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AN ACTION RESEARCH APPLICATION OF PERSONAL  
CONSTRUCT PSYCHOLOGY IN ORGANISATIONS :  
THE USE OF COGNITIVE MAPS TO PRODUCE POLICIES FOR ACTION

A dissertation presented in partial fulfilment of the requirements for the  
degree of Doctor of Philosophy in Psychology at Massey University.

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1990

## ABSTRACT

The research developed out of an interest to clarify people's values and to relate these to a repertoire of past, present and future behavioural or environmental patterns. Cognitive maps, derived from Repertory Test and Laddering techniques, directly illustrate this relationship between superordinate values and subordinate behaviours, objects, symbols and environments.

Repertory Test and Laddering Technique are associated with Personal Construct Psychology. This dissertation describes Personal Construct Psychology and related methodology as founded by Kelly (1955). It then follows one branch of the further development of the theory. The second generation developments of Hinkle (1965) are examined, followed by subsequent developments and applications ; particularly those of Little (1983) and Eden (1977, 1978, 1980, 1988).

Using an action research approach, the methods developed by these personal construct psychologists, were applied to problems in three organisational interventions : 1. an individual client vocational-redundancy counselling situation, 2. an intervention with a work group who were experiencing dysfunctional internal relationships and, 3. in a team-building intervention with the inaugural Board of Trustees of a Primary School. In all cases the procedure used Repertory Test and Laddering procedures to identify individual cognitive maps. In the latter projects these were aggregated to form group cognitive maps, and in all cases the final intent was to produce a policy or specification for action. A pre-test post-test untreated control groups design was used in the final study to assess the comparative progress and development of three school Boards of Trustees.

In the vocational-redundancy counselling case, the procedure provided the client with a policy for action that he could use to guide future career and lifestyle behaviours. It revealed both lack of control over one's anticipated future and the need to reconstrue one's future, as sources of negative response to severance for this client. The study clearly demonstrated the notion that a construct is defined by that which is both superordinate and subordinate to it, and in particular enabled the client to define what his religious beliefs meant to him. In subsequent studies this method of construct definition formed the basis of a procedure for the content analysis of cognitive maps, describing them verbally and for aggregating them into collective cognitive maps. With the dysfunctional work group, identification of a collective cognitive map formed a description of the groups functions and was translated into a statement of purpose. It was also useful for enhancing self awareness, organisational awareness and for clarifying both group and individual role. In the team building intervention with a school's Board of Trustees, the Treatment group displayed not only improvement on more scales than the control groups, but also improvement of greater magnitude than the control groups. This data supported the Treatment group's self report of benefits gained from the intervention. The intervention provided the Board with a guiding policy for action, which they were then able to apply directly to formal policies required by statute.

It was demonstrated, therefore, in three separate organisational contexts, that an applied personal construct, cognitive map approach, based on repertory test and laddering techniques, was viable for intervention purposes where role clarification, values clarification and formation of a policy for action was desired. Methods were refined for portraying cognitive maps and expressing these verbally. Issues surrounding organisation development, content analysis of construct systems and the role of action research were discussed. The processes and findings of the dissertation were related back to the theory of personal construct psychology. Kelly founded Personal Construct Psychology in the applied setting, and it is claimed that it is in the applied setting that it displays particular power.

## ACKNOWLEDGEMENTS

First and foremost, I must thank my family for their assistance throughout this project. In particular, my wife, Denise, not only tolerated the project but frequently acted as the slave driver urging me back to my desk at moments when my enthusiasm waned. My children, Nicola, Michael and Tam, were very understanding throughout the last six months while the dissertation was being written. They will be grateful that it is now complete.

Secondly, my supervisors provided valuable assistance under less than ideal circumstances : for four-and-a-half years we were separated by 250 kilometres or three hours of travel. Initially Dr. Beryl Hesketh provided the impetus to get started, but when Beryl took up another position overseas a change in supervision occurred. It is to these supervisors, Prof. George Shouksmith and Dr. Judith Brook, that I owe most gratitude. I am also appreciative of the willing advice and support I received from the entire staff of the Massey University Department of Psychology.

Thirdly, my employers and colleagues in industry deserve a lot of thanks. My first employer allowed me to trial my projects in the work place. For reasons of confidentiality to participants in the projects, I have not mentioned these employers by name. My subsequent employers, Olex Cables (New Zealand) Limited, warrant special thanks. In the latter stages, they actively encouraged me and gave time and resources to complete a substantial portion of the dissertation. This was an act of generosity for which I will always be grateful.

Fourthly, my sincere appreciation to the project participants, particularly for their open willingness to give informed consent to partake.

Lastly, special mention must be made of the Massey University Extramural Librarians. Their efficiency and understanding deserves nothing but praise.

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