ends that the sub-programmes may have neglected.

As Mintzberg notes: "what is interesting about this approach is that it ties the description of the manager's work to a set of programmes that have already been specified" (1973:137). More particularly, we are introduced to the sub-routine of 'interrupt' where the manager is seen as starting and stopping and switching backwards and forwards between programmes. This would tend to suggest problems are solved (decisions are made) not in an wholistic manner, but that when one part of the problem has been solved the manager may switch to a new problem before coming back to carry on finding a solution

to the original one.

Amongst the empirical work done on programming managerial decisions is the study by John Radomsky (1967). He studied the decision-making behaviour of three middle managers by asking them to verbalise their thoughts as they sat working at their desks. He recorded their actions on videotape. The following day these tapes were reviewed with the manager and it was found that he was able to pick up details missed by himself and previously unnoticed by the subject. From these protocols, Radomsky worked out the manager's scheduling programme (Figure 8).

He defines scanning as the process of identifying information in the environment - the skinning of information which the manager sees or feels is easily within his reach. Some of this information has purposes other than identification of problems. The manager is essentially focussing his attention on that portion of the task which he will consider for processing. This has the 'flavour' of a programmed process in that he is seeking to recognise problems that have occurred before or are predetermined by policy procedure or practice.

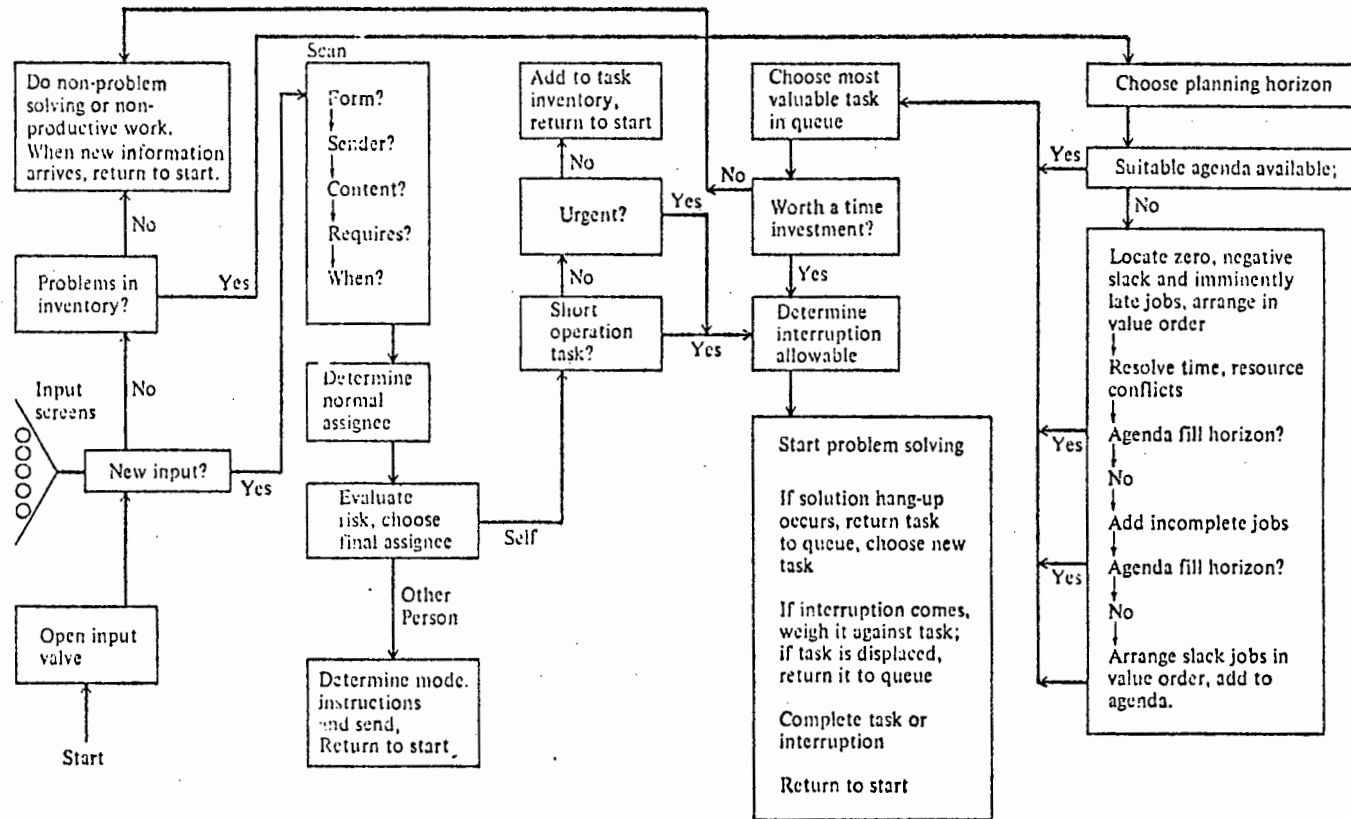
Radomsky differentiates between scanning and search. He defines the latter as a task consisting of extended active information. It is the information-gathering process associated with new ill-defined problems. For example search consists of thoroughly studying supplemental data to pinpoint the source of vaguely defined problems.

He notes that the manager always begins his working day by doing short jobs and cleaning up loose ends before proceeding with scheduled items. As he scans and new information comes to his attention the manager modifies his agenda accordingly: "thus we are dealing with a dynamic process, making decisions based on conditions of the moment." (1967:29)

What is even more interesting is Radomsky's conclusion that the manager has created a mental picture of the world as he would like to see it and that his efforts are directed to influencing the efforts of others to achieve this ideal:

FIGURE 8

THE MANAGER'S SCHEDULING PROGRAMME



Source: Radomsky (1967:60)

"When the manager receives information describing the world as it really is, he will compare it to this model and identify undesirable differences as problems. The key to this is his information system. What he gets, determines what he does." (1967:63)

### STRATEGIC DECISIONS

Field investigations of the <sup>\*</sup>strategic decision process compared to the vast volume of normative literature on the subject is of course sparse, but there are to date a number of studies of these unprogrammed strategic decisions which have attempted to describe the decision-making process in conceptual terms. Whilst none of the researchers "were able to develop enough understanding of the process to formulate a computer simulation of it" (Mintzberg, 1978<sup>\*\*</sup>), their findings stand in contradiction to a great deal of the prescriptive dogma.

The first of these was Cyert, Simon, and Trow's (1956) investigation into the decisions surrounding the feasibility of using electronic data processing equipment in a medium-sized firm. By observation, study of company records, and interviewing, they were able to infer a sort of 'programme' which was used in this unprogrammed decision process, and further, to identify the programme component of communication, search for alternatives, and information gathering routines. They found little evidence of maximising behaviour: The firm was seen to seek alternatives which were satisfactory rather than optimal and in many cases the choice made was between 'doing something and doing nothing.'

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\* We define a Strategic decision as a single important non-repetitive decision: one which in retrospect had a telling effect upon the organisation or a part of it. This compares with Strategy Formulation (Policy Making) discussed in the next section.

\*\* Material in this section is extracted from Mintzberg (1976) and (1978: in draft).

TABLE 5		SOME FIELD STUDIES OF STRATEGIC DECISION PROCESSES.		
RESEARCHER	ACTUAL DECISION(S) STUDIED	TYPE OF DECISION	NUMBER STUDIED	METHOD USED
Cyert, Simon Trow (1956)	Feasibility of using EDP equipment in a corporation	Improvement decision - new equipment	1	Intensive study during course of decision -- observation, study of records, interviews
Snyder and Paige (1959)	"U.S. decision to resist aggression in Korea"	Foreign policy crisis decision	1	Documentary evidence and interviews
Pfiffner (1960) (Nicolaidis, 1960)	Various decisions in the public sector	"Policy" decisions	332	Decision narratives collected by students via interviewing and observation
Dufty and Taylor (1962)	Decision to transfer employees after merger of two transportation companies	Implementational	1	Participant observer
Cyert and March (1963)	Accelerated renovation of old equipment, search new working quarters for a department, selection of a consulting firm, choice of a data processing system (last two subdecisions from Cyert, Simon, Trow, 1956)	Various types of	4	Observation, interview,
Soelberg (1967)	Search for a full-time job by MBA students	Personal strategic decision	32	Longitudinal interviews and questionnaires
Mintzberg Raisinghani Theoret (1973)	Various decisions in all kinds of small to medium sized organizations	Many types of strategic decisions	25	Interviews, (some studies of records)

In 1960 Pfiffner analysed Nicolaidis' (1960) study of 332 administrative decisions which were documented in the form of short narratives. They found irrefutable evidence of information which extended far beyond the sphere of traditional economic rationality and into areas such as emotions, politics, power, group dynamics, personality, and mental health. Fragmentation of the decisional problems into smaller units was found to be a feature as it was by Soelberg (1967) who investigated the judgmental decisions of MBA students going about choosing their full-time jobs. Soelberg found that the decision process started with the student formulating an ideal solution (the perfect job), that he then begins the search for available solutions in parallel, and that each alternative (job offer) is put through a series of evaluation cycles. Those which passed initial screening are put into an 'active roster.' A 'confirmation' process follows during which the student compares his ideal candidate with his second choice in order to convince himself that he has chosen well. When satisfied he will announce his choice.

One of the most surprising findings was that although students were trained in very sophisticated techniques of management science, they did not engage in any form of quantitative analysis before making their choice, but rather weighted the different goals only after the choice had been made. In summary then we have fragmentation, comparison of alternatives to a preset ideal (corroboration of Radomsky's finding), non-quantitative evaluation of alternatives, and post-choice justification.

There are a number of other empirical works which have investigated many different types of decision using widely different methodologies. These are summarised in Table 5. In this section I should like to concentrate on the work of Mintzberg, Raisinghani and Theoret (1976). Firstly it is perhaps the most rigorous study in this area and none of its findings are contrary to those of other researchers. Also, the conceptual framework which they develop incorporates (allows for the explanation of) the earlier findings:

Fifty teams of students who were engaged in policy courses at Master's level were asked to study a single strategic decision made by an organisation. They had to describe the decision in narrative form and then attempt to programme it - to "describe the steps included in the decision in enough detail so that you can represent the decision in flow-chart form as you would a computer program." Of the fifty studies over a period of 5 years, 25 of them were selected for further analysis. The selective group covered a wide variety of decisions made in vastly different types of organisations:

Port Authority	:	to construct a new container terminal
Consulting Firm	:	to survive after losing a major client
Airline	:	to buy jet aircraft
Radio Station	:	to hire key announcer
Brewery	:	to introduce new type of beer
Hospital	:	to introduce controversial new form of treatment
Machinery	:	
Manufacturer	:	to institute mandatory retirement age

The object was to isolate the basic components of the strategic decision process, to plot their interrelationships, and so to describe the structure of the strategic decision process.

The Authors' analysis is presented in the form of a lengthy discussion which incorporates an incredible 50 hypotheses which are derived (1) from their own earlier findings (Mintzberg, 1973), (2) from other empirical literature, as well as (3) some which lack formal support but were suggested by anecdotal evidence in their study. Quite obviously detailed discussion of these hypotheses is not possible here, but I have incorporated some of them into the brief description of their conceptual framework.

Mintzberg et al describe the decision process in terms of 3 phases which are further broken down into 7 subroutines:

Identification Phase	involves the Recognition of a decision situation and the Diagnosis of it
Development Phase	consists of Search and Design activities which leads to the establishment of one or more solutions
Selection Phase	involves the Screening of alternatives, the Evaluation and Choice of a solution as well as the Authorisation of it

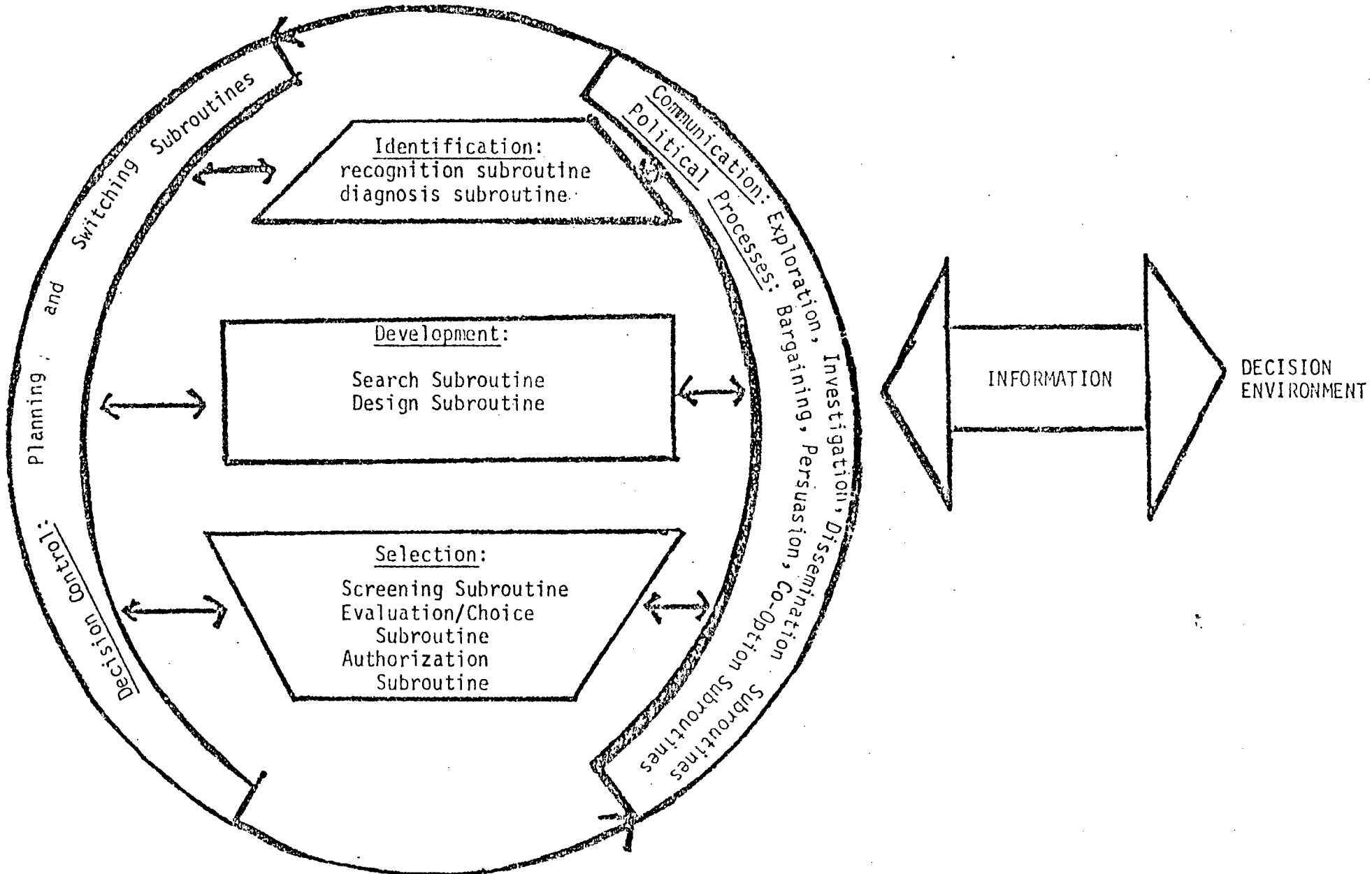
In addition they describe 3 groups of parallel processes which support the central phases. These are Decision Control processes which oversee the planning and execution of the decision-making, the Communication processes whereby information is collected and disseminated, as well as Political Processes which the decision-maker uses to achieve a successful solution in an environment of power complexity. Further, they find evidence that the whole strategy decision-making process is characterised by 6 Dynamic Factors, 'time-related events that reflect the open-ended nature of the process.' These are interrupts and impasses, scheduling delays, feedback delays, timing speedups and delays, comprehension cycles and failure cycles. These components of the strategic process are illustrated diagrammatically in Figure 9.

The Authors take pains to point out that although all decision processes, begin with the identification of a stimulus and end with selection of a course of action, it cannot be assumed that the processes flow through the 3 phases in a simple sequence. The flows are complex and involve a complicated intermingling of the 3 phases. We are dealing then with a process which is not sequential but iterative, switching backwards and forwards between phases and constantly being mediated and influenced by the dynamic factors:

"The organisation typically begins with little understanding of the decision situation it faces or the root to its solution, and only a vague idea of what that solution might be and how it will be evaluated when it is developed. Only by groping through a recursive, discontinuous process involving many difficult steps, a host of dynamic factors, and a considerable period of time, will a final choice be made. We are dealing here, not with the decision-making under uncertainty of the text book, but with decision-making under ambiguity where almost nothing is given or easily determined."  
(1976:13)

FIGURE 9

THE STRATEGIC DECISION PROCESS



Source: Mintzberg (1978)

### Identification Phase

Recognition: The manager monitors his environment continuously in search of decision situations. He 'finds problems and opportunities in the streams of ambiguous, largely verbal data that continually bombards him' (H1). Some of this data comes to him from the formal MIS, but because the problems and opportunities are found in the largely informal data, most of the information which influences strategic decisions comes to the manager through his own information system.

Incoming data, as we would expect from the findings of the cognitivist, is filtered and the manager only makes use of the small portion of it in order to recognise strategic decision situations. He is therefore able to protect himself to a certain extent from information overload and he can also devote his attention to those issues which he believes to be important. However, this selective perception or filtering-out of certain types of information may cause him to overlook problems and opportunity situations in certain areas of the organisation and his attention is directed elsewhere.

Even these very limited observations bring into question the whole concept of the formal managerial information system which lays down that all the information needed by the manager for making strategic decisions can be provided by means of the MIS. (This question has been documented by Mintzberg in two<sup>\*</sup> thought-provoking papers)

Diagnosis: Once an accumulation of informational input has reached a certain threshold level, the decision process is initiated and the manager begins to commit resources to make it. His 'first action following recognition

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See Mintzberg (1972) 'The Myth of the MIS', and (1975) 'Impediments to the use of management information'.

is to open information channels to learn about the situation he faces' (H6). If we conceive of all strategic decisions as being constructed along an Opportunity-Problem-Crisis continuum, then 'formal diagnosis is most common where the decision to be taken concerns a problem which is nearer the opportunity end of this continuum. Opportunities do not require a great deal of investigation, whilst intense problems and crises mean that pressures of time would discourage a formal diagnostic procedure.

### Development Phase

Search Programme: Various types of search can be described: Memory, Active, Passive, and Trap (the activation of 'search generators' such as suppliers). Specifically, 'search begins in local familiar areas' (H9) and 'initial failure leads to the use of more active search procedures and to search in more remote and less familiar places' (H10). Finally, 'organisations resort to design activity (if possible) when search for an acceptable ready-made solution ultimately fails' (H11) (1976:19).

Design Programme: Because ready-made solutions are often unavailable to the manager they must be especially invented to fit the particular requirements of the situation. Mintzberg et al found that more than half the decisions required especially designed solutions. Thus design involved a creative act.

Further, they hypothesise that 'the decision-maker begins with a vague image of an ideal solution and that the decision is factored and through a sequence of nested cycles of design and/or search activities, a solution gradually crystallises' (H12). This cycle is repeated until an acceptable solution is found. They also find strong evidence that only one full solution is produced by the end of the development stage before final selection takes place.

### Selection Phase

Screening Programme: Typically only one fully developed alternative has been generated. Screening takes place to reduce the number of partially generated solutions or alternatives to just a few. In practice the manager

simply does not have the time to intensively evaluate every alternative that he has discovered during his search programme. "This suggests that screening by its very nature focusses on feasibility - it is more concerned with strictly eliminating unfeasible or unworkable alternatives than with determining which one is best" (1978:30). Thus the acceptance or rejection of each of the alternatives is done in terms of other constraints which are often of a policy nature and have nothing directly to do with the problem at hand.

Evaluation and Choice Programme: In the same way as screening reduces many alternatives to a few, so the evaluation and choice programme reduces the few to one. It requires the consideration of a great number of factors and therefore 'the evaluation/choice program is surprisingly crude in practice.' (H17) and further evaluation and choice are usually inextricably intertwined (H18). The manager must consider a variety of value issues as well as hard factual data. Pfiffner in addition points out that there is a vast array of behavioural data:

"These are facts relative to emotions, politics, power, group dynamics, personality and mental health. In other words, the data of social science are facts just as much as the carbon content of steel or the dollars and cents in the salary fund. The administrator is forced by environment to take social science data into account in making his decision." (cited in Mintzberg, 1978:31)

Authorisation: Authorisation is usually necessary following evaluation/choice because the decision-maker does not by himself have the power to commit the resources involved in implementing the decision. Thus the manager must defer to the 'sponsor' for his approval. The sponsor's authorisation is in turn going to be contingent upon the availability of resources and the type and nature of other decisions which he has authorised - all of which are unknown to the decision-maker.

"What we have in authorisation, therefore, is a coupling of the manager's comparative ignorance with the sponsor's inherent bias. The manager while perhaps unbiased, cannot really verify the sponsor's figures, while the sponsor knows the issues best, is most committed to the project, and his figures therefore may be questionable." (1978:33)

### Selection in Three Modes

All the programmes or sub-routines within the selection phase (screening, evaluation/choice, or authorisation) can take place in one of three basic modes of behaviour. These are Judgement, Analysis, and Bargaining. The mode which is chosen is a function of the agreement on the facts and the values involved in making the decision. Where both fact and value is agreed and the data is available, then analysis (computation) is used. Where there is disagreement about values, bargaining is used, and when calculation is not possible but there is agreement about values, then the mode of choice is judgement.

We have some evidence from Mintzberg's earlier study (1973) that judgement is the mode which is most frequently used. This is because the manager is the person in the organisation who has most information in his possession and also has the authority to commit the resources that are required by strategic decisions. Hence judgement is most compatible with the hierarchical nature (structure) of the traditional organisation where both information and authority are located at the top of the pyramidal form. Mintzberg adds that "judgement is also the most convenient mode - choices are made within one head, for better or worse." (1978:34)

We should also expect analysis to be the least used mode because as we have seen the issues involved in the strategic decision process do not often lend themselves to computation.

In summary then we find that the empirical evidence on strategic decision-making is at variance with the normative model. The findings suggest a complex interwoven pattern of cycles which is even more complicated than Simon's (1965) trichotomy of Intelligence, Design and Choice. The whole process involves issues which are value-laden and in many respects depend upon cognitive, behavioural, and other factors which make it far more imprecise than the prescriptivist would have us believe.

## STRATEGY FORMULATION

A venture into the literature on Strategy can be a confusing experience. For, in seeking to find out what strategy is and what to do in order to formulate it, one is treated to conflicting answers and advice. In Chapter I we reviewed the prescriptive literature of Management and this is naturally the largest source of information on Strategy Formation as well. There is little disagreement between writers in this School:

By far the most authoritative book on the subject is 'Top Management Planning' by George Steiner (1969). He tells us quite definitely that:

"Strategic planning is the process of determining the major objectives of an organisation and the policies and strategies that will govern the acquisition, use, and disposition of resources to achieve those objectives." (1969:34)

Strategy is defined in almost the same terms by Chandler as "the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals." (1962:13) Newman et al tell us a little less formally that the strategic planner must first of all ask himself what the mission of his enterprise is going to be and then must pick steps to achieve that goal: "Picking the right target obviously is crucial " (1976:8). And so by this time one has gained the definite impression that the end objective must be followed by formulation of the means to achieve it, and this preliminary thought is confirmed by Paine and Naumes who state quite categorically that "strategies may be viewed as specific major actions or patterns of action for attainment of objectives" (1974:7).

This method or mode of strategy formulation is then the Grand Plan: It demands rationality (almost in the economist's sense of the term), formality, and strict quantitative analysis. Sophisticated scientific techniques are employed to systematically reduce all the means to formally stated goals and into structured components. It is in essence an extension of early operational planning\* to the strategic level.

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This mode corresponds to Planning-Programming-Budgeting Systems (PPBS) in the public sector.

However, reading authors such as Ansoff (1968), Cyert and March (1963) and Lindblom (1959) one finds a certain disagreement with this approach. This is best illustrated by considering Lindblom's concept of 'disjointed incrementalism' or 'muddling through' .

In contrast to the rational-comprehensive approach of the traditional planners, Lindblom sees the whole strategic process as proceeding through cycles of successive limited comparisons. He argues that the means cannot follow the end because the two are not distinct from one another but are closely intertwined: the means and ends are not distinct and means-end analysis is often inappropriate, mainly because the goals or objects of the organisation comprise value goals which cannot be quantified. Thus the amount of analysis which is possible is drastically limited:

"I know of no way to describe - or even to understand - what my relative evaluations are for, say, freedom and security, speed and accuracy in government decisions, or low taxes and better schools, than to describe my preferences among specific policy choices that might be made between the alternatives in each of the pairs." (1959:81)

He draws a distinction between the 'Root' method of the planner and the 'Branch' approach which he advocates because values are seldom agreed upon and stable. Policy-making is for him "not made once and for all; it is made and remade endlessly .... as a process of successive approximation to some desired objective in which what is desired itself continues to change under reconsideration." (1959:86)

Thus this view of strategy formulation sees the organisation behaving in an 'adaptive' mode (Mintzberg 1973a). It reaches decisions by incremental serial steps and reacts to its ever-changing environment by seeking only to reduce uncertainty. The whole strategic process is disjointed and fragmented and can here be compared to the concise, clear-cut, and sure path of the planning mode.

Ranged against these two theoretical interpretations of strategy formulation is a third mode - the entrepreneurial. The many writings of Peter Drucker (based upon his own experiences), as well as those of Collins and Moore (1970) and Michael Maccoby (1977) give us empirical evidence of men at the head of organisations actively searching for opportunities and taking risky decisions under conditions of extreme uncertainty. The strategy-making of these organisations is thus proactive and "is characterised by dramatic leaps forward in the face of uncertainty" (Mintzberg, 1973a:45). The environment is not looked upon as a sum of constraints to be 'satisficed' but as a global force to be fought, changed, and thus conquered.

Where then, does the 'truth' of strategy making lie? Which mode is correct? Do different companies use different modes dependent for example upon their structure? Or does a single company use different modes at different levels? Or at different times in its organisational life?

Questions such as these went largely unanswered until Mintzberg conducted an investigation into the strategies of a number of different organisations over a long period of time. The study was largely inductive and his paper 'Patterns in Strategy Formation' (1976b) is a report based upon the results of three studies:

Volkswagenwerk 1920-1969  
 U.S. policy in Vietnam 1950-1968  
 The magazine, 'Saturday Night' 1928-1971

He begins by drawing a sharp distinction between intended strategy (general a priori guidelines of the sort that we have considered above) and realised strategy (the evolved, a posteriori results of decisional behaviour) which is the set of strategic conditions resulting from the intention. He therefore defines strategy in general as 'a pattern in a stream of decisions' (page 2).

Basic data was collected from a variety of written records and reports and was backed up wherever possible by interview with current and ex-employees. The data on each study was then listed chronologically and divided into time periods

of important decisional changes and actions by the organisation. Simultaneously a chronicle of environmental changes and trends was made covering the same time period. From these two chronological listings various patterns in the stream of decisions began to emerge and the following types of periods were identified:

Continuity: where existing strategies remained unchanged

Limbo: periods where the organisation hesitated to make decisions

Flux: where no consistencies in the decisional streams were evident

Incremental change: during which new strategies form gradually

Piecemeal change: where one strategy changed quickly whilst others remained stable, and

Global change: where many strategies changed quickly and in unison.

Mintzberg found strong evidence of two superimposed patterns running across the three studies. The first he describes as 'the life cycle of an overall strategy - its conception, development, decay and death.' The second pattern is cyclical and exists within the life cycle. It shows periodic waves of change and continuity and suggests that strategy does not follow the continuous neat sequence of the advocates of the planning mode, but is rather 'bumpy and ad hoc' (in response to the turbulent environment in which the organisation exists) with a complex intermingling of periods of continuity, change, flux and limbo. Mintzberg therefore speaks of the usual prescriptions and employment of the normative techniques of analysis and planning as being 'insignificant' and concludes that:

"To tell management to state its goals precisely, to assess its strength and weaknesses, to plan systematically and 'rationally', on schedule, and with reams of quantitative information, to make strategies explicit, are at best insignificant guidelines, at worst the demonstrably misleading precepts to some organisations facing a confusing reality." (1976b:22)

But within the cycle we can find evidence of all three types of strategy modes: the incremental change of the adaptive mode, the continuity of the planning mode, and the global change involving the formulation of gestalt strategies of the entrepreneurial mode.

The precise pattern to be found in any single organisation is then going to depend inter alia, upon the chief executive - the degree to which he retains power or delegates, the stage of development of the organisation and the state of the environment in general, though - and most importantly for our purposes - strategy formation "can fruitfully be viewed as the interplay between a dynamic environment and bureaucratic momentum (of the organisation) with leadership mediating between the two forces" (page i) (underlining mine).

The choice of mode (or combination of them) and the degree to which the leader is successful in implementing it will strongly determine the survival and growth of the whole organisation. The choice and the extent of his influence is therefore a reflection of the leader's own effectiveness.

We have thus seen a confirmation by the empiricist of cognitive findings on the manager's information handling and a cyclical pattern in his strategic decision and policy-making activity has been demonstrated.

In the following chapter we explore the relationship between these concepts and the way in which strategic implementation is mediated by the manager's total role behaviour in the light of (monitored) information.

CHAPTER 9SOME TENTATIVE POSTULATES

In the last three Chapters we have reviewed empirical evidence of a widely different sort. Along the way links have been found such as that between cognition and decision-making - but elsewhere the interrelatedness of the bodies of knowledge is not so obvious. In particular, the discussion of material in the last Chapter was in no way meant to be comprehensive: presentation was designed to introduce the reader to the type of work being done in this area. I should now like to substantiate the contention made earlier that the work of the cognitivist and the strategist have bearing upon the validity of the Role Set by attempting to consolidate these findings. It can be shown that they are not isolated islands of information in the sea of management but on the contrary, form a cohesive body of empirical evidence - a gestalt.

There are several ways in which we could proceed to demonstrate this interrelatedness. One way is to start off with cognitive knowledge and to point to findings such as information overload with the attendant difficulty of evaluating 'soft' data, and then to cite researchers such as Witte (1972) who concludes from his empirical studies that:

"Human beings cannot gather information without in some way simultaneously developing alternatives. They cannot avoid evaluating these alternatives immediately, and in doing this they are forced to a decision. This is a package of operations, and the succession of these packages over time constitute the total decision-making process." (cited in Mintzberg, 1976:12)

And in this way successive overlapping links could be shown. However I should prefer to look at the whole question a little more broadly:

It is generally recognised that the furtherance of psychological knowledge proceeds at 3 levels of inquiry and there is continuous debate as to which level should be chosen for investigation and generation of data. The most microscopic or experiential level relates to consciousness or mind. The cognitivist's work with its focus on thought process is mainly of this type although his work overlaps onto the second, physiological level. The 'highest' level is that of overt behaviour.

Similarly, within the field of management there is recognition of a number of levels which can be arranged in a hierarchy of complexity. In ascending order we have roles, programmes, decision-making, and strategy formulation, which culminates in policy or management of the total organisation - the attainment of overall objectives. We have reviewed empirical work on each of these levels.

Now it is patently obvious that a manager's overt behaviour is reflected in his role performance. We thus have not two bodies of knowledge emanating from two distinct disciplines, but a cohesive single entity of different type and magnitude of enquiry no one part of which can be adequately explained without reference to its antecedent precursors.

In talking about Role though we must be careful to draw a distinction between Role prescription (the pattern of behaviour which is expected of the manager - his responsibilities and duties) and role performance (the actual pattern of behaviour indulged in by him: the actual functions and duties which he performs). One can here draw an analogy between intended and realised strategy which we mentioned in the last Chapter where the primary interest was in the latter.

We saw from the empirical evidence that total role performance involves the manager coupling sets of programmes of a widely different nature which are then linked to form (make) strategic decisions and hence strategy. Implementation of these strategic decisions (which involves committing resources to action) cause changes in both the organisation's internal and external

environment. It can therefore be argued that the results of implementation act as a stream of decisions which cause an on-going reformulation of strategy. This entire process must be monitored by the manager.

At the same time the manager must also couple his set of role performances with those of the other members of the organisation (they must be 'in step') in order to create the structure necessary for the flow of authority and information: The authority for influence, the information for monitoring - although the two are interlinked. This process too is under the control of the manager in the sense that it depends upon his adopting the correct behaviour (role performance) to bring it about.

We can therefore conclude that role performance influences strategy formulation and implementation, and conversely, strategic implementation (if monitored correctly) influences role performance.

(It is interesting to here note that we draw these conclusions solely on the basis of the empirical evidence reviewed in this Section. However, the Social System theories of Katz and Kahn (1966) and Hunt (1972) discussed in Chapter 5 both saw roles and communication as 'crucial to the organisational process', and further, the objectives of the system were said to be determined by this interaction. At that time we drew the conclusion that: "strategy must continually be altered in the light of information received").

Let us for a moment look at this process the other way about, not from the point of view of role performance but of overall organisational success: One cannot define the success of any organisation excepting in terms of a set of stated criteria, and a company will state these criteria in its report to shareholders.\* These criteria of success (or failure) are most often measured by for example an increase in market share or by some financial indicator such as percentage return on invested monies. Companies build up track records of previously stated objectives (intended strategy) with the results of implementation

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This statement holds true for the public sector as well, although here the criterion is often 'service' of one sort or another: An increase in service within the same budgetary constraints or the same amount of service on a reduced budget.

(realised strategy).

The level of strategic implementation then, can be looked upon as the level of success or failure of an organisation.

On the other hand, if implementation causes a continuous reformulation of strategy by the manager in the light of (monitored) information received, then the level of role performance (of behaviour) is the level of measurement: The level at which the manager by 1001 acts or omissions of behaviour determines the success or failure of his organisation.

Stated informally one can look at the manager as being in a human Skinner Box and measurement and analysis of the quality and quantity of his role performance must provide an indicator of success.

Analysis of the time spent in performance of each role in the set will provide us with an operational statement of managerial success (P1). Successful managers will exhibit a consistency in their time allocation between roles compared to unsuccessful managers, and quite obviously, (P2) The amount of time spent in performance of each of the roles by a given manager will not be equal.

If the manager must monitor both internally and externally to initially formulate strategy and then continue to monitor the results of implementation to ensure effective reformulation (strategic shift), then effective performance in the monitor role must be crucial for managerial success (P3). Successful managers will exhibit significant differences in the type and quality of their monitor role behaviour compared to their unsuccessful counterparts..

Monitoring is not just simply a question of informational input: The manager must select (filter) that which is useful to him from the vast volume of information with which he is bombarded. And at the same time he must be open to and aware of input from certain quarters which are important to him. There must neither be an overconcentration on \* 'favourite' areas nor a neglect of 'disliked' ones.

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The literature abounds with examples of executives who came to general management through, for example, marketing and continue to favour that function at the expense of production.

The extent to which he does this is going to depend upon his ability to learn what is important to him, and this in turn will to a large extent be dependent upon his own personal cognitive limitations. Whilst we are not primarily concerned with questions such as 'what makes a good monitor?' or 'what stops a man from monitoring effectively?' (the study does not go into the personality characteristics which predispose towards a particular action, but is concerned mainly with what the manager does or does not do and its effect), we can say that (P4) The extent to which a given manager can select that information which is important to him will strongly influence his success.

Above we said that the manager's total role performance must be congruent with that of his subordinates in order to create the necessary structure for strategy implementation. The extent to which the manager can effect this congruence will be a product of the influence he exerts upon his employees, the employees' behaviour, and the degree to which he changes his own role behaviour to suit them. The one reflects the manager's motivational (leadership) ability, the other depends (largely) upon the manager's monitoring skill. Overall effectiveness in this area will increase subordinates' satisfaction, aid structure, promote productivity, and generally provide a positive organisational climate. This will be reflected in the amount of unsolicited (volunteered) information which the manager receives. We can thus conclude that (P5) Successful managers spend more time in motivational (leadership) role performance and (P6) Successful managers receive more unsolicited information from their subordinates than do unsuccessful managers.

The manager has several roles which he performs outside of the organisation (Figurehead, Spokesman, Liaison). The network of contacts built up via the Liaison role is especially important in providing him with vital environmental information. This information is in turn an important input to his decision-making and hence strategy. Therefore, (P7) Successful managers receive more information from outside the organisation than Unsuccessful managers do.

In the above paragraphs a number of interactions within the Role Set have been proposed. The Roles indeed form a 'gestalt' (Mintzberg). There is an interdependence of managerial performance in each of them which reciprocally influences both manager and subordinates. It should therefore be possible to plot a map of role interaction showing that (P8) Performance in the monitor and leader roles is essential to managerial success.

PART FOUR

THE EMPIRICAL STUDY

CHAPTER 10THE EXPERIMENTAL DESIGN

The broad overall aim of this study - the purpose hovering in the background - was of course to effect an integration between the two main traditional bodies of knowledge which were reviewed in Part One. The fact that much of the empirical evidence in Part Three refutes a good deal of the traditional dogma and itself forms a gestalt does not mean that no truth resides in the Management or Behavioural Science Schools. On the contrary, we saw how each sub-school tends to concentrate on just one aspect of management.

However it was patently obvious that further investigation along traditional lines was going to be fruitless and that the only concept which showed promise of being able to generate meaningful data and so serve as a vehicle to effect this integration was the Ten Role Set.

I reasoned that the data generated by practising management analysed in terms of the role system could provide valuable insight into the question of what successful managers do: It had to be operationalised. Mintzberg himself provides direction for this thought when he says that the role set "is not fully operational in the form presented, but that to make it so should be . . . an obvious next step for comparative research." (1973:267-268)

The formulation of an experimental condition in which to do this so as to adequately test the propositions presented at the end of the last Chapter presented a number of difficulties:

1. Mintzberg's original study (1968) as well as subsequent validation by for example, Chorán (1969) and Costin (1970) were of course all done with successful subjects (managers). What about unsuccessful ones? The point is here that a consistent demonstration of work characteristics and managerial work content analysis across successful executives does not necessarily mean that these findings hold true for them alone: Unsuccessful executives (or bad managers) may exhibit some of the self-same characteristics.

This meant that the study had to be a comparative one between successful and unsuccessful managers in order to validate the findings relating to the former. The problem lay in the definition of an 'unsuccessful chief executive.' This is a contradiction in terms because any man who consistently shows himself to be a bad manager or is completely ineffective in his job will have been removed from it. One can therefore only talk about successful and relatively unsuccessful executives and this seemed to be an inadequate measure for the study.

2. It appeared that the only way in which this problem could be overcome would be to find a yardstick independent of the manager's own behaviour against which to measure his success. This implied some market share or financial measure. The problem was which yardstick to choose.
3. Whilst we can say that successful managers effectively formulate and implement strategy and also perform well in all their roles on a continuously changing basis relative to the monitoring feedback which they receive, the converse of this statement is not necessarily true: The 'unsuccessful manager' may be indulging in inadequate role performance of one sort or another or may not be performing adequately at all. We have no way of knowing which.
4. Perhaps the greatest problem is the fact that the Role Set was the end-product of Mintzberg's work and, whilst the conceptualisation is empirically based, the roles are a resultant description of the activities which he observed. They form a gestalt and "there is no simple one-to-one mapping

of activities onto roles" (1973:267). A number of the activities in which the manager indulges can be described in terms of more than one role. Very little of the manager's time is spent in the performance of what we might call a 'pure' role: It is extremely uncommon for any given activity to be given over to the performance of a single role. More commonly the time period of a given activity has elements of more than one. The primary purpose or motivation for example in calling a meeting might well be satisfied but during its course new information comes to hand, conversations take twists, the manager wishes to praise an employee for a particular piece of work which he becomes aware of, and so a particular meeting which primarily might have been called for the purpose of decision-making (resource allocation) turns out to have informational (monitor/disseminator) and interpersonal (leader) role elements.

This meant that if I was to operationalise the roles by allocating time expenditure for particular role activities and compare the results between a successful and unsuccessful sample group, then I should have to make certain assumptions about some of the role activities and so formulate a tighter definition of each role type.

In doing this I was much encouraged by Mintzberg himself who said: "do not be afraid of making assumptions in social research. Providing you state clearly that you have done so and you are consistent, then that is  
\* all right."

Although some of these categorisations were developed during the course of the first part of the analysis (pilot study), I should here like to summarise the criteria against which the data was analysed into role activities.

A more comprehensive explanation of the rationale surrounding these categorisations is given in Appendix 2, and examples of each of the roles are quoted in discussion of the results. (Chapters 11 and 13).

No difficulty was experienced in apportioning activity to the roles of Figurehead, Disseminator, Liaison, Spokesman, and Negotiator.

The remaining three Decisional Roles of Disturbance Handler, Entrepreneur, and Resource Allocator were dealt with as follows:

**Disturbance Handler:** This was taken to be attention to immediate crises or 'fire fighting' - attention to problems which had only just manifested themselves.

**Resource Allocator:** Programming, assigning, or otherwise allocating resources is fairly straight-forward except for cases where action by an employee has to be authorised for responsibility previously delegated. This type of activity was ascribed to the Resource Allocator (rather than Entrepreneurial) role.

**Entrepreneur:** All activity involving improvement projects - the initiating of controlled change - whether of a minor or major nature was ascribed to the entrepreneurial role.

The largest assumptions were made with regard to the monitor and leader roles. Here the set of activities seen as falling into both was severely circumscribed:

**Monitor:** Only that activity which was specifically for the purpose of the reception of information was ascribed to the monitor role. At the same time this informational input to the manager was split between solicited and unsolicited (volunteered) information and a distinction was made between information coming to him from outside the organisation and from within via his subordinates.

**Leader:** Here too, the leader role was very narrowly defined to include only those activities which were used expressly for interpersonal purposes - where the primary purpose of the activity was encouragement, criticism, or praise of subordinate. At the same time, within this definition, the leader role activity was split between motivational activity and leader activities revolving around staffing, hiring, firing, training, and promoting.

The reader will therefore quickly perceive that this policy of ascribing time to the leader and monitor roles will result in a very conservative estimate of the amount of time which the manager spends fulfilling these two role performances. This policy was deliberate as these two roles are central to the discussion which will be presented below, and it will be my intention to show that the arguments hold true even under this 'reduction' policy.

Because of these assumptions regarding the role activity the results of both the pilot and the main study reflect not an absolute but relative amount of time spent performing each role. However, as the ultimate aim of the study is to isolate differences between the successful and unsuccessful managers, this is not material.

5. Even before embarking on any of the empirical work I had seen the study possibly ending in the development of an instrument which could be used to test the role performance effectiveness of a given manager easily. Attainment of this goal was going to require two things in addition to the validating data which is the main purpose of the study:  
A reformulation of the role activity and the development of an accurate method of data collection which could be used on many subjects.

Redefinition of Role Activity: The description of the roles presented in Chapter 6 is in essence a summary of Chapter 4 of Mintzberg's (1973) work. These descriptions had to be reduced. They had to be made tighter in the sense that the list of activities constituting a particular role had to be more compact, and they had to be looser in terms of the descriptions being in more general terms without becoming so loose that a particular description was ambiguous.

Put informally, the intention was here to formulate a summary score sheet against which a given manager's time could be costed.

Data Collection: In considering which method of data collection to use I regarded it as imperative that the subjects should not know that their role performance was being studied (they should not be informed of any sort of 'label' or category beforehand) and that they should not be required to do any sort of self-estimating. This seemed to eliminate questionnaires - the usual method of choice for large samples - because I could see no way of constructing nor validating such an instrument without transgressing one or both of these criteria. This left the methods of direct observation and some sort of diary method. Of these two it was patently obvious that observation could not be used in the future for mass collection from many subjects because it is so time-expensive. This left diaries as the only method which could be self-administered by the subject without him having any idea of exactly what the purpose of the data collection was.

On the other hand I was very aware that for the purposes of this study it was preferable - perhaps essential - to gain as much detail as possible both in terms of time-expenditure and anecdotal material to substantiate and back up this data in demonstrating the validity of the postulates. Direct observation was the only method that was going to provide this.

In addition, consideration of the above five areas of difficulty led me to believe that these problems were not going to be overcome all at once, but would have to be worked through. I therefore decided to do a Pilot Study of Observation before embarking on the main research using a Diary method. In this way a compromise could be achieved between detail and spread.

CHAPTER 11PILOT STUDY

The Pilot Study was undertaken principally in order to gather data in sufficient detail so as to be able to 'map' the roles and so plot the dynamic interaction between them. Following from this, I felt sure that one or a small number of the roles would be central or crucial to total successful managerial performance and therefore wanted to isolate these roles and so refine hypotheses about them. These hypotheses would then be tested in the main study.

SELECTION CRITERIA

The choice of subjects posed some difficulty: A pair - one Successful, the other Unsuccessful - was needed, but the criteria against which the selection was to be made required some consideration.

I reasoned that if the data collected from the Successful manager was to be used to refine a set of hypotheses then this man would have to be what could be described as generally Successful in every sphere. He must have headed a company which had at least maintained (but preferably improved) its position over the last five years: he must possess a good 'track record' in order to satisfy the management school. In addition I wanted him to possess the innovative spirit to satisfy my penchant for the entrepreneurial aspect of Successful leadership.

His leadership style had to be neither wholly autocratic nor wholly democratic. It had to show elements of both and he preferably had to exhibit a strong style of flexibility. He had to be the type of man who was aware of the importance of human relations within the firm and one who had shown that he had employed these basic principles, albeit in an intuitive way.

In order to find the target subject I studied the list of Top 100 companies (Financial Mail Special Survey, April 23, 1976) and the Chief Executive heading each of them. Further data on each of the companies was collected from other sources and from the Stock Exchange Handbook. After this fairly lengthy search I drew up a short list of three possible men and then gathered further personal data on each of them - mainly from magazine profiles and interviews. Final choice was a Mr. Gordon\* whom I believe is ideal insofar as both he and the company which he heads in many ways surpass the set of criteria which I have outlined above. Perhaps a short profile of the man and his company will illustrate this contention.

#### The Successful Subject : The Man and His Company

The company which Gordon heads, Spatial, is a chain of retail stores which operates nationally. It was started by him approximately 10 years ago and the increase in profit and turnover during the last five years have both been greater than 350 percent. The Company continues a vigorous physical expansion, follows a policy of decentralisation into regions, and has successfully diversified into several allied activities.

Spatial can thus be classified as being in a Second Stage (Lievegoed) and the man himself has satisfactorily performed the dual function of Strategist and Organisation Builder (Uyterhoeven). Other criteria against which the

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All names in the study have been changed.

management school would judge success are most certainly met.

Over the last five years especially, Gordon has had to delegate considerably both to allow for the organisational growth and in order to reduce his own personal workload. But he has not allowed this delegation to remove him or put him at a distance from his employees. He still maintains an open-door policy to any of his subordinates at any time: "In a company relying as much as we do on dedication, loyalty, and enthusiasm, management can't afford to be aloof." He believes in teams and teamwork. He is looked upon by his employees as being "tough but fair."

He therefore shows considerable evidence of realising the importance of human relations principles and he is perceived by his employees as having a flexibility of style which should satisfy the Leadership Theory School. Further evidence of this flexibility emerged during this study and examples are quoted later in this Chapter and in Chapter 13.)

#### The Unsuccessful: The Man and His Companies

As Gordon's counterpart or foil I needed a man who, regardless of his style or method of management, could be described as Unsuccessful in management school (financial) terms. Again I scanned company reports and periodicals and finally isolated a Mr Lewis. This man heads James Stanton & Co., a mini-empire of industrial holdings engaged in such diverse spheres as textiles, property, commodity trading, and a service industry. The Holding Company and two of its subsidiaries have listings.

The label 'Unsuccessful' is merited on several counts. The companies have lost millions of Rands over the past few years, bankruptcy has threatened on at least three occasions, and the turnover in his senior managerial staff is known to be phenomenal. Both growth and organisation building are therefore negative.

Even though Gordon and Lewis are in many ways very different, they share a number of similarities: Both are entrepreneurs, having founded their own businesses with very limited capital just over a decade ago. They come from the same sort of background, are the sons of non-professional men, and have the same (University) education. They are both in their 40's.

We shall now consider each man in turn. The method and analysis of each is presented separately and then in the final part of this Chapter the differences between them are discussed.

THE SUCCESSFUL MANAGERMethod of Data Collection

At the initial interview with Gordon I described the research that I intended doing and asked him to participate. He listened carefully and then said that whereas he was sympathetic, he could not allow me to observe him directly because his staff would not understand who I was or what I was doing there and would therefore "clam up." This would disrupt relations with his subordinates which were "precious" to him. He said that he was prepared to devote further time to me, to give me further interviews, but there was to be no observation. He appeared completely sincere in this and not even my frank admission to him that he was to be my 'guinea pig' appeared to worry him. However there did not seem to be any way in which I could profitably make use of his offer.

Just as I was regretfully thinking that I would have to approach someone else, Gordon mentioned to me that it had for many years been his habit to keep a diary of all his daily activities. This document was in addition to his normal appointment diary kept by his Secretary and was dictated by him from memory into a dictaphone usually at the end of each day's work. It was then typed by his Secretary the following day. The diary documented not only reports of meetings both scheduled and unscheduled but also his thoughts, impressions, future plans, records of telephone conversations, opinions of people, company data, and reminders to himself for follow-up action. It was a chronicle of everything that he had done and everyone that he had interacted with throughout a given day.

It really was a most unusual and comprehensive document and perusal of just a few pages gave tremendous insight into not only the activities of this man but the way in which his mind worked. It occurred to me that with very little adaptation this diary could be used to collect the data needed for the study. I also regarded it as significant and important that the preparation of this diary was not a new exercise for him - he had been used to doing it for many years and it was therefore a habit.

After some discussion he agreed to expand this diary simply by being sure that each activity (however insignificant) was well-documented and that the time taken for each was recorded. The only other change which was necessary was that, to compensate for any possible memory loss, he promised as far as his schedule allowed him to make notes and to record the data for the diary in frequent mini-sessions throughout the day rather than in a block at the end of it.

Using this expanded diary method, data was collected over a period of 14 days. This included three Saturday mornings and so the period covered was equivalent to 12,5 full working days.

### Analysis

In the first stage of the analysis I made no attempt to categorise any of the activities into roles but merely went through the diary material splitting a particular day's work into time slots according to the information provided and making a note in the margin as to the length of time that each meeting or telephone call had taken.

At the same time I ensured that every minute of the working day had been accounted for. Occasionally there were gaps in the time sequence and this was marked as 'Lost Time'. Subsequent analysis showed that this lost time was almost wholly due to travelling by car to and from lunch appointments or other meetings, or time spent in aeroplanes.

The difference between the stated Starting and Stopping Time produced a Gross Work Time for that day. From this was subtracted any lost time (travelling) to produce a Net Working Time for the day. ('Recordable' Time). Addition of all the Recorded Times on a particular day (the sum of the activity times) gave the Actual Recorded Time for the day. The difference between the Recorded and Net Times was shown as Unaccounted Time. This Unaccounted Time was on most days very little and is an obvious reflection of time expended on private activities by any person. It was also found that on those few occasions where the Unaccounted Time was greater than 15 minutes it was as a product of travelling time: time lost due to the upheaval of physical displacement and rearrangement.

TABLE 6	SUBJECT GORDON : HOURS WORKED AND RECORDED TIME						
	Start Time	Stop Time	Gross Hours For Day	Lost Time	Net Hours For Day	Recorded Time	Unaccounted Time
Friday 11	08.15	18.35	10.20	-	10.20	09.57	.23
Saturday 12	08.30	12.35	04.05	-	04.05	04.00	.05
Monday 14	08.00	19.30	11.30	01.00 <sup>T</sup>	10.30	10.00	.30
Tuesday 15	08.00	19.00	11.00	02.20 <sup>T</sup>	08.40	08.20	.20
Wednesday 16	08.15	18.15	10.00	.40	09.20	09.05	.15
Thursday 17	08.15	19.15	11.00	.30	10.30	10.15	.15
Friday 18	08.10	19.40	11.30	1.00 <sup>T</sup>	10.30	10.25	.05
Saturday 19	08.00	13.00	5.00	-	5.00	04.55	.05
Monday 21	08.15	19.00	10.45	-	10.45	10.35	.10
Tuesday 22	08.10	19.00	10.50	-	10.50	10.45	.05
Wednesday 23	07.55	21.45	13.50	1.45 <sup>T</sup>	12.05	11.45	.20
Thursday 24	08.30	19.30	11.00	1.15 <sup>T</sup>	09.45	09.45	-
Friday 25	08.00	17.20	9.20	-	09.20	09.00	.20
Saturday 26	08.00	12.15	4.15	-	4.15	04.00	.15
Total Time =			134.25	Total Recorded Time =			122.47
$\bar{x}$ =			10.45	$\bar{x}$ =			10.00

T = Travelling time

Table 6 lists the Gross, Net, and Recorded times for the total period of the study. From this it can be seen that the mean Gross Time worked was 10,45 hours per day, and the Net was 10,0 hours, Total Recorded Time in the study was approximately 123 hours.

During this first part of the analysis I made notes on queries on the identities of certain people and the nature of certain activities I did not understand, and these were cleared with the Subject himself during a subsequent interview. Any further minor points were cleared with his Secretary during the course of the analysis.

I then went through the material again splitting the periods into time activities, questioning in each case which role was being performed without actually doing any scoring. It was during this part of the analysis that many of the role categorisations discussed in the last<sup>\*</sup> Chapter were developed.

Finally with these assumptions made, each activity was apportioned to a particular role. During this stage I kept asking "what is the main purpose of this activity? In many cases any given time activity was spent in performance of a single role. In some cases there were two and in the case of 3 meetings the role performance was of course multiple. In the absence of more detailed time information an assumption had to be made as to the time split between roles. These cases are discussed below.

Before presenting the results of this analysis I shall cite examples of each role performance. Although these have been divided into the 3 groups for purposes of presentation, the reader will notice the interlinking between the Interpersonal, Informational, and Decisional roles: They cannot be  
 \*\* completely dissected.

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\*See also Appendix 2.

\*\*This original analysis of Gordon's diary was done in June 1977. I reanalysed it in May 1978 immediately prior to analysis of the data in the main study. Changes in the apportionment of role activity were minimal.

### Interpersonal Roles

As figurehead outside his organisation Gordon takes part in the usual ceremonial events and there is nothing especially noteworthy in his performance here. Within the organisation he (predictably) records that: "I also then spent 10 minutes signing all the director's cheques for their fees." However at the same time he takes the opportunity of introducing a motivational aspect by "writing a personal note to each director thanking them for the year's work." (Leader:Motivator).

Leader role activity was scored under 2 headings: What Mintzberg calls the 'special category' of staffing: firing, hiring, training, and promoting - generally providing for interpersonal growth of the organisation - was labelled Leader:Builder and all other Leader activity was strictly for Interpersonal purposes was labelled Leader:Motivator and thus included all other relationships with subordinates.

In the Motivator category Gordon gives guidance sometimes by criticising, sometimes by praising. There is a strong flexibility of style. He also does not have to seek out subordinates needing guidance: they come to him asking for it.

"Tony (General Manager) phoned me about the TV interview which he is holding on the new Price Marking Act and I gave him a few pointers on how to handle this."

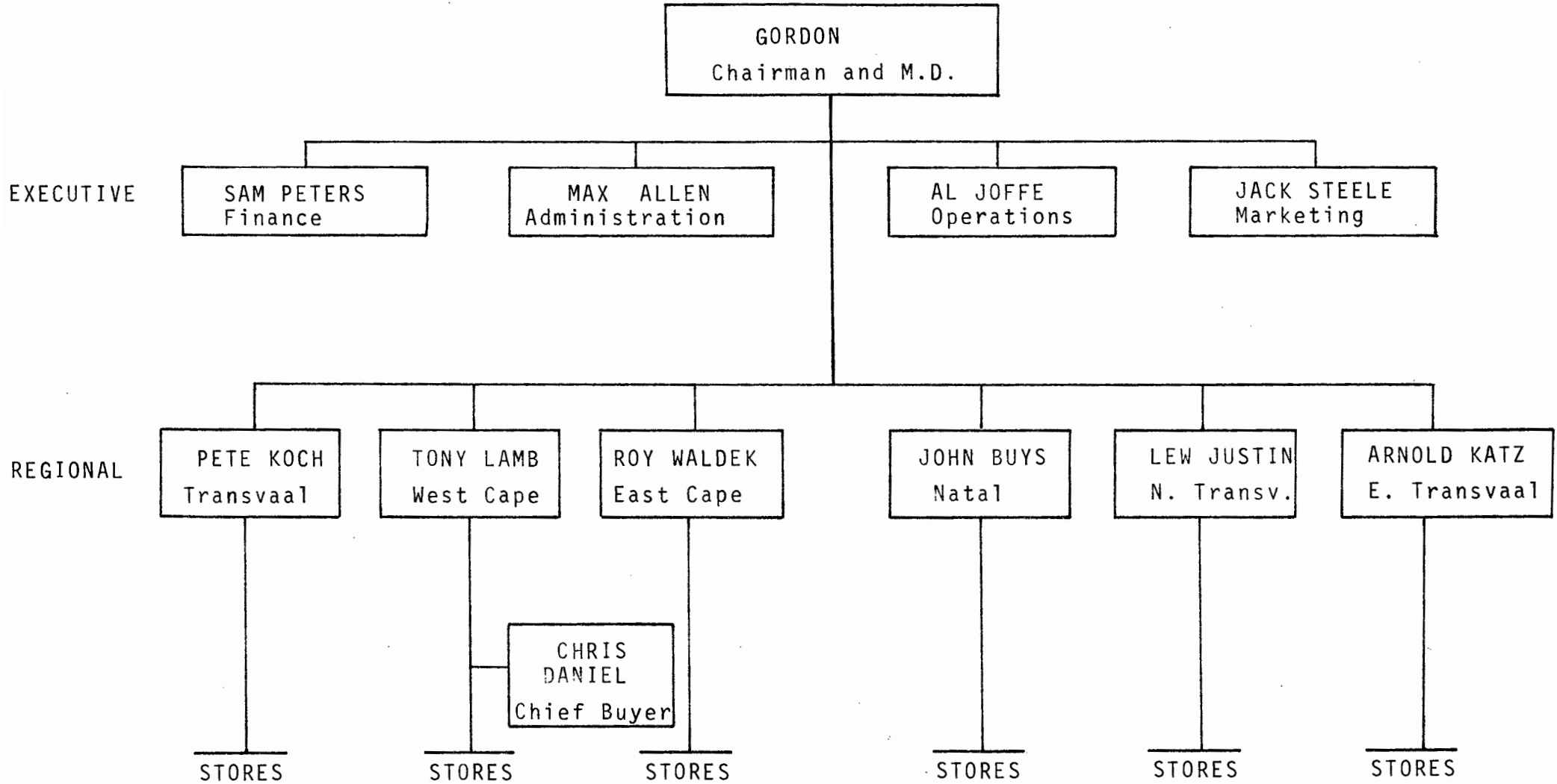
He remembers things and gives encouragement where it is not really called for:

"It is 11 o'clock. I phoned Lew (General Manager) to wish him and the store a very happy birthday. It is exactly 2 years old and all the dramas of the opening day came freshly to mind."

For this particular bit of human relations building Gordon is himself rewarded - and the bond between superior and subordinate further cemented into a working team - when this manager later phones back to report that "they had a very big birthday cake baked and gave a piece to each customer."

FIGURE 10

SPATIAL'S ORGANISATION CHART  
(Simplified)



But when subordinates do not perform as Gordon thinks they should then the criticism is not slow in coming:

"I phoned Tony and gave him hell for not having got out the Polanski Minutes after our meeting with him 2 weeks ago. I told him that it was inexcusable not to do a Minute after a meeting for communication purposes."

And confirmation that this anger is controlled, purposeful, and certainly not just a reaction is given when, after discovery of a crisis situation which he believes has arisen because subordinates have "handled the situation extremely badly with regard to relationships" and in some cases "exceeding their limits of authority", he records:

"I hammered this hard because it was a matter of principle to teach young buyers that we will not tolerate any breaches of policy of strong, open, fair dealing. And if we have not been courteous or if we have broken any contracts, I will certainly not tolerate it. I think it was a very useful blood-letting."

As Builder he is constantly scanning his own organisation looking for talent amongst his own ranks which can be rewarded with promotion. On one occasion he meets with one of his senior subordinates and they spend an hour discussing whether a particular senior post should be filled from overseas or not. They decide that "our own talent is sufficient without our filling important slots with outside people."

But this confidence in and support of his own subordinates is not unrealistic. Again we see a flexibility of thought when on another occasion he records:

"We researched 3 of our own men but we felt that they were either not suitable or would not quite get on in the circumstances and so we agreed to bring in an outside man into this post."

His personnel policy and practice is curious in this respect for its flexibility: A man previously employed at Spatial and dismissed, reapplies. He is granted an interview and is considered again. Rejection is reluctant:

"He just isn't suitable enough. Although we have tried for 3 years to make him into something. It's a pity but he just isn't up to it." But when another manager cannot control stock shrinkage "and other matters", he is dismissed. Instantly.

There are 2 buyers at a particular branch. The one has a problem with the other "relationship-wise" and wants to resign. Gordon goes "through the problem and the cause of it" and comes to the conclusion that "the whole thing is one of incompatibility and possibly just bad handling." And so he puts "a 2-week moratorium on the situation to sort out the problem."

Two days later he calls in 3 of his senior subordinates and discusses the problem with them for an hour. They reluctantly decide to accept the resignation. But still Gordon is not satisfied and talks to the problem-buyer the following day. Only after this meeting as well as after further discussion with other subordinates does Gordon finally decide to accept the resignation and record: "It's sad but I felt that it was correct after discussion at length."

This conviction of the need to conserve man-power is of course not only for the present but also for the future. He has many meetings specifically for the purpose of discussing personnel policies, procedures, and training "to ensure that we use their talents for the future."

Although performance of the Liaison role is primarily in order to build up a network of contacts which will be useful in the future, there were very few occasions where this fraternising with peers did not produce some immediate reward:

"I then went to town and had an interesting lunch with (5 Gentlemen whose names read like the Who's Who of business and banking). We discussed politics, business, and the state of the country in general. I got the distinct inference that . . . This is purely a gut feel but I think it is going to come about."

On another occasion Gordon gives a lunchtime speech to a small group of influential brokers and financial investors and records that: "I felt it did our company a lot of good because of the influence of these people."

Afterwards he picks up a piece of 'hot' information concerning the price of Spatial's shares and also hears a rumour that another large Group is in financial difficulties.

(Here I apportioned to the Monitor role 5 minutes for each of these small activities and the remainder of the time to the Liaison role).

### Informational Roles

Analysis of the Monitor role activity was very interesting. As already explained this role was split two ways: Into Information coming from outside the organisation and that which came from internal sources, and at the same time a distinction was made between solicited (requested) and unsolicited input. This of course meant that any time period costed to the Monitor role had to be recorded twice.

The most obvious source of outside information for the manager is the printed word and Gordon does his fair share of reading periodicals and trade magazines. On an aircraft he spends half an hour reading "the latest retailing magazine which had a long article on expansionism. This is very interesting if we are to think of . . . (some expansion project)." And so we here have a link with the Entrepreneurial role.

Within the organisation he solicits information from subordinates about topics which he believes to be relevant from time to time: A general manager is "cross-questioned deeply" about the management methods which he is employing and how it is that he is able to keep his control tighter than in any other division. As a result "a note of about 15 points which I am going to record and want to circulate and discuss at the meeting" are made.

This linking between the Monitor and the Disseminator role occurred throughout the analysis. It seldom happens that information is solicited without Gordon taking the opportunity to disseminate to his informant or the informant taking the opportunity to add some unsolicited information to that which he has been asked for. Also, Gordon often solicits information which would in

all probability come to him in an unsolicited form at some later time. But, as contended by Mintzberg, there is a pressure for the immediate and the verbal. The following report illustrates both these points. Gordon:

"I phoned Max about the possible court case with the Sherwood situation and he told me that he had settled out of court for R52,000 which has been written off against last year." He told me that he had managed to settle the rates for the Durban Store and this has come down dramatically from what it was through his fighting for it. I also told him about the outcome of the John Carter situation and how he had decided to handle the matter."  
(In cases such as this the total time for the telephone call was apportioned between the various enacted roles).

He is constantly scanning, probing around at odd places in order to glean information, and this constant searching for facts often brings to light problems or situations which need attention. These crises would only have been brought to his notice much later had he not initiated the inquiry himself:

"I decided to check into the . . . merchandise problem and the question of the R125 000 to see whether it had been charged to last year (accounting period), and I was shocked to find that despite Sam, Lew, and Brian all having told me it was charged to last year, it had not been done. I was terribly annoyed that they hadn't told me the truth. It was primarily bad communication by them together but they still hid the facts from me and I made my point in no uncertain terms to all three of them. It is now settled and charged against last year as originally planned."

"It just shows that one simply cannot stop checking and it also shows that it is about time that our top executives started to behave as such."

This last sequence shows the linking between solicited monitoring, disturbance handler and leader monitor roles. The total time for this activity was 90 minutes and was divided equally into the 3 roles.

Unsolicited information from outside the organisation can come to him from any quarter at any time. I was with Gordon when he heard quite incidentally that a certain commodity was not being stocked in one of his Stores. He immediately called in the Buyer to check on the facts and then 'jumped rank' by picking up the phone and speaking directly to the Store Manager. But I did not know what he was thinking at the time. Later I read in the diary that he had recorded: "It looks as if there could well be a problem where (the manager) has either cut the range too much or is running his Store badly. In any case the investigation can only bring about the true position."

Thus information, however unsubstantiated, is acted upon on the assumption that a disturbance exists and he is wanting confirmation either that the information is false or that the crisis has been cleared up. Once again we see a link between Monitor, Disseminator, and Disturbance Handler.

Any manager must rely heavily upon unsolicited information coming to him from within his organisation from subordinates. Because of his preference for live 'hot' informational input he cannot wait for this to come to him through channels from any level in the hierarchy. Mintzberg goes so far as to suggest that the executive actually encourages subordinates to jump rank and come directly to him. This wish is subtly conveyed to the subordinate so that he feels sure of being well received - provided that the informational tit-bit which he has to offer is of sufficient importance. Gordon provides us with strong confirmation of this:

"Chris came in to mention to me that he had heard a rumour that the Ressel Group is possibly going insolvent. This could cause an enormous problem with the Bank and could cause trouble with our Witbank Financing arrangements."

Gordon does not regard performance of the Spokesman role as a nuisance but at the same time he does not glory-seek. He merely regards it as an essential part of his overall management of the organisation. In the middle of an important scheduled meeting he records:

"I was interrupted by the Sunday Times regarding a big supplement that they are putting out. They wanted to know how I felt about the impending rise in price of (a certain commodity). This call took a good 10 minutes."

### Decisional Roles

The role of Resource Allocator is best illustrated by considering the proceedings of one of the two Directors Meetings contained in the study. One of these took two hours and the other one and a half hours.

The proceedings of this meeting illustrate just how true it is that the manager performs a Leader role in real terms whenever he interacts with his subordinates. In the space of the two hours a total of 20 items were discussed and all these were itemised separately for me in the Minutes. During this time Gordon listened to information from his co-director subordinates (Monitor), expounded information which was relevant to the topic under discussion (Disseminator), and charged one or several of his subordinates with the task of following up each item under discussion (if there was incomplete information) or with the implementation if a decision was made (both Resource Allocator). And yet there can be no disputing the fact that not only was he performing his function of Leader but also that of Figurehead. Some examples extracted from the Minutes in summary form show how these were allocated to the various roles:

Gordon raised the point that rates as well as other overhead charges had risen steeply recently. Max Allen to check on these charges and to report back (Disseminator/Resource Allocator)

Cash Position: The Company has Rx on call at the week ending . . . (Monitor)

Gordon indicated that the Company results for the Fiscal Year were looking good but put emphasis on the preparation for the possible difficult year ahead. SP is to have the results ready for the preliminary Board meeting on Saturday 26. (Disseminator/Resource Allocator)

Gordon mentioned that Jeff Smith (Middle management) had resigned and that his replacement would be handled over the next few days (Disseminator).

In this case I was forced to divide the time by the number of items and further to sub-divide each item according to whether it was a single or dual role activity. I do not believe that handling the 2 Directors' Meetings which were included in the study this way makes any material difference to the results simply because (as already stated) all the items under discussion fell into one of the three roles of Monitor, Disseminator, or Resource Allocator.

Another important aspect of resource allocation is the scheduling of the executive's own time and the way in which Gordon does this is examined in the following Section.

By far the most interesting Decisional role is that of Entrepreneur. At the time that the study was made Gordon had already initiated or set in motion an extremely important improvement project, namely a reorganisation of Spatial's capitalisation. Preliminary discussions and meetings have already taken place. We pick up the sequence of activities on Wednesday 23:

"I then had a 3-hour meeting with John, Solly, Wesley (outsiders) and 4 of our own people on the whole question of a capital base and we agreed to go for the share issue."

There could be a very convincing argument for including a degree of Monitor role in this activity as Gordon is hearing expert advice from his subordinates as well as other advisors on the matter of the capital base. However, this meeting has taken place some 11 days after an earlier one (Saturday 12) which lasted 135 minutes and which was split between Entrepreneur, Monitor, and Resource Allocator. At this meeting Gordon ended by asking 2 of his subordinates to "go into depth and come back to a meeting on the 23rd with the final alternatives and with figures attached." However, even at that time he records that "we had definitely decided to go for the RXm capital raising exercise and we are now (only) working out the route and the timing."

The point is here that he had already taken the decision on the 23rd and has elected to keep the decision very much under his own supervision. He was really only asking for figures to endorse a decision already privately taken: He has decided on a certain course of action and will not change his decision unless the information brought to him shows this decision to be wrong.

But the figures endorse his own point of view and after the "informal vote" is taken on the 23rd he records: "I am pleased to have talked around it and have come to this decision." There is a strong suggestion that he himself does not realise the extent to which he has "predecided" the matter.

He is clearly looking for support for a decision that he has taken. There is not a right or a wrong answer, all of the variables cannot be quantified, there are probably more unknowns than knowns, and the degree of consensus that he gets reduces the sense of loneliness 'up there.'

There were a number of these cases where the more important decisions - particularly those of the improvement project type where he was performing an entrepreneurial role - tended to be discussed privately between Gordon and one or two of his senior subordinates first rather than brought up in open directors' meeting. Plans and changes for the future were often discussed seriatim with a number of subordinates, then with a larger group where each one would be informed of Gordon's intended action, and by the time they were discussed in formal meeting it was merely a question of 'rubber stamping.'

Performance of the Negotiator role was confined to a few occasions where he made "deals" with senior executives of supplying factories. Each of these meetings lasted approximately an hour. The results of this role analysis are presented together with those of Lewis in Table 12 later in this Chapter when we discuss the differences in role performance between these two men.

### GORDON'S WORK CHARACTERISTICS

We turn now to a consideration of the people with whom Gordon interacts, for how long, and how often per day: An examination of his work characteristics.

We are here fortunate in being able to make a direct comparison on selected characteristics between the Chorán and Mintzberg studies as reported in the latter's work (1973:105).

Logically one should expect that the activity profile of the chief executive of a large South African Company would fall somewhere between those of a large and a small American one. Do Gordon's? The answer is yes, and no. Table 7 shows Gordon's work characteristics listed between those of the Mintzberg and Chorán study.

In the total number of activities per day, the number of telephone calls and the proportion of total time taken, Gordon is very similar to or the same as the executives in Mintzberg's study, although his calls take somewhat longer. Similarly there is little difference in the characteristics of his scheduled meetings. The main differences come in desk work, unscheduled meetings, and the amount of time spent in verbal contact with subordinates.

We should remind ourselves that the Mintzberg and Chorán figures are the results of averages between people so that any one of Gordon's personal work habits is going to be highlighted when seen against these means.

He is primarily motivated by a strong belief in people. He has an open-door policy and is genuinely willing to spend large amounts of his time talking to subordinates. He ends up by spending 66% of his time in verbal contact with them - a figure far higher than either of the other two groups. (In personal interview he told me: "I spend 50% of my time on people matters.") This has several results: It means that although the number of unscheduled meetings which he has per day is not significantly higher than those of Mintzberg's executives, they take up 24% of his time and at 23 minutes per

TABLE 7

## SELECTED COMPARISONS OF THE WORK OF CHIEF EXECUTIVES OF SMALL AND LARGE ORGANISATIONS

	Large Organisations 5 chief executives 25 days of observation Mintzberg Study	Gordon based on 12 days of observation	Small Companies 3 presidents 6 days of observation Choran Study
Number of activities per day	22	19	77
Desk Work Sessions			
Number per day	7	2	22
Proportion of time	22%	15%	35%
Average duration	15 min	46 min	6 min
Telephone Calls			
Number per day	5	5	29
Proportion of time	6%	7%	17%
Average duration	6 min	10 min	2 min
Scheduled Meetings			
Number per day	4	6	3
Proportion of time	59%	48%	21%
Average duration	68 min	47 min	27 min
Unscheduled Meetings			
Number per day	4	6	19
Proportion of time	10%	24%	15%
Average duration	12 min	23 min	3 min
Proportion of Activities Lasting Less Than 9 Min	49%	20%	90%
Proportion Lasting More Than 60 Min	10%	11%	0.02%
Proportion of Time in Verbal Contact With:			
Subordinates	48%	66%	56%
Suppliers and associates	17%	5%	31%
Peers and trade organizations	11%	11%	0.2%
Others	23%	4%	14%
Proportion of Scheduled Meetings with more Than 3 participants	43%	20%	0%

meeting are nearly twice as long. Gordon does not believe in hurrying people either in personal contact or on the telephone. Also, notwithstanding that he works long hours he is left with very little time for himself for desk work sessions. These he has to 'make' by periodically closetting himself in order to deal with that which has to be dealt with.

TABLE 8	GORDON'S MAIL RECORD	
DAY	TIME SPENT (mins)	PARTICULAR ACTIVITY IN ADDITION TO NORMAL MAIL
Friday 11	30	Includes dictating diary
Tuesday 15	45	Includes messages
Saturday 19	60	Includes going through own notes
Monday 21	40	Includes diary
	45	Includes diary and "a few personal matters."
Wednesday 23	15	Mail of the previous day
Thursday 24	40	Includes messages
Friday 25	30	Includes checking outstanding matters with Secretary
Total =	305	= 4,04% of total time (7555 mins)

On one occasion he records that: "I had very few phone calls today because I just cut off and spent the morning . . . and the afternoon . . ." Occasionally he feels the need to mainly rearrange his thoughts and often speaks about "clearing himself" By this he does not mean clearing work off his desk but rather "just collecting my thoughts on the meeting this morning."

This brings us to his mail record which is analysed in Table 8. From this it can be seen that, far from attending to mail as it comes in, many days can pass between mail activities. Mail is dealt with during those few times (2 per day) when he has time at his desk. On one occasion he records "I had time to myself for the first time in 2 weeks."

His activities are therefore not only dictated by the requirements of the organisation as they are with any chief executive:

"I am absolutely exhausted but I feel a lot has been achieved in the last 24 hours,"

But also by his seemingly endless willingness to interact with his subordinates:

"The magic word is 'communication' which is really the name of our business."

In concluding this Section I should like - merely for illustration purposes - to show how a given activity which appears to belong to one role function in fact belongs to a completely different one, often of another group. I shall cite 2 examples. In the first Gordon meets with one of his inside directors to discuss a forthcoming overseas visit. At first glance this meeting is interpersonal in nature, until one realises that the primary purpose is in fact one of Resource Allocation:

"I had an hour-long meeting with Max concerning his and my overseas trip. The main purpose was to coordinate our meeting with Mr Spiegel of (Company name) concerning our overseas buying relationship and the week that I am going to spend with the people in Frankfurt."

There is also a secondary purpose of this meeting which is to take the first steps towards the initiation of a change within the company. But the fulfilment of this entrepreneurial role activity will only take place at the time that the trip is made: Assignment or scheduling of his own time precedes the entrepreneurial step in this case.

The second example is somewhat more dramatic. I am sure that if I had asked Gordon what the purpose of the meeting was before it took place he would have told me that it was purely liaison in nature. In fact he says so:

"At four o'clock going right through until six I met Mannie Cohen for what I thought was going to be a five minute courtesy meeting but it took 2 hours because I found a severe relationship problem and a possible break in limits of authority as well as a possible commitment of 10 000 units of merchandise from another Company which looked crazy to me."

Gordon reacts to this crisis by calling in two of the subordinates, then a third, then a fourth, and finally phoning a fifth "to get all the facts," and at the conclusion of the meeting he records: "We came to the conclusion that there is not a commitment but that they (the buyers) had certainly not handled the matter satisfactorily as far as relationships and limits of authority were concerned."

Once again we see the link between Monitor, Disturbance Handler, and Resource Allocator: A crisis is perceived and dealt with until the executive is sure that the surface of the sea is relatively calm again.

### A ROLE SET MODEL

When the sequencing and linking of Gordon's role activity is combined with the notions outlined in Chapter 9, an interactional pattern between the roles is suggested. This is illustrated in Figure 11.

It is easy to see that non-performance of the manager's Liaison role will result in the manager being cut off from a very useful source of (Monitoring) information and conversely, the less the manager monitors both inside and outside his organisation the less easily he will be able to liaise efficiently - because of rejection by his peers as he is ignorant of outside affairs in general, and the internal working of his own company in particular. Also less monitoring will result in poor ability as a Spokesman because he cannot impart specific information about his company without authority.

Efficient monitoring aids adequate performance on the Figurehead role and vice versa. This latter role is further aided by adequate performance of the Leader role.

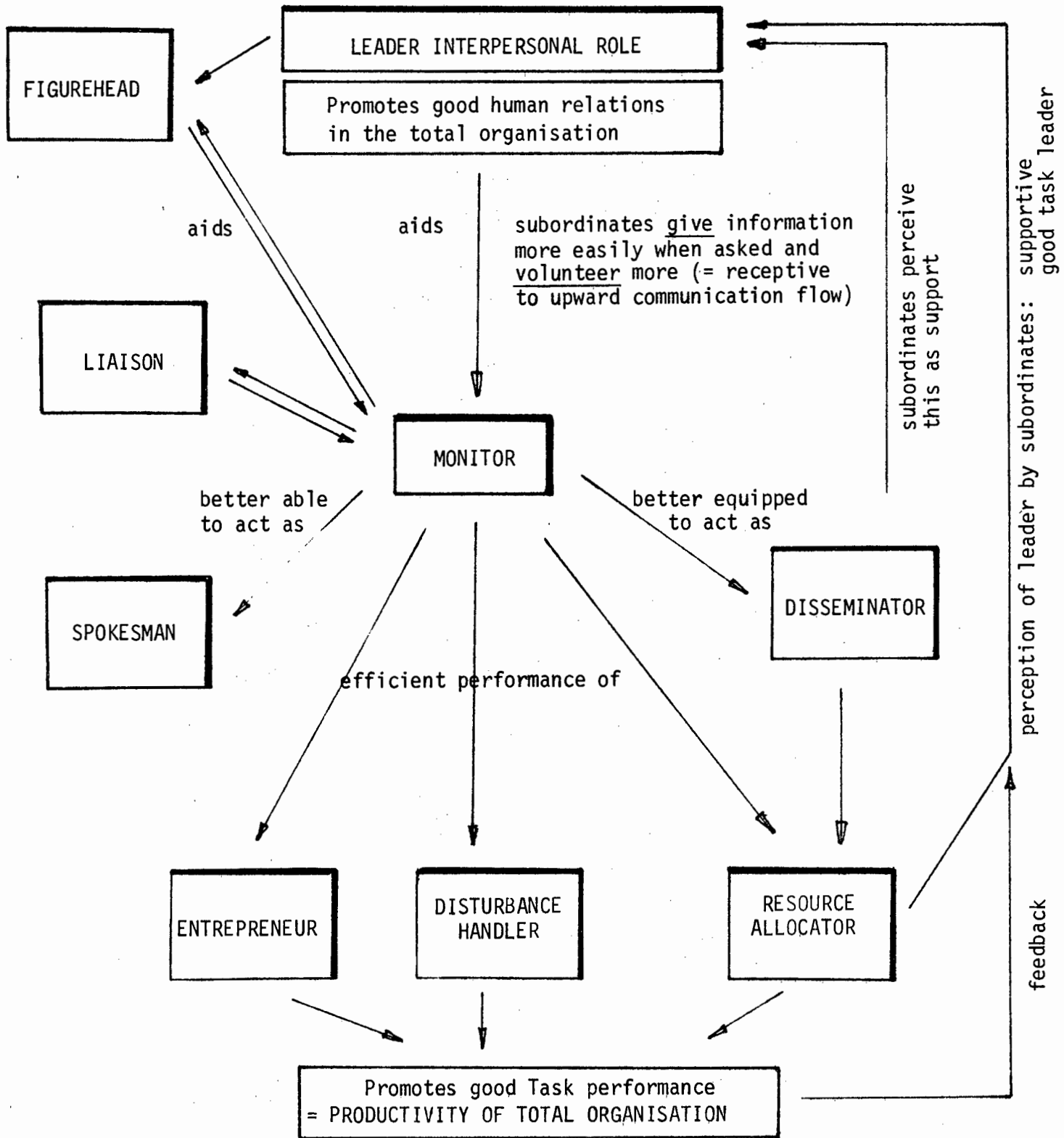
We have seen several instances of monitoring followed by \* dissemination and resource allocation activity. The manager cannot disseminate effectively unless he monitors adequately, and monitoring is also essential for all decision-making. (Entrepreneur, Disturbance Handler, Resource Allocator, Negotiator). Decision-making is in turn essential for adequate task performance by the manager, by his subordinates, and therefore by the organisation at large.

There is certainly a feedback from Resource Allocator and Disseminator to the Leader role on a psychologically supportive level: The Leader will be perceived by his subordinates as being a good task leader and their confidence

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Mintzberg contends that a decision must intersperse between monitor and Disseminator (1973:74-75). Logically one must agree. However, it is so quick that it cannot be observed, and we must leave it to the cognitive researchers to give us an explanation of its nature.

FIGURE 11  
A MODEL OF THE ROLE SET  
 POWER AND AUTHORITY



Role 10: NEGOTIATOR = a combination of Figurehead, Spokesman, and Resource Allocator. Monitor is central to all 3

in him as a manager will increase. This would be interpreted by them as task support. It could also be argued that a similar feedback exists from Disturbance Handler (to Leader role) although this was not observed.

Adequate performance of the Leader role further aids performance of the Figurehead as well as the Monitor role in that the Leader is seen as being receptive to an upward communication flow from his subordinates. They will therefore give more information to him more easily when they are asked for it and further, will volunteer more. This will result in the manager being exposed to a greater variety and quantity of information.

From this brief analysis it can be seen that it would appear that Monitor is central to Leadership activity: It is the most important role in the set. However, of almost equal importance is Leader because this has one of the strongest inside influences upon the Monitor role.

The Leader role plays such a strong part in the promotion and establishment of organisational climate and hence the promotion of good human relations in the organisation as a whole.

The emergence of this dynamic is hardly surprising when we recall the reciprocal relationship between satisfaction and productivity which was demonstrated ('proven') in Part I.

The suggestion of this model is certainly not complete and should only be seen as a first approximation. More specifically it does not adequately show the importance of some aspects of the Leader role such as training, hiring, and promoting (Builder) nor the importance of ongoing and long-term improvement projects (Entrepreneur). Both of these role activities have important effects upon the future.

Efficient performance of both is also entirely governed by adequate Monitor role activity: If the manager's intelligence system is defective he will not know who to train or who is being trained or when. Neither, no matter how good his innovative ideas are, will he be able to ensure that he has adequately-trained people in his organisation to carry them out.

THE UNSUCCESSFUL MANAGERIntroduction

The method of choice for the pilot study had been observation, but as Gordon had used an expanded diary I asked Lewis to do the same. At my initial interview with him, after agreeing to help me, he took notes on what was wanted and agreed to start on the following Monday.

On Monday afternoon I called him to inquire how he was getting on. He wasn't. "I can't work and do this thing at the same time," he said. The following day I went to see him and found that he had made a valiant attempt: The record started at 7.15 a.m., was neatly divided into columns of various types of activities, but ended in a blur around 9.45 a.m. "I work at such a frenetic pace," he told me, "you'll have to come in and record yourself."

Observation was therefore imperative - a development about which I was not sorry as I wanted to study this man closely. But the significance of the fact that he had tabulated his attempted record into columns as well as his remark about a 'frenetic' workplace were only brought home to me later.

At that time it was not possible for me to observe him fulltime. About a week later I called him to arrange dates and he told me he was in the middle of a major crisis. Nevertheless, I could come at any time: "But if you want to see how a businessman behaves in a crisis, then you are welcome."

One rarely if ever has the opportunity of observing a man's behaviour when he is engaged in a battle for survival. It is more usual for a man to share the glory of his successes with others (especially outsiders) than the agony of his failures, and so I accepted this invitation eagerly. In addition I felt that Lewis' method of handling this type of situation could provide a useful contrast to the bland routine when he was not under pressure.\*

Therefore the days of observation are not consecutive. After the day of crisis I kept in contact with Lewis by telephone, constantly monitoring the situation of his Group and waiting until the major issues had been resolved. The elapsed time between the first day and the other days of observation is approximately 8 weeks. I then observed him on 4 further days. These dates were chosen by myself and not by him: He would tell me what he was doing on any following day and I chose the days for observation when there were fewer lengthy routine meetings such as with auditors going over historical accounts.

## METHOD OF DATA COLLECTION

### Introduction

The routine of observation did not vary much. I would arrive at approximately 8.15 on each day of observation. Invariably he had been in office for a few minutes himself. Mostly he would be reading the newspaper. He spent a few minutes filling me in on what homework he had done the previous evening and that morning and what (if anything) he had done in office so far. Perhaps we would spend a few minutes chatting about generalities. If anything of major importance was expected to happen that day he would tell me at that time. Recording began after this.

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As it turned out neither his work characteristics nor his role activity showed any variability between Day 1 and the other days of observation. The reader will soon see why.

I sat in one of the clients chairs opposite his desk and remained there for the rest of the day. He seemed to prefer me sitting near to him even when he was dictating. Occasionally when several visitors were in his office, I occupied a chair in the corner on which his briefcase normally stood.

He excluded me from nothing. On those few occasions when I did not accompany him to outside meetings it was because - after discussion between us - we felt that my presence might hinder the proceedings.

He hid<sup>\*</sup> nothing from me. I was able to see all letters, was present at all dictation periods, and in addition was given copies of all draft accounts and balance sheets which he prepared. If these were discussed in a meeting then an extra copy was made and handed to me. I was therefore able to follow the detailed content of all proceedings.

### The Record

Everything was tabulated on one record which therefore became a mixture of the starting and stopping time of each activity, other occurrences such as the entry and exit of people from the office, anecdotes, and (when there was time) my impressions or opinions.

I found that usually everything was happening at such a frenzied pace that it was hard to keep up with the recording of the activities. It often took longer to write about a particular event than the actual time taken for it to happen. This is due mainly to already-stored information and the fact that various physical actions were taking place at the same time that words are being spoken. For example, Lewis might finish a call, shout an instruction to a subordinate, and reach for a document on his desk all at the same time. In observation so much of what is happening is visual.

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The single exception to this was a 5 minute call he made to his personal Sharebroker on Day 2.

In the evening of each day of observation I made further notes, expanding on the (sometimes one word) impressions formulated during the day and then dictated these notes and the record onto tape. Subsequent transcription of this material resulted in some 70 pages of data for the 5 days of the study.

Telephone Calls: The procedure for handling telephone calls varied between the first and the rest of the days of observation. Because I was not completely familiar with the people who might be calling, Lewis would cup his hand over the mouthpiece and explain to me who the person was before he began speaking. Because of the experience of Day 1 and due to several discussions which I had with him in the interim this was not necessary on the remaining 4 days. It was then only necessary for him to say, for example, "Smith" in the short period between the time the telephonist told him that the caller was on the line and switching him through.

However, as Mintzberg has pointed out, during observation one could never hear the other side of the conversation and therefore after every call it was always necessary for him to tell me (in synopsis form) what the caller had said - although it was usually possible to pick up the gist of the content from Lewis' responses during the call.

Talking to the Researcher: During a study of this kind, no matter how much one would like to pretend to be a 'fly on the wall', this is just not possible. As several other Researchers have noted, introductions are necessary to subordinates as well as to outsiders at the beginning of each meeting. This does take time. (see Box).

My presence also affected the study in another rather unexpected way: During the natural breaks in the sequence of activities I naturally said little, but rather waited because I wanted to see how Lewis would handle or use the unstructured time. Instead of getting on with the next activity he often addressed remarks to me. These were entirely spontaneous, were not elicited by me in any way, and unless he asked me a direct question which demanded an answer I did not reply. This tactic usually had the desired result:

He got on with his work. Sometimes though (as we shall see) there was nothing in the natural sequence of events to occupy his time and here I was forced into conversation. These periods which I diarised as 'talking to researcher' took up a total of 79 minutes over the 5 days and were equivalent to 2,85 percent of the total gross time. This was analysed as Lost Time.

Then there was Lewis' own reaction to my presence. Throughout the period he remained friendly and cooperative, open and frank (in fact I am sure that in many respects, I know more about him than his own family does) and, notwithstanding that he appeared sorry when the study came to an end ("you are welcome to come back and do it again any time."), I am sure that he found the fact that he did not know exactly what it was that I was doing increasingly burdensome. This showed in the manner of his introducing me to callers. In the beginning he was completely neutral, but as the days passed he demonstrated that he was becoming increasingly intrigued and curious until on Day 5 the secrecy became irksome: During the introduction to a visitor, he said, "I don't know what he is writing but he's been doing it for 4 days now. Anyway."

### Analysis of the Data

The first stage of the analysis into gross hours worked and activity time was done in exactly the same way as for Gordon (page 157), and the results are given in Table 9. This shows that Lewis works an average of 7 hours per day compared to Gordon's 10: A fact which by itself could mean nothing but what is interesting is that Lewis loses 2.15 hours per day (difference between mean gross and net times) compared to Gordon's 45 minutes. We can therefore draw a tentative inference at this stage: Lewis is probably a less efficient utiliser of his time than is Gordon.

Each activity was then apportioned to a role, the assumptions as before. But in order to fully understand why analysis of Lewis' role activity produced the results which they did, it is necessary to talk a little bit more about the man, his method of working, and his environment. And so I should like to reverse the procedure and first discuss his characteristics.

### OBSERVER PRESENCE EFFECT

What effect does the presence of an observer have upon the subjects under study (manager and his subordinates) and thus upon the data collected?

Mintzberg (1968) reports that "clearly the manager could get used to my presence as the week progressed but to most participants at meetings, .... the presence of a researcher was unexpected. In almost every case, introductions were necessary.

Once introductions were completed, various patterns set in. A few people were self-conscious, and would steal quick glances in my direction as if they did not believe the expressed explanation for my presence ... In the vast majority of meetings, however, my presence seemed to be quickly forgotten.

In spite of the adjustments that took place during meeting, the main topic of research interest - purpose of activity - appeared to be unaffected. The presence of an observer will not change the basic purpose of a meeting, although it may change the style that the manager uses during the meeting." (page 270)

Choran (1969) reports similar introductions to subordinates at the beginning of meetings and remarks that this causes a waste of time. Further, that some individuals "showed some anxiety at the beginning of a meeting." It was not only the participants who found his presence disturbing: He reports that "in one case the manager asked me to leave the meeting mid-way through as he felt that my presence was upsetting his ability to hash out the argument presented by the participant(s)."

Stewart (1976) states: "We were not able to assess whether the observer affected what happened except by comparing the diary with the observation. We thought that he did in one of the studies (page 152).

Whilst no fault can be found with Mintzberg's contention that the basic purpose of an activity will not be altered by an observer (and therefore had little effect upon his own data), this is not what we shall be studying in the future: in the Role Set we have a valid set of statements with which to describe purpose. The thrust of the research must now be directed at questions such as time distribution between Roles, frequency of performance of activity, quality and quantity of interaction between the manager and subordinate and between the manager and his peers, to name but a few. In all of these the presence of the observer will have a telling effect upon the results obtained.

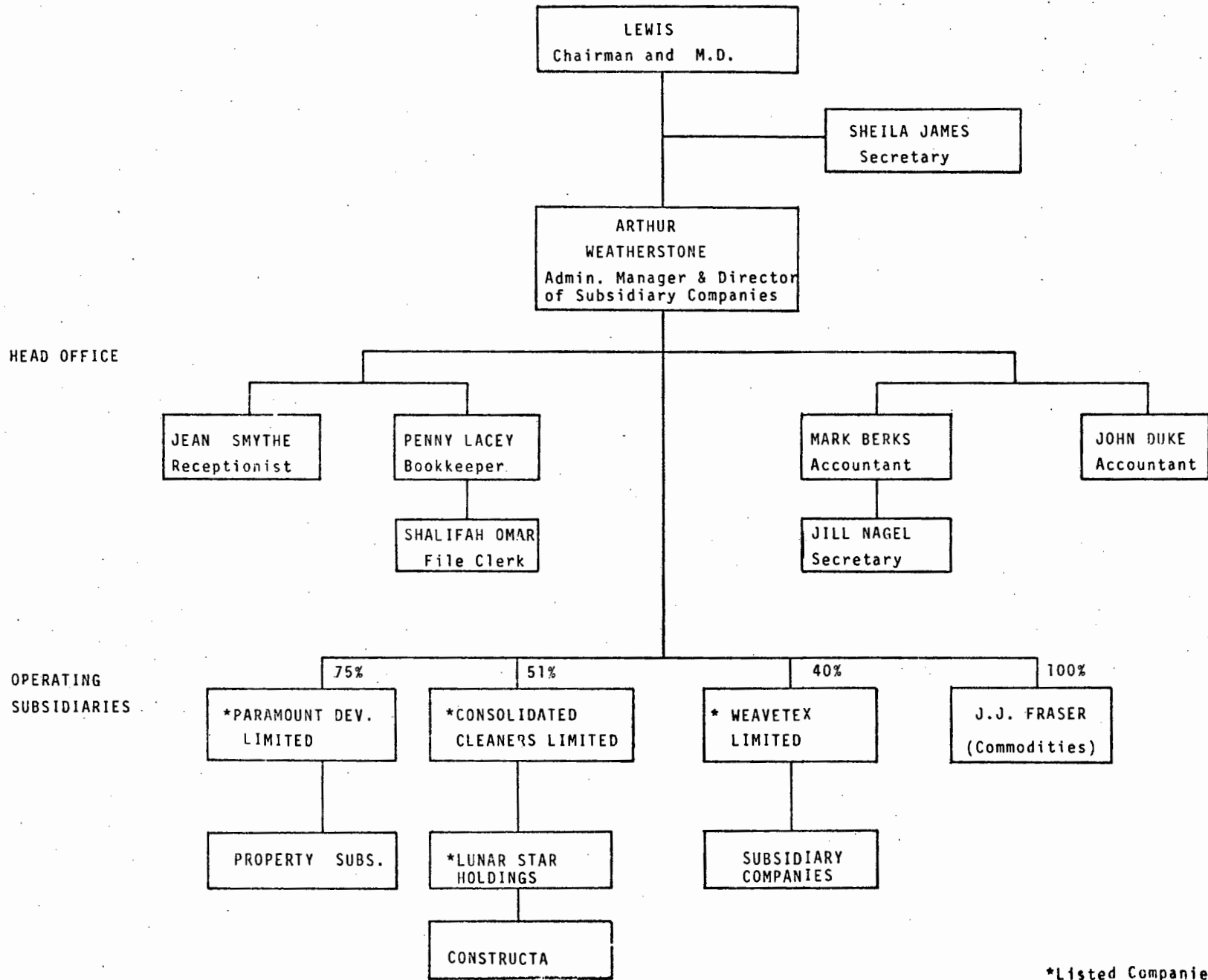
Introductions are inevitable - completely unavoidable. They take time. The manager is going to sometimes feel inhibited (Choran) in front of a relative stranger, and few subordinates are going to react and interact normally in front of a complete stranger to whom they have only just been introduced. They will feel threatened. Thus both 'flavour' and true communication pattern will be lost.

Considering the reports of the above researchers and in the light of my own experience (see text), I would recommend that direct observation not be used for future research and that workers consider using videotape (Radomsky 1967) in those cases where observation is necessary or other methods such as diary or questionnaire are considered inappropriate.

TABLE 9	SUBJECT LEWIS : HOURS WORKED AND RECORDED TIME							
	Start Time	Stop Time	Gross Hours For Day	Add After Hours	Less Lost Time	Net Hours For Day	Actual Recorded Time	Unaccounted Time
Wednesday 12	08.25	16.55	8.30	.30	1.46	7.14	7.00	.14
Wednesday 7	08.15	17.05	8.50	.30	1.53	7.27	7.06	.21
Thursday 8	08.20	18.05	9.45	.30	3.36	6.39	6.08	.01
Monday 12	08.50	17.00	8.10	.30	2.04	6.36	6.22	.14
Wednesday 14	08.45	17.12	8.27	.30	1.54	7.03	6.58	.05
			Total Time =		46.12		34.59 = Total Recorded Time	
			$\bar{X}$ =		9.15		7.00 = $\bar{X}$	

FIGURE 12

STANTON'S ORGANISATION CHART



\*Listed Companies

Quotes in the text are verbatim: This is how Lewis speaks.

### LEWIS' WORK CHARACTERISTICS

When I arrived at 8.15 on the first Day to observe a man facing a crisis which threatened to deprive him of a large part of his 'empire', I did not expect to find him sitting reading the Births and Deaths column in the newspaper: Unconcerned. Later in the morning he is quite cheerful when he tells me: "So they (the bank) have got the panics (about the financial state of the Group). So I get a letter. So cheques might be dishonoured. But its lovely."

And still later in the day when he has explained the nature of the crisis to numerous callers ranging from private creditors to merchant banks, he remarks: "Today's been easy relative to other days." Easy? "Sure, I've had to make no decisions today."

Two things dominate his worklife: The telephone and his Lists. Everyday before breakfast he spends half an hour making a list of telephone calls which must be placed to people that he wants to talk to as well as a list of things to which he must attend and items such as files which must be placed in his briefcase to be brought home that evening. These will be of many types ranging from those on operating subsidiary companies to banks and friends. All these items are neatly tabulated in column form and as each one is attended to it is struck off: "I love crossing off lists." Items are also added to this list during the day and if it becomes too "messy" then it is rewritten. A lot of his deskwork session time is taken up attending to the lists.

I was to find though that it was the telephone that dominates his life: "I always do my calls first because that determines the day." The following extracts from the diary illustrates his telephone behaviour:

12.45 - 12.54: Throughout the morning as each placed telephone call comes through Lewis has scratched it off his list. He has also made copious notes whilst talking to every caller - commonly on the same sheet of paper as the list. This sheet is now full of notes, scribblings, and scratchings-out. And so he now rewrites the lists: first the telephone calls, and then the "do" list. "I can live on the telephone. When I have nothing to do I create telephone calls."

From his own study and backed up by the work of many of the diarists and early observationists, Mintzberg contends that the manager performs "much work at an unrelenting pace." Stewart (1976) characterises him as having "no time to think." In contrast, Lewis the unsuccessful exhibits quite different behaviour:

He finishes a call and continues searching through files. Whilst doing so he talks to me: "I want to try and decide on what basis to propose settling with Transocean on Friday". . . He finds what he is looking for, closes the file, sits back in his chair: "Now I sit." I say nothing. The time ticks by. And his reverie is only broken when 4 minutes later Sheila puts a pile of letters on his desk which he signs.

I had come to observe a man trying to extricate himself from a difficult situation - one which threatened the survival of his whole Group - and instead of finding a man in a frenzy, I find one who has nothing to do. This behaviour did not change very much from between the 'Crisis Day' and the other days which were supposed to be 'normal.' The following extract from the diary is useful in illustrating this:

- 10.24 - 10.28      Lewis clips items from the newspaper and gives them to Sheila to file.
- 10.29              Nothing to do. Lewis sits.
- 10.30 - 10.37      Lewis makes a personal call.
- 10.38 - 10.39      He sits. Looking at the telephone and waiting for it to ring.
- 10.39 - 10.44      He calls the Bookkeeper, Penny: "Why am I calling you? No, I don't know why. Look, as I am talking to you anyway, on the question of bonuses, you take whatever Sheila gets . . . Well, I'm feeling in a generous mood today." Penny obviously thanks him because he becomes embarrassed and mutters that "thanks are not necessary" before putting down the phone.  
He looks at me and says: "I hate waiting for things to happen."

As a result I had to list a new category of work activity in the log: 'Doing nothing' took up 66 minutes or 2 percent of the total time during the 5 days of study. This was quite apart from the category of "Talking to Researcher" and both these groups of activity were marked down as Lost Time.

#### His Work Environment and Relationships with Subordinates

Lewis has a completely open door policy: Literally. In fact the door is seldom even closed when he is in a meeting with outsiders except on those occasions when Sheila is typing and the noise might be disturbing. The layout of offices is in the form of a long corridor and by leaning slightly forward Lewis can even see Sheila at her work station. Whilst it is not possible for him to see his other employees he can shout to them down the 'passage' and often carries on conversations with the telephonist, Jean, this way.

Any caller coming into the reception area, be he an important visitor or merely a messenger, can see Lewis working at his desk.

People walk in and out of Lewis' office all the time whether he is talking to someone or not. If he is on the telephone then the subordinate will stand waiting for him to finish his call. He does not motion with his hand either to sit down or to leave, nor does he in any other way acknowledge their presence. Another factor which ensures the constant stream of people in and out of the office are the files: Lewis not only keeps essential information which should be in the possession of his subordinates, but he also literally 'sits on' many current files. These are stacked on a table in his office and the overflow is on a counter behind his chair. The contents of the files relate to individual acquisitions, current company activity, financial statements, profitability figures and balance sheets, feasibility studies, as well as debtors.

His subordinates are therefore placed in a position of having first of all to look for these files either in their own or in the general office and having wasted this time in a fruitless search to come and ask him for the relevant information - merely in order to perform their own function properly.

THE DIARY OF A NUMBER 2

The following is a chronicle in summary form of the interactions and meetings which Lewis had with his senior subordinate Arthur Weatherstone during the 5 days of the Study. The time of each interaction activity is given in brackets.

DAY 1

- 11.21 (Arthur Weatherstone walks into the office. Lewis is on the phone and ignores him. He asks Sheila a question and then leaves.)
- 11.38 Lewis calls Arthur in and briefly informs him of the morning's events. (3)
- 12.40 (Arthur walks in, looks around, sees Lewis is on the phone, and leaves.)
- 1.55 He comes in and Lewis tells him about some new product that Spintex are going to make. He mutters a reply and leaves. (2)
- 2.48 Lewis reports the contents of a call just completed to Arthur. (2)
- 3.34 He attends a 90 minute meeting with Lewis on the sale of the subsidiary Constructa. Lewis dominates the proceedings.

DAY 2

- 8.48 Weatherstone comes in to report on progress of the sale of Constructa. Lewis is reluctant to engage in detailed conversation and instructs him to enter into "real negotiation" with the prospective purchaser. (16)
- 9.17 He comes in with a query. (1)
- 12.35 (Arthur has been hanging about in Sheila's office.)  
Lewis sees him, says: "All hell's breaking loose ... now they want to buy shares and not assets."  
Weatherstone: "Oh, yes." (1)
- 2.20 Arthur comes in asking: "Should I get Mr. P or Mr. R ..."  
Lewis doesn't answer him, but asks: "What have you done about ....?"  
Weatherstone: "Oh God, I must phone." He hurries out. (2)

DAY 3

- 9.43 Weatherstone comes into the office and they have a short discussion on the sale of Constructia. Weatherstone reports progress. Lewis issues further instructions. (7)
- (Lewis out of office in the afternoon.)

DAY 4

- 9.32 Lewis calls out good morning to Arthur who is pottering around in Sheila's office.
- 3.37 Lewis calls Arthur into his office and 'fills him in' on the sale of the past few days. (Arthur has the file pertaining to these matters in his office. Lewis currently has the information) Weatherstone says very little. (13)
- 3.50 They move onto a discussion of Constructa. Weatherstone requests permission to accept offers for part-purchase of the plant. Lewis agrees. (13)
- 4.37 Weatherstone comes in with a query whilst Lewis is in a meeting with an outsider. The interruption is allowed. (1)

DAY 5

- 9.14 Weatherstone is called in so Lewis can inform him of a meeting which is to take place. (5)
- Lewis asks him about progress on the sale of Constructa. Arthur talks, Lewis makes notes. (9)
- Lewis then begins talking and goes into detail as to how he sees the position and how it should be handled. (23)
- (Various interruptions)
- Weatherstone attempts to continue the conversation. He asks a question. This reminds Lewis of something else (it is obvious that he is not listening) and he calls the bookkeeper, Jean.
- Weatherstone ignored, leaves.

(I did not see him again.)

Total interaction time = 99 minutes  
 Percentage of total time = 3,57

A MORNING IN THE LIFE OF A SECRETARY

- 9.11 - 9.12      Sheila walks into his office and Lewis enquires:  
 "Have you got work to do?" "Yes, I . . ."  
 "Well then, let's get that sorted."
- Sheila gets her pad and sits down opposite him.  
 Just then the phone rings.
- 9.13 - 9.16      Lewis takes the call.
- 9.16 - 9.21      He sorts files, mail, brochures, arranging and  
 re-arranging them into piles.  
 Sheila sits.
- 9.21              Sheila leaves.
- 10.35 - 10.36    Lewis calls Sheila in, asks for certain files and  
 stationery to be put in his briefcase to be taken home.
- 10.42             He calls Sheila in and begins dictation.  
 Dictation interrupted at
- 10.52 - 10.59    Lewis takes a call. Sheila sit.
- 10.59 - 11.05    The phone rings again. Sheila sits.
- 11.05 - 11.12    Dictation continues.
- 11.12 - 11.21    Dictation interrupted by Lewis himself who makes  
 an outside call.
- 11.22             Another call comes in.
- 11.24             And yet another.
- 11.25             Dictation is resumed and continues until:
- 11.37             Sheila leaves.

Dictation time (see Mail Record)      =    28 minutes  
 Total elapsed time 10.42-11.37         =    55 minutes

TABLE 10		LEWIS' MAIL RECORD								
DAY	TIME SPENT (mins.)	ROLE PERFORMANCE								
		Figurehead	Liaison	Monitor	Disseminator	Spokesman	Disturbance Handler	Resource Allocator	Negotiator	
Wednesday 12	9	3	3	3	-	-	-	-	-	-
	7	-	-	-	-	-	-	-	-	7
	12	4	4	-	4	-	-	-	-	-
Wednesday 7	49	8	12	5	-	6	3	15	-	-
Thursday 8	28	1	15	-	-	12	-	-	-	-
Monday 12	35	10	2	-	-	10	-	13	-	-
Wednesday 14	21	4	5	-	-	12	-	-	-	-
Total	161	30	41	8	4	40	3	28	7	
% of Total Time	7,78%	% 18,63% mail time	25,46%	4,96%	2,48%	24,80%	1,86%	17,39%	4,34%	

His meetings and consultations with subordinates are limited to a few minutes each and although his door is always open and employees do frequently walk in, they are seldom given the opportunity of saying more than two sentences before Lewis interrupts - either with an instruction or with a long involved speech. Seldom if ever are they given an opportunity of saying their piece without interruption.

The telephone gets preference over people at all times. Never once during the days of observation was I able to record that he gave an instruction to the switchboard to 'hold calls' even when he was in scheduled meeting with important outside callers.

He opens all the mail himself and after attending to it (Table 10), it is added to the detail contained in the files already in his office.

The results of empirical analysis of Lewis' work characteristics are shown in Table 11. The contents of Table 7 have been reproduced here for convenience. Overall it can be seen that Lewis performs far more like Chorán's small company president than he does like Gordon or Mintzberg's chief executive. The outstanding characteristics are in the proportion of time spent on the telephone which at 21% is higher even than Chorán's man - although the length of time spent on each call is longer - and the proportion of short activities during the working day. Lewis spends a high 71% of time on activities lasting less than 9 minutes.

The most glaring characteristic though is the small amount of time which Lewis spends in contact with his subordinates. The figure of 40% is lower than any of the other 3 studies. It is also time which Lewis spends for the wrong purpose. I shall now have to substantiate this statement.

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Having recorded Lewis' frantic activity changes, I feel a certain sympathy for Chorán.

TABLE 11

## SELECTED COMPARISONS OF THE WORK OF CHIEF EXECUTIVES OF SMALL AND LARGE ORGANISATIONS

	Large Organisations 5 chief executives 25 days of observation Mintzberg Study	Gordon based on 12 days of observation	Lewis based on 5 days of observation	Small Companies 3 presidents 6 days of observation Choran Study
Number of activities per day	22	19	37	77
Desk Work Sessions				
Number per day	7	2	9	22
Proportion of time	22%	15%	22%	35%
Average duration	15 min	46 min	10 min	6 min
Telephone Calls				
Number per day	5	5	15	29
Proportion of time	6%	7%	21%	17%
Average duration	6 min	10 min	5 min	2 min
Scheduled Meetings				
Number per day	4	6	3	3
Proportion of time	59%	48%	39%	21%
Average duration	68 min	47 min	44 min	27 min
Unscheduled Meetings				
Number per day	4	6	10	19
Proportion of time	10%	24%	16%	15%
Average duration	12 min	23 min	7 min	3 min
Proportion of Activities Lasting Less Than 9 Min	49%	20%	71%	90%
Proportion Lasting More Than 60 Min	10%	11%	2%	0.02%
Proportion of Time in Verbal Contact With:				
Subordinates	48%	66%	40%	56%
Suppliers and associates	17%	5%	15%	31%
Peers and trade organisations	11%	11%	17%	0.2%
Others	23%	4%	16%	14%
Proportion of Scheduled Meetings with more than 3 participants	43%	20%	16%	0%

### THE PERSONALITY OF THE MAN

This additional material has been brought out of the main text partly because we should not get too far away from the main objective of studying Lewis' role activity, but also because (although substantiated by anecdotal material) it largely consists of my interpretation of his behaviour. In that sense it is subjective.

It is extremely difficult to form an accurate picture of the total man. He is a mass of contradictions: Impulsive, stubborn, honest, clever, naive, kind, unrealistic, are just some of the adjectives which appear in my notes.

#### People

He demonstrates a compelling urgency to have constant contact with people - to talk to and to be liked by them. But when he is given advice by others he reacts brusquely and fobs them off. If he is praised by them he becomes embarrassed.

And so there is a strong indication that it is the stimulation of the events and the recognition which the callers might bring with them which is his primary motivation rather than the people themselves. This would explain why he tends to put up with people even when they are ineffectual. "I suppose my trouble is that anyone can subvert me."

#### Things

He demonstrated many times that he needs the constant stimulus of new events and happenings to keep him going. He is a completely spontaneous person. Consider the following extracts from the diary:

He walks around the office touching files and sorting papers on his desk on the completion of each circuit around the floor. "I love shuffling files." After a few minutes he manufactures a reason to "see how Burke is getting on." On the way back from Burke's office (2 minutes later) he finds a file in Sheila's office which interests him. He brings it back to his desk.

When there was nothing obviously immediate that needed doing he might look at the telephone, look at me, drum his hands on the desk, and say "now what?" He actually appeared agitated that there was nothing that required his immediate attention. And so we have here an interplay between happenings (events) and people. The man creates situations and then reacts to them. The telephone is the most convenient means of achieving this. And he knows it. On one particular day after a flurry of telephone activity with several different people he put down the phone, smiled, and said, "see what can happen with just one call."

And one morning the PABX was out of order for 2 hours. Disaster. Lewis commences reading the mail, stops, gets up, walks around the office ("I'm a bit disorientated without the phone"), and sits down again.

Everything in his workaday life is dealt with seriatim with little attempt made to sequence activities into order of importance. As he gets caught up in the happenings of the day his prepared list of items lies forgotten - to be returned to when things quieten down - only as a source of generating more activity.

In summary then it is really involvement in the events which seems to excite him rather than the events themselves: "I like to do deals and conclude and go on."

I am left with the firm conviction that the situations are created or precipitated in order to maintain the hectic climate in which he thrives: "I want finality. I hate unresolved issues." He can thus be described as an immediate man. One whose frenetically active mind leads him to impulsively respond to anything in the environment which he finds stimulating at the given time.

### Naivete

There is certainly no doubting his intelligence. He has an extremely agile mind and is quick to grasp the meaning of new information. And yet there seemed to be a certain almost childlike naive quality in his dealings with and belief in people.

The main precipitant of his crisis situation is Weavetex' MD who has pledged a portion of Stanton's shareholding in this company to a third party. The crux of the matter is: Will Weavetex remain in the Group or not, and if it does, at what price will the third party acquire the shares?

Lewis favours fighting to keep Weavetex. I pointed out to him that this might not be a good thing if he were forced to keep the present management team who were all loyal to their 'traitor' MD. Lewis could not see any basis for concern or potential difficulty in the future in working with this man.

In discussing the possible longterm outcome of the crisis with an outside caller Lewis says: "I don't want Weavetex at the price that they are offering to pay. I will then be ruined and since I cannot afford to be ruined they must just pay a better price."

At lunch I remark on his apparent willingness to tell callers details which they do not necessarily have to know and he retorts: "I always just tell people exactly what I am going to do and then they are surprised when I do it. But they also sometimes take advantage ... well, I hate lying."

### Self Realisation

This brings us to the question of to what extent does Lewis realise his own deficiencies? And the answer is that he has a great deal of insight into these shortcomings:

"I pick people badly, I either get people who do me in or if they are nice people they are no good. I choose people I like. I know that this is a weakness."

"I am not a typical executive because of the chaos around me. But one day, when the Group is restructured, I shall get in a strong man as my Number 2."

When talking about the reasons for his predicament Lewis is especially frank. One cannot say that he is objective but he is certainly that within the constraints or confines of his own personality:

"We have just misread every situation. All our problems are due to Weatherstone and myself. I mean he kept telling me that things were going well and they weren't. He just gets panicky every time a cheque is due and his every statement is prefaced with absolute assurance as to its truth. Result - we lost R1 million. I take just as much of the blame."

"This is the problem with running a diversified conglomerate. You must have a man running each division. You become scared of getting rid of him if he performs badly because then there is no-one."

The man is an island. Everything is in his head. He just cannot let go.

#### On Business Life

The final contradiction comes in his attitude towards business life and his reaction to the difficulties. Elsewhere we have seen that he appears unconcerned, untroubled. He told me that on the day that he first learnt of his crisis situation he did what he could "and then put my feet up on the desk and read a paperback." His general attitude is typified by :

"It's decisions all the time. But I don't mind. You make some wrong ones - what's the difference? You must just run faster than the Banks."

But as we ride down in the lift together one evening I say: "you are tired, aren't you?" To which Lewis replies: "I am terrified because I don't know where we are going."

Is he?

SUCCESSFUL AND UNSUCCESSFUL ROLE ACTIVITY : A COMPARISON

The above discussion of Lewis' work characteristics may seem somewhat lengthy but the man's work habits so affect his role performance that it was necessary. We are now in a position to compare the role scores of Gordon and Lewis and to explain why it is that the latter performs so poorly. These scores are shown in Table 12, whilst Table 13 further analyses the Leader and Monitor roles.

The role set is a dynamic, and Figure 11 (page 176) postulates the form of this dynamic - the relationship between the roles. This means that we can commence explanation from (almost) any point but it also means that a certain amount of repetition is inevitable in building up a verbal representation.

Let us start off with the rather simple statement that Lewis' delegation is poor and incomplete: That his subordinates are given little or no authority to carry out the responsibilities with which they have (nominally) been charged. This not only means that Lewis must occupy his time attending to small matters (a work characteristic) but also that the subordinate must constantly refer back to him for instruction: This constant referral is further ensured by for example Lewis having the files relevant to the subordinates work in his own office. This increases Lewis' Resource Allocator activity (15%:22%).

Practically every telephone call which comes into the organisation is put through to Lewis. The telephonist is not told that a particular subordinate is dealing with a certain matter. When he receives a call on a partially delegated matter, Lewis makes no attempt to divert the caller to one of his employees but rather handles it himself. This means that he must afterwards convey the contents of the call to the subordinate. This increases Disseminator activity (6%:10%).

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In the text Gordon's percentage is compared to Lewis' in that order. Whole numbers are used, the exact values appearing in the Tables.

	TABLE 12	RELATIVE PERCENTAGE TIME DISTRIBUTION BETWEEN ROLES	
	ROLE	GORDON	LEWIS
INTERPERSONAL	FIGUREHEAD	2,78	4,59
	LEADER	23,83	0,62
	LIAISON	11,98	11,89
INFORMATIONAL	MONITOR	18,42	8,70
	DISSEMINATOR	6,29	9,57
	SPOKESMAN	2,65	9,37
DECISIONAL	ENTREPRENEUR	9,0	10,49
	DISTURBANCE HANDLER	4,3	6,67
	RESOURCE ALLOCATOR	14,89	21,99
	NEGOTIATOR	3,38	13,24
	UNACCOUNTED FOR	2,49	2,66

	TABLE 13	THE LEADER AND MONITOR ROLES	
		<u>GORDON</u>	<u>LEWIS</u>
MONITOR	Solicited	12,44	6,48
	Unsolicited	<u>5,98</u>	<u>2,22</u>
	Solicited	8,87	3,43
	Inside		
	Unsolicited	4,39	1,69
LEADER	Solicited	3,57	3,24
	Outside		
	Unsolicited	1,59	0,53
	Leader motivation	12,71	0,19
	Leader Personnel	11,12	0,43

which is often done in an incomplete manner because Lewis has several communication disabilities:

Many times I observed him begin to explain things to people and then after one or two sentences break off with: "Well, anyway" and change the subject. The subordinate is left with the mere gist of what is happening and this further ensures that he will have to come back to Lewis for further information or instruction at a later stage. This inadequate dissemination further increases Resource Allocation.

Because the subordinates deal with less matters themselves they are less able to bring him information, and so he hears less from inside his own organisation. In addition he blocks himself from information from within and without because he is not a good listener. When information is being passed to him he listens for a while and then either interrupts, begins speaking himself or literally shuts people up:

On one occasion a man called back to provide Lewis with information which he had specifically requested earlier in the day. The total time of the call was 9 minutes. Lewis listened with few interruptions for the first 2 minutes and then spent the remainder of the time telling the caller how he believed the situation should be and how it should resolve itself.

He has a characteristic way of ending conversations. Whether these are on the telephone or with subordinates face to face: When he thinks that he has heard enough he says: "Well okay" which he pronounces 'AWKAY'. Several times I saw a perplexed look come onto subordinates' faces when they were cut off in the middle of an explanation and Lewis would return to doing other work or pick up the telephone. They had not learnt to read the signal.

Because of the poor delegation subordinates are not able to support him in doing work which is necessary. And because he monitors too little (18%:9%) crises are precipitated. The Disturbance Handler role activity increases as a result (4%:7%) and this in turn further serves to increase the Resource Allocation. As the flow of instruction to subordinates increases he solicits greater help from them in trying to extricate himself from the 'squeeze'.

In fact I observed a fine line between Resource Allocation and Disturbance Handling. Often the allocation could quite easily be identified as a direct result of the crises which Lewis had caused. But in these cases, following the rule, the time was allocated to Resource Allocator no matter what or who performed.

The handling of Disturbance also increases the Spokesman activity (3%:9%), not acting as a public relations man for his industry as Gordon does, but lobbying to outsiders as he jockies his way out of trouble.

Looking at the remaining decision-making roles of Negotiator and Entrepreneur, we see that Lewis' negotiation activity is over 4 times more than Gordon's. This is an obvious reflection of his quest for the new and exciting ("I like to do deals and go on") without any follow-through or implementation, and leaving a void behind him. Does this make him a good negotiator? Maybe. Is this increased negotiation activity a good thing? I don't think so. Lewis 'runs' far faster than anyone around him and he does not look to see whether anyone is following him.

The Entrepreneurial activity is only slightly higher than that of Gordon. (9%:10%). But even this does not tell us the whole story. We have to look at the quality of this long-term decision-making. Whilst Gordon is surrounding himself with experts from whom he solicits opinions, getting the reaction of senior subordinates to his plan, and mulling (sometimes agonising) over the consequences of this type of decision, Lewis is playing impulsively by himself:

I saw him restructure a set of accounts in front of two outside auditors so quickly that they were left far behind. On another occasion he went into a meeting with Weatherstone and the manager of a subsidiary company, completely dominated the conversation, and emerged 81 minutes later with 6 pages of his pad filled with scribblings and balance sheets (all constructed during the meeting) to show what position the company would be in as a result of each

of his proposed alternatives. Input from the other participants at the meeting was minimal. He could well have held the meeting with himself.\*

And yet this time could not be apportioned to any other role but that of Entrepreneur. Therefore it is not only the absolute amount of time spent in the performance of the role but also the quality of it which is important.

We come now to our two role concentrations of Leader and Monitor.

Lewis' almost complete lack of delegation and his shortcomings in the area of communication of course not only affect his information and decision-making but they have a very definite effect upon the human relations functioning.

It can be said that not only does he not motivate people but he actively demotivates them by constantly interrupting, by keeping information to himself, and by attempting to deal with everything personally. This type of behaviour can only engender frustration in the subordinate.

In spite of this I cannot say that there is a bad organisational climate persisting in this Company. The employees are not overtly dissatisfied. Rather they are 'neutral'. They appear to like him. He is after all a likeable man.

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I found that Lewis' hobby was drawing balance sheets. The fact that his initial attempt at keeping a diary was written on financial analysis paper should have given me the hint earlier.

Leader Role

Lewis' score of total Leader role performance of 0,62 compared to Gordon's 24% of course merits special discussion. It would be useful to chronicle those activities which were ascribed to this role:

DAY 1

8.51 He compliments the telephonist briefly on a piece of work that she did yesterday. (Motivator: 1 minute)

DAY 2

2.03 The accountant Burke comes into the office to look for some files. Lewis remarks that he thinks that "we are going to have to actually write down responsibilities. At the moment there is no consensus, no division." Burke replies: "I would like that too." Together they talk briefly of various files which Burke will need. They are (of course) in Lewis' office and he gets up to find them. Burke remarks that he was "hunting all over for them." Lewis (instead of giving the file to Burke) opens it and starts shuffling through the contents. Some explanation of what was to be done followed. (Although the method was wrong, this was training and I therefore scored the total activity time to Builder: 7 minutes)

DAY 3

9.17 Weatherstone comes into the office with a query. Lewis answers him and adds: "That is good." (Motivator: 1 minute)

DAY 4

9.12 Lewis is talking to the Bookkeeper, Penny, about her assistant, the file clerk. Lewis asks: "what sort of work does she do?" and Penny replies that: "she is of great help and can do work up to Trial Balance."  
Lewis: "And so if I was looking for areas in which to save money next year, you would not advise me to save money in that direction?" To which Penny replied: "No certainly not." (One could put forward a good argument for costing this activity to Resource Allocator but I reluctantly saw it as organisation building and so apportioned it to Builder: 2 minutes)

DAY 5

\* 9.24 Lewis calls the Accountant in one of the Weavetex subsidiaries and blasts him for 2 minutes regarding his non-performance on preparing the set of accounts. (Builder: 2 minutes)

At no other time during the 5 days of observation did Lewis praise or criticise any of his subordinates, guide them or train them. There was also no other activity which fell even remotely into the category of hiring and firing.

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I cannot decide whether there is any significance in the fact that these few leader role activities tend to occur early in the day.

### The Monitor Role

The breakdown of monitoring activity (Table 13) reveals an extremely interesting picture. We have already seen that total monitoring by Gordon is approximately twice that of Lewis (18%:9%) and in discussing the other roles have pointed to several probable reasons why.

This ratio is maintained in their relative solicited monitoring activities (12%:6%) and so we can infer that the main differences must be in the amount of unsolicited informational input. Also, Gordon's solicited:unsolicited ratio is 2:1 whilst Lewis' is 3:1. And yet Gordon's solicited monitoring from outside is almost exactly the same as Lewis (3%:3%) which would point to a lack of adequate inside scanning by Lewis. This was strongly evident in the study (see Box). Regarding the unsolicited monitoring, we have seen how Lewis cuts himself off from information and as a result so much of what has to be solicited by him from outside and inside could/should come to him unsolicited. Considering the amount of time he spends on the telephone engaged in conversation with outsiders one would expect a higher unsolicited informational input. In fact, very few incoming calls are unsolicited and he spends the time (as we have seen) in disseminating (opinion) and in Spokesman (lobbying) activity. He cuts outside callers short and discourages them from phoning him.

If the channels of communication inside his firm were open, if Lewis' subordinates were assured of an interested audience as they are with Gordon ("Lew came in and told me .... and we talked ....") then this information would come to him unasked for. But because of the lack of support, encouragement, and motivation, his subordinates are reluctant, are not motivated, to bring him these much-needed titbits and scraps of information.

### THE ABSENCE OF SCANNING

Whilst Gordon is constantly searching for information which might be relevant, reminding himself that "there are so many areas which have to be watched and covered," and (randomly?) "deciding to look into ...", Lewis is indulging in quite different behaviour:

During the course of the week, I had become increasingly intrigued - I could say concerned - that Lewis appeared to manage only part of his Group.

Reference to the family tree (Figure 12) shows that there are 2 major asset groupings from which Lewis is receiving no information at all. These are the laundry company, Consolidated Cleaners and the commodity trader, J.J. Fraser. Consolidated is 51% owned by the Stanton Group whilst Fraser is a 100% owned subsidiary.

Previously I had not said anything to him on the subject because I did not want to prompt him in any way. On Day 5 as we walk uptown to a meeting just before lunch I can contain my curiosity no longer. I ask about Fraser and Consolidated:

He explains that the interest in Consolidated was acquired in May 1976 as the result of an approach made to him by a third party. "I told him (the Broker) if we could get shot of certain things (assets) then I would be interested." Consolidated was bought, the asset-stripping exercise completed, and the Companies shown on the chart became part of Stanton.

Since then what active part has Lewis played in their management? "They are a law unto themselves. I don't know. Haven't had a Board meeting for 5 months. Having a meeting Monday. Then we'll find out."

He goes on to say that there are certain activities indulged in by the present management of Consolidated that he would like to put an end to. For instance it irks him that a particular director has combined an overseas holiday with a visit to the European Industrial Fair: "I know bloody well that he took a holiday at our expense." As for the rest, Lewis has not taken the trouble to find out. He receives no bi-annual, quarterly, let alone monthly management information from them and they are left entirely to their own devices. Why doesn't he do something about it?

His stated intention to 'find out' at the Board meeting is in conflict with his next statement: "You know, I could get 75 cents a share (asset value plus or minus R1,10), raise R540 000 and then I'd have no debts."

His attitude towards J.J. Fraser is even more simple or direct: "The Group is very small. I don't know. I'll look at this next year. I don't sign. We don't put money in and we don't draw money out."

In other words, his attitude is simply one of 'it can wait.' Whether Fraser will still be a viable entity when Lewis gets around to looking at it does not concern him at the present. Whether it can be made into a cash generator which could help Stanton (and other subsidiaries) out of their present liquidity difficulties has not been investigated. He receives no information from the company and has no contact whatsoever with the people who run it. A case of complete abrogation.

## Conclusion

In studying these two men we find evidence which strongly supports each of the propositions outlined in Chapter 9.

The role set has been operationalised to the extent that it is possible to apportion any particular activity of the manager to one of the roles and an obvious inequality of time distribution between them has been shown.

Although both the Leader and Monitor roles were very narrowly defined we see that Gordon spends far more time in leadership activity, overall monitoring, and also receives more unsolicited monitor input from his subordinates. The numerical data is supported and corroborated by a quantity of anecdotal material.

Further, we not only find an absence of many (seemingly) important characteristics and role activities in Lewis' behaviour but we can in many instances outline a reversal of the role set dynamic which was proposed on the basis of the study of Gordon's role linking.

But although all this evidence is of sufficient strength to lead us to generalise, we cannot at this stage do so. The two pilot subjects were chosen because they were 'obviously' successful and unsuccessful: their selection was not in terms of any rigidly defined criterion. They operate in completely different sectors of the economy and are thus subjected to different sets of environmental pressures. Coupled to this we have not yet demonstrated any sort of correlation between the results of strategic implementation and leader and monitor role activity.

A larger sample, selected against an independent measure was called for. We turn now to the main study and begin with a discussion of this selection procedure.

A statement of the hypotheses follows on page 212.

CHAPTER 12MAIN RESEARCHTHE FINANCIAL YARDSTICK

In deciding which financial yardstick to use in the main study I naturally considered many analytical instruments outlined in the literature - some available as 'packages', others which can be derived from a variety of measures. A number of them are highly sophisticated and still others such as Shirley (1976) give historical sectorial averages from U.S. Stocks. However, many of these measures are theoretical and few of them are 'proven' in the sense that they have been consistently applied to the listings of a particular Stock Exchange.

Above all, I believed it essential to employ a yardstick which was practical in its base, had been shown to work, and thus had predictive validity. A firm of \*Stockbrokers have for the last ten years been applying six of what they consider to be the most important financial ratios to all listed shares, and for the past five years they have circulated the results of the analysis to their clients in the form of Risk Ratings.

The Risk Rating for each share is worked out as follows : each of the ratios is calculated for a particular share which is then assigned points on a weighted scale for each of the ratios. The ratios employed and the maximum attainable points on each are :

Shareholders' Interest	25
Return on Capital Employed	20
Total Borrowings as a % of Total Liabilities	15
Cash Flow to Total Borrowings	15
Profit and Loss Gearing	15
Current Ratio	<u>10</u>
TOTAL	100

And so each share listing is assigned a single score out of 100: A high score being indicative of low risk and conversely a low score being indicative of high risk. (An explanation of the ratios and the scale of point scoring for each is contained in Appendix 3).

The Brokers fully admit that the rating system is subjective insofar as, out of all the ratios that they could use, they have chosen only these 6. Further, that the method of weighting the importance of each is equally subjective, but "the results produced do appear to be meaningful and as each company is scored on the same basis, some relative comparisons of the ratings seem reasonable".

The shares are then grouped and divided into deciles ranging from 90+ (almost negligible risk) to 0-10 (inordinately high risk). The Authors say that they regard it as extremely unlikely that any company scoring 65 and above will go bankrupt. On the other hand, any share falling in the 'very high risk' and below (risk rating of 30 downward) is in very real danger.

"Our conclusion is that when the risk rating gets down to 30 or lower the chances of survival are greatly diminished and the rate of decline from a Risk Rating of 30 to Bankruptcy can be very quick. The Chairman of the Franklin National Bank when he was asked 'how did you go bankrupt?' replied, 'gradually for quite a while - then all at once'."

Obviously the primary purpose of the Risk Rating is not to predict bankruptcy but to highlight good investment stock. The Authors point towards the emergent 2-tier market developing where the 'quality' shares (commanding a high rating in terms of dividend yield and P/E ratio) which have good sound management will attract an increased amount of institutional cash flow, whilst the poor performers will be denied this investment inflow: "We believe this quality preference will continue to be exhibited and the 2-tier market will develop further".

To what extent does financial performance reflect management expertise? It is contended that "it all comes out in the numbers". A company which consistently performs badly is employing inappropriate strategy and this is in turn a consequence of bad management. Also, a high risk rating does not necessarily mean that bankruptcy is unavoidable: "If management realises

TABLE 14		RISK RATING IN YEARS PRIOR TO BANKRUPTCY				
Company	Sector	Year 5	Year 4	Year 3	Year 2	Year 1
Consolidated Jersey	Textiles	44	37	19	44	25
Glen Anil	Property	22	18	17	18	1
*I.L. Back	Clothing	64	31	31	18	29
Penguin Pools	(Leisure)	NA	70	58	35	3
Spectro	Electronics, Leasing Property, Farming	75	72	31	23	3
Tollmans	Hotel	NA	NA	33	19	27
Van Achterburgh	Property	22	23	22	19	3
		45,4	41,8	30,1	25,1	11,7

\* I.L. Back was rescued from bankruptcy when taken over by Rembrandt.  
Source : Ivor Jones, Roy & Co. Inc., 'The New Survivors', 11 May 1977

TABLE 15		RISK RATING OF RECENT NON-SURVIVORS	
Company	Sector	Event	Risk Rating
Lengro	Property	Shares suspended 10.11.1977 Takeover by Trustbank (Bankcorp)	0
Simba-Quix	Food	New Chairman and MD 10.11.1977 Saved from Bankruptcy by parent Federalevolks	7
Marshall Industrials	Retail/Wholesale	Judicial management 14.11.1977 Liquidation Order 5.1.1978	26
Fairweather	Clothing	Liquidated 23.1.1978	12
Hofman	Property	Provisional Judicial Management 17.3.1978	19

Source: Press Reports

### FORMULATION OF HYPOTHESES

In reviewing all the empirical findings in Chapter 9 I argued that the manager's role performance influences strategy formulation, that strategic implementation (if monitored correctly) influences role performance, and also proposed that effective monitoring of both the internal and external environment must be crucial for managerial success (page 145).

Further, on the basis of the sequencing and linking of Gordon's role activity, the monitor role appeared to be central to a dynamic role set model (page 175). This notion finds support when the role performance of Gordon and Lewis are compared and one of the main differences found is in various aspects of monitoring activity (page 204) - notably the unsolicited internal component. Their Leader role activity is markedly different and a strong link between Leader and Monitor is suggested. In addition, when looking at Lewis' activity by itself, an actual reversal of the earlier proposed dynamic is evident (page 206).

On the basis of this rationale the following hypotheses were formulated:

### HYPOTHESES

Although a number of other statements suggest themselves on the basis of the results obtained so far, this was the first attempt at demonstrating an empirical link between managerial behaviour and the financial result obtained by an organisation and I thus wanted to confine the formal part of the study to the central issues.

Therefore, employing the Risk Rating to isolate organisations, hence identifying their chief executives, and so defining sample groups of Successful and Unsuccessful managers, I contended:

- H1 Successful managers spend more of their time in direct leader role activity than do Unsuccessful managers.
- H2 High Leader and total Monitor role activity are a feature of Successful managers.
- H3 Internal monitor role activity is higher for Successful than for Unsuccessful managers.
- H4 Within the monitor role, Successful managers receive more unsolicited information from within their own organisations, and
- H5 Successful managers spend more of their time in external information gathering than do their Unsuccessful counterparts.

## SELECTION CRITERIA AND METHOD

Although the Risk Rating was to be used to select the sample, there were a number of other criteria which I believed to be important to the study :

1. Any company chosen should not be too large : it should be of a size where the chief executive was not too far removed from the operating sphere, buffered by many layers of subordinates so that he is in fact a Figurehead.
2. No subject company should have been involved in a major takeover, merger or acquisition in the past 2 years.
3. Following from this, the chief executive of any chosen company must have occupied this position for a similar period.
4. The firm's main sphere of operations should be as 'pure' as possible. Forward or backward integration was acceptable, as was horizontal diversification - providing that it was directly related to the main sphere of activity. Thus <sup>\*</sup> Pep Stores' purchase of Papillon would not have disqualified it: activity remains clothing sales with backward integration into manufacture. But Abercom, a conglomerate of diversified steel and engineering interests, disqualified it.

Within these constraints, it was my intention to use the Risk Rating to identify pairs of companies which were matched for sectorial listing, type or sphere of activity, and (as far as possible), their size.

### Selection Method

Excluding the Secondary Section, there are 524 listings on the Johannesburg Stock Exchange, divided into 28 sectors. However, the Mining, Banking and Insurance sections have been excluded from the Risk Rating analysis. In addition, the analysis does not deal with Industrial Holding companies (which in view of the criteria of conglomerates and diversified companies is not material). Subtracting the excluded shares (see also Appendix 3) left an initial sample population of 19 sectors into which 318 analysed shares fell. These are categorised in Table 16.

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\* No names of companies which took part in the study are given. Everyone in the sample group was given a firm undertaking that their identity would not be revealed.

TABLE 16	THE STOCK EXCHANGE : SECTORS AND LISTINGS	
Category	Number of Sectors	Number of Shares Listed
Mining and Mining Financial	5	11
Banking, Insurance And Investment Trust	3	43
Industrial Holding	1	44
General Remainder	19	318
TOTALS	28	524

Now we have seen that the Authors of the Risk Rating claim that any company scoring a rating of 30 and below was in danger of failing. It therefore seemed appropriate to define the Unsuccessful (US) sample accordingly. To balance this, I took the Successful (S) group to be any company having a score of 70 and above. ('very low risk' and upward).

Whilst this does mean that I am saying - in view of the extremely good predictive validity of the measure - that the companies of US managers score 30 or less, it does not necessarily mean that all effective managers fall into the S group as defined: Many well-established companies headed by acknowledged business leaders fall into the categories 'moderate risk' and 'low risk'. Some examples of companies scoring between 50 and 70 are Foschini, Huletts, SAAN and Barlows.

Analysis therefore began by isolating those companies of the 318 analysed which had a Risk Rating (RR) of 70 and more or 30 and less, and then categorising them by sector. There were 124 of these - 70 high raters and 54 low raters. Table 17 shows the results of this analysis.

TABLE 17	DISTRIBUTION OF COMPANIES BY SECTOR		
SECTOR	HIGH RATING	LOW RATING	COMMENT
BEVERAGE AND HOTEL	-	3	Eliminated
PROPERTY	1	14	No match
BUILDING	3	6	No match
CHEMICAL	-	1	Eliminated
CLOTHING AND KNITWEAR	6	3	Sample 1
FOOD	3	3	Sample 2
FISHING	8	-	Eliminated
FOOTWEAR/LEATHER	2	-	Eliminated
FURNITURE	3	4	Unsuccessful
IRON, STEEL, ENGINEERING	16	10	Sample 3
MOTOR	2	6	No match
PAPER AND PACKAGING	8	-	Eliminated
PHARMACEUTICAL	3	1	Sample 4
PRINTING	2	-	Eliminated
WHOLESALE/RETAIL	2	2	Unsuccessful
STORES	3	1	Unsuccessful
SUGAR	1	-	Eliminated
TEXTILES	3	-	Eliminated
TOBACCO AND MATCH	1	-	Eliminated
TOTAL	70	54	

As can be seen from this table, certain sectors were automatically eliminated at this stage simply because there was no high or low rater with which to make up a pair. There were 9 of these. Ten categories thus remained, but in 3 of them, no adequate match of companies could be found, and I shall discuss each of these in turn:

Property: The single high RR here is the subsidiary of a mining house with which its affairs are inextricably linked.

Building: Although there are a number of shares listed in this sector, the companies are actually a mixture of construction firms, primary building component producers, and secondary goods manufacturers (some of which even have consumer/retail activity). The primary producers tend to score high (Golden Brick 91, Everite 81), whilst the secondary and component manufacturers tended to be low scorers (Masonite 27, Natven 7).

Motor: Here too no adequate match of similar activity within the market sector listing could be found. There appeared to be little sense in equating for example, General Tyre which is a motor vehicle component manufacturer (RR 71) with Schus or Robbs who are retail car dealers (RR 15 and 20 respectively).

In all of the remaining 7 sectors, pairs of companies matched within acceptable limits of size and activity sphere could be found. In many cases of course, there were more than one (up to 4) possible companies in either the high or low categories of a particular sector. In these cases, a preferred group or pair was marked for initial contact with the others ranked in order of preference and kept in reserve. This preference was solely on the basis of the highest or lowest RR.

### Procedure

The Stock Exchange Handbook was used throughout the study as a reference, but in several cases, it does not specify who the chief executive is. Thus, before approaching any firm, I checked this fact with sharebrokers, or a financial journalist, or in some cases, by getting another person to telephone the receptionist in advance. In this way, I was certain that data, if forthcoming, would be generated by the right person and it also helped of course in 'running the gauntlet' of the Secretary who exists as a barrier between every managing director and the outside world.

### WHY CHIEF EXECUTIVES ?

There are 2 overriding reasons why chief executives of public companies were chosen for the study :

1. A number of the roles (Liaison, Monitor, Spokesman, especially) are performed outside of the system in which the manager wholly or in part works. In the case of the chief executive, these outside role functions are performed outside of his own firm. It is therefore far easier to detect when a given executive steps outside of his own organisation in the performance of a particular role function (for example, picking up a telephone to extract information from an external source, socialising over lunch with his peers) than it is to detect when a middle manager interacts external to his own department.

The manager on a lower level performs the internal role activity exclusively within his own department and any external role interaction is performed either in the rest of the organisation or in the external environment. Both are part of the lower level Manager's external environment. It therefore becomes more difficult to detect outside role behaviour when studying Managers on lower levels. For example: When exactly does the Section Manager of, say, an insurance company receive information which is absolutely pertinent to his division emanating through formal organisational channels, and when can this same information be considered to be coming to him from an 'external' source?

Thus on the lower levels there is a blurring in the performance of some roles precisely because of the overlapping lateral and (horizontal) communication flows. These are part of the informal system.

2. By employing quoted companies, I was able to use a common financial measure with which to compare role performance with the result of strategy implementation. Also, we have as yet no way of measuring the effectiveness of middle managers across companies.

The method of initial contact varied according to the geographical locality of the company: Local companies were telephoned in the first instance. I introduced myself, explained that I was conducting research into 'management behaviour', emphasised that this study was essentially practical, and further explained that "the activities of a number of chief executives heading companies in several sectors of the economy are being studied with a view to isolating commonalities between them". I then asked for his co-operation in the study.

I wrote to companies in Johannesburg and on the Reef in the first instance. This letter contained the same information as the local companies received by telephone. I set aside certain dates and asked for an appointment. In approximately 50% of the cases, no reply was forthcoming to this letter and here I followed the letter with a telephone call and treated these firms in the same way as the local sample.

In both cases, the objective of the initial approach was simply to gain an appointment. In only one case (below), was this refused.

At first interview, I essentially repeated the information outlined above, emphasising the practical nature of the study - I wanted to try and find out how he as a successful head of a public company ran his firm - and waited for some sort of tentative commitment to help me before going on to explain exactly what it was that I wanted from him.

Data required : Here I should like to digress for a minute to discuss the nature and detail of the data which I requested from the participants. I was very much aware that each subject was going to carefully weigh up time and effort involved before finally agreeing to participate. And the nature of the data needed for the study was going to cost a considerable amount of both. So the less detail I asked for, the more likely I was to be successful in soliciting his help. On the other hand, certain detail was essential in order for it to be meaningful. There was therefore a decided dilemma situation, but the latter consideration weighed more heavily, and I decided to 'pitch' the request slightly on the side of asking for a little more detail than was in fact needed for the analysis.

After obtaining an initial indication of willingness to co-operate, I went on to specify that what was needed was an activity record covering a period of one week (with a note on after hours and weekend activities). He was handed an instruction sheet (reproduced in Appendix 4) which explained that the record for each day should include :

1. Starting Time : Whenever this is on a particular day
2. Type of Activity: Meeting, telephone call, etc.
3. Nature or Purpose of the Activity (In general terms only)
  - Meetings : Scheduled or unscheduled  
What was discussed  
Who initiated it
  - Telephone Call: Was it from or to  
Did you receive information or give orders
4. Who participated in each activity
5. Duration of each activity
6. Stopping Time : Whenever this is on a particular day

I shall now outline the events which took place between isolation of the initial pairs of companies and the selection of the final sample :

In both the Clothing and Food Sectors I was fortunate in soliciting the co-operation of the executives heading both initially-selected pairs. (Although Clothingman A took just short of 7 months to deliver his data).

Things did not work out as smoothly in the Furniture division and here I was to have 2 of the 4 withdrawals from the study. Like many other sectors on the Exchange, companies with widely differing spheres of activities are lumped together under this heading. I wanted to concentrate on companies engaged in basic furniture manufacture and thus the initial choice of company to match the low-rating Hugh Parker (RR 2) was Bakstey with a RR of 85. I initially obtained the agreement of the executives of both these companies to participate. However, some 2 months after interview the managing director of Bakstey telephoned and said that he felt, upon reflection, that he was unable to see his way clear to providing me with the data. Meanwhile letters to Hugh Parker enquiring when the data would be forthcoming were ignored, and finally I telephoned. I was again told that the data would be sent but it never arrived. This meant that I had to mark the furniture sector as Unsuccessful because other companies either had their activities bound up with the motor industry (for example Asmar, RR 12) or were in fact furniture retailers such as Morkels.

### WHY PERSONAL VISITS?

I believed that it was essential in a study of this nature for the subjects to be visited in person. I am now absolutely convinced, having visited them, that I would not have been able to solicit their co-operation by letter or by telephone. Personal visits were necessary not only to explain to the subject in detail what it was that you wanted from him, but to become known to him - indeed to 'sell' oneself, to the extent that he would go out of his way to provide the data. For after all, I was not asking for a simple half hour to fill out some questionnaire, but was rather asking for a good deal of his time, effort, and thought.

In fact, two of the Reef subjects, on hearing that I was from Cape Town, rummaged around on their desks and produced (unanswered) questionnaires which they had received from researchers. One of the men had three of these, one from the G.S.B. He was more interested to know whether I knew the sender than in the fact that it was a month old!

That was necessity. Personal interview also meant that I got to know the man, his working environment, and sometimes his subordinates. As important, talk of practicality invariably led to more general conversation and I here learnt of his philosophy about management in general and his company in particular. These anecdotes are quoted in the text.

### WHY ONE WEEK OF DATA?

The Diarists collected data from their subjects over lengthy periods. Twenty-four days in the case of Carlson (1951), 20 in that of Burns (1957) and Stewart (1967).

The Observationists studied men at their work for shorter periods :Guest (1956), Jasinski (1956) - for one day. Ponder (1957) and Landsberger (1962) collected data for 2 days.

Mintzberg's (1968) observational period was 1 week or 5 days, and Chorán (1969) - in a validation of the Role Set - gathered data for 2 days.

What then is the 'correct' period of time to gain data representative of a given manager's work pattern?

In choosing to study the managers for 5 days I was guided by Mintzberg's conclusion that "the evidence from this study and from other work suggests that the one-week periods were representative of each man's work" and by his own finding that, with minor exceptions, no activity patterns were evident :

"It cannot be argued, based on the data available, that mornings differed from afternoons, that certain activities took place at special times of the day, or that certain days of the week differed from others" (1973 : 31)

THE ATTITUDE OF THE SUBJECTS TO THEIR SECRETARIES' INVOLVEMENT

Most of the subjects willingly and enthusiastically agreed to help. They spoke to me with a great deal of candour and my emphasis that I did not need to be exposed to confidential information was sometimes treated with a wave of the hand - as if to say "I would be quite happy to, anyway".

But not one of them elected to dictate on tape for subsequent transcription by myself, but rather chose to write or make notes and have the data transcribed by their own secretaries. Further, they became very reserved when I made any mention of possibly soliciting their secretaries' involvement any further. I make mention of this because it was suggested to me that I might use the secretaries as a check on their bosses - to corroborate their time expenditure. This would not have been possible for two reasons : (1) A large amount of the Manager's time in meetings, on the telephone, is spent away from his Secretary's eyes behind closed doors and (2) we have the attitude of the Managers towards their Secretary's further involvement as outlined above.

Experience was similar in the Iron, Steel and Engineering sector where I had the third withdrawal from the study. The company of choice here was dictated by high rater Prima with a Risk Rating of 99. Initial interview with the chief executive of this company on the Reef was cordial and we in fact spent approximately an hour talking about general matters after I had obtained his commitment to co-operate. Approximately 2 months passed and no data arrived. Meanwhile I had 'recruited' Steelman X who headed the other company in the pair with a RR of 16. I telephoned Prima's MD and asked him whether he perhaps was having difficulties in generating the data and was told that he had lost the instruction sheet. I wrote enclosing new documents. Another month went by and a further telephone call elicited yet another promise to do the work. I finally had to mark him down as a withdrawal when, after a further 6 weeks, no data had been received. However, this pair was saved with the subsequent recruitment of Steelman A who heads a company very similar in activity to that of Prima and has a RR of 91.

In Pharmaceuticals, the chief executives of both companies in the original choice pair agreed to co-operate.

In a study of this nature, there is bound to be an element of what might be described as plain bad luck and this was the case in the Wholesale/Retail sector: A company with a RR of 80 was isolated as being suitable for pairing with both Katz and Lourie (RR 4) as well as Marshall Industrials (RR 26). First of all, Katz and Lourie declined to give me an appointment - and thus became the first and only outright refusal - saying that they had a "very tight schedule" and therefore could not spare the half hour for interview. A second attempt at gaining an appointment later met with a further refusal together with a comment that they were "very busy". Then Marshall Industrials was placed under judicial management (prior to liquidation) one week before I was scheduled to visit them in Durban.

Meanwhile, the original Wholesaler A (RR 80) had been interviewed and had contributed his data. Extracts from this are quoted in the study.

The Stores sector remained. Here the single low-rater (RR 29) is a fairly small firm, Harrowe's and yet its activities could best be described as those of a departmental store. I therefore had a choice of matching with a company of similar size but different activity, or the same activity but of a much larger size. I obviously chose the latter as data from this management might in fact point to why it has failed to grow in the many years that it has been in existence. It was matched with one of the large store groups (RR 74).

As with Prima, no data arrived from Harrowe's MD. Initially calls elicited promises to write, but then further calls were not returned. Storeman A contributed his data, but there was no-one with whom to pair him.

Table 18 shows the Risk Rating and Market Capitalisation of the final selected sample. It can be seen that in each pair size (as reflected by capital employed) is within acceptable limits of similarity. In most

cases, the low-raters have a smaller capital employment but this trend is completely reversed in the case of the Pharmaceutical pair.

TABLE 18		THE SUBJECT COMPANIES			
Company	Capital Employed (R'000)	RR	Company	Capital Employed (R'000)	RR
Clothing A	3 000	87	Clothing X	2 500	29
Food A	14 000	82	Food X	11 000	3
Steel A	13 500	91	Steel X	9 600	16
Pharmaceutical A	720	97	Pharmaceutical X	1 850	19

Let me at this stage summarise by saying that at the time that a given subject agreed to participate in the study and to record data for it, he had no idea that the company which he headed had been selected on any sort of financial or result basis at all. I in fact told all subjects that the selection of companies had been random and at the same time emphasised that it was the company and not himself that was being studied: I knew nothing about him in his personal capacity and was merely seeking to isolate characteristics of management of the company as personified by himself. Also, no subject was given any idea of what the true purpose of the study was and at no time during interview or subsequently was the word 'role' mentioned.

#### THE DATA

The data which initially came in from the subjects was disappointing. Generally, there was nothing wrong with the time sequencing and in this area, they had followed instructions, but many of the activities lacked essential detail as to the purpose. One example will suffice here. If a subject records "walked to the Bank to see the Manager", one is not sure

whether it is (1) a personal call, (2) an interpersonal or liaison activity on behalf of the Company, or (3) a Resource Allocator activity. With the addition of the three words "about our overdraft" the confusion is removed and it is clearly a Resource Allocator activity.

Because of this type of omission, I had to telephone or re-interview 5 of the subjects. Three of these had to be re-interviewed because I felt that the additional information they had given me over the telephone was not sufficient. Three subjects, Foodman X, Foodman A and Steelman A produced very comprehensive records and it was not necessary to clarify any of their time periods. Foodman X's record resembled Gordon's although it was not as comprehensive.

### Mail Record

One further problem remained before analysis could begin and that was with the mail record. Although I had had the opportunity of analysing Lewis' mail input and output in detail (Table 10) I was certainly not prepared to take this as being characteristic of all managers and further, Gordon and Lewis spent different amounts of time (4% : 8%) on mail activities. What was wanted was a simple (but realistic) and reasonably accurate breakdown of mail activity against which I could cost the time recorded by the subjects.

Attendance to mail is to the manager just that : he does not see it in terms of performing various role functions but simply in terms of performing a single activity, and therefore the records that they sent me simply reflected the time spent without any further detail : detail which was not able to be collected in a study of this nature.

Fortunately, Mintzberg gives a very comprehensive breakdown of both mail input and output by purpose in the Appendix of his study (1973:244-245). Analysis of this record showed that mail input could quite reasonably be apportioned in the percentages of 25% to Figurehead, 50% to External Monitor, and 25% to Internal Monitor. This breakdown ignores 5% of mail input time given to the purpose of 'acknowledgements'. Similarly, mail output could be roughly divided between Liaison and Disseminator with only an 8% error.

TABLE 19

 RELATIVE PERCENTAGE TIME DISTRIBUTION BETWEEN ROLES  
 FOR A SAMPLE OF SUCCESSFUL AND UNSUCCESSFUL EXECUTIVES

ROLE	Clothing man A	Foodman A	Pharmacy man A	Steelman A	High Rater		Clothing man X	Foodman X	Pharmacy man X	Steelman X	Low Rater	
					Mean	SD					Mean	SD
FIGUREHEAD	3,92	1,38	2,20	7,87	3,84	2,89	2,45	12,68	1,68	3,55	5,09	5,12
LEADER	9,66	6,5	4,52	9,88	7,64	2,59	3,50	1,75	1,17	2,52	2,24	1,01
LIAISON	11,72	27,55	5,61	25,07	17,49	10,54	6,31	11,06	7,03	10,65	8,76	2,44
MONITOR	30,43	33,79	35,95	24,5	31,17	4,99	14,30	10,80	11,18	13,0	12,32	1,63
DISSEMINATOR	3,11	5,64	6,48	4,94	5,04	1,43	8,06	5,66	0,58	6,57	5,22	3,25
SPOKESMAN	2,39	7,69	4,52	2,64	4,31	2,45	14,19	5,66	1,17	9,62	7,66	5,56
ENTREPRENEUR	18,90	2,96	10,74	10,41	10,75	6,51	4,73	13,17	4,69	--	5,65	5,48
DISTURBANCE HANDLER	1,91	0,59	4,52	1,06	2,02	1,75	8,76	7,85	4,30	11,17	8,02	2,85
RESOURCE ALLOCATOR	9,81	13,85	19,22	10,95	13,46	4,20	25,59	23,00	65,81	26,63	35,26	20,43
NEGOTIATOR	8,13	--	5,65	2,64	4,11	3,54	12,09	8,34	2,34	16,27	9,76	5,91

TABLE 20

## ANALYSIS OF MONITOR ROLE ACTIVITY FOR A SUCCESSFUL AND UNSUCCESSFUL EXECUTIVE SAMPLE

	Clothing man A	Foodman A	Pharmacy man A	Steelman A	High Rater		Clothing man X	Foodman X	Pharmacy man X	Steelman X	Low Rater	
					Mean	SD					Mean	SD
TOTAL MONITOR ACTIVITY %	30,43	33,79	35,95	24,50	31,17	4,99	14,30	10,80	11,18	13,06	12,33	1,64
TOTAL SOLICITED	25,60	30,24	30,30	17,62	25,94	5,97	13,81	10,40	11,18	11,51	11,72	1,47
TOTAL UNSOLICITED	4,83	3,55	5,65	6,88	5,23	1,40	0,49	0,40	--	1,55	0,61	0,66
INTERNAL SOLICITED	10,33	24,79	12,55	6,64	13,55	7,86	8,38	7,77	8,99	8,25	8,34	0,50
INTERNAL UNSOLICITED	3,39	2,96	2,26	6,0	3,65	1,63	0,49	0,22	--	1,03	0,44	0,44
TOTAL INTERNAL	13,64	27,75	14,81	12,64	17,21	7,08	8,-7	7,99	8,99	9,27	8,78	0,55
TOTAL EXTERNAL	16,75	5,76	21,15	11,86	13,88	6,61	5,43	2,81	2,19	3,78	3,55	1,41
TOTAL LEADER ACTIVITY	9,66	6,5	4,52	9,88	7,64	2,59	3,50	1,75	1,17	2,52	2,24	1,01

Thus, when a subject recorded "attention to mail", "morning mail", or "dictation", "general correspondence", this time was costed to the roles according to these respective percentages.

### Analysis of the Data

The data was analysed in exactly the same way as Gordon's and according to the same criteria. Firstly, starting and stopping time of each day was noted, the record checked for time gaps, gross and net times calculated, and finally the activities were apportioned to the roles. Where subjects recorded after-hour work activities these were included in the recorded time, but office work by 2 subjects on Saturday morning was not included so as to make the diary record a uniform 5-day study for all subjects.

No additional assumptions about the roles had to be made and any difficulties experienced during the analysis stage are discussed in the next Section.

The results of the analysis for all subjects are presented in composite form in Table 19. Table 20 analyses the Monitor role activity for each of the 4 subjects and again, lists the total Leader activity for comparison.

Perhaps I should state quite categorically at this stage that the results do not show an absolute but a relative time expenditure between the roles: I cannot contend that any given subject spent say 20% of his time solely gathering information (monitoring) but only that 20% of his activities were initiated for that purpose. Also, the results of the pilot and main studies are not directly comparable as the method of data collection is different.

### Statistical Analysis

A Hotelling's  $T^2$  was first of all performed on the results. This produced a  $T^2$  value of  $408,045$  which was found to be significant at the 0,05 level.

$$T_{\text{calc.}}^2 = 408,045$$

$$T_{\text{crit.}}^2 = 17,361 \text{ at } 0,05 \text{ level}$$

Because the  $T^2$  was significant, the individual t-scores were then calculated:

TABLE 21	CALCULATED t-SCORES FOR THE 5 INDIVIDUAL VARIABLES		
** Variable	$t_{\text{calc.}}$		df
Total Monitor	1	- 6,10	3
Internal Unsolicited	2	- 5,36	3
Total Internal	3	- 2,21	3
Total External	4	- 3,08	3
Total Leader	5	- 6,23	3

Now we have adequate grounds for making a priori assumption concerning the influence of variables 1, 2 and 5. Thus here the  $t_{\text{calc.}}$  was compared with normal student-t tables :

---


$$* T^2 = 408,045 \quad f = 27,203 \quad df = 5, 2$$

\*\* The variables are extracted in order from Table 20 - numbering does not correspond to the hypotheses.

TABLE 22		COMPARISON OF t-SCORES FOR 3 INDEPENDENT VARIABLES		
Variable	$t_{\text{calc.}}$	df	$t_{\text{crit.}}$	level of signif.
1	- 6,10	3	3,18 at 0,05	0,01*
			5,84 at 0,01	
2	- 5,36	3	3,18 at 0,05	0,05
			5,84 at 0,01	
5	- 6,23	3	3,18 at 0,05	0,01
			5,84 at 0,01	

However, we have no such grounds for making these assumptions about variables 3 and 4, and so we are here obliged to square the calculated  $t$  values and then compare them to Hotelling  $T_{\text{crit.}}^2$  values from tables in order to maintain an overall level of significance at the chosen value :

TABLE 23		COMPARISON OF SQUARED t-SCORES FOR 2 INDEPENDENT VARIABLES		
Variable	$t_{\text{calc.}}$	$(t_{\text{calc.}})^2$	$T_{\text{crit.}}^2$	level of signif.
3	- 2,21	4,88	17,361 at 0,05	<u>not</u> signif.
4	- 3,08	9,49	17,361 at 0,05	<u>not</u> signif.

\* The  $t^2$  values for these 3 variables are all significant at the 0,05 level.

Concerning Hypothesis 2, we are wanting to show that a successful Manager will indulge in more Monitor and Leader role activity than the unsuccessful will.

Now it has been shown that there is a significant difference between the means of S and US in regard to both Monitor and Leader. We therefore now want to show that when Leader and Monitor activity of the S group are compared there will be significantly less of a difference between these means than for the US group.

TABLE 24		COMBINED LEADER AND MONITOR t-SCORES : FOR S AND US SAMPLES				
Total Leader	Total Monitor	t <sub>calc.</sub>	df	t <sub>crit.</sub>	Signif. level	
9,66	30,43			3,18 at 0,05		
6,50	33,79	6,37	3		significant at 0,01	
4,52	35,95			5,84 at 0,01		
9,88	24,50					
3,50	14,30					
1,75	10,80	26,12	3	3,18 at 0,05	significant at 0,01	
1,17	11,18					
2,52	13,06			5,84 at 0,01		

### Discussion of Statistics

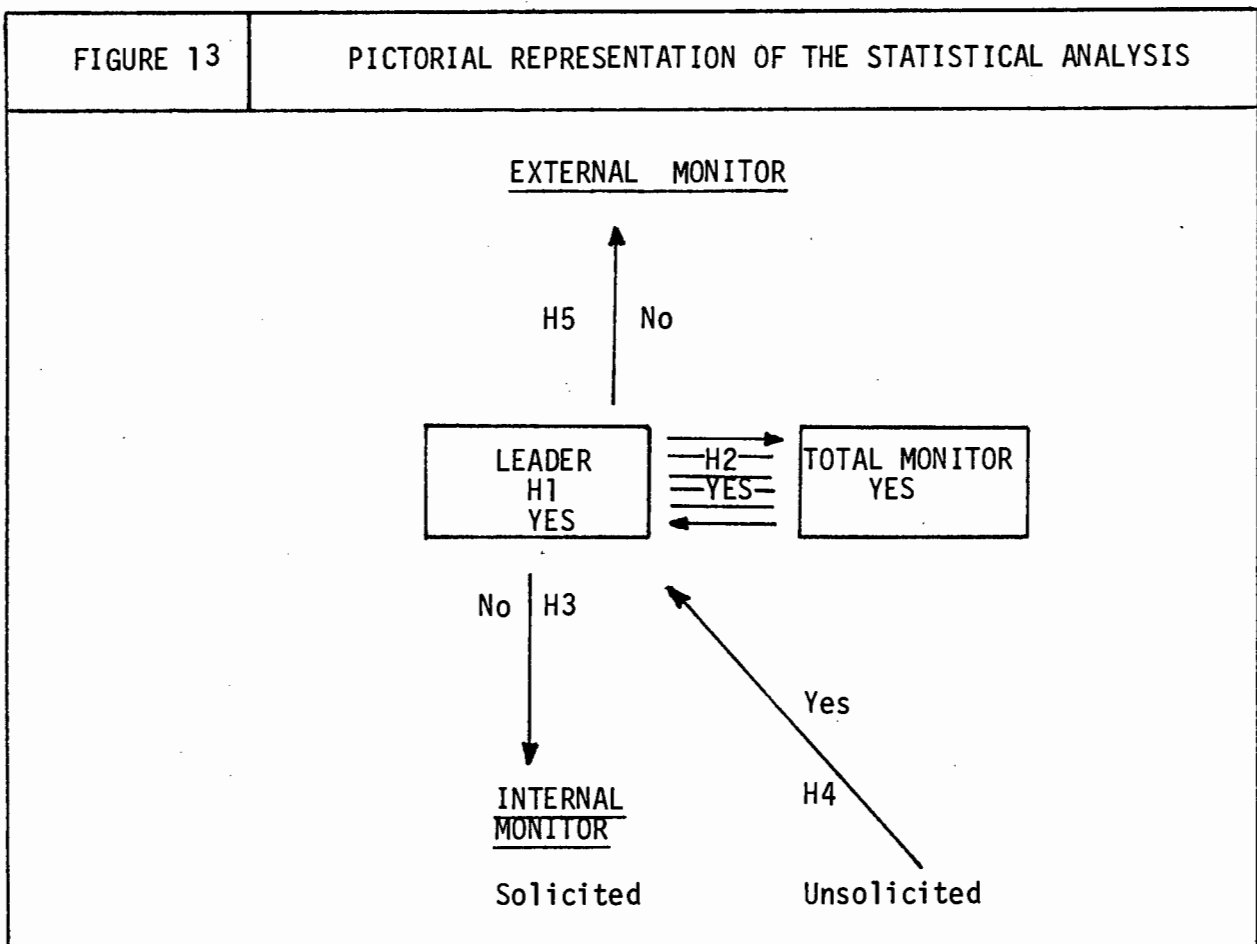
The differences between the means of the Leader scores have been shown to be significant and on the basis of this result Hypothesis 1 is accepted.

The validity of Hypothesis 2 is very strongly confirmed: not only is the combined Leader and Monitor mean significantly less for the S group, but over 4 times so. On the basis of this result the link between Monitor and Leader roles can be taken as well established.

Within the Monitor role we find support for the significance of the unsolicited input (H4), but not for that of either total internal (H3) or total external (H5).

But even this supposedly 'negative' result has two strong meanings, the one absolute, the other implied:

Remembering that Total Monitor activity is significant, by logical deduction the only difference can be in the unsolicited internal component, and so indirectly we find support for H4. (Figure 13)



If External and Internal monitoring components are not significant, but overall Total monitor is, then the implication is that the S and US groups are indulging in a different type or quality of monitor activity. Following from this the inference would be that the successful manager has learnt to use his time more efficiently - to select that information which is important or crucial to him, and further to so conduct himself (Leader role) that he has easier access to information which he needs (unsolicited). Again a dynamic is indicated. The unsuccessful manager has not learnt this.

We move now to a more full discussion of the results. Additional data in the following Chapter is presented there merely for convenience.

PART FIVE

DISCUSSION AND IMPLICATIONS

CHAPTER 13THE ROLE OF SUCCESS  
(and non success)INTRODUCTION

A cold analysis of results and a statistical indication of their validity does not answer the primary question of why it is that these groups exhibit such different role profiles.

I now propose to introduce each of the subjects, talk briefly about their work characteristics and to provide some information on their organisational environment before moving on to an isolation of their commonalities.

They are all very different men and an individual description will I believe help the reader to understand the role behaviour of each man. Although the analysis was not done in this order (see Box below), the descriptions of the unsuccessful group are given first as this is useful in providing a 'backdrop' to understanding the reasons for the successful executives performing so very differently in their role functions.

Each subject has been given a title. This is without praise or prejudice: it reflects what I believe best describes the dominant characteristic of each man.

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Whole numbers are given in the Text. The exact percentage figures appear in Tables 19 and 20.

### SCORER RELIABILITY

It is usual in a study of this nature - especially where an instrument is being developed - to have a number of people score the data so as to ensure accuracy of the results obtained. This was not done.

The most important reason for this was the question of confidentiality. Each subject had been given an absolute assurance that not only would his Company's identity not be made known, but that the personal information which he provided would be treated with discretion. I have tried to honour that commitment.

Further, although the scoring was done against a list of criteria, it requires not only a certain knowledge of management, but also practice. This was made clear to me when I re-costed Gordon's data after a break of some 11 months and found that I had to begin the analysis almost from scratch.

It was not possible to score blind: The data was in most cases provided on Company letterhead, I had discussed and rediscussed activities with each subject (see Text) getting further information, and by the time that scoring commenced I knew the data fairly well.

There was thus danger of bias creeping into the scoring. Recognising this, I waited until all the results were in before doing any scoring at all: only when it became evident that the Storeman was not going to contribute did I begin. All scoring was then done fulltime over a period of 6 days and randomly across S and US samples and between company pairs.

I strove to maintain objectivity and cost the activities according to the assumptions made (Appendix 2). In doubtful cases, I always 'let the list decide' - I was after all looking to define what is and 'negative' results could have been just as interesting.

As it turned out, the data support the main hypothesis. Perhaps after reading the descriptive section on each subject, the reader will understand why.

Clothingman X : The Pretender

After an unhurried 2-hour initial interview, I was surprised to receive very brief and inadequate data from him. Consulting my notes, I found that in the 2 hours that we had spent together, he told me a lot about himself and his philosophy, and a lot about his firm, but very little about his own involvement in his firm. This was curious, as was the fact that he had given me the impression that he was quite happy to go on chatting all afternoon, but at the same time had appeared to be reserved and aloof.

Arriving for the second meeting, I was ushered into the office where the senior managers had been having lunch at a table in Clothingman's office. As they filed past me, I noted the absence of conversation between them and the glum look on their faces.

His Monitoring certainly appears to be adequate - indeed impressive - until one begins to realise that he is the detailed information clearing-house for the whole organisation. He sees every peice of mail which comes in, notes the value of each cheque and a daily report on production is put on his desk: "I like to know what is going on." "I see every telex that comes into the factory - it is given to me." Processing this mail input does not take very much of his time (an estimated 30 minutes per day), but then each piece of mail generates an instruction to one or many of the employees - and he is just as likely to issue an instruction on payment periods to be allowed a customer as he is to query the price of one particular item on an order. Files in his office list all purchases of raw material, production figures, orders placed, debtors and outstanding accounts, in fact all conceivable type of information.

His senior subordinates are given very little discretion in their decision-making. Members of the "executive team" discuss every "important" decision with him - which means almost everything.

His Monitor activity of 14% is the highest of the US group but is all totally inwardly-directed at this detail: 9% is internal and only 5% collected from outside. And as a result of the time spent issuing instructions, 26% is spent in Resource Allocation.

There are no clearly-defined areas of authority. Everything is discussed with everybody and the overlap of responsibility as shown on the organisation chart (Figure 14) is considerable.

Entrepreneurial role activity is low and attempted with inadequate information. Expansion into a new market area is discussed at one meeting and "we were not sure of the price brackets that we should market into and we then discussed the fabrics that we thought might be applicable for us to use and we then went on to discuss in some detail the type of marketing measures we may have to take to get in there." There is no preparation, information gathering, detail of competitor's market share, or similar much-needed information available.

How then are decisions taken? Well the guessing is replaced eventually by: "obviously you are advised by your sales directors but then I direct them from the angle of deciding price brackets," and "I have to direct them into the avenues into which I want them to go as far as design and colour are concerned."

Naturally an organisation run on these lines with decisions being taken on inadequate information inevitably has problems and Clothingman has his fair share. He handles disturbances on, inter alia, the late delivery of fabric, quality control and delivery of garments to customers, production scheduling, the sale of surplus (unsold garments), and as an inevitable consequence of all these, financial pressures.

The description of 'pretender' is warranted on a number of counts: He pretends joint decision-making ("you can't run a factory as a one-man show, it is not possible to do that.") but he is in fact an autocrat. Secondly, he pretends to want to "keep contact" by embarking on tours around the factory which "I try to get done at least twice a day." whereas in reality these tours were confined to two half-hour activities over the 5 day period. His Leader

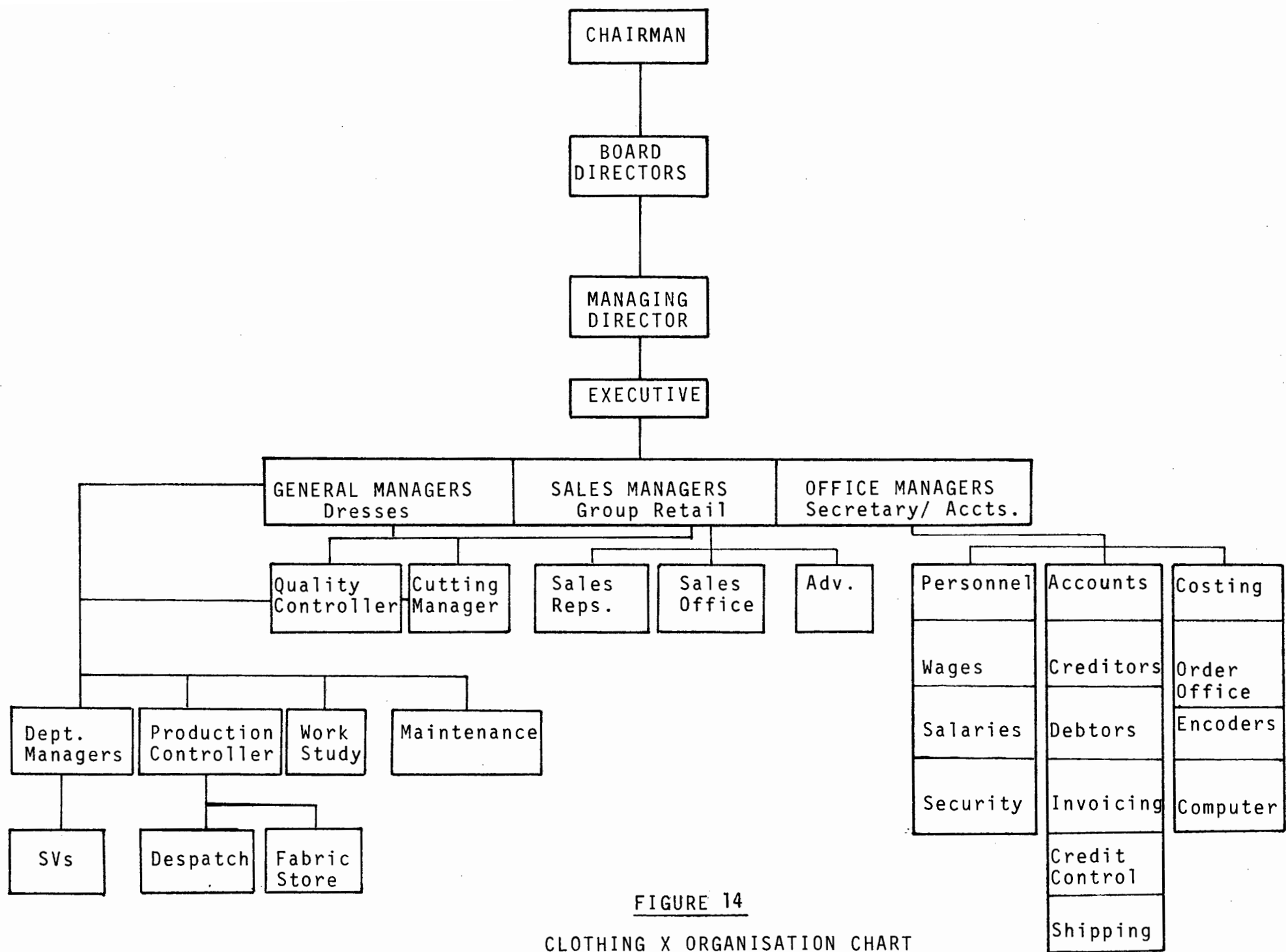


FIGURE 14  
 CLOTHING X ORGANISATION CHART  
 (As supplied by the Company)

role activity of only 3,5% is reflected in his unsolicited informational input (0,5%), and like our friend Lewis, he disseminates opinion (8%) and spends a large amount of time (14%) in Spokesman (lobbying) activity.

#### Foodman X : The Abrogator

This man's role activity is in many ways very similar to Clothingman's but the personality of the man is very different. Just as Clothingman talks too much, Foodman is the quiet silent type.

But there is a similar lack of defined responsibility and no measure of authority given to subordinates. As a result, 23% of time is spent in Resource Allocator - mainly giving instructions and authorising intended actions. Notwithstanding this inadequate base on which to run the present operations, Entrepreneurial activities include grandiose schemes such as the setting up of a factory in a foreign country and time spent in this role (13%) is coupled to the 8% spent negotiating to put it into operation.

Monitoring is largely confined to internal operations (8%), is of course almost totally solicited, and confined to the miniscule :

"I visited the label store and the label office to inspect and check up on the surplus and current label stocks."

Thirty minutes were spent on this activity and (worse than Clothingman) this subject does not even issue instructions for this detailed information to be delivered to him : He goes to find it. He records that he "walked down to the accounts department to enquire about the progress of the monthly accounts from the accountant."

Leader role activity was confined to two instances in the 5 days of study: he spent 15 minutes counselling an "apparently" sick employee and 25 minutes criticising the work of another subordinate.

This man is so inner-directed and cut off that he records placing a "call to the Chairman's Secretary to keep up to date on the \*holding company gossip".

One wonders what prevents him from phoning the Chairman himself.

#### Pharmacyman X : The Autocrat

Earlier I reported ensuring that data was collected from the chief executive of each company. Now I was aware that Pharmacyman had a Joint MD. I asked for an organisation chart and was particularly interested in this case to see the split of responsibility before analysing the results. There was none. "But I can tell you" said Pharmacyman. He spoke and I drew. I checked that the representation was correct. It was. This chart is reproduced in Figure 15. It shows inter alia, no manager for the chemical factory, an incomplete split between production and marketing (5 sales reps. directly responsible to the chief executive), and despatch responsible to finance. Altogether a completely unorthodox structure.

This results in a rather comical - but nevertheless tragic - situation of the chief executive of a public company meeting with 9 (chemical) factory workers in his office for an hour on each of 4 occasions during the 5 days.

A total of 11 hours was spent selecting ranges of new products without the sales manager or the Joint MD being present. He therefore cuts into the other man's area of responsibility.

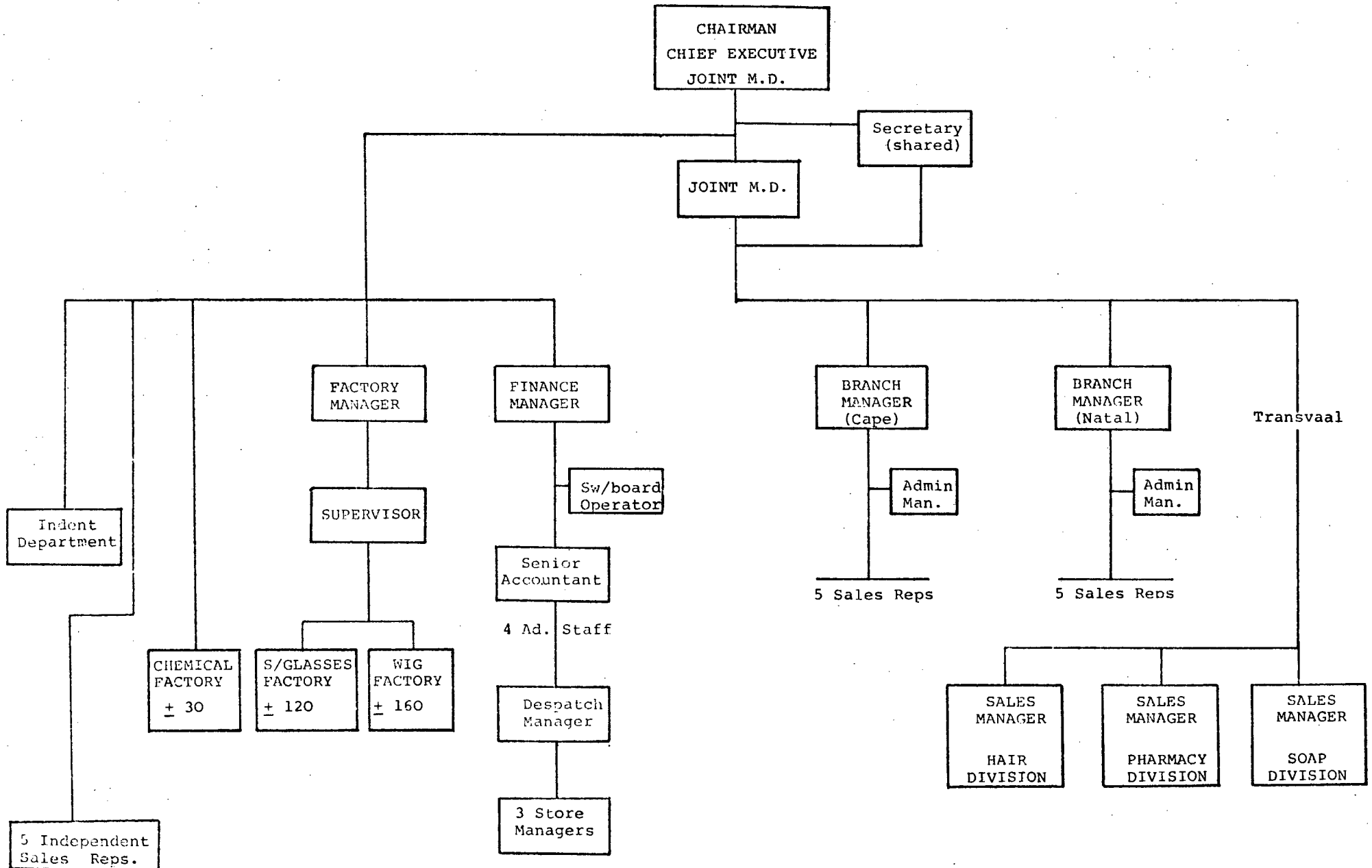
Pharmacyman has an additional quirk: not only does he open all the mail ("all post is centralised through me"), but he goes through it in front of an audience who are then given their instructions. Normally these people are the finance, indent and production managers. Mail input time for the week was 2 hours.

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\* This Company has a separate listing but is part of a larger Group.

FIGURE 15

PHARMACY X ORGANISATION CHART



As a result of these activities and the inadequate structure, his Resource Allocator time is an incredible 66%, mainly spent issuing instructions and programming the work of junior employees.

This preoccupation with the lower levels of the organisation is mirrored in his Monitoring activity which totalled 11%. Nine percent of this time is spent on internal information gathering which is typified by one 2-hour activity which consisted of going to inspect the outstanding accounts and his subsequent statement: "I tend to follow it all the way through from sale to cash collection. A great deal of my time is taken up in this."

Contact with the Joint MD was confined to one lunch-hour discussion during the week. Then how with this incomplete and overlapping split of responsibility is co-ordination of this organisation maintained? "We have a formal meeting once a month."

Is this man an autocrat? Yes, self-confessed: "I am forced to run this place as an autocrat. I do everything."

#### Steelman X : The Report Writer

This subject is a somewhat colourless man: bland. In many ways, he resembles Foodman X and their time spent on Resource Allocator, Disturbance Handler, Liaison, Disseminator, and total Monitor as well as Leader varies only a few percentage points. The split between internal and external Monitor is similar.

There is though a difference in the type of activity that constitutes the Resource Allocator time. Steelman X loves writing reports. In the 5 days he spent 285 minutes spread over 10 deskwork sessions in this activity. This accounted for just over 16% of his time.

A completely neglected area is that of Entrepreneur. There was not one activity which I felt could be allocated to this role. There was never any talk of any sort of improvement project and (indirectly) I checked this

with him by telephone.

Also like Foodman, he appears to be a little lost and out of his depth. His activities are mainly directed at holding together what there is rather than improving upon it.

### The Successful Men

#### Clothingman A : The Entrepreneur

This man's whole organisational life consists of improvement projects and he seems to be constantly asking himself if what he has cannot be made better or what else could be done. The innovative programme is total and ranges through simple reallocation of workload to "improve the control of administration", consideration of a new trimming on a dress, to the introduction of a completely new garment range.

One activity concerned a decision to be taken on an order from a customer for a new type of garment. I asked him to expand on the purpose of this meeting: "Well it was a request for a new garment and so I was trying to decide 'Will it work?' 'Is it practical?' and then I decided 'Yes, we will go ahead'."

All this entrepreneurial activity (19%) of course requires adequate information, and the total monitoring of 30% has a higher input from outside the organisation (17%) than from within (14%).

But the internal functioning of the organisation is not neglected in this quest for new ventures sought on the outside: responsibilities are delegated as far as possible and even then decisions are taken jointly. After one activity he reports: "I always consult my man before an occasion like this." And so the monitoring is linked to the entrepreneurial decision role and at the same time motivation is increased.

FOREIGN CONTROL

Two of the Companies in the sample are subject to Foreign control. One is a wholly-owned subsidiary of a United States Corporation and the other has 52% of its shares held by a British group.

The question then arises: To what extent are these companies masters of their own destiny, and following from this, how much of the chief executive's decision-making discretion is predetermined by parental policy?

I asked these executives how much of their policy-making was dictated from overseas. The 'British' executive replied: "Not at all. We are completely autonomous."

The U.S. subsidiary executive's reply was somewhat more lengthy:

"We are treated as being completely autonomous as far as day-to-day running of the firm is concerned. However, when a major decision has to be taken such as a new product launched then we have to submit plans for overseas approval. Thus any real material decision requires authorisation. But I'm looked to to propose these changes. They are not imposed from America." (underlining mine)

Writing reports for head office and other activities such as instructing an auditor to redraft the balance sheets because certain allocations are not allowed in U.S. Law cost this executive 2 hours of his time in the 5 days of study. He summarises his position as follows:

"It is a case of confidence building - when I started with the Company some 3 years ago everything had to be approved by them. Nowadays, I am left more or less to my own devices."

I therefore conclude that this factor did not materially affect the results.

Specifically, the Leader role is commonly performed by means of tours through the factory. But unlike Clothingman X who neglected this aspect, Clothingman A undertook tours on 8 occasions in the 5 days. The average duration was 33 minutes and they alone accounted for 13% of his time. The purpose?

"I go into the factory at least once a day - sometimes twice. The purpose is twofold. One must keep a finger on the pulse - find out what is happening. Also, the staff must see that one is taking an interest." \*

The total Leader role time of 10% can be compared with a very high unsolicited input of 3% and (because of the delegation) Resource Allocator at 10% and Disturbance Handler of 2% are both extremely low.

#### Foodman A : The Public Relations Man

This successful manager represents a profile which can be compared to Clothingman A's for its similarity in a number of respects and its absolute difference in others. Like Clothingman, Foodman presides over an organisation in which responsibility has been delegated, matters run fairly smoothly and Disturbance Handling is limited to less than 1%. His Resource Allocation of 14% is slightly higher but is confined to 4 rather lengthy activities during the course of the study.

Monitor activity is high at 34% and Leader time of 6,5% brings him 3% of unsolicited information from within the Company (the total internal being 25%).

There the similarities end, for Foodman A uses the remainder of his time not in entrepreneurial activity (limited to 3%), nor in negotiation with outsiders (nil) but in an inordinately high 28% spent performing the Liaison role. He plays golf with customers, entertains them to lunch, and to dinner. Perhaps negotiation takes place on the golf course but it was not recorded.

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\* Tour time reported by subjects was split equally between Leader and Monitor role.

We notice, though, a defect because the high Liaison activity only results in 5% of Monitor activity obtained from outside. We could say of this man then that in the absence of a very strong number two subordinate looking after improvement projects, there is a danger in the medium and long term of overall results obtained by the firm declining - precisely because the variety of his outside role performance is not great enough.

#### Pharmacist A : The Investigator

Scanning is epitomised in this subject. He investigates everything inside and outside the organisation all the time. He lives on a diet of information. Like Clothingman, he is not satisfied to maintain the status quo but is engaged in a number of improvement projects (11%) and his external Monitor input (21%) is higher than internal.

However, the organisational functioning is also not neglected. Delegation is not quite as much as for the other successful subjects and he has to spend 19% of his time in Resource Allocator - mainly telling people what to do. This is as a direct result of his quest for information and his "follow-up system" : Information on a certain subject is scanned for, disturbances are dealt with (5%), and a reminder is put in a follow-up folder to again be investigated on a particular date. This invariably results in a further meeting with the subordinate to solicit whether the matter has in fact been dealt with (30%) and inevitably a further instruction (Resource Allocator) results:

"Whenever I pick up a problem I discuss it with the staff member concerned and then diarise it for a forward date and check with them that the problem has been satisfactorily settled."

Pharmacist is more controlled and disciplined in apportionment of his time than the other 3 successful executives. Meetings wherever possible are scheduled and when unscheduled, they are treated as if they were scheduled insofar as he makes himself completely unavailable and devotes his whole attention to the problem at hand. Once it is dispensed with, he goes on to the next thing. There is therefore far less brevity, variety and

fragmentation in his working day as a result of this discipline which he imposes upon himself. He feels that working like this enables him to be "more efficient."

He always begins and ends his day with a mail period, messages which come in whilst he is busy are accumulated and then dealt with as a block and, excepting for one day, he always arrived and left work at the same time.

But his quest for information does not cause him to neglect his Leader role - although at 5% it is lower than the rest of the sample and it has a strong informational component:

"Two of our staff are presently on training courses and I asked them in to find out how they were getting on and generally to encourage them in their efforts."

(Digression: As analysis progressed I became increasingly concerned by the Leader role split. There were a number of activities where the distinction between Motivator and Builder was vague. The above example - counselling a man about his training programme, illustrates this dilemma. Although I continued the split analysis, as I cannot be sure of its validity or accuracy, the reported results are shown as an overall Leader score.)

What this subject does neglect is his Liaison activity. At 6%, it is lower than that for all subjects in the study and was mainly confined to office hours. He reports only entertaining business associates approximately 10 times a year and attending charitable functions approximately 6 times.

#### Steelman A : The All-Rounder

With entrepreneurial role activity time of 10% and Leader activity time of 10%, Steelman resembles Clothingman. Liaison activity is high at 25% but unlike Foodman, this time is not spent with a limited number of contacts for long periods, but rather with a wide variety of peers.

What is perhaps hard to convey to the reader though is the ease with which this man switches activity from attention to seemingly unimportant trivia to larger issues. From outside Boardroom lunch to unsolicited information from his personnel manager on black workers commuting by bus, to inventory level, to revised salary scales for the production personnel, to a new distribution arrangement for post 1980, to :

"Discussed the provision of facilities for the new marketing manager due to commence duties on 1978-05-25 and of the progress on the induction programme for him ..."

all happens in a matter of a few hours. In this he is very much like Gordon. He is interested in everything and everybody at all time.

The total Monitor time of 24% is lower than the other 3 subjects in the successful group, is fairly evenly divided between internal and external input, and yet the internal unsolicited input is an incredibly high 6%. How does Steelman achieve this? After a detailed study of his record I am convinced that the answer can be summarised: By having trained personnel each of whom has specific responsibilities and who are motivated by him. Subordinates bring him information which he reports being of direct use and news of problems already solved by themselves in which they feel he will be interested. Unsolved problems are usually brought to him only when the subordinate has tried and cannot deal with them himself.

Resource Allocator time is approximately 11%, but after coming across the entry that (whilst he was at a meeting in the City): "Secretary received a call from Mr. Smit of ..... which was transferred to the production director in my absence", and knowing that he usually began each day with a brief discussion with his Secretary "regarding the day's activities" and gave her instructions, I further analysed the Resource Allocator role to exclude that time which was spent instructing his Secretary. This was 4%. This left the Resource Allocator time of 7% for all other subordinates. The whole organisation runs like clockwork and Disturbance Handling is a minimal 1% confined to 2 periods over 5 days.

After that brief look at each of the successful and unsuccessful subjects in the study, we can now proceed to some more general statements.

TABLE 25	COMPARISON OF GROSS AND NET TIME WORKED						
HIGH RATERS	Average Times Over 5 Days of Study (Mins.)			LOW RATERS	Average Times Over 5 Days of Study (Mins.)		
	Gross	Net	Gross - Net		Gross	Net	Gross - Net
CLOTHING MAN	471	418	53	CLOTHING MAN	606	571	35
FOOD MAN	540	507	33	FOOD MAN	513	456	57
PHARMACY MAN	583	530	53	PHARMACY MAN	549	511	38
STEEL MAN	588	566	22	STEEL MAN	412	349	63
$\bar{X}$ (mins)	545	505	40	$\bar{X}$ (mins)	520	471	48
HOURS WORKED + LOST	9.05	8.25	.40	HOURS WORKED + LOST	8.40	7.51	.48

THE ROLE OF SUCCESS

Delegation has been defined simply as "the art of getting work done through other people". It is much more than that. It can also be seen as having two major effects: The one is an obvious freeing of a large part of the manager's time because he does not have to attend to needless detail and spend time issuing instructions to subordinates. The other is the creation of a situation where, solely because of the responsibilities entrusted to them, subordinates are motivated. This process is of course carried down through the organisation. Structure is built.

The executive then has time to cast around for new opportunities to keep abreast of what is happening in the outside environment, and to remain informed as to the internal status of his organisation. As important, he then has the time to encourage, train, sympathise with, and criticise. Subordinates become even more motivated. Synergy is at work. \* Growth results.

Now one of the most obvious general findings is that all the managers in the successful group practised delegation whilst it is absent amongst the unsuccessful sample. Thus if this brief reasoning is correct, then logically delegation must underly many if not all the phenomena that we have observed, and further, we should be able to point to specific instances and activities in this study which link these phenomena together. Can we?

When I arrived to interview Wholesaleman, I found that he had prepared some notes. One of the first points that he mentioned was that "I believe in complete delegation with report back by my senior employees to myself. I believe that it is encouraging to them." And Clothingman, in answer to my question of what his general philosophy of general management was, answered:

"I believe it is a question of motivating people. Previously we were run on a semi-dictatorial basis. I am encouraging my staff to take on more authority without referring back to me all the time."

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\* Growth is defined as an increasing ability to deal with the total environment (Schein) not necessarily an increase in size.

The link between delegation and Leader role (motivation) is strong and this is shown up in the results where we see that the successful managers do spend more time in Leader activity (H1). And delegation is not just something that they do, nor is it a belief that they practise. With some there is an actual fear of not delegating. Gordon :

"I am determined to keep this feeling of decentralisation and not to have central head office control. It is a matter of principle and I want to be sure that there is a clear understanding of this. We don't want to break this principle of controlled decentralisation. I don't want to become a centralised company."

The results also show that the amount of unsolicited information that they receive from their subordinates is higher (H4). But is this as a result of increased motivation on behalf of the subordinates as we postulated or not? Is there a link between the Leader and Monitor role?

We saw how Clothingman embarked on regular factory tours "to find out what is happening .... and let the staff see that one is taking an interest." Storeman does this as well "to observe what is going on and talking briefly with members of the staff." And this linking of the motivational aspect of Leadership and the Monitor role via the observational tour was endorsed by yet another man to whom I spoke. A retired executive director of Anglo American, it had been his function to "look after" a number of the Corporations' mines. He recalls :

"Whenever I arrived at a mine I always immediately went into the field to speak to the manager. They were always pleased that I had taken the trouble. Later when we talked in their office I was far better informed about their progress and any problems, and inevitably they opened up and talked to me enthusiastically."

We can therefore quite safely conclude that :

- \* P1. The absence of delegation is inconsistent with the successful management of large organisations.

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\* In this Section a number of statements or propositions are generated by review of the results. Proposition is defined as 'something proposed for discussion, or as a basis for argument.'

None of the unsuccessful group practised delegation and Pharmacist at least is actively and vociferously opposed to it (below). What is the result of this? Two possibilities seem to suggest themselves. Either the manager is forced to spend his time on petty internal functionings and like Pharmacist and Clothingman, to turn his attention inward and to become myopic with regard to the external environment, or like Lewis and Foodman, they do the opposite - they become abrogatory with regard to the internal organisation and spend all their time on unrealistic improvement schemes. I say unrealistic because this latter type finds himself presiding over an organisation which lacks the capacity to deal with present operations let alone to carry the load of implementation of any new project.

The result for both types is the same: part of his environment must be neglected. The time is not spent monitoring (but certainly in the case of the myopic man) has to be spent programming the work of his subordinates and dealing with problems. He just does not have any time to spend monitoring externally, his subordinates are unmotivated and in some cases, frustrated. An increase in problems and a concomitant expenditure of time by the manager solving them are inevitable.

P2. Successful managers spend less time in Resource Allocator and Disturbance Handler role activities than do their Unsuccessful counterparts, and conversely,

P3. An increase in time spent in Resource Allocator and Disturbance Handler roles is indicative of an ineffective manager.

This brings us to the question: which of his roles can the manager delegate?

Mintzberg points to what he calls the "dilemma of delegation" which the manager faces. He has the information, and to delegate responsibility for carrying out the tasks not only must he delegate the usual authority and responsibility but also the requisite amount of information needed by the

EXECUTIVE OPINION

His manner is calm and unhurried as he explains that: "The greatest failing of Managers is that they don't have the time to think." I have no respect for a man who carries home a pile of work every evening. I am not impressed by the Saturday worker. Of course there are always exceptions - such as year-end accounts to be prepared or stock-taking time, but if a man is so overloaded that he can't finish his work during the day, it means that he is not delegating properly - for if his job is genuinely too big for him or he has no-one to delegate to, all he has to do is to say so and more personnel will be appointed.

I will go further than that: "I don't need a man who can't make two hours a day to come in and talk to me."

Wholesaleman (Risk Rating 80)

subordinate to carry out the job. This he must disseminate. His dilemma comes because he must either spend time in the dissemination and have the subordinate carry out the job with inadequate information or do the job himself and spend time that way. The information must always be inadequate because transmission of all of it is too time-consuming:

"Hence the manager is damned by his own information system either to a life of overwork or to one of frustration. In the first case, he does too many tasks himself or spends too much time disseminating verbal information; in the second case he must watch as delegated tasks are performed inadequately according to his standards, by the uninformed." (1973:75)

It therefore follows that skill in the transmission of information is not only going to aid the manager in his delegation, but it is also going to decrease

the 'dilemma' in which he finds himself. Now I can point to no specific instance amongst the successful group where this skill was demonstrated: They all appeared to be good communicators. However we have seen that Lewis is very bad in both his reception and transmission of information. Also, Pharmacyman X speaks in a staccato and clipped manner. Foodman X is at times monosyllabic when speaking but is quite lucid on paper. Clothingman X is extremely verbose but conveys little information which is relevant to the subject under discussion. There is therefore strong evidence that unsuccessful managers are bad communicators. The results of the study tend to support this statement albeit in a negative manner: We can see no meaningful relationship in the amount of time spent in the Disseminator role between the two groups. The means are approximately the same and the only strong variant is Pharmacyman X with his very low score (0,58%). The difference then must come in the quality rather than in the quantity of their dissemination.

P4. The Successful manager is a more skilled communicator or conveyor of information than is his Unsuccessful counterpart.

The interrelationship between the Leader and Monitor roles have I believe been amply demonstrated in the study. Let us for a moment consider what would happen if the manager decides to delegate the Monitor role itself. He would quite obviously be deprived of information needed to make decisions both internally and externally in the organisation and he would lose (because of the interrelationship) the ability to motivate his employees. The result would therefore be very akin to a state of complete abrogation:

P5. Retention of the Leader and Monitor roles by the manager are essential for efficient management: delegation of these roles is the same as abrogation.

I should now like to consider the Leader role a little more closely. In the study we saw amongst the unsuccessful group an example of consistent autocracy and consistent abrogation. Neither of these is present in the

successful group: they appear to adopt a mode of behaviour which belongs to neither of the two extremes. Does this mean that this Leadership behaviour is equidistant between these two points, somewhat in a 9,9 Blake and Mouton style?

Earlier, in evaluating the contribution of the human relations theorists we suggested that the prescription for effective management could include giving orders and generally behaving in a manner which appears to be detrimental to subordinate relationships from time to time, and further posited whether this would force us to advocate a transgression of the strict behavioural science creed that this should never be done.

We find that this is so. The successful manager, in seeking to deal with the changing environmental forces, maintains his balance on the knife-edge by exhibiting behaviour which is appropriate to the given circumstance:

Gordon's monitoring picks up "murmurings" amongst his trainee store managers about working long hours due to late night shopping. He investigates, finds out that the arrangements are in his opinion "extremely fair" and reacts:

"I will not have this Company turned into a trade-union styled operation. We are giving these guys more time off than anyone else .... and they have got to realise this or go to another company."

There is no discussion, no compromise. He just will not (one feels sure) be manipulated. But can this be the same man who has a permanent sub-committee looking at the provision of staff housing, who has tremendous social responsibility, pays top wages to his lower-level employees, and steps in personally because he feels an employee is being treated "insensitively"? It is.

It is also the same man who reported to me that on a particular morning he: "was given hell by my secretary because I had three rows with people before 8.15 a.m." One of these episodes concerned a full-page advertisement

which did not appear as planned to coincide with a store promotion. He had the employee on the carpet and was given the explanation that the advertisement was "late." How did Gordon react?

"Late? I'm not interested in 'late.' Any man with guts and gumption would have gone to see the works manager (of the newspaper) and ensured that the thing got in."

This from a man who has a permanent open-door policy, will always - often at short notice - find time to talk to any employee who cannot get satisfaction from anyone further down the hierarchy, and who has even been known to interview a man with his wife to sort out some personal problem.

The key to understanding Gordon is of course his complete conviction that 'business is people.' He asks his subordinates no more than he is prepared to give and expects no less. In his dealings with them, he adheres to the single principle that "fairness is crucial" (the question of whether he does this out of a true belief in people or not is not at issue). Thus in meeting every situation he weighs up their needs and the needs of others with those of the company, and acts accordingly. As a result his behaviour fluctuates between the widest possible extremes.

I have also suggested that acceptance of the cause-and-effect relationship between productivity and satisfaction would result in periodic authoritative leadership action - provided it is effective - in time feeding back as a positive influence on the human relationships. This, I believe, is true. It is also a somewhat passive way of looking at the dynamic: a sort of 'no harm done if you have to do it.'

I should now like to carry this thought further by suggesting that in cases such as non-performance of a task or sloppy work this is the correct behaviour for the leader to adopt not only from the standpoint of productivity but from motivation as well: If an employee knows that he is guilty, if it is explained to him why, then he expects to be castigated. And not to do so is going to engender in him the same feeling of 'the boss doesn't care' as that which results from complete (and full-time) autocracy.

My argument then is that criticism (if deserved) is just as important as praise. Both are indicators given by the leader that he cares and are thus both positive motivators. How else can one explain behaviour of men such as Gordon resulting in respect, liking, and positive motivation by his employees who also regard him as 'tough but fair.'

P6. The successful manager exhibits a high degree of flexibility in his Leader role behaviour. And the evidence for this is so strong that in contradiction of much accepted behavioural science teaching, I contend:

P7. Inflexibility of leadership style is an indicator of the unsuccessful manager.

So far in the study we have examined a number of reciprocating dynamics of the open system. For instance on the total organisational level outputs feed back to influence input and on the group level we have shown that productivity is linked inter alia with satisfaction. What about leadership? This latter dynamic is said to take place "under the umbrella of leadership" which is always spoken about in the literature as if it were a one-way-top-to-bottom influence ("leadership is followship") and nowhere is there ever any mention of a reciprocal influence. Is this in fact correct?

Simply because of their relative positions of ultimate authority, there can never be an equality of exchange (Gouldner) but if the manager is goal-effective, encourages open channels of communication, guides and motivates his subordinates - in short creates an all-round positive organisational climate - is he not in turn motivated by his subordinates? I suggest that this is true.

Certainly it is lonely at the top where the manager carries the burden of responsibility. But this can be lessened not only by delegation of task but also by support and encouragement which his subordinates give him: the positive dynamic initiated by the manager is reciprocated in appreciation of a personal action taken or report of the result of a prior decision.

Precisely because he is alone he needs the encouragement of this feedback. From whom else can the manager receive motivation to carry on?

Most of this feedback is unsolicited, some the manager invites. Gordon:

"I had a call from Lew and I was pleased to hear that after deep analysis he has decided ....

"I spoke to Roy Waldek to get his result which is really fantastic ... His result figure is absolutely phenomenal ... he is achieving wonderfully."

These two men are Regional Managers and Gordon has no control over the decision of the one or over the financial result of the other: both have the necessary authority and responsibility delegated to them. And yet the information encourages him, and increases his belief in the subordinates concerned and in the way he has managed them. This is yet another example of the successful manager building teams.

The reverse also applies: the manager who either by abrogation or autocracy shuts himself off from his employees not only denies himself access to information but also the encouragement which it often brings with it. He is isolated and the result is at best, despondency. Especially in time of trouble this manager will have no-one to turn to, no 'family' on whom to rely for support. Why then would the literature go on having us believe that leadership from the subordinate's point of view is passive? It is simply not true.

P8. Successful managers receive reciprocal encouragement and motivation from their subordinates via the Monitor role.

Underlying this reciprocal communication and encouragement is a confidence by the manager in his own personnel and a belief in them as people. There is an awareness, a certain nurturing and an overt absence of preoccupation with his own status position: Wholesaleman led me into his office and indicated for me to sit down:

"Notice that we are sitting at a round table .... There must never be present the feeling of superior and subordinate and for that reason the table must always be round."

Steelman emphasises that:

"One also can't afford to become too far removed from the people on the shop floor. You are dependent on the lowest man in the line for your very existence."

And we can also recall Gordon's words of "in a Company such as ours relying on dedication, loyalty, and enthusiasm."

One is almost tempted to postulate that there could be a positive correlation between the amount of time spent talking to people about people (not direct task) problems and success.

This quite naturally brings us to the method of decision-making by the successful manager. In essence this is done jointly. There is consultation, in many cases participation, even though the final decision may be taken by the chief executive himself. Delegation is carried out to the extent that the decision-making is shared. Clothingman:

"This was a joint decision as to what we should offer him (customer). I always consult my man before an occasion like this."

P9. Successful managers are team builders.

No analysis of the content of the Entrepreneurial role was made, but in description of the subjects we saw several instances of what could be termed unrealistic or grandiose schemes. The successful groups spent time in investigating various improvement projects which were controlled and compatible with the total circumstances of their organisations. The Successful managers' time in this role was approximately twice (11%:6%) that of their counterparts. They are thus distinguished by a difference in both the quality and quantity of this role activity.

P10. Successful management cannot be sustained without decision-making performed in the Entrepreneurial mode.

THE UNSUCCESSFUL : A BRIEF COMMENT

In starting this Section with a discussion of delegation we have of course begged the question: Why don't the unsuccessful managers delegate? And from this flow a number of others: Are they aware that delegation is one key to solving their problem? If so, do they choose not to delegate (and if so, why?), or do they try unsuccessfully and find themselves unable to do so? In that case, what is the fundamental cause of this disability?

The study is certainly not directed at answering questions such as these, but a number of remarks made and incidents noted during the course of the study have a certain coherence which I believe suggests a common failing amongst the unsuccessful group.

Firstly we can point again to Lewis' communication disabilities which are shared by the 2 autocrats, Pharmacist X and Clothingman X - the one curt and the other loving the sound of his own voice. Both autocrats, and both their organisation charts show (inter alia) a situation which can be described as one where there are 'too many supposed chiefs and too few Indians'. Pharmacist has given the title of 'manager' to everyone in his organisation. There is also a certain preoccupation with status: Clothingman X "chairs" every meeting.

Pharmacist X writes and says: "but as I warned you, my span of control is too large and I am involved in more detail than I need." He then reports spending (as we have seen) two hours going to the credit control department to personally go through the debtors' ledger.

What motivates Foodman (whom we should remind ourselves is the chief executive of a public company) to walk to the Store (again personally) to check on the number of labels which are in stock? Behaviour such as this must surely result from distrust and an absence of belief in people - an incapacity to rely upon others. Pharmacist X:

"I find delegation impossible. It is a theoretical exercise which exists on trust between the participants. This I find very hard to achieve. You can't delegate without retaining sufficient control."

The last part of this statement is I suggest a pure rationalisation for the fact that he cannot bring himself to trust others and he knows it.

On a particular morning I walked into Lewis' office and as usual he was just finishing the newspaper. He said that he had gone to watch tennis the night before but that it had been rained out. I remarked that I knew and indicated that there was a picture (large with caption on page 2) in the newspaper. His reply: "Oh, is there? I never look at pictures. Funny."

Now if the selective perception of this man is such that he can completely ignore the informational input of a large newspaper picture and concentrate on the fine print in the Smalls, how much does it affect his overall Monitoring ability? And being an intelligent man, he almost certainly knows that not studying photographs (paying attention to part of his environment) is cutting him off from this valuable information.

Lewis says: "Anyone can subvert me." (which they can), Foodman X writes on his questionnaire that he believes the single factor which would help him to be more effective would be "aggressiveness" (which is true) and Pharmacist in answer to the same question, writes: "a larger net profit before taxation."

May I merely state that there is strong evidence that each of these men is aware of his deficiencies, but they also possess an inherent inability to compensate for them.

GENERAL SUMMARY

One striking general facet of the results is that although the subjects were carefully selected and matched for industry size and sector, the role profile of any given man bears absolutely no relation to the other of his industry sample pair. Rather, each subject in the group is more like the others within the same successful or unsuccessful group. Why is this?

If we look at the 3 role groupings in the set, Interpersonal Competence and Decision-making ability can be seen as characteristics which belong to the man and are largely independent of his industry. These 2 sets of characteristics can thus be thought of as being universal.\*

This leaves the Informational roles which can be regarded as specific. But these roles can be divided into information gathering (knowing what is important and how to get it), possession, and implementation (knowing what information to disseminate: what must be built into decisions and how to do it.

Now a successful manager new to an industry lacks only the possession of the information specific to his own sphere of operation in that organisation, whereas an unsuccessful manager who has been in a firm for years and possessing all the relevant specific knowledge still will not know how to go about using it. He remains incompetent.

Above we have seen that this competence largely rests upon the Leader and Monitor roles and so we can therefore postulate:

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I thank Dr. Dawid Gouws for suggesting this terminology.

P11. Successful managers have more in common with others of their own kind in different industries than with their unsuccessful counterparts in the same industry sector, and

P12. The ability to manage successfully is a universal general characteristic which depends more on the behavioural characteristic of the man than on the possession of specific information.

P13. The role behaviour of successful managers is largely independent of technology, and thus

P14. The key to our further understanding of successful management lies in research which concentrates on isolating their similarities and not their differences.

Chapter 14 attempts a synthesis of all the empirical work in terms of communication channels in the organisation. Implications of the study are considered in Chapter 15.

CHAPTER 14STRATEGY AND STRUCTURE : A CERTAIN SYNTHESIS

In reviewing the empirical school earlier I pointed to the diverse number of seemingly unrelated pieces of data before sketching a tentative dynamic between them. We are now in a 'worse' position for, having made dents in several managerial myths, the task is to bring about a synthesis to the findings. Brief consideration of two views of the organisation, the first empirically based and the other a conceptualisation would here be useful:

Michael Maccoby is a clinical psychologist trained by Erich Fromm. In 1977 he turned his attention from more conventional pursuits to an analysis of 250 New York executives whom he observed and interviewed. As a result he formulated a picture of a new kind of successful manager who was not like Whyte's (1956) security-seeking Organisation Man nor the archetype fearless entrepreneur ('Jungle Fighter'), but a man who "best fits the leadership needs of the organisation." This manager is competitive, innovative, a builder of teams who is fast-moving and flexible. Maccoby calls him the Gamesman:

"The modern gamesman is best defined as a person who loves change and wants to influence its course. He likes to take calculated risks and is fascinated by technique and new methods. He sees a developing project, human relations, and his own career in terms of options and possibilities, as if they were a game. His character is a collection of near paradoxes understood in terms of its adaptation to the organisation requirements. He is cooperative but competitive; detached and playful but compulsively driven to succeed; a team player but a would-be superstar; a team leader but often a rebel against bureaucratic hierarchy; fair and unprejudiced but contemptuous of weakness; tough and dominating but not destructive. Unlike other business types, he is energized to compete not because he wants to build an empire, nor for riches, but rather for fame, glory, the exhilaration of running his team and of gaining victories. His main goal is to be known as a winner, and his deepest fear is to be labelled a loser." (1977:100)

The Gamesman then actually precipitates win/lose situations and has no desire for approval of authority but for power.\* ("I experience power as not being pushed around by the company; it's a kind of freedom"). At the same time he is flexible and supportive of his fellow worker and subordinates: He is "driven" to promote winning teams - providing that he can be its leader in order to create his own power base within the organisation. This of course requires delegation: Altogether a not very different picture from a Gordon or a Clothingman or a Steelman.

The findings of Maccoby are also not very different from the conceptualisation of Schumacher who sees the large organisation divided up into semi-autonomous units which he calls 'quasi-firms', each having a large amount of freedom in order to give the greatest possible chance to creativity and entrepreneurship:

"The structure of the organisation can then be symbolised by a man holding a large number of balloons in his hand. Each of the balloons has its buoyancy and lift, and the man himself does not lord it over the balloons, but stands beneath them, yet holding all the strings firmly in his hand. Every balloon is not only an administrative but also an entrepreneurial unit. The monolithic organisation, by contrast, might be symbolised by a christmas tree, with a star at the top and a lot of lights and other useful things underneath. Everything derived from the top and depends on it. (In this case) real freedom and entrepreneurship can exist only at the top." (1974:204)

And if I can at this stage recall just one of the many propositions contained in James Thompson's 'Organisations in Action':

"Under conditions of complexity, when the major components of an organisation are reciprocally interdependent, these components will be segmented and arranged in self-sufficient clusters, each cluster having its own domain." (1967:P6.4) (underlining mine)

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The whole concept of power has been subsumed throughout. This is a serious flaw, but a necessary one: Consideration of this very important input to managerial functioning is completely beyond the scope of this study.

This postulate is confirmed by Maccoby's finding that entrepreneurship - far from being unnecessary in the organisation - is possessed and practised at several levels in the hierarchy. But this should hardly be surprising remembering that our successful managers in practice delegate, decentralise influence, practise joint decision-making, and therefore must require of their subordinates that they introduce new ideas into their job functioning and not merely slavishly follow a pre-planned path.

If, as all the empirical evidence suggests, this is the method by which strategy in an organisation is successfully implemented, then there must be two major effects both of which go largely unaccepted in the traditional literature: The communication patterns within the organisation will be radically altered and structure will not follow the normal hierarchical form.

The Successful manager then does far more than simply delegate authority down the vertical line in order to please himself. He is a team builder. He creates a structure of interlinking communication networks - clusters of subordinates, loosely structured, which, like the environment in which the firm operates, are constantly changing. In this way both he and his firm can better deal with the results of strategy implementation which feed back to the organisation and are monitored by him. Structure of the successful firm is thus characterised by plasticity.

How are these teams organised? Galbraith (1973) advocates 'slices' across traditional organisation chart lines, and in his later work 'Organisation Design' develops this notion further by stressing that the task force is a temporary group which exists only as long as the problem remains. Thereafter it disbands. Operating formally or informally these decisional units "remove problems from higher levels in the hierarchy" (1977:116). They are therefore a natural follow-on of traditional delegation.

The picture of structure which we are building up is very much in keeping with Pfiffner's (1960) conceptualisation of 'Communication Overlays.' But exactly how is communication related to structure? After citing the work of March and Simon (1958) and others, Pfiffner equates the two:

"The suggestion has been made that organisations can be compared to anatomy and administration to physiology, but even those who draw such easy analogies would undoubtedly protest against complete compartmentalization. Just as anatomy and physiology are interrelated so are structure and process. It is nevertheless helpful from the standpoint of organisation analysis to emphasise structure at this point, and a number of authorities have referred to communication as a basis for organisation structure. The term structure as utilised here connotes a stable set of relationships." (1960:296)  
(underlining mine)

Now 'structure' to the management school is as laid down in the organisation chart. It is as Chandler tells us "the organisation devised to administer these enlarged (strategic) activities and resources" (1966:13)\* - in other words, structure follows strategy.

But we know from the empirical work of Mintzberg (1976b) on policy making, as well as from the findings amongst the successful executives in this study, that strategy follows structure both in terms of joint decision-making and communication (monitoring) channels.

Also, by contrast, the unsuccessful managers, locked into a structure of centralised decision-making and poor communication channels, reflected poor strategy (the result of its implementation) as measured by the Risk Rating. The prognosis of Wrapp has been proved correct:

"Preoccupation with detailed statements of corporate objectives and departmental goals and with comprehensive organisation charts and job descriptions - this is often the first symptom of an organisation which is in the early stages of atrophy." (1967:95)

This is the problem with organisation charts. They are useful in denoting who is formally responsible to whom but they do only indicate the formal lines of authority, and the paths of communication within the firm follow a completely different pattern.

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With apologies to this Author for the title of this Chapter.

However, the extent to which a given executive slavishly follows their lines is not only going to determine his overall effectiveness, but it also gives us good insight into his attitude. We have only to look at Clothingman X's conception of how a company should operate (Figure 14) with its mixture of functions and people intermingled as if both were inanimate to show this.

In summary then we find that the truth of organisational functioning lies in neither the behavioural science nor management schools. Each has attempted to view the firm from its own limited perspective and has advocated (like the early leadership theorists) a one-best-way prescription. The empirical findings show that it is not a question of "either-or" nor of "both", but both with a new added dimension : reality. True synthesis only happens in the marketplace.

CHAPTER 15IMPLICATIONS OF THE STUDY

It was almost twenty years ago that Pfiffner warned us that we would have to be prepared to accept a more complicated view of the organisation and he emphasised the difficulty in developing a new body of "acceptable doctrine."

"For example, different people argue the primacy of such factors as role, structure and function, interaction, decision, fusion, communication, power and influence, individual motivation and satisfaction, leadership, and bureaucracy. The list is not comprehensive, but it does reveal the complexities which beset us. Each of these categories involves the others; and the real argument is over which deserves the greatest emphasis." (1960:463)

We now know that the answer to the argument is that each should receive equal emphasis because not only does each involve the other, but is part of it. One might ask why it has taken us so long to reach this stage in our knowledge? I would advance the reason that although we have been aware of the open system for a long time we have merely paid lip service to it and there has been no true acceptance. This must change. I am speaking not of recognition nor even of a commitment, but of the necessity of an internalising of open systems principles into all our future endeavours.

There are other obvious implications of the study which have been pointed to in the text. Many of them have relevance for us as teachers and as trainers and it is on these areas that I should now like to concentrate.

The empirical findings in the study have direct implications for our efforts in the direction of organisation development. Reflection shows that the principles underlying these programmes are all based (like much management theory) on normative attitudes of what we believe the human relations climate

in a successful organisation ought to be like and not on what it in fact is. After these OD packages have been sold to industry, myriad problems are encountered in implementing them, and (because they are not based upon reality principles) we cannot in the majority of cases adequately specify criteria with which to measure their effectiveness. The literature carries reports of positive effects lasting only a few months and, frantically casting around for a scapegoat, we inevitably put the blame not on the programme (where it often belongs) but on the worker participants for their "lack of cooperation."

In the Behavioural Sciences students are trained as future organisation researchers and as practitioners such as personnel specialists. Schooled in neat research design methods and armed with a bundle of sophisticated techniques (the business schools do it too only with different techniques) they are sent out ignorant not only of basic organisational functioning but also completely without the ability to communicate with the people from whom they are going to gather data or with whom they are going to work. The result? Disillusionment on the part of the practitioner and more limited findings from the researcher.

I just do not believe that it is possible to adequately educate an organisational psychologist without including training in organisational principles and basic managerial functions in his curriculum. He must at least have a basic knowledge of the parameters of the organisational totality and have a working vocabulary of the functions performed in it.

Ours is an applied 'science' and we must accept that the limits of its applicability are going to be directly proportional to the extent that we limit the training.

That is the problem with much of the behavioural scientist's work: He grabs hold of the right stick and holds it aloft proclaiming it as the answer to almost every situation with which he is faced. Some objectivity would show him that in many cases he had hold of the wrong end and that the particular instrument had limited applicability - either for type of circumstance or in depth of usage.

Let us take the subject of Teams and Team-Building as an illustrative example. We have seen that successful managers do inter alia build teams but our human relationist takes the concept to extremes: All decisions must now be joint ones, everyone must participate in all issues, consensus becomes essential in everything, and competitive situations are barred.

This has the effect of reducing everything to the lowest common denominator, individual initiative becomes stifled, and one begins to approximate to a committee situation. It is also very time-consuming and inefficient. Because it is inefficient it does not produce the best results in all circumstances and, because of this, this is not the way that task forces function in reality: The manager adopts just one single criterion against which to measure the worth of any particular technique or principle and that is its practical use in terms of the positive results obtained by its employment. This is because exactly the same criterion is used to judge him and his whole organisation. I do not believe that we are going to change this attitude of management because I do not see society at large adopting a different yardstick with which to measure the success of the company as a whole. This being so, we must adapt our methods and approaches accordingly.

There are signs that this adaptation is beginning to take place: In his 'Feedback and Organization Development' Nadler (1977) advances a refreshingly different approach to the whole OD process. He cautions against the over-use of questionnaires and advocates instead constant information-gathering and monitoring of the whole process by interview as being preferable. In addition he says that it behoves us to constantly view the organisation as a complex and interdependent open system, and to study the content (the 'what') as well as the process (the 'how') of organisational interactions. In order to adequately describe this content, knowledge of management principles is imperative.

Another recent work is that by Davis and Lawrence (1977) out of Columbia and Harvard. Simply entitled 'Matrix', they warn against "groupitis" resulting from the overadoption of matrix (team) principles: Matrix functioning does not mean that all decisions must be "hammered out" in group meetings. If all team members have to listen to all issues being discussed until a decision point is reached it wastes time and has a demotivating effect upon members because they begin to worry about their specialist identities. Further, senior management becomes "concerned about the speed and flexibility of organisational response."

In discussing one of their cases they state:

"There was nothing sacred about group decisions and it (is) not sensible to have all product team members involved in all decisions. ... The concept of team work was put in perspective. Group decision-making should be done as often as necessary, and as little as possible." (1977:134)

We also find additional implications for our training of business practitioners, and one of the most striking of these involves communication. If the manager spends more than 50% of his time in personal interaction with his peers and subordinates then it follows that better communication skills (Monitoring and Disseminating ability) is going to increase his effectiveness. And yet no training is given to the business school student in how to transmit information or how to conduct a meeting. It should be.

I have drawn attention in a number of places in the text to the narrowness of the business school's prescriptive teaching: how, for example, analysis is advanced and intuitive methods denied, and how this is at odds with real world functioning. What is called for is training in lateral thinking (de Bono, 1971) and creative activities such as role playing.

Mintzberg states:

"As long as management schools focus exclusively on cognitive learning and ignore developments of student skills through systematic experiential learning, they will be doing only half the job of training managers." (1977a:10)

This contention of Mintzberg's finds support in a report by Graves on a training programme which he organised for a group of managers. After a week of training at a centre they were given a practical on-the-job project to do. In evaluating the programme they were asked whether they would have preferred the full time to be spent at the centre. They unanimously answered 'no'. Graves concludes that the results support his proposition that:

"Training should be based upon managerial needs as perceived by the managers rather than development needs perceived by the trainers."  
(1976:15)

and that only by practising their skills of fact-finding, analysing, and problem-solving were these managers able to learn.

Of course practice has always been 'out of step' with teaching and Knowles and Saxeberg point to the inevitability of this fact:

"Managers in their leadership and behavior are reluctant to take radical steps beyond what they learnt from those under whom they trained. Managerial behavior and attitudes tend, therefore, to reflect those of a past generation and to be permanently out of step with the requirements of the present." (1971:5)

But in reviewing the evidence we find that there is a strong indication that the 'lag' is at present a reverse one: That organisation theory is trailing behind practice whereas the reverse should be true. To correct this situation we are going to have to make another commitment and that is to recognise that there is only one type of 'laboratory' in which we can gather data and that is the organisation itself. No more must we tolerate findings which emanate from contrived and thus artificial settings. How can we ever hope to stay ahead in the field of explaining organisational phenomena unless we gather field data only?

We are also going to have to learn that not all data is quantifiable, that some of it will have to be descriptive and anecdotal in nature and to learn tolerance of ambiguous findings. Initially our explanations will lack the clarity and crispness to which we have been used, but I would rather have an explanation in general terms as to how everything really works than a neatly packaged theory which explains to me only how some of the things might work.

Who was it who said that one hour's synthesis was worth a lifetime of analysis?

### SUGGESTIONS FOR FURTHER RESEARCH

What direction should this future research take and how should it be done?

Work on strategic decision and policy-making by the McGill Group continues. Any further comment on my part would be presumptuous. Also, Mintzberg discusses a number of research implications in his original work.\* This study is an investigation of but one of them and therefore their repetition would here be out of place. I shall therefore confine myself to a discussion of suggestions generated by my own role investigation.

The focus of this study has been extremely broad in the sense that it has ranged over the whole spectrum of organisational variables. At the same time it has had a narrow focus in that it has concentrated on a few of the roles (mainly Leader and Monitor) performed by one level of manager (top executive) in one type of organisation (private : commercial). The first question then is how does role performance differ for managers at other levels in different types of organisation?

Earlier we saw that there was an indication of differences in role emphasis and Table 3 (page 93) listed the variations across public and private organisations.

Mintzberg's (1978) 'Structuring of organisations' suggests 5 types of organisation each with its own unique structural configurations. These are briefly:

1. Simple Structure : The small business
2. Machine Bureaucracy : The classic bureaucratic organisation - public sector enterprises
3. Professional Bureaucracy : A hospital, school or university
4. Divisionalised Form : The large decentralised firm
5. Adhocracy : The professional firm or project organisation

I propose that using this typology and perhaps employing the same assumptions used in the study to categorise role activity (Appendix 2), research is undertaken

amongst managers at various levels. In this way we can build a portfolio of 'norms' of role activity and work characteristics for managers across different types of organisation. This will provide us with a yardstick against which we can thereafter compare any given manager and give us an indication of his success in terms of his role performance. However, the collection of data from such large samples will probably necessitate the development of a simple self-recording instrument.

There is another direction in which the research could proceed and that is to investigate the role interactions. Throughout the empirical study I pointed to the linking and sequencing between the roles which we remember form a gestalt. In addition the manager performs several roles simultaneously. An investigation along these lines will not only give us additional insight into managerial behaviour, but it might also provide very useful information about the cognitive processes which underly this behaviour.

Thus this suggestion should not be seen as an alternative to the above recommendation but as a very valuable adjunct. Research could be undertaken in the two directions in parallel.

This unravelling of the performed role 'packages' is going to necessitate the use of videotape because the record will have to be played over and over again with the researcher concentrating on looking for different role activities on each run.

Another general question is to what extent does the role activity of any given manager change over time? We have seen that role performance is a function of the communication patterns in the organisation and that this in turn reciprocally influences structure. It therefore follows that role performance is not stable over time and an investigation of the changes in terms of other organisational variables should prove very interesting.

Concurrently with this there are a number of questions within the individual role groupings which bear investigation.

Looking first at the Decisional roles, we defined Entrepreneur as including all improvement projects initiated by the manager, and no distinction was made between the different types. We need to know how much time a manager spends on small improvements such as improving an existing system and how much on what might be called global projects such as the establishment of completely new facilities? What is the lead time involved in these? Then it would be useful to try and establish some sort of upper limit of efficiency in this role: whilst we can safely surmise that Foodman's 3% was too little, was Clothingman's 19% an over-concentration? Or are Pharmacyman and Steelman (11%) not giving innovative aspects enough attention? I labelled Steelman the 'All-Rounder' and thus (by inference) felt that his time distribution was optimal. But this is only a tentative thought and certainly needs confirmation.

Similarly, Resource Allocation contains a number of decisional categories which include allocation of organisational and the manager's own (mainly time) resource. We need first of all to draw a distinction between the two and then to seek answers to questions such as to what extent does delegation or decentralising decision-making free the manager from spending his time programming the work of his subordinates: what is the ratio of delegation to time saved? We shall have to probe and analyse deeply but the answer in terms of the effect upon the manager's other roles as well as the communication patterns will prove very valuable.

It is readily easy to identify Disturbance Handler activity and the role is fairly self-contained, but we still know very little about the detail of the act itself. Handling crises amounts to decision-making under pressure and an in-depth look at this single role would give information as to how the normal decisional pattern is altered under these circumstances. We saw Lewis in this situation and the one outstanding feature was his neglect of certain areas of his 'empire'. But he is such an unusual man that I am hesitant to draw even a tentative generalisation from his behaviour.

In fact if we look at these 3 decisional roles we can identify a certain incompleteness in the categorisations. This being so, there is in all probability an overlap of activity between the arbitrary divisions.

Mintzberg readily admits this and says that he has "no objections to taking these roles as a package and seeing how else they can be chopped up or re-arranged."\*

There is an inherent danger here though: my study, by splitting the Leader and Monitor roles into 2, expanded the role set from 10 to 12. If the decisional roles are split into a greater number care must be taken to maintain a certain integrity so that the role set does not grow so large as to become a meaningless list: Analysis must be followed by careful resynthesis.

The two most interesting interpersonal roles are of course Leader and Liaison. We have seen how successful performance of each by the manager brings him valuable information from respectively within and without his organisation. Further, that performance of the purely motivational aspect of leadership is integral to the manager's success. Flexibility of style was demonstrated.

We need far more in-depth observation to produce descriptive answers to : what type of interaction by the manager with his subordinates is most motivation-producing and information-evoking? Under what conditions do managers most consistently show the greatest flexibility of style? What is the purpose behind a manager adopting a certain behaviour and does he achieve it?

One glaring omission from my study is that it fails to show how much external information the manager gleans from performance of the Liaison role. Whilst I am sure that my subjects did 'pick up' information, it went unreported. Further knowledge of this role will enable us to split the external component of the monitor role into solicited and unsolicited in the same way as was done with the internal.

Liaison role activity varied widely between the subjects and we need to know why some successful managers spend so little (6%) and some so much (28%) time in this role. Also, where is the line between efficient time usage and pure socialising: what activities are really worthwhile for the manager?

QUESTIONS FOR THE COGNITIVIST

Judgement rather than analysis or bargaining is the preferred method by which the manager makes decisions. To do this he employs not facts but his own interpretation of those facts. What cognitive processes underly the judgmental process?

Following from this, why does he use only limited categories of information to arrive at a decision?

What decision processes are involved in the manager choosing between roles? What determines his role behaviour? Do outside events dictate the role choice - is he manipulated or does he exercise free volition?

Both bargaining (for resources inside the firm) and negotiation (with outsiders) involve 'trade-offs' and compromise which is by definition non-rational. What is the nature of compromise situations? What commonalities can be isolated which would help us to pinpoint the stage at which an individual is "satisficed".

What is the nature of the decision which takes place between the monitoring of information and its dissemination? What determines the categories of information which a manager will select?

Information storage capacity is limited.

Why is some information earmarked for retention and some discarded?

It is of course the Monitor role which generates the most questions. Amongst the many gaps in our knowledge are :

The successful manager has trained himself to 'tune into' the correct categories of information: his cognitive filtering selects out that which is important to him. So what categories of information does he select and which does he discard?

He trains his subordinates to bring him unsolicited information and he also solicits from them. How much of this informational input is about internal organisational happenings and how much is about external events? Is the successful manager one who efficiently scans the external world via his subordinates, or is he largely his own external monitor?

We saw that the manager often receives unsolicited information together with information which he has solicited. Does success revolve in part around asking the right questions of subordinates so that the bonus unsolicited information is given? Does the manager ask questions with this purpose in mind?

All these issues should prove to be worthwhile avenues of investigation. This is also the area in which the cognitivist's work will be of most help. (see Box).

At the present stage of our knowledge there are still more questions than answers, but we have at last made some meaningful progress towards solving the puzzle of managerial functioning.

A Summary Conclusion follows.

CHAPTER 16SUMMARY CONCLUSION

It is time to return to the starting point. I began by outlining the history of organisational psychology and questioning whether there was any difference between the aims of this discipline and organisation theory derived from the management school.

We have seen in reviewing the actuality findings of the various empiricists that if we ask questions of organisations in terms of strategy it produces an answer in terms of relationships, if we ask in terms of psychological interaction it produces an answer in terms of structure. We have reached a stage where the knowledge of each cannot be further advanced without reference to the other.

Therefore there can be no doubt left in our minds that the two are in fact synonymous. They have reached the same endpoint along different paths. But both do have a common ancestor in F.W. Taylor and it is time for a reconciliation in the family.

For the future we can draw on the words of advice given on a completely different subject: Prior to writing 'Le Mal Francais' Peyrefitte went to the historian Le Senne and told him that intuitively, he imagined two kinds of society, the one a society of confidence and the other a society where defiance seemed to dominate. Which, he asked, was correct? He records that Le Senne told him:

"The subject needs a multi-disciplinary research approach. It forces you to assimilate the techniques of the ethnologist, of the sociologist, of the geographer, of the historian, of the psychologist, of the economist; in short of the anthropologist. You must break the artificial barriers which separate the 'private hunting grounds' of science. Either you must grasp the whole of Man, or you will grasp only wind." (1976:24)

If we heed these words then we shall be in a position of being able to build on the considerable body of empirical evidence already gathered by Mintzberg, Hunt and others.

A set of findings to which I believe this study has contributed.

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APPENDIX 1MINTZBERG'S PROPOSITIONS ABOUT MANAGERIAL ROLES

1. Managerial activities and managerial roles may be grouped in three categories - those concerning primarily with interpersonal relationships, those that deal primarily with information processing, and those that involve the making of significant decisions.
2. The work of managers of all types may be described in terms of ten observable roles: figurehead, liaison and leader (interpersonal roles), monitor, disseminator, and spokesman (information roles), and entrepreneur, disturbance handler, resource allocator, and negotiator (decisional roles).
3. These ten roles form a gestalt - an integrated whole. The three interpersonal roles derive from the manager's formal authority and status; these give rise to the three informational roles; and these in turn enable the manager to perform the four decisional roles.
4. The simplest of managerial roles, that of figurehead, identifies the manager as a symbol, obliged to carry out a number of social, inspirational, legal, and ceremonial duties. In addition, the manager must be available to certain parties that demand to deal with him because of his status or authority.
5. The leader role identifies the manager's relationship with his subordinates. He defines the milieu in which they work, motivates them, probes into their activities to keep them alert, and takes responsibility for hiring, training and promoting them. The manager attempts to bring subordinate and organisational needs into a common accord to promote efficient operations. The leader role pervades virtually all the manager's activities in which subordinates are involved, even those whose main purpose is not interpersonal. The power of the manager is most clearly manifested in the leader role.
6. In the liaison role the manager develops a network of contacts outside of his organisation, in which information and favors are traded for mutual benefit. Managers spend considerable amounts of time performing this role, first by making a series of commitments to establish these contacts, and then by carrying out various activities to maintain them.
7. Evidence suggests that the manager serves as "nerve center" of his organisation's information. His unique access to all subordinates and to special outside contacts (many of them nerve centers of their own organisations) enables the manager to develop a powerful data base of external and internal information. In effect, the manager is his organisation's generalist with the best store of nonroutine information.

8. As monitor the manager continually seeks and receives information from a variety of sources in order to develop a thorough understanding of the organisation and its environment. Information arrives on internal operations, external events, ideas, and trends, and in the form of analyses and pressures.
9. A good part of the manager's information is current, tangible, and nondocumented. Hence the manager must take responsibility for the design of his own information system, which he does by building liaison contacts and by training subordinates to bypass their superiors in delivering information to him.
10. The manager uses his information to detect changes, to identify problems and opportunities, to build up a general understanding of his milieu for decision-making, to determine organisational values, and to inform outsiders and subordinates.
11. As disseminator the manager sends external information into his organisation and internal information from one subordinate to another. This information may be of a factual or value nature.
12. The manager serves as the focal point for his organisation's value system. Influencers direct their statements of preference to him; he, in turn, assimilates and combines these according to the power of the source, and disseminates information on overall organisational values to subordinates who use it as a guide in decision-making. The dissemination of values occurs in terms of specific statements on specific issues, not in terms of global preferences.
13. The manager faces a "dilemma of delegation." Only he has the information necessary to make a great many important decisions. But the information is in the wrong form - verbal and in memory rather than documented. Hence dissemination of it is time-consuming and difficult. The manager must overload himself with tasks or spend a great amount of time disseminating information, or delegate with the understanding that the job will be done with the use of less information than he has.
14. As spokesman the manager must transmit information to various external groups. He must act in a public relations capacity; lobby for his organisation; keep key influencers (board of directors or boss) informed; inform the public about his organisation's performance, plans, and policies; and send useful information to his liaison contacts.
15. As spokesman, furthermore, the manager must serve outsiders as an expert in the field in which his organisation operates.
16. The manager must take full responsibility for his organisation's strategy-making system, the system by which important decisions are made and interrelated. He has the necessary authority and information, and by having control over all important decisions he can integrate them.

17. As entrepreneur the manager initiates and designs much of the controlled change in his organisation. He continually searches for problems and opportunities. When a situation requiring improvement is found, the manager initiates an "improvement project" - a series of related decisions and other activities, sequenced over a period of time, that leads to the actual improvement.
18. The manager may involve himself in an improvement project on one of three levels. He may delegate all responsibility to a subordinate, implicitly retaining the right to replace him ; he may delegate responsibility for design but retain responsibility for choice via authorisation; or he may supervise the design phase himself.
19. At any one time senior managers appear to maintain supervision over a large inventory of improvement projects. These vary widely in stage of development, with some under active development, some in limbo, and some nearing completion. Each is worked on periodically, with each step followed by a period of delay during which the manager waits for the feedback of information or the occurrence of an event. Occasionally, a project is completed or a new one added to inventory.
20. As his organisation's generalist, the manager must take charge when his organisation meets with an unexpected stimulus for which there is no clear programmed response. In effect, he assumes the role of disturbance handler. Disturbances may arise from conflicts between subordinates, conflicts between the manager's organisation and another, and losses of resources or threats thereof. Disturbances arise both because "poor" managers are insensitive and because innovation by "good" managers inevitably leads to unanticipated consequences. Faced with a disturbance, the manager gives it priority and devotes his efforts to removing the stimulus - to buying time so that it can be dealt with leisurely by an improvement project.
21. In his resource allocator role the manager oversees the allocation of all forms of organisational resources (such as money, manpower, reputation). This involves three essentials - scheduling his own time, programming the work of the organisation and authorising actions.
22. In scheduling his own time the manager implicitly sets organisational priorities. What fails to reach him fails to get support. Thus, his time assumes a significant opportunity cost.
23. The manager takes responsibility for establishing the basic work system of his organisation and programming the work of subordinates - deciding what will be done, who will do it, what structure will be used.
24. Basic continuing control over resource allocation is maintained by the manager by authorising all significant decisions before implementation. This enables him to interrelate decisions. Some decisions are authorised within a regular budgeting process; most are authorised on an ad hoc basis. These are difficult choices - time is limited, yet the issues

are complex and subordinates' proposals cannot be dismissed lightly. In some cases the manager decides on the proposer rather than the proposal.

25. To help in evaluating proposals, managers develop loose models and plans in their heads. The models describe a great variety of internal and external situations. The plans - in the form of improvement projects to be initiated - serve to provide a common basis against which to evaluate proposals. The plans are loose, flexible, and implicit, so that they can be updated with the arrival of new information.
26. As negotiator the manager takes charge when his organisation must engage in important negotiation activity with other organisations. He participates as figurehead, as spokesman and as resource allocator.
27. The ten roles suggest that managers, while generalists when viewed within their organisations, are in fact specialists required to perform a particular set of specialised roles.
28. Organisations require managers not only because of imperfections in the system and unexpected changes in the environment, but because a formal authority is required to carry out certain basic, regular duties. The ten roles suggest six basic purposes of the manager - to ensure the efficient production of the organisation's goods and services, to design and maintain the stability of organisational operations, to adapt the organisation in a controlled way to its changing environment, to ensure that the organisation serves the ends of those persons who control it, to serve as the key information link between the organisation and its environment, and to operate the organisation's status system.

Source: Mintzberg (1973:96-99)

## APPENDIX 2

### ASSUMPTIONS CONCERNING ROLE ACTIVITY

No difficulty was experienced with the Figurehead role and inconsequential requests or attendance at a ceremonial occasion was usually 'pure' activity. Similarly, there was little difficulty experienced with the Disseminator role. Where the subject reported: 'I phoned Fred and told him', I took this to be pure dissemination of information in the absence of it being reported that the conversation took another twist: The main purpose was the passing on of information.

Performance of the Liaison role takes place exclusively outside of the organisation and time spent in activities which logically fit into this role (such as attendance at conferences and social events) was ascribed exclusively to this role unless the subjects reported otherwise.

Performance of the Liaison role is of course extremely important but the external contacts which the executive builds up are not geared to providing instant 'reward' to him. He attends some social events at which he knows his peers will be present not in the primary hope that he will pick up the latest information which is relevant to his organizational purpose at that particular time, but in order that he will reap a reward at some later date. In other words, performance of the monitor role as a result of adequate performance of the Liaison role takes place at some time in the future.

Spokesman role activity also takes place outside the organization via the dissemination of expert information to, for example, the press and customers. Identification of this role activity was reasonably straightforward and no assumptions had to be made.

The decisional roles of Entrepreneur, Disturbance Handler and Resource Allocator presented some problem.

Firstly, the Entrepreneur and Disturbance Handler roles: If a neglected problem area is brought to the manager's attention he can decide either to take steps to restore it to the position that it would/should have been in had it not been neglected in the first place, or, taking into account new information which he has at his disposal this time but did not have in the past, he might decide to guide this problem in a novel direction. In the first instance he would have been performing a Disturbance Handler role, in the second, that of Entrepreneur, and so a decision had to be as to how to handle cases such as this.

Here I was guided by the fact that entrepreneurial activity is that of innovation or initiation and also by Mintzberg's rather strong contention that all improvement projects should fall into the entrepreneurial category.

I see Disturbance Handling as attention to crises or 'fire fighting' and in mapping the activities I followed this formula.

Resource Allocator (insofar as it refers to programming and assigning or delegating work to subordinates) presents no problems. There is also no difficulty in recognising those activities that relate directly to the manager's intention of apportioning resources and deciding which of them should be conserved or expended.

There is however a small grey area between authorising the action of subordinates which had been taken on improvement projects delegated to them (resource allocation) and supervision of the project itself which remains entrepreneurial activity. I here adopted the viewpoint that authorising action on delegated responsibility for improvement projects be ascribed to the resource allocator role. (Mintzberg, 1973:79)

No difficulty was experienced with the Negotiator role. It is a hybrid and as we have seen, consists of Figurehead, Spokesman, and Resource Allocator elements.

Information comes to the manager from inside and outside the organization in a variety of ways. It can be verbal, written, formal or informal, requested or unrequested, programmed or ad hoc. There is a Monitor element in "every activity involving information input to the manager, no matter what the main purpose of any of these activities" (Mintzberg, 1973:268).

It therefore follows that (with the possible exception of Figurehead, Disseminator and Spokesman), there is a degree of monitoring activity in practically every role which the manager performs.

For example, if he attends a meeting with an outside supplier in the role of Negotiator, it is almost certain that he will receive information during the course of the discussion which is new to him. Also, it can quite easily be seen that every Disturbance Handler role activity has a monitoring element in it. This is often fleeting as when the manager goes on tour and sees something which is not to his liking or which he knows to be incorrect. A telephone call begins with an outsider informing the manager of some recent environmental event. The caller asks for his reaction and he spends the next 10 minutes performing the role of Spokesman.

It is hard to conceive of any one instance where the manager, in performing his roles of Resource Allocator, Disseminator or particularly that of Leader, does not receive some informational input simply because he is in interactive communication with other people. Often though, this monitoring is so fleeting and occupies so little time relative to the main purpose of the activity that it is not really possible to record it accurately.

Therefore rather than guess I decided to adopt a rigid policy of only ascribing to the monitoring role that time which was used specifically in the reception of information such as when the manager reported that 'I was told . . .' or 'he reported that . . .' One can draw a distinction

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\* "The amount of time spent expressly receiving information will probably provide a reasonably accurate estimate of the manager's attention to the monitor role." (Mintzberg, 1973:268)

between informational input which comes to the manager from within the organization (from his subordinates) as opposed to the input which he receives from external sources. Also, it can quickly be seen that information given to him from his subordinates logically falls into 2 main categories: that which is expressly requested by the manager such as 'please tell me how' (verbal, as well as any written memos and analyses of reports which have been asked for), volunteered. These two categories were recorded separately.

The greatest difficulty was of course the apportionment of the time spent in the Leader role. Many management writers - some very prominent - regard any activity which is not in fulfillment of the leader role as essentially non-managerial. We have also seen that traditional leadership theories concentrate wholly on this role and exclude or ignore decision-making. It was argued that this was fallacious.

Even concentrating on the 10-Role Set of managerial leadership, Leader role performance pertains to all activity which involves subordinates. Thus the manager can strictly be said to be performing as leader not only when he is for example improving relations with subordinates and guiding them in their work, but also when performing the Monitor, Disseminator, Figurehead, as well as all three decisional roles. He spends a fairly large proportion of his time programming the work of his subordinates: Resource Allocation. Here he also interacts with subordinates and therefore performs a leadership function.

Mapping of the activities into roles therefore produces a fundamental dilemma: if we are to define the other roles according to the criteria which have been outlined above and also recognise that every time the manager interacts with one of his subordinates he is partially fulfilling his leadership function, then we would either end up 'under costing' some of the other roles such as Disturbance Handler or Disseminator, or we would end up accounting for some of his time twice.

Neither of these alternatives seemed particularly appealing, and so I decided to credit only those activities which were used expressly for interpersonal purposes to the leadership role: where his primary purpose was for example encouragement or criticism or the maintenance of the organizational climate. I reasoned that what was needed was a relative rather than an absolute indication of the time that subjects spent performing in the leader role.

At the same time I was particularly interested in the special group of leader activities comprising staffing, hiring, firing, training and promoting: what we might call the 'personnel' function and took particular care when mapping the activities to record the time spent in this sub-role separately.

APPENDIX 3THE RISK RATINGTHE RATIOS1. Shareholders Interest

This is the all-important debt/equity ratio which is accorded the highest weighting in our Survival Rating. It is calculated by showing total equity (inclusive of preference and minority interests, but excluding intangibles) as a percentage of total liabilities. Generally speaking, the higher the figure for shareholders' interest the lower the risk factor.

2. Return on Capital Employed

In our Survey this is calculated as the percentage of pre-interest profits to capital employed - Our definition of capital includes, equity + reserves net of intangibles, preference, minority interest, convertible loans, deferred liabilities and all borrowings both long and short. With the exception of deferred liabilities, all the items included in capital employed require to be serviced either by way of interest or a participation in profits.

By calculating the pre-interest return on capital employed we achieve a further measure of a company's ability to borrow money and can also assess the effectiveness with which it is using its funds. We consider this a particularly important ratio and consequently have accorded it a high weighting in our survival rating. The importance of this is fairly basic since companies may be losing money on their borrowings.

3. Total Borrowings as a percentage of Total Liabilities

This ratio is almost self-explanatory as it is simply long-term borrowings plus short-term borrowings and overdrafts expressed as a percentage of total liabilities. To a lesser extent it is another way of looking at the debt/equity ratio.

4. Cash Flow to Borrowings

This ratio measures the ability of a company to repay its debt assuming no dividends are paid to shareholders. The arithmetic is simply: cash flow (earned for ordinary + depreciation) divided by total borrowings (long and short). If the ratio is 1,0 then the company could repay all its borrowings (both long and short) with exactly the latest year's cash flow. If the ratio is 0,33 that indicates it would take 3 years to repay all debt.

## 5. Profit and Loss Gearing

This is the percentage of trading profits that reaches the pre-tax level, i.e., it is trading profit less depreciation, less interest paid and plus dividend and other income received. This is in part a measure of business gearing because if a company is very capital intensive it will have heavy depreciation commitments as a fixed overhead. Secondly, it shows the effect of the balance sheet gearing in the form of the interest paid on long and short term borrowings. The greater the percentage of trading profit reaching the pre-tax level the better. There is a strong correlation between a high return on capital employed and a high percentage of profit getting through to a pre-tax level.

## 6. Current Ratio

This is the ratio of current assets to current liabilities and is an indicator of group liquidity. We accorded this ratio the lowest number of points in our Survival Rating as many companies which are in a precarious state often have good current ratios but this may be because they are over-stocked or have a particularly long debtors book. Our experience has been that this ratio can be misleading.

### Gains and Losses

If a Company has revalued its assets then it will have boosted shareholders interest and score higher than it otherwise would have. But the return on capital will be reduced by revaluing assets thus offsetting the higher shareholders interest score.

If a company is heavily dependent on creditor finance it will show a low shareholders interest figure and a poor current ratio, but it will probably gain good points for a low dependence on fixed interest capital by having a high return on capital employed and hence high profit and loss gearing.

### Criticism of the Ratio

The ratio of cash flow to borrowings is meaningless unless the repayment period of loans is known. Also, the debt/equity ratio can be misleading unless a company's total debt capacity is known. The higher the earning power the greater the capacity for the company to carry a given debt.

### Accounting Methods

The Authors point out that, whilst there is nothing that they can do to compensate for various 'accounting gymnastics' such as Off-Balance-Sheet Financing and the fact that the debt/equity ratio and return on capital employed are not strictly accurate, they have compensated for the more accepted variations in accounting practice such as LIFO and FIFO valuation of stocks as well as different rates of depreciation.

1. Shareholders Interest

	Points
85%+	25
80-85	24
75-80	23
70-75	22
65-70	20
60-65	18
55-60	16
50-55	14
45-50	11
40-45	8
35-40	6
30-35	4
25-30	2
20-25	1
-20	0

2. Return on Capital Employed

	Points
+40%	20
35-40	19
30-35	18
25-30	16
20-25	13
18-20	12
16-18	10
14-16	8
12-14	5
10-12	2
8-10	1
- 8	0

3. Total Borrowings as % of Total Liabilities

	Points
Zero	15
0-5	14
5-10	13
10-15	12
15-20	10
20-25	9
25-30	7
30-35	5
35-40	3
40-45	1
45-50	0

4. Cash Flow to Total Borrowings

	Points
+2	15
+1	14
0.9-1.0	13
0.8-0.9	12
0.7-0.8	11
0.6-0.7	10
0.5-0.6	9
0.45-0.50	8
0.40-0.45	7
0.35-0.40	6
0.30-0.35	5
0.25-0.30	4
0.20-0.25	3
0.15-0.20	2
0.10-0.15	1
-0.10	0

5. Profit and Loss Gearing

	Points
+100%	15
90-100	14
80-90	13
75-80	12
70-75	11
65-70	9
60-65	7
55-60	5
50-55	3
45-50	2
40-45	1
-40	0

6. Current Ratio

	Points
+3	10
+2	9
1.8-2.0	8
1.6-1.8	7
1.4-1.6	6
1.3-1.4	5
1.2-1.3	4
1.1-1.2	3
1.0-1.1	2
0.9-1.0	1
-0.9	0

They have also attempted wherever possible to recalculate and add back any excess provision to earnings. Here they also include the total provision as part of shareholders' funds. They comment on the use of equity accounting; where a company employs this method they have only included in their calculations of earnings those dividends received from investments. They define earnings per share as 'earnings available for distribution, net of miscellaneous adjustments.'

#### Omissions

The Risk Ratings of certain companies were not calculated for a variety of reasons.

Mining Companies: Mines cannot afford to carry a high degree of financial risk as they carry enough risk in their deposits, the mining conditions, and the price of the commodity mined. However, a number of examples of the Risk Rating of the larger companies are given.

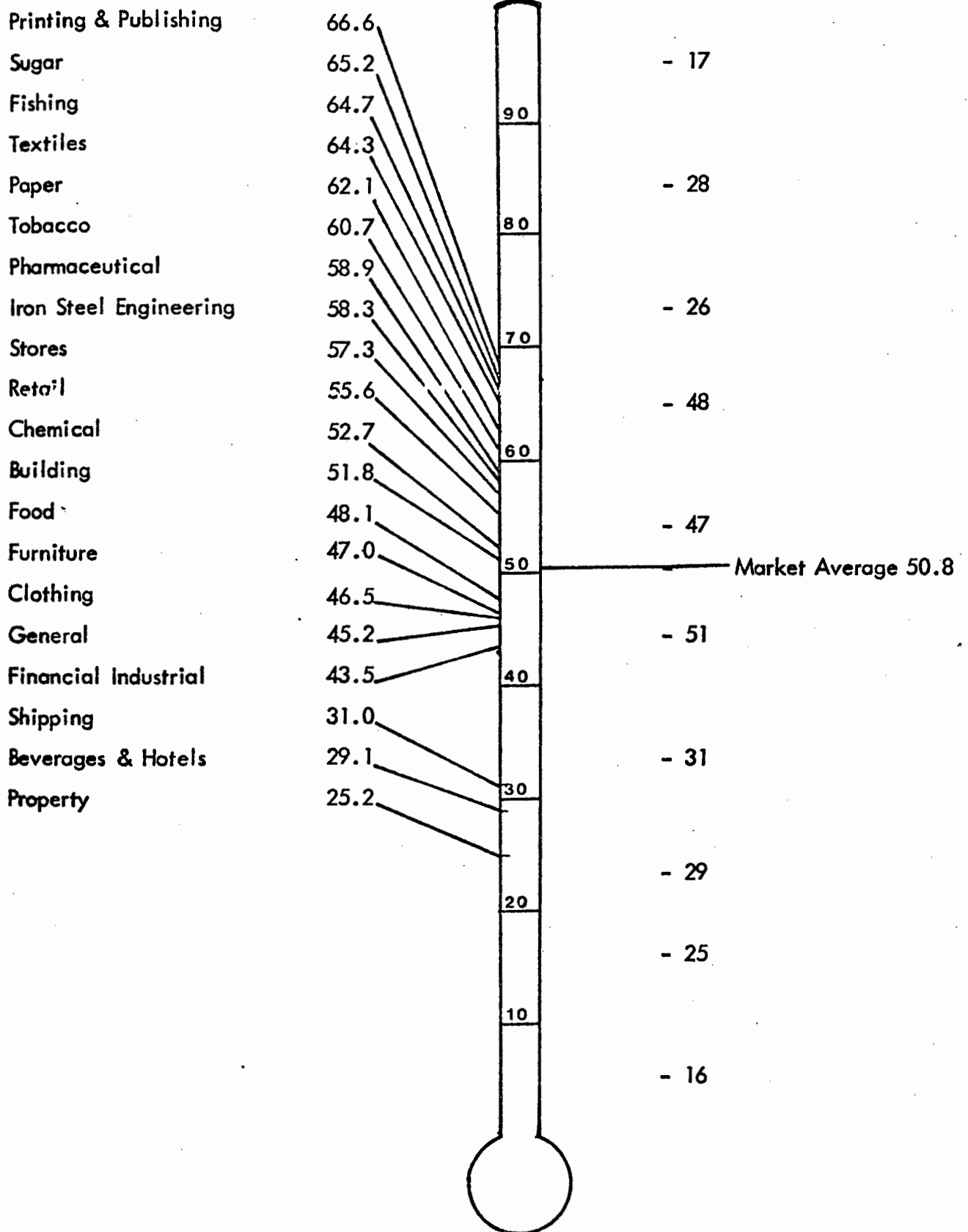
	<u>Survival Rating</u>
De Beers	92
Palabora	58
Consolidated Murchison	98
Rustenburg Platinum	74
Impala Platinum	62
S.A. Manganese	86

Pyramid and Holding Companies are excluded.

The Banking, Insurance and Investment Trust sectors are also excluded because the method of analysis used is not appropriate for the accounts of these companies.

Sectoral Averages

No of Companies



## UNIVERSITY OF CAPE TOWN

(WITH WHICH IS INCORPORATED THE SOUTH AFRICAN COLLEGE)



Phone : 69-8531

 DEPARTMENT OF PSYCHOLOGY  
 RONDEBOSCH.  
 7700
RECORD OF MANAGEMENT PRACTICE

I am asking that you provide me with a fairly specific record of all your activities for a period of 1 week.

This data will to some extent be an amplification of your appointment diary, but it will be necessary to record meetings, conversations, and dictation periods, so accounting for the total time spent in a given day.

The record should therefore include :

1. Starting Time : whenever this is on a particular day.
2. Type of Activity: meeting, telephone call, etc.
3. Nature or Purpose of the Activity : (in general terms only)
  - Meetings : Scheduled or unscheduled
  - What was discussed
  - Who initiated it
  - Tel call : Was it from or to
  - Did you receive information or give orders
4. Who participated in each activity.
5. Duration of each activity.
6. Stopping Time : whenever this is on a particular day.

A note on after-hours or other evening activities :  
 Please record anything which is not purely social.  
 Thus entertainment of peers, charity functions, etc.,  
 should be noted.

I emphasise that it is not necessary for you to impart any confidential information or figures and the identity of subordinates and of other people with whom you liaise can be given in general terms - Marketing Manager, Banker, Supplier.

I fully realise that you might be put to considerable inconvenience in the provision of the material and I thank you for your cooperation.

At the same time I assure you that your identity will not be revealed to anyone and that the data will be treated with the utmost discretion.