THE STATES OF ORGANISATIONS IN TURBULENT ENVIRONMENTS: THE REORGANISATIONS OF THE AUSTRALIAN DEFENCE GROUP

by

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ABSTRACT

The contemplation of the reorganisations of the Australian Defence Group of departments over the past 34 years led to a notion that for organisations operating in turbulent environments there may exist a hypothetical relationship between perceived environmental uncertainty and organised complexity. This hypothetical relationship is described as 'coping' and is based on an assumption that in an organisational setting, individuals make some form of response to changes in their environment and this response is manifest in organisational change.

The notion of this hypothetical relationship also led to the development of two 'ideal type' models - the Coping Model and the Overload Model. The application of contingency theory through the Overload Model showed that the State of an Organisation could be defined according to its mode of existence in relation to some optimal level of information processing and some optimal level of organised complexity. A typology of the States of Organisations has been derived from the Overload Model and design strategies which are appropriate to each state have been ranked according to an ordinal preference scale. The 'ideal type' models have allowed subjectively weighted judgements to be made about the present state of the Defence organisation and the ranking of design strategies to avoid the perceived undesirable state of overload.

The Department of Defence is now imputed to be in a state of 'disorganisation'. The Overload Model suggests that there has been an over-investment in vertical information systems at the expense of lateral relations. The policy-making implication of this suggestion is that the state of 'overload' can be avoided through a reduction in organised complexity and the creation of lateral relations. This can be achieved if the Central Office is restructured to reduce the number of committees and if appropriate co-ordinating representatives are placed in the Service Offices.

C O N T E N T S

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FOREWORD

One of the fundamental lessons derived from the study of history is that the outcomes of decisions seldom correspond with the original intentions of the decision-makers.[1] The realities of life are complex. It is beyond the capabilities of ordinary man to foresee all the consequences of a decision and all the uncontrollable outcomes of actions which may impact one upon another. Perfect knowledge can only be assumed and thus we can only know what are fragments of reality. We can attempt to reach an understanding of reality with the aid of concepts or by constructing models to describe an order of relationships which approximate reality.

The theoretical models presented in this thesis have emerged from the contemplation of the re-organisations of the Australian Defence Group of Departments over the past 34 years. The insights gained led to the notion of a hypothetical relationship between the complexity of the organisation and the perceived environmental uncertainty of the decision-makers who controlled the organisation. This notion in turn led to an examination of two separate areas of theoretical and empirical research into complexity and

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1. Simon, Herbert A., Administrative Behaviour, (Second Edition, New York, The McMillan Company, 1957), Foreword.

uncertainty. In the literature, complexity per se is generally treated as a sub-set of uncertainty. In recent years we have witnessed increasing recognition in various disciplines of the concept of complexity and attempts aimed at its measurement. The two concepts are now being seen more clearly as separate theoretical constructs.[1]

The drawing together of these two separate areas of theoretical and empirical research presented some problems. In order to give the concepts the necessary rigor, Weber's notion of the 'ideal type'[2] was adopted. The use of the notion of the ideal type thus allowed the author to bring some conceptual order to the relationship between uncertainty and complexity. The construction of the ideal type models also allowed judgements to be made about the extent that reality had departed from the ideal type. Shils and Finch describe Weber's methodology of the ideal type as follows:

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1. Sahal, Devendra, "Elements of an Emerging Theory of Complexity Per Se", Cybernetica, (19:5-37, 1976).

2. "An ideal type is formed by the one-sided accentuation of one or more points of view and by the synthesis of a great many diffuse, discrete, more or less present and occasionally absent concrete individual phenomena, which are arranged according to those one-sidedly emphasised view points into a unified analytical construct". Shils, E.A. and Finch, H.A., "Max Weber on the Methodology of the Social Sciences", (Glencoe, Illinois, The Free Press, 1949), p.90, quoted in Freund, Julian, The Sociology of Max Weber, (Harmondsworth, Middlesex, England, Penguin University Books, 1972), p.60.

> "The ideal type is not to be identified with reality in the sense of expressing reality's 'true' essence. On the contrary, precisely because it is unreal and takes us a step away from reality, it enables us to obtain a better intellectual and scientific grasp of reality, although necessarily a fragmented one".[1]

The methodology followed in this thesis may therefore be described as ideal typical analysis based on empirically derived observations of historically recorded events.

In developing the ideal type models the author took the contingency approach[2] to organisational theory and collected and integrated a number of findings based on research of contingency theory propositions. The conceptual links thus established led to the formulation of a hypothetical relationship between organised

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1. ibid., p.65.

2. The contingency approach is "commonly used in the context of management and organisations ultimately directed toward suggesting and determining managerial practices and/or organisational designs most appropriate for given kinds of conditions or situations. It seeks to understand the significant relationships within and among the organisation's sub-systems and the functions of management, as well as between the organisation and its external environment, and to define patterns of relationships or configurations of variables. In essence, contingency approaches seek to determine the conditions under which a given type of management style, practice, technique or organisational arrangement tends to prove effective and efficient. They can also involve setting forth guidelines or criteria to be employed for making certain kinds of decisions or solving certain types of problems". Richman, Barry M., Farmer, Richard N., Management and Organisations, (New York, Random House, 1975), p.534.

complexity and perceived environmental uncertainty which was called 'coping'.[1] In other words the ideal type was a model which described the organised complexity that decision-makers create in order to cope with perceived environmental uncertainty. This organised complexity was in turn defined as the structure of the organisation and the processes by which it accomplished its tasks. In this regard the thesis breaks new ground. While coping is not a new term, it is a new concept in relation to organisational change.

Following development of the Coping Model, the study of the literature revealed the potential existence of optimal levels of complexity and information processing (the latter being defined as the counter-part of perceived environmental uncertainty). Consideration of the potential existence of these optimal levels then led to the formulation of the Overload Model and a typology of the States of Organisations to describe the transition of organisations attempting to cope with overload conditions. The typology has heuristic value in that it enables decision-makers to consider the likely effects of implementing certain organisational design strategies. In other words, the ideal type Overload Model enables the researcher and the decision-maker to make judgements involving causal imputation; we are able to isolate what is unique about certain historical

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1. Coping is defined as dealing successfully with or competently with a situation or problem.

events by showing, in each particular case, the extent to which empirical reality has departed from the ideal type. The algebraic treatment inherent in this model is not intended to convey that such an order of precision could exist. The formulations are intended only to bring meaning to complex conceptual processes and to assist in understanding how some organisational problems may be resolved.

In the analysis of a large complex organisation, such as this study of the Australian Defence Group, it is necessary to focus on those individuals responsible for decisions to make organisational changes. In this study these individuals have been called domain decision-makers because they define the domains of the organisation. This does not imply that these decision-makers are the only influences on organisational outcomes; because it is accepted that there are an infinite variety of other predictable and unpredictable influences at work. The thesis only attempts to impose an order of relationships on the reality of the organisational changes which occurred.

The organisational changes which have occurred in the Defence Group have been empirically derived from the historical record according to criteria established in the ideal type model. These changes have been arranged in a time-series to allow observations to be made of trends in the intensity and direction of

change. These observations have in turn allowed judgements to be made about the state of the organisation. Finally it has been possible to identify preferred organisational design strategies in order to avoid the state of overload.

The time-series of organisational changes shows that there has been a qualitative increase in information processing and organised complexity over the past 34 years and that the organisation is now in a state which has been defined as 'disorganisation'. This state has been reached through organisational changes which have attempted to rationalise, centralise and integrate the structure and process. The dominant design strategy by which these organisational changes were achieved has been described as an investment in vertical information systems. It is argued that the Department of Defence has an over-investment in vertical information systems and that overload can be avoided by adopting strategies described as the creation of lateral relations.

The thesis should be viewed as a first work in developing a theoretical perspective of decision-makers coping with perceived environmental uncertainty through organisational change. The typology of the States of Organisations is offered as a description of the transition to 'overload' as a possible result of continuous organisational change in turbulent

environments. As such, it is the first thesis to argue that contingency theory might make a contribution to the current debate on the possible reorganisation of the Department of Defence.[1] The matching of appropriate organisational design strategies to this typology rests on theoretical argument, therefore if the thesis serves to stimulate the collection of data and further debate it will have served its purpose.

I would like to thank the many friends and mentors who have assisted me in this work over the past four years. My first thanks must go to my family who suffered my many absences from 'normal' family life. I also acknowledge the small group in the Department of Defence and the Strategic and Defence Studies Centre at the Australian National University who are concerned with issues of Defence organisation and who provided the genesis of the theory which is the subject of this thesis. To those who gave of their time, my grateful thanks. Finally I wish to thank Mr Alan Jarman who supervised my work. He was a most helpful critic. This enterprise could not have been completed without his assistance.

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1. Parliamentary Joint Committee on Foreign Affairs and Defence, (Sub-Committee on Defence Matters). See Chapter 1 for details of the current debate.