

Lincoln University Digital Thesis

Copyright Statement

The digital copy of this thesis is protected by the Copyright Act 1994 (New Zealand).

This thesis may be consulted by you, provided you comply with the provisions of the Act and the following conditions of use:

- you will use the copy only for the purposes of research or private study
- you will recognise the author's right to be identified as the author of the thesis and due acknowledgement will be made to the author where appropriate
- you will obtain the author's permission before publishing any material from the thesis.

**Persons and positions:
A social psychology of intentional action**

**A thesis
submitted in partial fulfilment
of the requirements for the Degree of Doctor of
Philosophy**

**At
Lincoln University**

**By
A. J. Cook**

Lincoln University

2003

Abstract of a thesis submitted in partial fulfilment of the
requirements for the Degree of Ph.D.

Persons and positions:
A social psychology of intentional action

by A. J. Cook

The overall aim of this dissertation is to develop an understanding of the intentional actions of persons, whereby the person is assumed to be the principle unit for analysis. Unlike the predominant cognitivism and the emergent social constructionism of psychology and social psychology, the 'person' is treated in the naturalistic sense, as the person encountered in everyday life. This treatment contrasts with both cognitivism's emphasis on sub-personal explanations and the tendency for discursive explanations of persons in social constructionist psychology.

The naturalistic conceptualisation of persons and the overall aim are similar to ethogenics (Harré & Secord, 1972). Persons are taken to be users of language who have their reasons for acting and can be assumed to act in their own interests. Support for this general view is derived from ethogenics and selected works in social constructionist psychology. From this perspective, discourse comes to be seen as providing evidence for the person as agent. Using this enabling 'common-sense' argument, a model of the actions of persons and a sub-model based on the analogy of the 'taking of a position' are developed. These models are given significance by means of the critical reinterpretation of selected theories and studies of prominence in cognitivist social psychology. The theory of planned behaviour (Ajzen, 1991) and the elaboration likelihood model (Petty & Cacioppo, 1981) are critically assessed and a new interpretation of these works is provided. In addition, to develop the new interpretation further, the attitudinal consistency study by LaPiere (1934), the Asch (1951) conformity experiment and the Milgram (1963) obedience experiment are reviewed and subjected to critical reinterpretation. The new models are presented as amenable for

hypothesis testing and, more crucially, are shown to avoid problems inherent in cognitivism regarding the positing of an unseen realm of states, dispositions and drives. The new models provide for a descriptive understanding of intentional action and hold that regularities in the actions of persons arise from the use of learned skills and abilities. Social action is understood within a climate of debate, with negotiation being a primary means of intervention and empathy being the means of understanding the relative positions taken by persons. The work thus offers a useful means of describing and explaining action, while recognising the active role that persons play in the administration of their lives.

Key Words: Person, action, position, agency, ethogenic, discursive psychology, social constructionist psychology.

Acknowledgments

I am grateful for the care and attention of my supervisor Kevin Moore and my associate supervisor Gary Steel and am also appreciative of their encouragement and enthusiasm. I also thank Geoff Kerr for his encouragement and support in the earlier stages of this work. Thanks to my friends and colleagues at Lincoln who have helped make the writing process an enjoyable experience. Most importantly, thanks also for the support of Carolyn, for the company of Sam, the enjoyment of Jonathon and for the support of my parents.

Contents

	Page
Abstract	ii
Acknowledgments	iv
Contents	v
List of figures	vii
List of tables	viii
 Chapter one: Introduction	 1
1.1 Introduction	1
1.2 Persons and social constructionist psychology	3
1.3 Overall aim and general plan	10
1.4 Consideration of aims and objectives	10
1.5 Structure	11
 Chapter two: Explaining the actions of persons	 14
2.1 Introduction	14
2.2 An overview of ethogenics	16
2.3 An overview of discursive psychology	17
2.4 Basic contrasts between ethogenics and discursive psychology	19
2.5 The impetus for change – problems of mainstream psychology	21
2.6 Realism and psychology	28
2.7 From Kant to Wittgenstein	31
2.8 Rules as guides for behaviour.	35
2.9 From rules and roles to positioning	36
2.10 Persons and selves	39
2.11 A connectionist model of cognition	46
2.12 Implications of the connectionist model	53
2.13 Chapter summary	55
 Chapter three: The person-action model	 57
3.1 Introduction	57
3.2 A person-action model	57
3.3 Issues of veracity	60
3.4 The meaning of responses	61
3.5 A theory of the open kind	64
3.6 The role of quantitative methods	67
3.7 Chapter summary	70
 Chapter four: The theory of planned behaviour	 71
4.1 Introduction	71
4.2 Attitude-behaviour research	71
4.3 The theory of planned behaviour	73
4.4 The value of ‘rational’ models	80

4.5	Extent of rational thinking	82
4.6	Arguments for additional explanatory variables	83
4.7	Definition of constructs.	86
4.8	Causality and the TPB.	86
4.9	The logical connection argument	91
4.10	An Ethogenic interpretation	93
4.11	A new paradigm view of the TPB	95
4.12	Chapter summary	96
Chapter five: Reinterpretation of the theory of planned behaviour		97
5.1	Introduction	97
5.2	Belief elucidation	97
5.3	Ambiguity and the TPB	100
5.4	Reinterpretation and some direction for application	111
5.5	Chapter summary	113
Chapter six: Reinterpretation of the elaboration likelihood model		115
6.1	Introduction	115
6.2	Background to the ELM	115
6.3	The elaboration likelihood model	117
6.4	Criticism of the elaboration likelihood model.	122
6.5	The PAM, positioning and persuasion.	128
6.6	Comparison with the elaboration likelihood model	135
6.7	Chapter summary	141
Chapter seven: Persons, positions and situations		143
7.1	Introduction	143
7.2	The LaPiere study	145
7.3	The Asch experiment	150
7.4	The Milgram experiment	153
7.5	Cognitive explanations	156
7.6	A PAM interpretation	161
7.7	Chapter overview	169
Chapter eight: Discussion and conclusion		171
8.1	Introduction	171
8.2	Overview of the main arguments and findings	171
8.3	Persons as the primary generators of action	178
8.4	Evaluation of method	181
8.5	Directions for further research	182
8.6	Implications for theory	184
8.7	Chapter summary and conclusion	187
References		189

List of Figures

	Page
Figure 4.1 The theory of planned behaviour	74
Figure 4.2 Representation of the theory of planned behaviour	79
Figure 6.1 The elaboration likelihood model of attitude change	119

List of Tables

	Page
Table 2.1 Ontologies	19
Table 5.1 Intentions and attitudes, 2000 and 2002	103
Table 5.2 Likelihood and desirability for eight consequences, 2000 and 2002	104
Table 5.3 Correlation for intentions and attitudes, 2000 and 2002	105
Table 5.4 Correlation for consequences, 2000 and 2002	105

Chapter One

Introduction

1.1 Introduction

'Person' is the common term for a human being as encountered in everyday life. Further, persons are commonly understood in vernacular and day-to-day experience as the source of intentional action (e.g., 'he or she did that'). Cognitive and social constructionist explanations in psychology and social psychology, however, do not currently recognise the person as the entity or the reality that appears in such accounts.

On the one hand, the predominant cognitivist approach is concerned with the individual rather than the person. The individual is understood in terms of the effects of law-governed causal processes. As a social individual, the person is thought of as behaving in keeping with postulated underlying cognitive laws or rules. This means that social behaviour is commonly explained by referring to a putative bundle of personality traits, motivations, attitudes and drives. Rather than a person having an attitude, for example, the attitude has prominence because it is held to direct behaviour causally. The explanation is at the sub-personal level and such sub-personal processes are taken to be the foundation for, and generator of, personal decisions and choices that impact upon the life of the individual. In cognitivism, the person is an individual whose behaviour is explained sub-personally. Rather than the person making his or her own decisions, the individual is understood to reach a decision as a result of causal forces acting on his or her sub-personal constructs.

On the other hand, the person is little more than a 'spokesperson' in social constructionist psychology, which gives prominence to language as the carrier and source of concepts and meaning. According to this view, the person is a subject only by the invocation of a concept in language. To say 'this is a person' is to use the known concept of the person, or engage in talk about persons. This intense focus on language can seem, at face value, to be inadequate to explain the common experience of physical things. Even though pain can be agreed upon as a term that gives common meaning to the experience of 'pain', for example, the constructionist stance is often criticised for

implying that there is nothing to pain other than the words and the meaning they engender. It seems strange that the sensation of pain can be explained without reference to it having a physical basis. Similarly, it seems unusual to explain persons, or the interpretation and meaning of persons, as being primarily subject to social and cultural processes without recognising their embodiment and the common ways they are regarded across time and between cultures.

In both approaches, the respective explanation of 'person' does not readily fit with experience. The cognitivist operates both above and beneath this experience, by summarising across individuals and conceptualising common states and causal processes at a sub-personal level. With equal sophistication, social constructionist psychology explains persons as constituted by conventions, morals and discursive practices (Cromby & Nightingale, 1999:4).

Recently, there has been a recognised attempt to study persons in keeping with everyday accounts. In contrast to the burgeoning cognitivism of the early 1970s, the ethogenics of Harré and Secord (1972) advocated the study of people as if they were human beings. Based on what they described as contemporary ideas, Harré and Secord (1972:84-99) understood the person to be a language user, to have a material basis and to have attained the mastery of certain powers. The powers of persons included the power to initiate action, to monitor their own actions, to be aware of being aware and to make personal plans about the future. Nevertheless, ethogenics is now often simply regarded as having a role in the establishment of a large, but not dominant, discourse-orientated social constructionist psychology. Yet growth of this 'new paradigm' has been stifled (Potter, 2000) and the inability of the discipline to account for the person as being more than a social construction has been recognised as a significant problem with no ready solution (Cromby & Nightingale, 1999).

This dissertation has a similar aim to ethogenics, but advocates, neither the resurrection of ethogenics, nor a major turn in social constructionist psychology to enable persons to be explained as if they were persons. Instead, it is proposed to work in a conceptual space between the two. This work therefore promotes the study of persons as the users of language, while being responsive to, and reflective of, more recent work in social

constructionist psychology. This work involves the development of theory through reinterpretation of cognitivist interpretations of various phenomena. The plan is to set out a theory, develop the theory as a means of understanding social psychological issues through the reinterpretation of a selection of prominent cognitivist models, and give clear direction to the value of the new theory for explaining intentional social action. The argument is against the predominant cognitivist approach in psychology and social psychology and draws resources from ethogenics and social constructionist psychology for this task.

The remainder of this introduction distinguishes this work from social constructionist psychology. The necessary task of challenging the dominant cognitivist approach in psychology begins in chapter two. The introduction concludes with the dissertation aims, consideration of method and an overview of the remaining chapters.

1.2 Persons and social constructionist psychology

In 1972, Harré and Secord set out "...to provide a systematic and unified theoretical account of the new ways of thinking about people" (Harré & Secord, 1972:v), which they termed ethogenics. Their argument was for a major shift in perspective away from 'positivism' in psychology, to a more naturalistic conception of human behaviour. In this context people are assumed to behave somewhat like animals, but with the additional capacity to engage in purposeful behaviour based on their interpretations of themselves and the world. In ethogenics people are considered to be language users, but unlike theorising in recent social constructionist psychology, people are held to have a biological presence and are assumed to have personal skills necessary to initiate and manage their own actions. People are taken to be the primary instigators of action and to contribute to the generation of meaning by their individual actions. Ethogenics also offered a prescription for a programme of research with a model showing how adherence to rights, duties and obligations shaped social behaviour.

Ethogenics was, and remains, a way of understanding people as they are normally encountered in everyday life. Yet despite offering a complete theory of social behaviour, ethogenics had only a short period of prominence, albeit under the shadow of

cognitivism. On the wider scene, outside of cognitivism, there appeared a growing interest in language itself as the primary reality. Words and their meanings were taken to construct what is taken to be real. Indeed, even ethogenics played a part in encouraging such ideas by its incorporation of the trading of words and meanings as a form of symbolic interaction, though its main contribution may well have been its strong arguments against cognitivism.

In giving further primacy to language, persons came to be supplanted by an understanding of the use of language termed discursive psychology or, alternatively and sometimes confusingly, social constructionist psychology. Those working under these broad banners assert that words and gestures themselves are sufficient for explaining a person's actions to the point where personal intentions can be disregarded. An example of this view in its purest form is the brand of discursive psychology promoted by Edwards and Potter (1992). This relativist view suggests the denial of material elements and considers reality to be wholly an invocation from words, language and discursive practice (Edwards, Aschmore & Potter, 1995). The use of words in this context is analysed as rhetorical to the conversation and 'reality' in which they are used. The person merely has a role in the fabrication of accounts to suit various social contexts.

One problem for relegating persons to a mere ancillary role in the production of discourse is that there is no way of envisaging how social psychological change can be brought about. As Cromby and Standen (1999) have pointed out, in feminism the increasing emphasis on discourse has meant that researchers began to reject the importance of women's testimonies about their own lives. What is felt to be personally meaningful becomes, in the analyst's interpretation, a version of events for the immediate purpose of doing work in a conversation by resourcing such moves as excusing, blaming or supporting a version of events. The analyst may well be able to identify such responses in terms of their role in the flow of an immediate conversation, but apart from their role in relation to this context the analyst is otherwise unable to determine why a particular response was made (Cromby & Standen, 1999). The focus is on discourse as rhetoric in relation to the conversation, which means the person is unable to provide personal meaning. For example, Billig (1987) explained that certain attitudes are put forward in particular contexts and are often accompanied by particular

argument and justification so that an attitude functions not as an expression of an 'inner' state, but rather as a term used in relation to a particular conversation. Attitudes are, therefore, examined in terms of what expressions of attitude do, with regard to their impact upon a conversation. Even memory, commonly presumed to involve the storage of the personal experience of events, has been interpreted in terms of how talk about versions of the past are managed and structured to present a version of events for the situation at hand (Edwards & Potter, 1992). In this way, the personality traits, motivations, attitudes and drives associated with cognitivism are radically transformed into moves made relative to conversations. This also means that words and talk cannot be expressive or representative of something in any referential sense, including being representative of the intent of the person as an agent in the conversation (Cromby & Standen, 1999).

This account of persons means that those of us who think we personally have something to *contribute* to a conversation are actually merely *engaged* in a conversation. Primacy is given to the activity of conversation and the versions of reality that are produced. Yet somehow from this conversation people are also "...formulating an inner life of beliefs, motives and feelings that make their actions accountable" (Potter, 2000:35). However, this comment was made as part of a millennium-marking paper that was about "...risking big thoughts about what comes next" (Potter, 2000:31). At present, there is a realisation that the person must somehow be brought more fully into social constructionist psychology. In its present form, however, the focus on discourse, and the tendency to adopt relativism in relation to psychological concepts, makes it difficult to account for the human condition adequately in terms of persons, and perhaps also prevents social constructionist psychology in broad form from becoming a more influential force in psychology and social psychology (Nightingale & Cromby, 1999a:xv).

An author who has been eminent in attempting to give prominence to persons within a conversational reality is Rom Harré. As a key player in the movement towards social constructionist psychology, Harré, (1983) moved on from ethogenics by incorporating the work of Wittgenstein, Mead and Vygotsky, in particular, to develop a social psychology in which language has a prominent role in explaining the actions of persons.

Despite moving on from the person-centred ethogenics to give emphasis to discourse, Harré's work is nevertheless recognised as emphasising the role of persons, albeit within social constructionist or discursive psychology. While this has merit for those who advocate a person-centred psychology, a discursively grounded psychology does not readily sustain intentional persons, and a good deal of conceptual work would need to be done to allow this to happen. It is recognised that there is a need for some way of accommodating person related notions such as the self, embodiment and materiality within social constructionist psychology. However, while some good arguments exist in relation to these matters, there is currently no sign of the desired theoretical grounds to enable this major shift in thinking (Nightingale & Cromby, 1999a). To some extent this difficulty is reflected in the work of Harré, with an element of ambiguity being apparent since the development of ethogenics.

In '*Personal being*' (Harré, 1983) discourse was introduced as the primary medium for thought and action and was shown to be a key in the development of the skills necessary to become a person. This conceptualisation, and reliance on the work of Wittgenstein and Vygotsky, is clear in the following excerpt.

"The fundamental reality is conversation, effectively without beginning or end to which from time to time individuals make contributions. All that is personal to our mental and emotional lives is individually appropriated from the conversation going on around us and perhaps idiosyncratically transformed. The structure of our thinking and feeling will reflect, in various ways, the form and content of that conversation" (Harré, 1983:20).

In this passage the person is inextricably caught up in discourse as the means of communication, as the basis for thought and as the enabler of personhood. Nevertheless, persons are distinct and make contributions to the broader flow of language and meaning. Persons reflect the reality that is taken to be conversation, but are not assumed to be simple instruments in the conversation. Yet, later in the text, with reference to personal use of the term 'I', it is explained that:

“I believe the pronouns by which people identify themselves as ‘speakers of the moment’ are a lexical system parallel to ‘here’ and ‘now’, ‘this’ and ‘that’ of physical space and time. The study of the logical grammar of ‘I’ and ‘we’ should therefore reveal the referential grid for psychological and social reality. It is the array of persons since it is to persons that utterances are anchored by the pronominal indexicals by using ‘speaker’ as the utterance label. In the primary structure persons are not like things, they are places” (Harré, 1983:61).

In this passage something quite different to agency is suggested. ‘I’ is being used as a referential marker for oneself in relation to the conversation (the primary structure), so that the person as a material ‘thing’ is not considered. This means that conversation is seen as the construction of a social world where the person is a place, not necessarily for speaking from, but rather a place as part of the conversation. In this passage ‘I’ is not a marker for the person as either speaker or hearer, but rather ‘I’ is a referential marker that indicates who is speaking in terms of their sustaining the conversation. As Harré (1983) has put it, the person is a ‘place’ or location for a conversation. Despite an explanation being offered of persons enabled by their engagement in a social world, the intentional person is disregarded.

While in one sense persons are indispensable, Harré (1983) finally gives primacy to conversation. That is, agency is sacrificed when conversation is given primacy, because in a socially constructed world all things as well as persons are conceptualisations maintained by the conversation. Fisher (1999:103) has made a similar point by describing such a situation as the “...choice of external context over internal dynamics and objects”. Similarly, the practice of treating discourse as primary, whereby it becomes the carrier of meaning, treats the person as ancillary or at best a secondary concern. The ontological grounding of persons is not necessary and as a consequence relativism is given opportunity.

Despite this apparent problem, the argument for persons and a reality sustained by conversation continued in the work of Harré and Gillett (1994). Yet it had been made plain that the maintenance of intentional persons in a conversational reality relied more on a sympathetic reading of the arguments than on the soundness of the arguments

themselves. As the title of a paper by Harré (1992) indicated, these arguments were essentially '*A plea for persons*'. In Harré (1992) this plea is borne upon common-sense arguments including the assertions that there would be no talk without persons and that some agreed rules for engagement were required. However, such arguments, while valid in themselves, do not address the problem of incorporating persons in social constructionist psychology.

Nevertheless, despite knowledge of the problem, the contradiction of persons in a reality generated by conversation has continued, although the tendency over time appears to have been to give greater emphasis to the conversational reality. Harré (2002a:152), for example, has discussed forms of psychological research in terms of their having distinguishable discursive conventions and associated grammars. Also, use of the term 'storyline' (e.g., Harré, 2002a:287; Harré & Gillett, 1994:29) demonstrates the emphasis given to the conversation over consideration of the contribution of intentional persons. In addition, although a connectionist model of brain function is presented in a factual manner (Harré, 2002a:189-213), its material reality is denied when framed as discourse involving molecular grammar (Harré, 2002a:149). Some repair is made by reconciling the brain in the realm of discourse and grammar by inviting consideration of the brain as a tool to assist in carrying out cognitive tasks (Harré, 2002a:159). However, this infers that the brain must be accounted for in discursive practice, because its physical presence is otherwise not recognised.

It would seem that while it is commonsensical that persons be taken to be real, under social constructionist psychology there is currently no adequate logic to validate this position. Nevertheless, Harré (2002b) takes the view that persons have skills that enable conversations, while appearing to sweep aside the implications of a conversational reality on the agency status of the person. Of interest, Harré has found it necessary to present this view on other occasions (e.g., Harré, 1995a; Harré, 2001a) and even Shotter (1993) thought it so important he devoted a chapter to the consideration of Harré's treatment of persons. Shotter (1993) concluded that Harré was essentially a realist, while noting that this position had become more difficult to clearly discern. This lack of clarity can still be found. For example, Harré (2002b:612) asserted: "It is no part of the social constructionist approach to deny that there are any universal aspects of human

life, nor that, in a certain sense, there are essential attributes of persons and processes.” Harré (2002b) then proceeds to argue convincingly for the development of persons by their acquisition of skills to undertake discursive acts. Crucially, this argument is enabled by initially setting aside the problem of the person being a social construction. This suggests it is useful for the making of certain arguments to exclude the relativisation of some things including persons.

It seems reasonable to take persons to be real with the qualification that theorising has yet to find a way of resolving the conceptual problem. This is essentially the argument of Nightingale and Cromby (1999a) in their presentation of attempts to define and address the problem of persons in a constructed world. This means that at present social constructionist psychologists may well recognise the paradox of persons in a constructed world without letting it intrude on their ability to conceptualise persons as necessary elements for social interaction. This situation is less than satisfactory, but does not exclude arguing for the irreducibility of persons based on the argument and evidence at hand. Similarly, the common practice of modelling can begin with ideas based upon the behaviour of an assumed thing, the form of which has yet to be fully investigated.

In the following, the problem of arguing for persons in a social constructionist world is deferred until a conceptualisation based on the assumption of the necessity of persons as theoretical constructs is generated. Unlike Harré’s apparent tactic of advocating a form of social constructionist psychology without clearly addressing the problem, this work is intended to be more in keeping with ethogenics and subsequently avoids the problem by taking persons to be primary in a largely socially constructed world. In this way persons can be taken to be users of words and interpreters of meaning, while recognising that these abilities are drawn from social interaction with meanings and ideas being taken from conversation. This also means that people can be spoken of as using their brains to carry out personally meaningful projects within the boundaries of what is known and physically possible. The stance is essentially ethogenic inasmuch as the person is seen to act autonomously, and to have a degree of choice over their actions, while being subject to social constraints and influences. Culture is therefore prominent, though not entirely determining of the individual’s action, so that it is

possible for the individual to be aware of social positions and the effects of their actions. Yet, unlike ethogenics, implications from recent connectionist modelling of the human brain can be drawn upon to characterise more comprehensively the skills and abilities acquired from culture and subsequently reposition the person as agent in the social world.

1.3 Overall aim and general plan

Having juxtapositioned this work against the emerging social constructionist psychology, the plan of the work can now be more fully explained. The overall aim is to develop an understanding of the intentional actions of persons, whereby the person is assumed to be the principal unit for analysis. The plan is to develop a model of persons and their actions in contradistinction to the cognitivist approach and then extend upon this model by critical reinterpretation of contemporary cognitivist theories. Like ethogenics, the work is framed as significant in light of the failings of cognitivism. Unlike ethogenics, the work deepens these criticisms by discussing difficulties associated with particular cognitivist theories. In particular, the theory of planned behaviour (TPB; Ajzen, 1991) and the elaboration likelihood model (ELM; Petty & Cacioppo, 1981) are critically assessed and a new interpretation of these works is provided. In addition, three historic studies by LaPiere (1934), Asch (1951) and Milgram (1963), and more recent cognitivist interpretations of these studies, are examined to develop the new interpretation further. Consideration of these specific theories and studies is intended to develop incrementally the new model of the actions of persons.

1.4 Consideration of method

In terms of method, the sequential critical examination of cognitivist approaches and sequential development of a new interpretation is intended to avoid the problem of reliance upon a crucial experiment to confirm one theory while rejecting the alternative. Such practice involves the common error of presuming that data are neutral and the sole criteria for the confirmation or rejection of a theory. As Greenwald (1975:494) pointed out, such experiments "...fail to take into account the capacity of each formulation to

account adequately for results ‘predicted’ by the other”. Like the competing genres that Kuhn (1962) envisaged, competing interpretations are incommensurable, because the data are not necessarily understood as evidence of the same thing in each interpretation. Although experiments can be a ready source of evidence of inconsistencies or failures and subsequently have a role in informing decisions to reject one theory in favour of another, theories are not necessarily evaluated solely in terms of their empirical precision and adequacy. Attention is therefore directed to the evaluation of a theory by critical examination of its assumptions, because these ultimately serve to shape a particular style of comprehension and judgment. In keeping with these imperatives, this work concentrates on critical assessment of cognitivist theories, while the assumptions, arguments and relative merits of the new approach are also provided.

1.5 . Structure

The following is a brief overview of the remaining chapters.

Chapter two provides a review of literature relevant to the development of a person-centred approach to understanding social action. The chapter also presents criticism of the underpinnings of cognitivism. Ethogenics is initially described with the general progression of the chapter involving the extension and revision of ethogenics in light of more recent work in the ‘new paradigm’.

Chapter three extends upon the literature review of the previous chapter to present the new person action model (PAM). The chapter also gives consideration to a number of methodological issues including the use of quantitative methods, the interpretation of findings and the use of models in social science.

Chapter four introduces the TPB and provides criticism from a number of perspectives. Amongst other criticisms, questions of sufficiency and challenges to the assumption of rationality are presented. The grounds for claims of causal relationships are questioned and two ‘new paradigm’ criticisms are described. In summary, this chapter serves to explain and then question the TPB, while introducing relevant suggestions for reinterpretation.

Chapter five provides an original contribution to criticism of the TPB and provides initial direction for applying the PAM. An examination of the methods for applying the TPB is provided followed by the presentation of evidence of a previously unrecognised finding from the analysis of TPB data. This new evidence is taken to suggest that people take a position on a social issue and then simply provide the researcher with responses in keeping with this position. Unlike the sequential causal decision process taken to be supported by TPB data, regularities in this data are shown to result from respondents completing a questionnaire in light of their position on a social issue.

Chapter six is designed to develop further the idea of a person taking a position as a sub-model of the PAM. The description and critical examination of the ELM is followed by a reinterpretation using the 'taking of a position' as an analogy for explaining the persuasion phenomena that are addressed by the ELM. This involves examining the postulates of the ELM and serves to show that the position model accounts adequately for the actions of persons taking a position in situations that the ELM treats as examples of attitude change and persuasion. This position model is then presented as providing new direction to understanding how people take a position on a social issue, while also suggesting how best to initiate a change of position.

Chapter seven is designed to develop and support further the PAM and the position model through consideration of a number of historic studies in the development of social psychology. The consistency study by LaPiere (1934), the Asch (1951) conformity experiment and the Milgram (1963) obedience experiment are reviewed and critical attention is given to recent cognitivist interpretations. As planned, these relatively straightforward experiments serve to demonstrate the personal and social constraints on the taking of a position. In addition, the studies are used to initiate consideration of the role of brain function in the actions of persons.

Chapter eight is the concluding chapter and begins with a review of the key arguments and findings and then specifically describes the PAM and the position model. The methods employed in development of the models are considered and direction is given to using the new models for the explanation of persons and their role in social

situations. Contribution of these models to theory is also considered in terms of the acceptability of the new models to ethogenics, social constructionist psychology and cognitivism. The chapter closes with a summary of the conclusions and recommendations for further research.

Chapter Two

Explaining the actions of persons

2.1 Introduction

The purpose of this chapter is to review literature relevant to the development of a model of intentional action. The focus is on assumptions and principles for the purpose of explaining the nature and behaviour of persons, which necessarily entails argument for an ontology of persons.

Various threads and themes are followed in this chapter to give primacy to persons as the principal unit for understanding intentional action. The emphasis given to persons is enhanced through presentation of some key shortcomings of cognitivist psychology. In addition, the emphasis is distinguished from the recent trend in critical psychology that gives primacy to discourse. Particular attention is given to the work of Harré, the principle designer of the person-centred ethogenics (Harré & Secord, 1972), whose more recent work has attempted to maintain a primacy for persons within a social constructionist psychology (e.g., Harré & Gillett, 1994; Harré & van Langenhove, 1991).

The resulting theory, which is developed over the course of the chapter, is of the realist tradition. This new theory can be likened to an ethogenic approach (Harré & Secord, 1972) with the incorporation of a social constructionist theory of cognition. Elements of Harré and Gillett's (1994) brand of discursive psychology are drawn upon, though the focus of the model is on persons as instigators of action, in contrast to Harré and Gillett's (1994) focus on discourse as the arena from which meaningful action emerges. In this light, positioning theory (Harré & van Langenhove, 1991), a related though quite separate development to Harré and Gillett's (1994) discursive psychology, is judged as valuable for understanding positions as emerging from discourse. Unlike positioning theory, the new line of argument holds that positions are anchored *within* persons, rather than positioning theory's stance of positions emerging from discourse.

A key justification for a return to a person-centred approach is the powers and capacities that arise from modelling the neural networks that comprise the human brain and nervous system. Such connectionist models exclude the idea of the storage of symbolic representations and alternatively propose distributed patterns of activation built upon experience. These models show how the brain can produce momentarily occasioned responses, such as thought, talk and action. In this way, examination of words and actions can be linked to people's lives enabling a fuller descriptive understanding of behaviour.

The review begins by introducing the ethogenics of the 1970s, as laid out by Harré and Secord (1972), and Harré and Gillett's (1994) brand of discursive psychology. The development of ethogenics is then considered in light of the shortcomings of cognitivist psychology, as they were highlighted by Harré and Secord (1972). These shortcomings undermine cognitivist understandings of human behaviour at the practical and philosophical level. These are introduced to show fundamental flaws in contemporary social psychology and to serve as standards for the development of a comparatively better model. Scientific realism as pertaining to psychology is presented and aspects of the philosophy of Kant that support ethogenics are considered. The philosophy of Kant is subsequently questioned and principles from Wittgenstein's later philosophy that underpin the more recent work of Harré and his associates are explained.

Consideration is then given to the rule-role model, which was central to ethogenics. Positioning theory is then introduced as a more useful tool than the rule-role model for framing the dynamics of social interaction, though its focus on discourse as opposed to persons is questioned. The review then focuses on defining persons by drawing upon a variety of threads and themes from Harré's work to argue for a person-orientated approach to understanding social behaviour. Finally, the approach is given further support by drawing upon the implications of neural network models and direction is given to the interpretation of thought, talk and action.

2.2 An overview of ethogenics

Ethogenics arose as a response to perceived problems of psychology and social psychology in the late 1960s. Joynson (1970), for example, feared that reliance on stimulus-response models would lead to a constrained and inferior psychology. Without a strong theory of the mind, it was felt that psychology would revert to physiology and largely disappear as an independent science. Cognitivist psychology offered one solution through the development of information-processing models of human thought processes. Harré (1971), however, provided an outline of a solution involving the consideration of agency as an intermediary between behaviour and sciences of the brain. This approach was formalised in Harré and Secord (1972). Their work began with a detailed, critical deconstruction of psychology. The shortcomings of Humean causality, stimulus-response type models and a logical positivist methodology were highlighted as factors that led to an efficient though misguided psychology. Drawing upon the philosophy of Kant, a case was built for a new psychology with the following assumptions:

- Persons are agents and it is unscientific to treat them as anything else (Harré & Secord, 1972:29).
- A person is self-aware and capable of commenting upon their actions (Harré & Secord, 1972:102).
- Personal accounts are a valid explanation of what people do (Harré & Secord, 1972:101).
- The meaning of human behaviour can be understood by what a person understands its meaning to be (Harré & Secord, 1972:149).
- People appear to assume roles and act according to implicit rules (Harré & Secord, 1972:177).

A key to forming the new science was the introduction of a critical descriptive stage prior to the development of an explanatory theory. The descriptive stage involved observing people in everyday situations, much as was the case in standard ethology where observation is made of animals in their natural habitats. A critical difference, however, was that, unlike animals, people were assumed to know what they were doing.

People were taken to be users of words, tools and other means to carry out a variety of day-to-day intentional actions. People were also taken to be capable of explaining themselves and to manage their behaviour in light of the views of others.

Against this background, a rule-role model was designed to explain intentional social action. Drawing upon the ideas of Goffman (1959), an observer's stance was taken in order to view actions as a dramatic performance, with roles played out in situations as if on a stage. From this standpoint, self-monitoring was then assumed to initiate concern as to how well they play their roles. Roles are a set of actions a person takes to be appropriate for a given situation. Rules were taken to both generate and guide the performance of a role and its series of actions. The model assumed a propensity to adhere to social roles and to conform to socially acceptable rules of behaviour. The model was not prescriptive, but provided an explanation of social behaviour based on the assumption that people followed rules and assumed roles, either tacitly or explicitly, in the course of everyday behaviour.

Ethogenics focused on understanding social behaviour by stipulating the person as the indivisible unit for analysis. This was a key departure from cognitivist psychology, which focused on, for example, dispositions, motives and drives as factors responsible for human behaviour. Ethogenics held that, for scientific purposes, persons should be seen as having personal responsibility for their actions and as being independent initiators of action with the capacity to monitor their own performance. In this context, dispositions, motives and drives are properties of a person and cease to be powerful administrators of people's lives.

2.3 An overview of discursive psychology

Ethogenics was foundational in the development of discourse-oriented approaches in psychology. These alternative approaches to cognitivist psychology are often described as being of the 'new' or 'emerging paradigm' by their proponents. Their commonality is a focus on discourse or everyday language use, including conversation as well as other meaningful forms of communication, such as writing, gesturing or facial expressions. The term 'discourse', in this context, refers to interpersonal activity in which persons

are involved in a process of learning or negotiating ways of signifying what is going on around them. People are assumed to give significance to the world according to the meanings in their discourse, as opposed to simply learning the names for things. Discourse-oriented psychology assumes that private thoughts and related behaviours are properties or features of discourse. The meanings of thoughts and behaviour are derived from engagement in discourse, and, that expressions of private thoughts depend upon the adeptness of the person, the role they assume and the way the situation unfolds (Harré & Gillett, 1994:27). Discursive psychologists therefore focus on discourse rather than persons, with emphasis given to the meaning of words and factors related to understanding the use of words. Harré and Gillett (1994) characterise a realist form of discursive psychology that is an extension of social constructionist psychology. Edwards and Potter (1992) exemplify the 'popular' relativist alternative.

Discursive psychology has a basis in the later work of Wittgenstein (Wittgenstein, 1953/1972). Wittgenstein linked the meanings of words, and therefore the contents of thoughts, to contexts in which people acted in the world and with each other. Discursive psychology recognises that the naming and signifying of things is a cultural production that is dependent on the situation of the discursive activity. For example, if a person were to say 'I like you' to a friend, he or she would be changing the nature of a conversation, which can be understood in terms of speaking to a friend. In terms of discursive psychology 'I like you' is not about the objects 'I' and 'you', or a syntactically correct sentence created by the speaker with reference to these objects. The making of such statements is empirically non-referential, in that they do not refer to an object, but work to identify or locate momentary status (Harré, 1983). The phrase is assumed to have an effect on the nature of the conversation and can be interpreted as having illocutionary force, because the words are understood as doing something in the social context. The phrase and its common meaning and usage are derived from discourse, because 'I like you', its meaning and its correct use, is learned from social intercourse and subsequently functions in a particular social context.

2.4 Basic contrasts between ethogenics and discursive psychology

Discursive psychology and ethogenics differ markedly from cognitivist psychology, and also from one another. Harré and Gillett (1994:29) provided a view of differences between cognitivist psychology and discursive psychology in a table showing aspects of their respective ontologies. The first two rows in Table 2.1 are from their table, with the third row added to show key aspects of the ontology of ethogenics.

Table 2.1 Ontologies (Adapted from Harré & Gillett, 1994:29)

Ontology	Locative systems	Entities	Relations
Newtonian	Space and time	Things and events	Causality
Discursive	Arrays of people	Speech acts	Rules and story lines
Ethogenic	Social relations	Persons	Rules and roles

Harré and Gillett (1994:29) describe cognitivist psychology as Newtonian or mechanical by nature. The Newtonian ontology assumes that an event or thing can be indexed in terms of time and space. Key questions are then ‘where’ and ‘when’, because time and space may bring variants upon laws or rules that are assumed to transcend time and space. Key entities are things and events which are indexed in time and space, and are taken to be fundamentally governed by causal relationships interpreted as laws or rules. Issues associated with aspects of this ontology are provided later in this chapter (section 2.5).

Discursive psychology and ethogenics are within a new, emergent paradigm. Their commonality is principally an objection to cognitivist psychology and, more positively, they involve the ascription of agency to individuals. In ethogenics emphasis was placed on persons as the indivisible unit for analysis with the theoretical model being based on the ascription of powers or capacities to the individual. In contrast, discursive psychology gives precedent to the conversation itself, by arguing that discourse is the primary reality for persons.

Discursive psychology is primarily concerned with discourse as the source of human thought and behaviour, and as the medium by which thoughts, behaviours, and their meaning are sustained or transformed. Discourse is located in arrays of people. Discursive psychology also holds that different discourses and meanings can be found in different people at different times. The primary unit for study is, however, not persons but discourse itself. The primary units for analysis are speech acts. The imperative is then to focus on the way words are used to perform various functions in conversation, in keeping with subjective meaning, others in the conversation and the situation in which the conversation occurs. Speech acts are interpreted as being governed by rules for the use of words and the telling of various story lines.

In some contrast to discursive psychology, ethogenics was based on a realism whereby the observations of people going about day-to-day activities gives rise to a theory of intentional action and agency. Like discursive psychology, the locative system is persons. Unlike discursive psychology, however, ethogenics is more concerned with social relations, or locations within a moral order, rather than with arrays of people as locations for varieties of discourse. Ethogenics also involved concern with rights, duties and obligations. Such concerns stem from an assumption of adherence to rules of behaviour.

In light of discursive psychology, the focus of ethogenics on persons as the principal unit for analysis seems unnecessary. The words and actions themselves provide evidence of their meaning and are reflective of any 'private' or 'inner' thought processes. Persons are not the primary reality, because their thoughts and actions are ultimately reducible to discourse. Nevertheless, discursive psychology is not simply a study of language use. Instead, the discipline is promoted as a means of understanding human behaviour and the study of discourse is the means towards this end. From this perspective, it is possible to think of people as having autonomy through the use of terms and words in the sense of selecting tools from a toolbox, or even to think of people as creating new ways of thinking and looking at things, albeit with reference to an already spoken language.

2.5 The impetus for change – problems of cognitivist psychology

Harré and Secord (1972) thank Kuhn for smoothing the path for acceptance of their new way of thinking. Kuhn (1962) took a historical view of the development of scientific knowledge and described the rise, fall and replacement of genres of theory in science, which he described as paradigms. Where a particular genre confronted seemingly intractable anomalies of relatively sufficient number or power, then scientific revolution is brought about through the advocacy of alternative ways of thinking. Eventually a new genre becomes established and continues until, like preceding genres, it becomes subject to its own intractable problems and suffers the fate of its predecessors.

Kuhn rejected logical positivism as an interpretation of scientific activity, insofar as it held that observation yields factual knowledge, which can be used inductively to confirm or disconfirm laws or theories and provides a neutral factual basis for assessing the relative merits of competing theories. Instead, Kuhn maintained that observation was theory-laden, so that competing theories could not, by observation, obtain knowledge of the same ‘facts’. Theories could not be compared, because there was no ‘neutral’ body of facts against which the relative merits of competing theories could be assessed. This challenged the view of science as a rational progression and introduced a relativist stance, whereby new genres brought new perspectives that were incommensurable with those of former genres. Kuhn’s relativist stance is often cited because it serves to introduce new ways of thinking. The stance is, however, often less than fully embraced, because its assumption of relativism, when applied reflexively, is ultimately self-refuting (Suppe, 1989).

The idea of ‘paradigm shifts’ occurring as revolutions in science would have seemed timely within psychology in the early 1970s. Leahey (2000:494) describes this unsettled transitional period in psychology from the behaviourism of the 1950s to the new cognitivist psychology of the 1970s as “the years of turmoil”. Where, previously, factions within psychology were reasonably tolerant of each other, the rise of humanism, radical behaviourism and cognitivist psychology, and the subsequent erosion of the basis of the tenets of behaviourism, would seem, in light of Kuhn’s thesis, to have had the hallmarks of an impending paradigm shift. What eventually emerged was,

however, somewhat of a compromise with stimulus-response type models of behaviourism being transposed to the input and output of information-processing language that was taken to reflect the structure of human thought. Information-processing also retained a logical positivist methodology, whereby theory was closely tied to evidence in the search for simple 'programmes' within the individual, who was understood as a complex machine.

While often the establishment of cognitivist psychology is described as a revolution, its magnitude was perhaps not of the scale that Kuhn envisaged. The new cognitivist psychology may well be best thought of as bringing a change of tack within a more general voyage of psychology. The crew appeared confident and looked smarter, but beneath the refurbished decks there remained a keel of some vintage. It was therefore not too difficult for Harré and Secord (1972) to make quick, though not unconvincing, points to reveal basic flaws in the design of cognitivist psychology. Their argument had three linked parts which revealed that stimulus-response type models of human behaviour, Humean causation and logical positivism were "...still the unconsidered foundation of a very great deal of modern psychology" (Harré & Secord, 1972:33).

A fundamental assumption of contemporary psychology is that an organism under the effect of stimuli will respond in a predictable manner. To account for factors related to the nature of the organism, the model is modified to a 'stimulus-organism-response' model in order to explain observed deviations in response from the simpler stimulus-response models. This view of causal relations follows Hume's regularity theory, which in summary holds that "Causation is nothing but the regular sequence of one kind of event and another kind which usually follows" (Harré & Secord, 1972:31), or as Hume stated "... the constant conjunction of objects determines their causation" (Hume, 1740/1978:173). Factors related to the nature of the organism are accommodated in this view, by being regarded as previously impressed forces or changes brought about in the organism in reaction to external stimuli. Organisms are therefore, according to Hume's view, the summation of forces from the environment. Using an example from Hume (1740/1978), causality is the transference of force from one thing to another, like the striking of a billiard ball causing movement in the other. To add to this example, should a billiard ball move out of the way before being struck, its movement could be

explained by the influence of other forces that had altered the billiard ball. Potentially, then, behaviour can be explained by causal forces both in past and present time that 'impact' upon an organism. According to Hume (1740/1978), it is cumulative experience, rather than rationality, that fundamentally guides human behaviour.

To facilitate the study of causal forces, logical positivism was adopted. Logical positivism in outline "...asserts theory to be a hypothetico-deductive system. Laws or hypotheses believed fundamental are asserted as postulates, and the consequences of these (theorems) are deduced by strict logical and mathematical rules. The theorems are then to be tested by experiment." (Koch 1962:12; quoted in Greenwood, 1989:2). The approach was put forward with some conviction in the 1930s and was more fully accepted by psychologists in the late 1950s (Greenwood, 1989). This acceptance would have occurred with some ease, because Hume held that knowledge of the world was based on cumulative experience or sensory experience, recognising that the world was experienced through the senses. Subsequently, impressions or conceptualisations of the world are only meaningful when they align with sensory experience. Logical positivism formalised this view by treating descriptions of aspects of the world as logical constructions from sensory experience (Leahey, 2000:407). All thought was held to be built upon sensory experience, which was interpreted as sensory data. In this way, it was thought that emotional states, for example, could be analysed in terms of their basis in sensory data, which would be the closest approximation of the world.

Greenwood (1989) describes how this form of logical positivism presented a dilemma for understanding human behaviour, because sensory data are contained within human beings in a way that is not readily accessible for study. In an attempt to resolve this dilemma, knowledge of the observations, or sensory data, was taken to be primary, with the qualification that under normal conditions any human being would have the same sensory experience. In this way, stimulus-response type models, Humean philosophy and logical positivism were intertwined to enable an empirically based understanding of human behaviour. Critically for enabling cognitivism, variants between people and between different times and different places could be disregarded as mere 'noise' in the search for common laws or rules assumed to drive human behaviour.

Harré and Secord (1972) were critical of the close relationship between observation and theory promoted by logical positivism, because they thought it placed restrictions on theory development. In their view positivism encouraged the postulation of simple rules or laws that had an immediate 'fit' with the data. Newton's science, they argued, made advancements in physics using this approach, though further advancements have not necessarily used Newton's approach. Greenwood (1989) pointed out that light behaves as both waves and particles in different experimental regimes, which would presumably initially dumbfound the Newtonian. Einstein's theory of relativity and Bohr's theory of the atom, he argued, explain phenomena using theories built upon logic, whereby observations of the phenomena do not immediately lead to the theory. For example, changes in spectral emissions of atoms, according to Bohr's theory, relate to changes in the orbit of electrons, which were assumed to behave much like planets in the solar system. In this case, the planetary model was found to be a useful metaphor in explaining the behaviour of atoms. In these respects, theory is a creation of the mind, which serves to structure empirical observations and, by extension, is a tool for the transformation of data to understand reality. In contrast, by wedding theory closely to observation, theory development is constrained.

A recent paper by Wallach and Wallach (2001a) demonstrated the constraints placed on theory development with the argument that many empirical studies in social psychology are uninformative. It was pointed out that empirical evidence of theoretical propositions is often supported, because the propositions are developed with the evidence in mind. In addition, in many circumstances hypotheses are truisms that border on being tautologies that are difficult to refute and largely unrevealing. In simple terms, they 'state the obvious' and consequentially reveal little more than what is already known about a phenomenon. This is a recognised problem in psychology that arises because of the need to support hypotheses in terms of observable behaviour (Fletcher, 1996). The problem is illustrated by Kimble (1989) who related that:

"If someone says that a man has hallucinations, withdraws from society, lives in his own world, has extremely unusual associations, and reacts without emotion to imaginary catastrophes because he is a schizophrenic, it is important to understand that the word *because* has been misused. The symptomatology defines (diagnoses)

schizophrenia. The symptoms and the “cause” are identical. The “explanation” is circular and not an explanation at all” (Kimble, 1989:495).

Kimble (1989), however, did not consider this to be a major problem, because an understanding of a behaviour is provided through a detailed description. Using the example of schizophrenia, determining the extent to which a schizophrenic hallucinates or withdraws from society would provide useful details about the condition. Such studies do not, however, conform to the general purposes of psychology, because they are descriptions of a condition and may not necessarily lead to the understanding, prediction and control of behaviour (Fletcher, 1996).

In reply to Wallach and Wallach (2001a), Kimble (2001) reiterated his earlier view (Kimble, 1989) that observations are themselves useful without the direct postulation of mental states. Wallach and Wallach’s (2001b) response reveals a key point in the agenda of cognitivist psychology and also raises a key problem. For them, behaviour is an obscure window on the realm of mental states, so that the behaviour itself does not constitute a definition of a mental state, but is often merely a rough indicator of it. Through experimentation and observation, the mental state and its functions are revealed, whereas circular studies link observations and reveal little about underlying mental mechanisms. Wallach and Wallach (2001a) raised the flag about issues of circularity and unfalsifiability, because, in their view, social psychology needs to be more ‘psychological’. Their assertion was that it is insufficient to simply describe, measure and associate observations of behaviour, in light of the potential for advancement through the discovery of the nature of mental states. This was clearly a call to renew belief in the existence and power of sub-personal constructs as responsible for human behaviour. However, such a move presents a dilemma. In cognitivist psychology, a departure from the evidence brings with it the potential for undermining the credibility of the theory.

Greenwood (1989) expanded upon Harré and Secord’s (1972) criticisms of social psychology by highlighting the problem that in open systems, where information is lacking, all influences cannot be accounted for. Such issues are not new. Maslow, for example, argued strongly in the 1940s that the study of isolated single behaviours was a

simplistic and misleading approach to understanding personality (DeCarvalho, 1991:35). In addition, the Gestalt movement, against atomistic theorising, emphasised that the whole of anything is different from the sum of its parts (Koffka, 1935). In comparison to theorising in open systems, closed systems are ideal because there is potential for the classification and documentation of all relationships, bringing surety to theorising and reducing the likelihood of revision. In psychology, laboratory tests of everyday behaviours can be seen as attempts to establish a closed system that is conducive for measurement of response to stimuli and for the identification of possible intervening variables. The resulting data provide the means for developing theories concerning regularity between a stimulus and response, and the grounds for developing and testing models of cognitive processes. These measures can be understood as necessary for an experiment that is ‘uncontaminated’ and manageable. However, while ideally each experiment can potentially be replicated in a similar environment, such experiments remain fragments of behaviour undertaken in everyday life.

Further questions can be raised about the limitations of information-processing models. Rychlak (1995), for example, finds that such models do not allow for the possibility of persons having control over their lives and questions the model’s ability to account fully for human action. Rychlak’s objection centres on the argument that “Reasoning is a matter of ‘taking a position’ rather than tabulating signals into a probability of occurrence” (Rychlak, 1995:582). His objection is to the practice of conceptualising a causal model for the interpretation of data. Such a practice is criticised because it disregards the possibility that the actions of persons could be responsible for patterns in data. Behind Rychlak’s claim for people ‘taking a position’ are empirical studies, which have shown that issues presented using both sides of an argument are easier to remember. Rychlak (1995) interprets the studies as showing that juxtapositioning is a natural tendency for decision-making. Billig (1987) has developed observations of this tendency to reach the conclusion that the way a person thinks is much like debating or taking a side in an argument. In addition, Dennett (1982) has presented a contrasting view by asserting that traditional arguments about determinism and moral responsibility have been augmented by mechanistic explanations of human behaviour.

Dennett (1982) argued that it is possible, in principle, to explain cognition and behaviour in mechanical terms. The same argument lies behind Wegner and Bargh's (1998) statement and argument that "The sense of control is an intriguing property of humans that can be conceptualised as an effect and as a cause of deterministic processes" (Wegner & Bargh, 1998:450). The implication of this argument is that the information-processing model depicts behaviour as being totally subject to a programme or rule. In addition, despite inviting possibilities for theorising (Dennett, 1982), Dennett (1996) gives preference to a pre-programmed model of brain function. As Shweder (1991:80) related, "The main force in general psychology is the idea of a central processing device. The processor, it is imagined, stands over and above, or transcends, all the stuff of culture, context, task and stimulus material as its content".

Thus, the ideal for psychology would be the identification of a timeless psychological law that explains a person's actions with little or no room for personal choice. However, as Rychlak (1995) suggested, if the writer of the program was accommodated, a program could be seen to be written in a different way and be understood in terms of the intentions of the writer. Searle (1980) exposed this issue in his Chinese room analogy, which eroded the value of the Turing test by showing that it is a flaw to be focusing solely on the interpretation of demonstrative reasoning. In 1950 Turing predicted that the computational machines he had designed would eventually be indistinguishable from a person in terms of answering questions. By passing this test the machine would effectively be judged as 'thinking' like a human being (Dennett, 1998). Like the point made by Searle (1980), information-processing models can be said to apply the Turing test in reverse by assuming the mind functions in the same way as programming directs a computer. Therefore, while it would appear that information-processing models are appropriate for the study of human cognition, asking a person to perform certain tasks and interpreting these using the information-processing model seems to be simply revealing an ability to simulate computer function.

To interpret information-processing models as representative of human cognition seems misguided, because it appears that the model of a machine is being imposed upon the data. As Searle (1998:91) points out such an explanation can be made, but it is inevitably insufficient because causal explanations exclude intentionality. To put it

plainly, while the modern computer does a spectacular job of processing information, it is misleading to think that human cognition should be like that of these machines. It would seem that, having created a successful machine that this particular design should apply to all cognitive devices, including the human brain. Unfortunately, however, the physiology of the human brain reveals nothing of this design. Instead, the organic material is understood to operate as a complex neural network. An explanation can be made of data in information-processing terms, but this does not equate to an explanation of human cognition.

Understanding of the complex workings of the brain is at present less than comprehensive. Harré's (1998, 2002b) approach has been to consider the brain as a tool that produces output, which in turn enables a human being to function as a person. Exploring how this output is produced is nevertheless useful for providing a more complete explanation of persons and their actions. The human brain as a neural network will be presented as support for realist social psychology (section 2.11). Before moving to consider the implications of this juxtaposition, the case for a realist social psychology is presented.

2.6 Realism and psychology

Harré and Secord (1972) and Greenwood (1989) asserted that cognitivist psychology is limited by a narrow and misguided approach to the consideration of human behaviour. As Greenwood (1989) pointed out, psychology, through empiricism, is inclined to suffer from what Hempel (1965) termed the 'theoretician's dilemma', where theory becomes virtually redundant in light of empirical observations. The dilemma is that if a theory serves its purpose of succinctly explaining relationships between observed phenomena, then the theory is no longer necessary, because it has effectively become a law. Greenwood's answer to this problem was the assertion that 'Scientific theories are to be best conceptualised as 'partially interpreted systems', which can be further interpreted to generate novel empirical predictions' (Greenwood, 1992:134). This stance leaves open the possibility for further theorising by emphasising the putative nature of theorising. Harré and Secord (1972) formalised the conceptualisation of social behaviour into their initial critical descriptive phase. This phase involves the

observation of things while refraining from drawing premature conclusions and, like the approach advocated by Greenwood (1992), enabled the consideration of new ideas. Careful science, they claimed, involves the careful study of things and their properties prior to the formation and testing of hypotheses. Their explanation was formed somewhat intuitively prior to formal theorising. In this way, Harré and Secord (1972) avoided presupposing the dominant paradigm of cognitivist psychology. Their stance was to give primacy to what can be observed. In terms of social behaviour, this turns out to be people interacting, while going about their day-to-day activities. From description, they proposed that an act, such as talking, indicating, or doing is intentional and meaningful for the person, and is performed in light of a social context.

In developing their model of social behaviour Harré and Secord (1972) were initially concerned with what is 'real'. The process of theory development they and Greenwood (1989; 1992) advocated are forms of scientific realism. While there are many versions of realism, scientific realism holds that objects in the physical world exist independently of people's conceptions of them. Theoretical propositions are nevertheless putative in that they are descriptions of objects that stand, or are refuted, depending on the existence of an object and its properties (Suppe, 1989). Theoretical propositions can be social constructions, but unlike relativism, realism holds that propositions have independent grounds for truthfulness, through comparison with the physical world. Yet a flaw in the realist argument is that the physical world cannot be experienced directly, because it is interpreted through the senses and ways of knowing and thinking. Realists therefore do not assume to be describing the world, but instead take theorising to be the making of an analogy, metaphor or model of reality.

It can, however, be argued that models of aspects of the world and interpretation of evidence of these models are social constructions. On the other hand, critical realism assumes that something is real if it can bring about physical or material consequences (Bhaskar, 1975). Smith (2000) has, however, pointed out that generally realists do not argue that what appears to be real *is* real, but assume that a reality exists independent of conceptualisations of it. Searle (1998:33) agreed that science does not provide an objective knowledge of reality, but pointed out that this does not directly support the claim that there is no reality. In Searle's (1998:33) view, antirealists mean to empower

themselves by refuting science, so that by placing themselves as central to their world, all else becomes trivial. In his view, their efforts are largely inconsequential, because they attack realist epistemology. While promoting a social constructivism, they cannot themselves confirm or deny their claims of a non-existent reality. In addition, Searle (1998:31) considered it somewhat nonsensical to justify reality, because any claims about reality presuppose its existence. Reality is therefore assumed and there are no absolute grounds for confirmation or for rejection.

Harré (1986) attempted to improve the realist position through use of the concept of 'Umwelt'. Umwelt refers to what is knowable within the boundaries of what can be explored by aided or unaided perception. An arm can be dissected to discern the mechanical operations of the muscles and bones and a microscope can be used to examine muscle composition. In this way, classification and prediction can be made with some surety of things plainly experienced in the Umwelt, through exploration of their mechanisms and sub-systems. This encourages a stance whereby observations of a physical object and its workings are given primacy over conjecture or imagination. Theories are involved in understanding a thing, either by linking sub-systems or by theorising beyond the realms of unaided and aided perception. Contents of the theorised realm are inferred by their apparent dispositions, or the events and practices they permit. In this way, observations are unequivocal as a truth test of a theory by the degree to which observations support the theory. It is here then that the realist must concede that the merits of competing theories with similar explanatory power are dependent on the agreement of a scientific community.

The realist's assumption of an objective reality and the prospect of scientific progress does not altogether remove issues associated with the relative nature of theorising. While an independent reality may exist, theorising is nevertheless an activity associated with the culture of a scientific community, which is itself located within a broader landscape of contemporary thinking. Rorty (1991:38) has similarly described the problem "What we cannot do is rise above all human communities, actual and possible. We cannot find a skyhook which lifts us out of mere coherence – mere agreement – to something like 'correspondence' with reality as it is in itself". Given that agreement and acceptance are necessary conditions for the advancement of science, the process is not

immune to the common traits of human life, including, for example, debate, ambition or envy.

Without denying that an objective reality exists, Harré and Gillett (1994) examined reality as experienced by human beings. In the context of the discussion of realism, the task is to consider the transformation of things and their properties to cultural artefacts and the ways in which human culture produces an understanding of the workings of things. Their starting point can be said to be much like that of ethogenics, with people observed to be going about their day-to-day activities. However, whereas the rule-role model provided an explanation of social behaviour, the task they set themselves was to provide a more comprehensive explanation of how people understood the world. This included consideration of the nature of human thinking and action. Harré and Gillett (1994) regarded discourse as the primary data, in the sense that a word or an action was a thing that could be observed, combined with the proposition that such data were meaningful in their deployment and interpretation. A background assumption was that for such discursive data to exist, the person must have an understanding, tacit or otherwise, of the personal and social function of discourse. This means that persons have the ability to use and understand discourse, and this ability is a necessary part of socialisation. However, if words and their meanings have primacy, then the person and their skills and capacities, as a consequence, are less important. If primacy is given to discourse then it is difficult to maintain a role for persons, apart from their having an ancillary role as speakers of the words and reiterators of meaning in the service of an ongoing conversation. In this light, the rule-role model of ethogenics can be understood as giving primacy to persons, because it allowed people to be agents and make choices within the boundaries of social acceptance. In contrast, the reality that Harré and Gillett (1994) assumed allowed for transformation of meaning within the various circumstances of individual minds and saw action as relative to the maintenance of discursive practice within a more general form of life.

2.7 From Kant to Wittgenstein

Kant, an icon of the rationalist movement that succeeded Hume, took a distinctly different approach from his predecessor to interpreting causal relationships. In contrast

to Hume (1740/1978), Kant (1789/1998) argued that causation could not explain experience, because something must exist prior to enable causation to be interpreted. Kant believed that sensory impressions were structured by categories of thought. The interpretation of experience through these categories meant that the mind imposed causality on experience.

Kant (1789/1998) also proposed that principles or rules served as a guide for behaviour. A morally based interactive order was seen to be established by a person acting so that their behaviour set a standard for others to follow. In this way, it was assumed that people differentiated standpoints in terms of a moral imperative to behave in an acceptable manner. In this context, actions are taken to be mediated by meanings associated with available standpoints.

With the support of the philosophy of Kant, Harré and Secord (1972) set out to model social behaviour. Their model was different from a causal model as it presented rules and roles as a framework to guide behaviour rather than posing causal forces as determinants of behaviour. In criticism of the philosophy of Kant, however, Harré and Gillett (1994:74) have pointed out that it did not explain how people came to have categories of thought. For Kant, experience required basic categorisation for it to have meaning, and social norms were required to further categorise and interpret the experience. Kant had included a level of normatively derived meaning, but had considered basic categorisation as given. On this point, Harré and Gillett (1994) turn to Wittgenstein as the provider of a fuller explanation of meaning and rule-following.

Harré and Secord (1972) make only scant reference to Wittgenstein. This appears puzzling, but can be understood. Wittgenstein stated, "There must not be anything hypothetical in our considerations. We must do away with all explanation, and description alone must take its place" (Wittgenstein, 1953/1972:§109). In setting out to make a new science of social behaviour, Harré and Secord (1972) took with them the view that explanation lay with theorising about an unseen structure that shaped behaviour. In this respect their theory was not unlike that of cognitivist psychology. Kant offered a view of the mind that accommodated this approach. He suggested that the mind produced an orderly view of the world through categories of thought.

Wittgenstein, however, provided an understanding of thinking as the correct use of grammar, i.e., the normatively defined correct use of words, which can change depending on the circumstances. Thus, Kant provided a structure for a moral order for individual thinkers, while Wittgenstein saw persons as inextricably interdependent.

Wittgenstein (1953/1972) also pointed out that there are many functions that statements perform besides describing or designating. In contrast he proposed that language be analysed in terms of the roles that words play in everyday language use. This involved rejecting the traditional view that words were used predominantly as names for things. Instead, it was proposed that meaning would become clear through considering the various ways in which language was used. To illustrate this point, Wittgenstein compared the use of words to the use of tools: “Think of the tools in a tool-box: there is a hammer, pliers, a saw, a screw-driver, a rule, a glue-pot, glue, nails, screws. – The functions of words are as diverse as the functions of these objects” (Wittgenstein, 1953/1972:§11). Wittgenstein emphasises that the functions of words are varied according to the needs of the speaker, much like how the selection of a tool is varied depending upon the needs of the worker. Their functional differences are what make them practical. The way in which a word is used is what makes it useful in the language. A word is understood by the circumstances surrounding its use.

Wittgenstein also shows the difference between his interpretation and the denotative approach through the situation of someone pointing out something to someone else. For example, in discussion of children being taught the names of things (Wittgenstein, 1953/1972:§6), the argument here is that children are learning the *act* of naming, within which learning the name of the thing is a necessary but minor lesson. Wittgenstein called such situations a ‘language game’. In this case, the action of naming, the type of language used and the social situation constitute a context. Knowing a language or being involved in a language game is therefore much like knowing a complex set of rules about how words are appropriately used for a diverse range of situations. As when someone points something out, we do not simply follow the direction of the finger with our eyes, instead the act of pointing is itself understood. Similarly, in understanding the move in a chess game, we know more than just the move of the piece to a certain place.

The move is understood, because the game of chess is understood (Wittgenstein, 1953/1972:§33).

Wittgenstein also challenged traditional views of the mind that incorporated inner or mental processes. Wittgenstein pointed out that if we had truly private, inner experiences, it would be possible to represent them in a corresponding language. He concluded, however, that the assumption of a private language could not be supported. He used, amongst others, the example of pain (Wittgenstein, 1953/1972:§253), because pain is presumably a very private sensation. He argued that talk of pain is not so much a description of what one is feeling, but is the behaviour of expressing the sensation of pain. Importantly, this is not behaviour understood using reductionism, and he was at pains to emphasise he was not a behaviourist. It is an action undertaken in involvement with a 'language game'. Wittgenstein pointed out that the word 'pain' and its meaning are learnt from other people without them having access to a person's supposed private sensations of pain. That the word has any meaning presupposes some sort of external verification, a set of criteria for its correct application, so that the pain must be accessible to others as well as to the person. According to Wittgenstein, the use of language for pain, or other supposedly 'inner' sensations, can only be associated with dispositions to behave in certain ways. In addition, Wittgenstein also showed there is no systematic way to co-ordinate the use of words to express private sensations between individuals without using language. Using the example of something being carried around in personal, private boxes, Wittgenstein (1953/1972:§293) proposed that even if it was agreed that the something be called a beetle, there is no way to establish a non-linguistic similarity between the contents of one person's box and that of another person's box. Public language is therefore used to describe and express so-called private thoughts and experiences. This does not mean that words alone constitute a sensation, such as that of being in pain. In learning the words and behaviour associated with being in pain, the sensation and the words become seemingly inseparable. The headache, the complaint of it, and the furrowed brow, are all a part of being in pain, with the implication that whatever is physically experienced is experienced via meanings learnt from other people.

2.8 Rules as guides for behaviour

Through the person deciding to do something in his or her own interests social behaviour can be taken to be a display of intentionality. The behaviour can be seen to have some meaning or as serving some purpose for the person. The behaviour can also be interpreted as normative, whereby it is judged according to standards of correctness or appropriateness. These arguments, which distinguish the study of people as separate from studies undertaken in the natural sciences (Harré, 1998), can be seen to lead to the assumption of rule-following as put forward by Harré and Secord (1972).

Ethogenics holds that for social behaviours there are tacit rules that guide behaviour. These rules are built up from prior experience of social situations, and are held to exist within or behind conscious thought. They are presumed to guide action, but not necessarily to direct it. Wittgenstein (1953/1972:§84) considered rules in a similar sense to ethogenics in his discussion of rules acting like signposts. That is, rules show the way at one point of a journey. They direct and do not control the traveller, who may choose another route or alter direction at any point of the journey. Wittgenstein (1953/1972) also saw rules as useful guides for understanding human behaviour, with three levels having particular relevance. Using the interpretation of Harré (1992), first, there are forms of life inferring general, though bounded, possibilities. Second, there are language games that are analogous to a general dictionary denoting the use and meaning of words. Finally, there is grammar, which is the set of rules denoting the correct use of a word for the circumstances. These could potentially provide for an understanding of social behaviour, given knowledge of the relevant language game and circumstances in which an action occurs.

There are, however, a number of difficulties in adopting rule-following as a general explanatory approach (Harré, 2002a:126). Rules do not determine an outcome, but merely suggest an action or actions. Rules also set out what is proper or correct, but have nothing to do with a subsequent occurrence of events. It can be illuminating for the researcher to consider normative behaviour as operating according to a rule. However, it is questionable whether people actually attend to the rules, even when it would seem wise to do so. Nevertheless, a person may be so conditioned in the performance of

everyday behaviour that it has become habitual, rather than a case of conscious rule-following. In such a case, the behaviour may well have been learnt by attending to the rules, and the person can be said to be acting in accordance with a rule.

In acting according to a rule, people behave in an orderly or customary manner. Yet explicit rule-following, which can be likened to following a set of written instructions, is largely inappropriate when considering a person being guided by customs or conventions in their broadest sense (Harré, 2000). In addition, Harré (1998) agrees with Searle (1995) who makes the point that a rule-structured mechanism by which people learn to conduct themselves would surely have evolved into a less structured system. Indeed, one can take on customs and conventions often without being aware of doing so, and they may come to mind only when they are explicitly pointed out (Brenner, 1982).

2.9 From rules and roles to positioning

The concept of positioning is in many ways a more dynamic alternative to the static concept of rules and roles (Harré & van Langenhove, 1991). A role specifies a particular set of actions, whereas a position allows for the selection of a particular action, or set of actions. A position involves the gathering of supporting arguments, but does not necessarily specify the use of particular arguments. As Davis and Harré (1990:41) point out:

“In the dramaturgical model people are construed as actors with lines already written and their roles determined by the particular play they find themselves in. Nor do they have much choice as to how to play these roles in any particular setting. They have learned how to take up a particular role through observation of others in that role the role models. ‘Positioning’ and ‘subject position’, in contrast, permit us to think of ourselves as a choosing subject, locating ourselves in conversations according to those narrative forms with which we are familiar and bringing to those narratives our own subjective lived histories through which we have learnt metaphors, characters and plot.”

In this depiction, rules and roles are prescriptive, because they set out an idealised explanation of social behaviour. Positioning is less constraining, because, as well as allowing choice of position the means of supporting the position is not prescribed since presumably the means can be derived idiosyncratically from personal experience.

Positioning theory (Harré & van Langenhove, 1991) takes persons to be the source of social behaviours, which are done intentionally in the context of conversation and institutional practices. By positioning, one locates oneself and others in a conversation, so that positions are then arrived at jointly and are therefore rhetorically formed. Positioning theory seeks to explain how people become located in conversations and become coherent participants in jointly produced story lines. Rights, duties and obligations are considered important, along with the illocutionary force of speakers in positioning others as well as the speaker. In all discursive processes, people are seen to position themselves and present versions of aspects of the world, while conforming to what is appropriate for the circumstances.

Davis and Harré (1990) provide much of the groundwork for Harré and van Langenhove's (1991) positioning theory. In addition, Harré and van Langenhove (1994) note an earlier version from Holloway (1984). Following Foucault, Holloway (1984) is concerned with discerning the way in which power is embedded in social discourse. However, in positioning theory, a moral dimension in positioning is emphasised. As Harré (2002a:284) explains, positioning theory involves,

“... a social process by which each actor in a complex interaction is assigned or takes up a certain limited set of rights and duties with respect to the kinds of speech acts which are acceptable and proper for that person to contribute to the interaction.”

According to Harré (2002a), the taking of a position is understood to be emergent within an interaction in which rights and duties can be seen to be entwined with the give and take of conversation. In this way, a person can appear to be forced into a position when a dominant person steers a conversation and can force others into positions they would not occupy in other circumstances. A person can also be understood as being

capable of positioning him or herself and to have the capacity to take a different position under different circumstances. While the taking of a position can be understood in terms of the situation and the actors who are present, a position can be taken ingenuously. The guilty, for example, often portray innocence in court, which is itself a convention for the circumstances. Circumstances can be understood as leading to positions in which, for example, the teacher controls the classroom or a judge takes impartial control over court proceedings. In such circumstances, an overbearing position is assumed to create responsive positions, with the comprehension of a structured circumstance being conducive to understanding positioning and its relationship with an outcome, be it the dynamics of a classroom or even the verdict of the court. In comparison, in everyday life there is more room for emergent positioning, though it can be seen as operating within a framework incorporating rights, duties and obligations. As originally proposed by Harré (1986), there is a moral imperative to take certain positions.

Yet an apparent failing of positioning theory is that it contrasts with the often quite consistent way in which people present themselves to others. While it is apparent that in similar situations people present themselves in similar ways, positioning theory implies that regularities in interpersonal discourse are responsible for positions taken in conversations, rather than the person bringing a self complete with positions and personal attributes to the conversation (Jones, 1999). Goffman (1959:245), whose work formed a background to the rule-role model of ethogenics, saw the self as meaning that "...he and his body merely provide the peg on which something of collaborative manufacture will be hung for some time. And the means for producing and maintaining the selves do not reside in the peg". According to Jones (1997), positioning theory differs from Goffman, and consequently the rule-role model, by only requiring names for transient selves that have positions. In positioning theory it is what one is taken to be in the conversation that counts. It is a further step to assume that persons position themselves, a step that requires the explanation of persons and selves.

2.10 Persons and selves

For Harré and Secord (1972) persons were logically the principle unit for analysis. Their science was about the “...study of psychological states, conditions and powers which are attributed to individual people when they engage in social activity” (Harré & Secord, 1972:1). People, in this view, can be distinguished physically as bodies located in time and space. People are also attributed with powers and capacities to initiate action, to monitor their own performances and, unlike other animals, to have the capacity to step back and be aware of their self-monitoring. People can plan and undertake purposeful actions in light of foreseen consequences, are assumed to know what they are doing, and can choose how to behave and are aware of the consequences of their actions. Harré and Secord (1972) also defined people socially, because a person cannot be treated as a person, or even call themselves a person, without at some point having another person name them as a person. Or, in other words, a person is a term used in language that is attributed on the basis of the demonstration of skills and abilities, such as making personal decisions and being able to hold a conversation with others. The person is seen to have a set of inner and outer responses, the person can have their own thoughts, make private plans and be self-aware and can also communicate with others and conduct themselves in their social environment.

Harré and Secord’s (1972) observations are much like Dennett’s (1978:269-270) conditions for personhood, which assume that persons are rational beings to which states of consciousness are attributed and are objects towards which a stance is taken, with the person being likewise capable of taking a reciprocal stance. Persons are taken to be capable of verbal communication and capable of a form of self-consciousness not found in other species.

Interestingly, Harré and Secord’s (1972) description of a person is not unlike Locke’s (1689/1975) description, which was historically significant in the development of psychology as a science. Locke (1689/1975) described the person in the following passage:

“*Person*, as I take it, is the name for this *self*. Where-ever a Man finds, what he calls *himself*, there I think another may say is the same *Person*. It is a Forensick Term appropriating Actions and their Merit; and so belongs to intelligent Agents capable of a Law, and Happiness and Misery. This personality extends it *self* beyond present Existence to what is past, only by consciousness, whereby it becomes concerned and accountable, owns and imputes to it *self* past Actions, just on the same ground, and for the same reason, that it does in the present” (Locke, 1689/1975: 346).

Like Harré and Secord (1972), Locke (1689/1975) was concerned with a moral person and at this level they would seem to be in agreement. Locke, however, exposes a key point of difference in his definition of a person as

“...a thinking intelligent Being, that has reason and reflection, and can consider it self as it self, the same thinking thing in different times and places; which it does only by that consciousness, which is inseparable from thinking, and, as it seems to me, essential to it.... For since consciousness always accompanies thinking, and ‘tis that, that which makes every one to be, what he calls *self*; and thereby distinguishes himself from all other thinking things, in this alone consists *personal Identity*, i.e. the sameness of a rational Being: And as far as this consciousness can be extended backwards to any past Action or Thought, so far reaches the Identity of that *Person*; it is the same *self* now it was then; and ‘tis by the same *self* with this present one that now reflects on it, that that Action was done” (Locke, 1689/1975:335).

From this view, a person has the capacity to be conscious of him or herself, to be aware of him or herself as a subject, and to recognise him or herself as the same self that had other experiences at other times and places. In general, this would seem reasonable from Harré and Secord’s (1972) perspective. There appears, however, to be an entity other than a person at work in the above passage. For Locke, consciousness is considered to be a companion to a person that provides an awareness of self as the source or subject of one’s activities, thoughts and perceptions. For Harré and Secord (1972) consciousness is a capacity or power that is conditional to being a person. In taking the person as the

basic unit for the purposes of understanding social behaviour, Harré and Secord (1972) set themselves in opposition to such Cartesian thinking. Their methodology led them to a point where there was no need to move to a sub-level for analysis, because of the ascription of agency and powers to persons. In this respect, persons are not divisible into constituent parts any more than the flesh and bone of one's arm is solely responsible for waving goodbye. Hypothesised constructs with causal properties, such as Locke's notion of consciousness, are unnecessary from this view.

The concept of the person is socially constructed in that it is a part of a social and psychological reality regardless of belief or disbelief in the existence of a real world beyond conceptualisations. Both realists and relativists would probably agree on this point. However, there are some simple considerations that provide support for realists who wish to promote persons as more than being solely malleable manifestations of social and discursive processes. In terms of the conditions necessary for the possibility of social constructions, Harré (1992) points out two fundamental requirements. The first is the existence of persons, with the assertion that there is no conceivable discourse that would not create and sustain persons. Given that persons are necessary for discourse, his argument was that it would be difficult for them not to be a mandatory construction in any form of life. Even in consideration of artificial intelligence, for a machine or computer to be self-directed, it must have a sense of self and be aware of its place in relation to other things. It may well be that popular science fiction characterises artificial intelligence as having human-like qualities, because having these qualities is necessary to function intelligently.

Harré's (1992) second defence of the person is that a language-game must be played for social constructions to be created and sustained and there are some basic requirements for such a game to be played. These include some form of debate, the recognition of others in any form of conversation and some degree of conformity in how the debate proceeds. This suggests that persons, by their necessary engagement in language-games, have a higher status than simply being social constructions, because without persons social interaction would be inconceivable. Yet, obviously this cannot simply be a chicken-or-egg argument and some understanding of the creation of persons as both

repositories for, and shapers and creators of, meaning is required to show more fully how persons become the constructors rather than remain the constructed.

In moving towards a social constructionist approach to understanding persons, Harré (1983:20) set out to reshape psychology by showing that:

...not only are the acts we as individuals perform and interpretations we create of the social and physical world prefigured in collective actions and social representations, but also that the very structure of our minds (and the fact that we have minds at all) is drawn from those social representations.

It would seem that the argument here was for the mind as a social construction. Harré's (1983) main conclusion, however, was that a person, while a product of culture, in becoming a person develops the capacity to order his or her activities according to a theory about themselves, which involves learning a way of thinking and managing him or herself. In this respect, all that is personal was at some stage taken from others so that thinking and emotions would be recognisable as being reflective of their origin. Importantly, also acquired is the capacity to conceive of oneself and to make and carry out personal plans and choose what to do and think within the boundaries of what is known, possible and personally and socially acceptable. This is more than a sense of self-identity in which a person considers the type of person he or she considers him or herself to be. This 'type of person' form of self-categorisation is based on the recognition of types of individuals in the context of social encounters, whereas what is comparatively more significant is the ability to consider and adopt types from this context. The sense of who one takes oneself to be is not arrived at by self-categorisation. In no small measure, the individual and individuality is definable by abilities to locate oneself in time and space, to take on values and commitments and to take a place in the social order of things (Harré & Gillett, 1994). A person may be thought of as a recognisable identity, or as being a particular 'type of person', but being a person is actually having the capacity to take on identities as defined by the social context.

Harré and Gillett (1994) give emphasis to the importance of being able to participate in society to be counted as a person. Indeed, unlike other forms of life, humans are born into a world of complex cultural practices that must be appropriated in order for the individual and species to survive. In this context, the person must develop a private understanding from which he or she can think and act for him or herself, while contributing to the maintenance of a social order. According to Vygotsky (1978), it is a process of internalisation, which is the learning of the meaning and significance of gestures and words in early childhood that facilitates the development of higher intellectual functioning. Of relevance to Harré and Gillett's (1994) emphasis on a moral imperative, development is said to always occur in relation to others. As Vygotsky (1978) stated:

Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (interpsychological) and then inside the child (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relationships between individuals (Vygotsky, 1978:57).

Vygotsky (1978) provided an explanation of consciousness as the end product of socialisation. At first a child mimics the words of caregivers, but once language is mastered it becomes internalised and allows a person to structure their own thoughts, make private plans and be self-aware. The capacity to be self-aware to take a standpoint and to consider oneself underpins Cartesian dualism, though, as Harré (1998) pointed out, the capacity is nothing more than the capacity of giving "...accounts of and commentaries upon what we perceive, how we act and what we remember" (Harré, 1998:12). Much like the claims and arguments made to others about oneself, the same assertions can be made about oneself to oneself.

A person is therefore a singularity that comes to be and continues to be through interaction with others. Persons are complex, with powers and capacities to operate within culture, while providing their own interpretation and making their own small transformations of cultural meanings. A view of how the person exercises their powers

and capacities while maintaining a cohesive self is offered by Harré (1998:21) in what he terms the 'standard model'. Harré's (1998) model had three essential parts. Self 1 was the person's point of view; personal history, attributes and beliefs comprised self 2, and self 3 was the components of self 2 as they are interpreted by other people. To take a researcher's perspective, there is often an imperative to understand self 2, because it is presumed that a person's beliefs and life history influence his or her subsequent beliefs and actions. There are, however, two important caveats for discerning attributes and beliefs. First, the presentational nature of self 3 means that attributes and beliefs are not necessarily straightforwardly discernible. Second, as Harré (1998:126) has pointed out, the ability to take a different viewpoint (self 1) can give attributes and beliefs new meaning. This would presumably complicate further the researcher's view of self 2, by introducing the possibility of dynamic attributes and beliefs. As Harré (1998:127) related, "We create autobiographical versions for ourselves and for others, in the working out of this or that project." In this way, while the model of selves is presented as a useful heuristic for explaining persons in social action, the model also serves to highlight problems for the empirical investigation of the actions of persons.

The standard model has been described as encompassing the threads and themes of Harré's earlier work (Burkitt, 2001). The model offers the researcher a means of providing an explanation of action by compartmentalising personal powers, personal attributes and the presentation of self. This compartmentalisation also serves to distil difficulties associated with the study of persons. One difficulty that is readily apparent is that the relationship between personal attributes and action cannot be direct. This is because it is the person, by virtue of their powers and capacities, who is assumed to have a choice over their actions. Personal attributes are therefore not causal determinants, but indicate probabilities of action, given that a person may be predisposed to undertake or avoid activities because of his or her past experience. While a person could do otherwise, it is assumed that a person tends to act consistently with his or her personal attributes.

It is apparent to others and apparent to oneself that a person's standpoint is unique and can be understood as a product of experience. For the person it is the beliefs they hold about themselves and about the world around them that form a basis for understanding

oneself and a basis for intentional behaviour. The person then acts from a standpoint and can explain or justify his or her actions with respect to a history of themselves. Given access to this biography, it should be possible for a researcher to form an understanding of the variations of action that a range of individuals undertake in a given situation. There are, however, caveats that impinge upon the accuracy of this understanding. While the events in a person's life cannot be revised, one's view of them can be modified to the extent that, for example, even a personal crisis can, with hindsight, become a turning point towards self-fulfilment. A person's autobiography is then up for revision from the perspective that the meaning of events can be revised. There is then potential for a multitude of possible autobiographies with each providing a different version of events. In addition, a person's autobiography is referential to the audience and may alter depending upon to whom the story is being told (Harré, 1998).

In this context, it is a version of oneself that is presented for the purposes of an interaction. Nevertheless, while there may well be some 'wolves in sheep's clothing' these are exceptions, otherwise deceit would be a predominant social norm. A person can wear different faces by perhaps being a father, a husband and a work mate in the same day. Each is understood in its context and managed by the individual without difficulty, and for each an autobiography could be told.

Reminiscent of Jones' (1997; 1999) criticisms of positioning theory, the emphasis given to discourse by discursive psychologists tends to disregard personal attributes and experiences brought to and, in a small way, taken from an interaction. Such interactions contribute to a person's life, but by focusing on a discursive event discursive psychologists take the view that ascription to fixed constructs as causal factors in social behaviour should be avoided, which it would seem includes personal characteristics, attributes or dispositions that a person brings to an interaction. For example, Harré and Gillett (1994) state that "...an attitude should not be seen as a semi-permanent mental entity, causing people to say and do certain things. Rather, it comes into existence in displays expressive of decisions and judgements and in the performance of actions" (Harré & Gillett, 1994:22). In keeping with the view that persons are socially constructed their statement is correct. The implication is, however, that what occurs is more important than any continuance the person brings with himself or herself. Then,

surprisingly, they close the paragraph with “Each reconceptualisation helps to draw attention to the fact that the study of the mind is a way of understanding the phenomena that arise when different sociocultural discourses are integrated within an identifiable human individual situated in relation to those discourses” (Harré & Gillett, 1994:22). Therefore, while the orientation differs from a cognitivist interpretation in that the focus is on the event and the role of interaction, as opposed to mental entities, discourses involving a way of thinking and acting are impressed on the mind and manifested in the person. In this way, possibilities of interactions can be considered. Like considering how the features of a room could influence a social interaction, so too the disposition of the participants can also shape what might occur within the room. These dispositions need not be, for example, an attitude as conceived by cognitivist psychology, but a stance or personal position derived from culture and experience. Following Vygotsky the point is not to deny the existence of ‘inner’ thoughts. Therefore it is surely permissible that thoughts, or at least the dispositions they engender, can be taken away from and brought back to interactions.

2.11 A connectionist model of cognition.

Harré and Gillett (1994) describe their approach to psychology as part of the second cognitive revolution, with the first being cognitive science. In so doing they set a framework for an alternative way of modelling cognition. Their point in introducing their approach in this manner was to emphasise that their proposals are directed towards a traditional purpose of psychology, which is to understand human behaviour. Discursive psychology focuses on understanding discourse to the extent that the approach could be said to be reminiscent of radical behaviourism, especially considering the denial by discursive psychologists of a Cartesian view of the mind and their focus on talk. Discursive psychology, however, does deal with thought processes, but sees them as being integrated with, and produced in, actions. In the view of Harré and Gillett (1994), the meaning of an action is instantiated in its performance, which is why discourse is examined as words in their speaking, rather than as their function as denotationally referring to things.

As shall be explained, the action of speaking, rather than being the product of, and an equivalent to, an internal thought process, is the end product itself. This does not mean there are no cognitive processes. In some contrast to the focus on examining discourse, it is important to understand that people have brains as well as natural and acquired abilities that enable a person to function as a member of society. Taking persons to be the embodied, primary reality means that the biological functions of the brain are an important element in the explanation of action.

While Wittgenstein (1953/1972) argued that action is deemed meaningful in the context of its performance, thus perhaps drawing the researcher to the analysis of discourse, it is important to realise that there are, nevertheless, legitimate ways of speaking of cognitive processes. Similarly, Vygotsky also considered it appropriate to consider mental processes as an action undertaken by an individual, as well as occurring between individuals (Quigley, 2001). Such processes need not or, following Wittgenstein's directives, should not, however, be considered as representational. Having investigated philosophical arguments for the representational view (Wittgenstein, 1921/1974), Wittgenstein's later work was primarily designed to both exorcise and supplant it by emphasising meaning as it is found at the point of action (i.e., in use). More recently, Shanon (1993) argued, in opposition to the centrality of representational thinking, that "...meanings cannot be separated from the beings who live in the world or from their interactions with it" (Shanon, 1993:294). If our minds are not the information processors that cognitive science proposes, but we are action-orientated beings, then logically our minds and brains must be orientated to action.

Following Shanon (1993), it is useful to introduce this way of considering cognition by means of the ideas of Gibson (1979). Gibson's (1979) theory of ecological perception, also often termed an ecological psychology (e.g., de Jong, 1995), was primarily concerned with understanding visual and auditory perception and is based on assumptions regarding the co-evolution of animals and their environments. A key concept in this form of ecological psychology is 'affordance', meaning the activities that the environment 'allows' for an animal. Affordances are therefore animal specific, because what serves as food and shelter for one species may not necessarily afford the same qualities for another. Using the idea of reciprocity, the environment is assumed to

virtually offer a service to a species. By receiving the service the species becomes part of the environment and, through this joint process of adaptation, ultimately co-evolution can be said to occur. In ecological psychology, perception is then approached from a functionalist perspective (Costall, 1995). This denies the view that it is solely the species that capitalises on and adapts to an environment. The role of the animal is to integrate with the environment by means of the activities it can accomplish.

Gibson's ecological psychology stands in contrast to the predominant view that information about the world is perceived and processed as data and subsequently transformed into meaningful conceptualisations that correspond with the world. Instead, a comparatively simpler model is proposed that has appeal when considered as part of an evolutionary process of adaptation. Rather than making a symbolic counterpart of the world in the mind of an animal, the world is held to be perceived directly through a process of transference -rather than transformation- of information. Biological functions and structures, such as the nervous system, are tuned to respond to information about the world, which involves the animal having a stance towards an object in terms of the object's subjective utility. As de Jong (1995:254) claimed, "Things are perceived in terms of affordances, i.e. of what can be done with them by a given biological organism". For ecological psychology, there is no transformation of data into images of the world and no data storage device. Instead, animals are orientated towards doing things with objects, which can be interpreted in terms of edibility, graspability, shelterability, etc..

Ecological psychology has relevance to this discussion for a number of reasons. First, although this approach to psychology has been principally directed towards explaining visual and auditory perception, it proposes a non-representationalist model of cognition. Second, biological functions such as the nervous system were highlighted as being adaptive and orientated towards what is to be *done* in the world. Third, while it was not based on language, ecological psychology proposed that meaning was related to action in that the meaning of an object was associated with its physical attributes, as well as with the animal's attributes and needs in relation to this activity. In addition, Costall (1995) has investigated a Wittgenstein/Vygotsky like extension of ecological psychology into the social context.

We experience objects in relation to the community in which they have meaning.

A child for example, is not simply left to 'discover' the function of a cup or spoon; rather, the learning situation involves careful structuring by the parent, through the removal of distractions, presentation of the utensil in the right orientation, and so on. Thus our activity is further channelized not only by the form of the object but also by its socially structured setting (Costall, 1995:472).

With regard to cognition, Shanon (1993) argues that the products of cognitive activity give the impression that a person is undertaking an internal process of retrieving and modifying stored data. In contrast, Shanon (1993) asserts that there is no such storage device and, much like ecological psychology's treatment of perception, the mind is assumed to be an adaptive processor tuned to the production of momentary occasioned responses, such as talk or action. The meteoric rise of computer technology has provided a convenient and powerful metaphor for studies of human thinking and behaviour that has served to reinforce the representationalist view. The information-processing model is nevertheless set to fall short in modelling cognition, because it overlooks the workings of the human brain and nervous system, which are arguably the most valid sources for modelling thought processes.

The workings of the brain and nervous system are currently understood as analogous to connectionist models or, more specifically, neural network models. Unlike the serial processing proposed by the information-processing models of cognitive science, the network model is comprised of interconnected neurons. Harré (2002a:192) explained that neural networks are models of linked neurons comprising a cell linked with other cells. He stated that actual neurons' impulses are electrical, though the impulses are mediated chemically whereby a particular strength of input can prompt a neuron to produce an output of particular strength. When the total input reaches or exceeds a certain threshold, a neuron 'fires', or emits a certain level of output. Inputs can have either a positive or negative effect on neuron firing, or have no effect when a threshold is not reached. Neuronal thresholds are determined by cellular structure and chemical composition, which can be represented as a mathematical function relating the positive or negative input strength to the strength of output. Harré (2002a:194) pointed out these

functions are normally modelled as algorithms, because in neurons the relationship between input and output is known to be non-linear. An important implication is that there is no electrical pulse moving through the network of neurons, which contrasts with serial processing of information-processing models. Instead, a neural network model reveals that a stimulus can, should it create a chain reaction, initiate a cascade effect across a network of neurons. The strength, path and survival of the chain like reaction is dependent upon each neuron's predisposition to treat input and produce output in a particular way.

In promotion of connectionist modelling, Crick (1994) argued that neural network models show traditional philosophical and methodological understandings of human behaviour to be misguided, because they either disregard or misrepresent the workings of the human brain. His assertion is somewhat like Dennett's (1982) claim that potentially all can be explained by a mechanical model. As Searle (1998:53) has made plain, the mind is a biological phenomenon, which would, in principle, be possible to replicate artificially. He added, however, that such an artificial device would have to be immersed in a human environment to learn how to operate in a human way. In considering the mind in relation to biological activity, Searle (1998:53) concluded that the subjective nature of a person's experience resulted in a person having subjective states and processes. This means that a person is not reducible to an individual that is governed by common laws or rules.

Crick (1994) emphasised the role of the brain in enabling social interaction, whereas Harré (1997) considered that acting in the world is a separate context from that of mental activity. Harré (1997) asserted that the brain is best considered a tool when considered in the social context. As Shanon (1993) similarly pointed out, network models require the addition of stimulation, and real neural networks require a real world within which they function. What is currently known about the brain's functioning in the world should therefore be of value in understanding the abilities of persons in terms of their interactions in real world situations.

Crick (1994) described the difficult task of using a neural network model to simulate the complex functioning of the brain and nervous system. He noted that in the visual cortex

alone there are estimated to be over a million processes performed in parallel. Studies of very simple neural network models have, nevertheless, produced encouraging results for understanding brain function, particularly in the area of how neural networks learn. The models can be taught to perform certain tasks by providing a certain input, checking the output and then providing further input as to whether the output was correct. This is described as 'unsupervised learning' because neuron adjustments are made solely by the network itself. Another method is 'supervised learning', where part of the artificial network is programmed by the researcher and serves to guide the remainder of the network. One example that Crick (1994) provided was of the work of Sejnowski and Rosenberg (1987; cited in Crick, 1994) who constructed a network that was designed to learn to read aloud passages of text. The network was not encoded with specific directives regarding pronunciation and learnt by comparing its output with correct output provided externally. Having learnt to perform this task, which resulted in speech sounding much like that of a child, the way in which the network had structured itself was examined. This examination found markedly different structures for processing letters, with vowels reflecting letter shape and consonants their sounds. The network was judged to have similarities with human learning and memory, although the network was too simple to compare with the development of human reading skills. In another experiment, conducted by Lehky and Sejnowski (1990; cited in Crick, 1994), a supervised artificial network deduced the shapes of three-dimensional objects from a single view. Upon examination of this network it was found that it had replicated the behaviour of neurons in a section of the human brain that deals with vision. This section of the brain deals with identifying edges of objects and the results were particularly interesting because this was not an obvious outcome from the training of the network.

Experiments with artificial neural networks serve to provide insights into the way that the brain operates and how it learns. Importantly, neural networks are adaptive and largely self-programmed, as is shown by the novel way in which a network may go about the tasks for which it is trained.

Conceptualising cognition as operating as a neural network, even in a rudimentary and admittedly highly simplified way, has a number of implications of particular relevance to realist social psychology. In keeping with Shanon's (1993) main argument against the

representationalist view is the central observation that a neural network can produce responses to stimuli without engaging in the manipulation of 'inner' abstract symbols. Instead, a network can be trained so that it deals with the stimuli and produces a response without producing an internal simulation or image of something. In this way a neural network can be said to be task-orientated, with its objective to produce a fitting response to external stimuli. As Shanon (1993) related, neither the response nor the stimulus are stored anywhere. Rather, prior training would have been necessary to produce the appropriate response. An illustrative example would be to consider a person responding to a question with the word 'no'. The word 'no' is a momentary event created for the purpose of response and 'no' does not exist anywhere except when it is spoken at a single point in time. With respect to a neural network 'no' does not exist symbolically and is not there to be retrieved as one thinks of retrieving an item from memory. Rather, if it could be found, it would be identified as the result of the encoding of a cluster of neurons that only activate under certain conditions, such as the asking of a particular question.

In this way, language and the tacit rules for behaviour, such as those explored by Wittgenstein (1953/1972), can be seen to be impressed upon the mind to produce a network of checks and balances to guide the person in a variety of everyday and new encounters. In keeping with the neural network model, each response is made for the occasion and governed by what has been learned. From such a perspective, the process of training is analogous at the neurological level to Vygotsky's (1978) proposal for what occurs in the teaching of a child.

In network language, variation in output can occur with changes in the path of a stimulus through the network. Each encounter with the world will therefore, even in a small way, be different from an earlier encounter, prompting a different path through the network. This is because the network itself is responsive, so that each activation of the network will impact upon its functioning at a later time. Thus, something said in conversation, for example, is likely to be different to the same conversation held yesterday, because a change in something as simple as the way something is said will prompt a slightly different path and subsequently a different response. In addition, in

some minor way the legacy of the prior conversation may itself have prompted a different way of thinking, thus having a further effect on a subsequent response.

2.12 Implications of the connectionist model

An important implication from the adoption of neural network models for the study of cognition is that in everyday circumstances, the resource for the experience of actual human cognition is hidden. The results of cognition are the actions, thoughts and words, beneath which is a subsystem, the human brain, which can be modelled and understood as a neural network. What it produces, and can be said to be designed to produce, are responses to stimuli. Only the output is presented, so that in performing an action, talking, or thinking, the person is largely unaware of his or her own actual cognition. Following this implication either thinking about something, or even reflexively thinking that the person is thinking, can be explained as output.

Extending from the implication that cognition is hidden is the implication for cognitivist psychology that the hidden nature of cognition is responsible for the incorrect assumptions of information-processing models. Information-processing models of cognitive science extend from seemingly logical relationships between stimulus and response. In light of the network model, there is no mechanism that can be likened to an information-processing model. While such a model produces what can appear to be an accurate explanation of relationships between a stimulus and response, the explanation involves the incorrect attribution of the information-processing model to human cognition.

A third implication is that, unlike cognitivist psychology, the assumption of fixed laws or rules cannot be accommodated in network models, because each response is occasioned. Rather than obeying laws or rules in robot-like fashion, each occasion produces a response appropriate for the occasion. There is no ideal, no template or set pattern, instead there is a background that can be likened to a general way of thinking.

A further important implication is that behaviour can only be understood descriptively. A response can be understood given redress to the person's general way of thinking, as

can be evident from examination of prior behaviour and life history, with regularities hinging upon a general stance or way of thinking akin to learning the ways of things. The seemingly systematic regularity of behaviour is not evidence of generative rules. Instead, responses are emergent from a general pattern like that impressed upon a complex network, in which case there is no ideal path akin to a written programme. Consequently, there should be no expectation of a perfect or correct response, or a measurable deviation from it. A response is merely appropriate and may be understood given the nature of the situation at hand, the person's attributes, and how the person has previously behaved in similar situations.

For the researcher, understanding the language and culture in which subjects have been immersed would then be a useful starting point. In addition, a further important consideration is that ultimately the result of an apparent process of conditioning is not to be like other people, but to have the capacity to operate as a person. In examining the stance of a person, network models indicate that the nature of this stance is a readiness to respond or act in response to environmental cues, as is appropriate for an occasion. It is the features of the environment, as perceived by the person, which interact with impressions created by prior training.

In keeping with network models, cognition is a tool designed to provide a person with an appropriate response for the circumstances. This is done without carrying around a virtual record of prior circumstances. In comparison, such a conceptualisation appears inefficient, because all the person has to do is respond, which is what his or her trained brain enables him or her to do. If our cognition does not involve storing symbolic equivalents to the world, then people quite literally act in the world. In this way the focus of discursive psychology on discourse is then vindicated and the focus of positioning theory on interaction is supported. In addition, considerations of talk and action as having illocutionary force sit well with the assumed predisposition to produce an appropriate response. Stimuli will then be regarded from the position of the person, with the responses produced in the interests of the person.

Considering these implications the project of understanding behaviour is set to be a common-sense activity. First, determining a person's general ways of thinking and

behaviour will be useful for the prediction of a person's perceptions of a situation and their likely position in relation to performing a behaviour. Second, taking account of the situation at hand, in terms of what differences it presents to a person in relation to prior presentations to them of similar stimulation would serve to frame understanding of varied responses to the same situation. Third, accounting for the propensity of the person to act in their interests, given that their talk, action or inaction is designed to have an effect on a given situation, would also be useful for explaining the action.

2.13 Chapter summary

This chapter began with a summary of ethogenic and discursive psychology. Basic contrasts in ontology were shown, and the case was made for a return to an ethogenic style of theorising by means of taking a person-centred approach to understanding social behaviour. The case for this approach was promoted by expanding upon Harré and Secord's (1972) arguments against cognitivist psychology. First, it was argued that cognitivist psychology was not the result of a paradigmatic shift in thinking. Rather, the discipline is shown to have been a renewal of older ideas by means of incremental adjustment and repair. This change has left Humean causality unaltered. In addition, positivism, built on the support of theory by observation, raises issues of circularity, while limiting the scope of theory development. Inherent limitations of the assumption that closed systems are representative of open systems revealed problems of overconfidence and inaccuracy. In addition, an argument against information-processing models was their failure to account for a person's ability to make their own decisions.

Realism was presented as a means of resolving issues that were raised about cognitivist psychology. Criticism of the realist position was noted, although realism was subsequently promoted as sensible in light of the potential of relativism for reflexive self-denunciation. Wittgenstein was then shown to provide a means of repairing the shortcomings of the Kantian philosophy that supported ethogenics. In this manner, some of the rigidity of the rule-role model of ethogenics was removed. Wittgenstein's philosophy introduced the idea that the use of language and actions was normatively moderated, because language was taken to be pervasive in all aspects of people's lives. Positioning theory, which highlighted the dynamic interactive process of negotiating

meanings in conversation, challenged further the rigidity of the rule-role model. This challenge also revealed the impoverishment of the role of the person in positioning theory, which prompted defence of the person-centred approach. Subsequently, the importance of persons as a primary unit for analysis was explained, while assuming that cognition is the product of language and giving emphasis to the role and importance of persons and personal attributes in understanding conversation and action.

Finally, by developing an interpretation of brain function, it was shown that cognitive processes, when considered as functioning for the production of momentarily appropriate responses, added further support to a focus on persons. It was argued that, in contrast with assumptions of fixed laws or rules, the brain served the person by producing responses appropriate to the occasion.

Having reviewed literature relevant to a person-centred explanation of intentional action, the new person action model (PAM) is presented in the next chapter.

Chapter Three

The person-action model

3.1 Introduction

The purpose of this chapter is to set out a model of the actions of persons. In addition, some necessary argument and consideration of method towards implementation of the model is provided. The term ‘model’ is used here in the sense that having established assumptions and principles, a more detailed representation of persons and their properties can now be made. The model is termed the person action model (PAM), to emphasise the primary role that is given to persons in understanding social action.

The review of the previous chapter served to develop a person-centred approach towards explaining human behaviour. Persons were taken to be powerful particulars, with powers and capacities sufficient for making personal choices and decisions. Much like ethogenics, a person is taken to be indivisible, though the new approach recognises the theory that language and experience is an important source of abilities necessary for a person to function as a person. This primacy of persons and explanation of the source of their powers and capacities is somewhat contrary to the emphasis on discourse that has become prominent in the ‘new paradigm’. The emphasis on persons is, nevertheless, an alternative view that, in conversational terms, gives precedence to the role and attributes of the speaker.

The chapter begins by describing the main elements and relationships of the PAM. Issues of veracity and interpretation are discussed and also, with a mind to application of the PAM, important points are made about the nature of theorising. Finally attention is then given to the merits and limitations of quantitative methods, which, while suitable for testing the PAM, are generally not preferred by proponents of the ‘new paradigm’.

3.2 A person-action model

An important point raised in chapter two was that a social action was best treated as intentional in the sense that in an action, a person may, for example, be defending,

justifying, or stating their position. The completion of a questionnaire, for example, is an action, because its completion is intentional. This may seem unremarkable, but it is an important point that relates to issues about experimentation in psychology. Such issues centre on the discernment of laws or rules associated with cognition and their projection onto a target population. The PAM avoids these issues, because no laws or rules of this type are hypothesised. Instead, a person's reactions are assumed to be local and made with reference to the action of the person in relation to the situation at hand. Finding out about the background of a person can lead to an understanding of their actions, but these factors can only be understood as the background from which the person acts. Nevertheless, given evidence that certain factors are associated with particular actions, probabilities can be attributed to the likelihood that persons from particular backgrounds act in certain ways, or conversely, that certain actions of persons can be linked to particular background factors.

In addition, because a response is an action, a response is also something done by a person that can be referenced by what the person takes the action to be. The imperative in designing a research approach is then to frame action descriptively, in terms of the intent of the person in the circumstances of the action and with reference to personal attributes. The starting point for answering factual questions, such as whether or not, or why, the person has performed a certain action is taken to be the circumstances of action. Therefore, the explanation of action entails examining action as being associated with circumstance and the attributes of the person responsible for its performance. In addition, and of particular importance, personal powers and capacities involving the taking of a viewpoint or position are taken to be necessary abilities for intentional action. This is because the act of positioning involves interpretation and reflection towards the taking of a stance that is adequate to satisfy personal and social requirements or standards.

Chapter two introduced the point that the brain and nervous system were best understood as neural networks. This understanding was shown to fit well with ecological psychology extending Gibson's ecological perception. The proposition was then made that human beings are tuned to act in the world unhindered by what would, by comparison, be the cumbersome and less efficient serial processing of information.

Trained brains arise by experience and the acquisition of skills, which give rise to the ability to think for oneself and consequently give a sense of order to ones' life. To gain insights into this largely unseen realm, Harré (1998) incorporates such attributes and capacities in his standard model to explain how human beings function as persons.

While Harré's (1998) model was concerned with the self, the interface between individuals and society is important, because it is at this point that a person's unique attributes and experience become entwined with having a viewpoint and the taking of a position on a social issue. In this context, the hand gesture, the conversation, or the survey response, can be understood as an action performed within a framework of customs and conventions or rules, and common meanings attributable to these actions, as well as the attributes and intent of the person operating in this context.

Key assumptions supporting the PAM are that persons have agentic powers and capacities. The stance is to interpret data as if they were the 'talk' of respondents. The PAM, nevertheless, implies regularities. For example, the action of talking is made in the context of common usage and joint understanding, making possible the discernment of discursive conventions. In addition, while the possibilities for individual attributes and experience are diverse, persons can often be differentiated by these factors. Based upon the possibility of such regularities, explicit assumptions regarding personal actions amenable to empirical testing include:

- An action is performed in consistency with a person's attributes.
- An action is performed with reference to a particular circumstance.
- Personal attributes and particular circumstances guide, but do not determine, an action.
- Choices of action are constrained or inhibited by personal attributes and circumstances.

The assumptions of the PAM serve to explain each action as a discrete action performed by a person for a circumstance. The link between actions, in this context, is the person and their personal attributes, while each person is assumed to be predisposed to act appropriately for a particular circumstance. Personal attributes can be taken to be

influential in a series of actions; however, because all actions are occasioned, regularities between actions will always be subject to qualification by the circumstances of each action and changes in personal attributes.

3.3 Issues of veracity

The inherent propensity of persons to adapt to social situations means that there may not necessarily be a straightforward way of measuring personal attributes. Attributes, in this sense, are the characteristics or qualities that may be ascribed to a person, such as being generous, adventurous or reckless. Ethogenics interpreted this problem in terms of authenticity, assuming a personal account could be a sham when compared with an account elicited by further interrogation (Harré & Secord, 1972:235). In the PAM, persons are understood as responding appropriately to a situation, rather than the person being framed in terms of degrees of authenticity. Framing persons in conversation in terms of authenticity is necessarily entwined with the assumption of a person as an actor (Harré, 1998:230). Less rigid than the rule-role model and its theatrical metaphor is the assumption that persons are predisposed to adapt to situations and circumstances. In which case authenticity is not the issue. Persons and their personal attributes exist independent of particular situations and circumstances. Therefore, accounting for the propensity to adapt to situation and circumstance need not be suggestive of deceit or cunning. A person simply responds to a situation and acts accordingly. Explaining and predicting how a person is likely to act must then take account of, and correct for, the situation in which talk or behaviour is made in order to facilitate an accurate explanation or prediction of subsequent behaviour.

In the context of the PAM something done by a person can be referenced by, as ethogenics directed (Harré & Secord, 1972:101), what the person takes the action to be. The approach is to frame action descriptively in terms of the intent of the person in the circumstance of the action and with reference to personal attributes. Clarification of the nature of the action lays the ground for answering factual questions such as whether or not, or why, the person will actually perform a particular target action.

Harré and Secord (1972) gave emphasis to the problem that participants in an experiment have their own ideas about what is going on. The idea was not new. Orne (1962), for example, had reported great difficulty in designing an experiment that respondents did not react to. Empirical studies (e.g., summarised by Lerner & Tetlock, 1999) have found that survey respondents react to context effects, such as the wording of questions, the way a topic is presented, or whether they will be held accountable for their views. In defining the completion of a questionnaire as an action, such effects are expected, because respondents are reporting their views, opinions or behaviour in the circumstance of answering the questionnaire. It is possible that some respondents may be strategic and make responses in a purposeful attempt to bias the results, and others may simply respond with little deliberation, perhaps ticking boxes while watching television. The problem for discerning these different responses is that the intent of a person cannot be readily determined. As Weinstein and Deuschburg (1964) have suggested and Brenner (1982) has emphasised, respondents, whatever their motives, tend to provide acceptable responses. However, unless strategic or mindless thinking are taken to be norms, it can be expected that respondents tell the researcher about themselves and their lives, or at least tend to give that impression.

3.4 The meaning of responses

In the PAM persons are powerful particulars whose actions can be understood when framed in terms of personal experience and the context in which actions are performed. Persons are socially constructed, because they acquire the capacity to be persons through the acquisition of language. This entails that persons have agentic powers and capacities, have learnt to think for themselves and are capable of making their own decisions. Words, gestures and survey responses are, from this view, subjectively meaningful intentional actions made with reference to joint interpretation. Meaning is socially constructed, though meaning is also mediated by the acquired capacity that a person has to think for him or herself. As Harré (1998:7) makes plain, a person is unique in terms of their life experience and because of the acquisition of powers and capacities, each person is unique in terms of how he or she interprets their own life experience.

A problem associated with the uniqueness of persons arises from the analysis of discourse in terms of an identified social discourse. If it is assumed that the person's talk is understood in terms of an identified social discourse, then the unique contribution of the person is overlooked. This is the error of approaches to discourse analysis that explicitly link social forces, such as dominant ways of talking and thinking, to a person's talk and actions in a deterministic way. For example, Harré (1981:149) has argued that the categorisation of 'working class' is only an ascription of a contrived state of being. The point here is that the working class can be defined as having certain attributes (e.g., low income, low levels of education), but being in the category of working class does not mean that certain attributes constitute the working class person. It is a further conceptualisation to think of 'working class' as a social force, which is very difficult to demonstrate empirically, because it is merely a taxonomic name for a collection of attributes (Harré, 1981:150).

Harré has been criticised for presenting a view of persons that cannot be readily integrated with a common view of sociology that discourse is primarily responsible for thought and action (Layder, 1990:116). By contrast, a definition of discourse that readily meshes with this viewpoint from sociology is that a discourse creates or determines the nature of reality (Nightingale & Cromby, 1999b:226). In some contrast, Harré's view takes discourse to be the "...social and cultural resources that people draw upon to warrant or explain their activities or the activities of others" (Nightingale & Cromby, 1999b:226). To illustrate this point using a local example, in a recent departmental presentation it was reported that a farmer had trivialised damage to a stream on his property by comparing it to the productive capacity of his farm. This was interpreted as the discourse of anti-environmentalism. What the farmer was actually doing with his words was not considered, because the farmer was taken to be a mere spokesperson for anti-environmentalism. An alternative interpretation, that the farmer's comments were examples of the discourse of defending and justifying oneself, was not considered. How best to interpret the farmer's talk is debatable. Nevertheless, if it is agreed that it is possible for the farmer to be aware of his or her capacity to select words and phrases for the purposes of the conversation, then no direct support can be found for the assumption that the farmer is subject to 'a discourse'. Following Wittgenstein's (1953/1972:§11) toolbox analogy, there may well be a limit to available words and

meanings in the 'toolbox', but how these resources, or 'tools', are selected and put to use for the purpose at hand is not prescribed. The implication for analysing talk, text and survey responses is that the person not only mediates, but also transforms words and meanings in the process of using them for the purpose at hand.

A further criticism of Harré's work is that the assumption that people are creative active users of language for the purpose at hand, may lead to a trivialisation of talk and action. As Layder (1990:118) pointed out, based on this assumption a person's account can be treated as mere rhetoric. Similarly, Harré (2001b) has indicated that questionnaire responses "...are displays of a knowledge of rules and conventions for carrying on such conversations". In addition, Harré (2001b) commented further that questionnaire responses "...reveal how we use the concept of responsibility and how we are supposed to tell stories about episodes in which issues about responsibility for emotions can be or have been raised". This 'telling of stories' implies the selective use of words and meanings for the purpose at hand, which raises the issue of the veracity of what could acceptably be fictional accounts. Nevertheless, while Harré (1998:134) emphasised interpretation of discursive conventions over interpretation of causal relations from questionnaire data, he gave emphasis to the idea of a person as containing a set of stable beliefs and attributes derived from experience. Harré (1998:136) made it clear that the person is a singularity with a singular experience who can, nevertheless, tell many fictional or factual stories of himself or herself. In this way, interpersonal communication has depth in the viewpoint and beliefs of the person and cannot be simply regarded as rhetorical to the situation at hand.

While Harré (1998:134) clearly rejects questionnaires as measures of psychological constructs, he also presents a person and their personal beliefs and attributes as an explanation for his or her social behaviour. Following this assumption, patterns in questionnaire data cannot solely be the result of responding to social rules and conventions, because the person can also be telling the researcher something about himself or herself. Given that personal views and experiences have a bearing on action and exist independently of action, there is potential for their utilisation as a base point for the purpose of explaining action. This explanation need not assume causality. As Manicas (1997) has noted, centring the person as the cause relegates personal

experience to likely conditional factors, rather than their being deterministic of action. For example, with reference to criminal activity, Manicas (1997:205) reported that:

Unsurprisingly, class, gender, age and drug use leap at us as critical structural variables in explaining these social facts. We can think of these as structuring the activities of persons; they are 'materials' which enable and constrain activity and, insofar, they structure motivations, opportunities, expectations, values, attitudes, goals, etc.

To continue with the example of being 'working class', the categorisation does not cause a person to do anything. It may present practical constraints (e.g., lack of money or qualifications), but the 'working class' person is, within constraints, free to choose how to behave and by their own choice may or may not be influenced by their 'working class' background.

3.5 A theory of the open kind

Aronson, Harré and Way (1995) have provided a detailed argument for the development of realism as a means of scientific progress. Interestingly, their detailed philosophical argument, use of examples and development of criteria for testing the efficacy of realist models of the natural world avoids the theorising or modelling of psychological processes. This may seem unusual since much of Harré's writing has been in promotion of a realist form of social constructionist psychology. Harré does argue for persons as a primary reality (e.g., Harré, 1992) and this argument forms an important basis for the explanation of human cognition. Nevertheless, following Wittgenstein (1953/1972), Harré's view (e.g., Harré, 1991:4; Harré, 1998:40) has been that it is wrong to model cognition as if it was a thing. Wittgenstein's (1953/1972:§308) warning was that psychologists are at fault to suppose psychological processes and states and then take what is assumed to be evidence of them, as evidence of something real.

A response to this warning has been to utilise a form of theorising that avoids the postulation of hidden things. For example, Harré (1991:4-5) has explained the sense in which he has used the term 'theory'.

...a theory is an open set of necessary propositions expressing the interrelationships of a cluster of concepts to be used for describing a certain roughly demarcated class of phenomena, which the concepts of the cluster themselves partly define (Harré, 1991:4).

Harré (1991:4) explained further that this form of theory is 'revisable', 'incomplete' and 'open'. In a similar vein, reliance is placed on 'concept' rather than a 'thing' to emphasise the revisable nature of this form of theorising. Harré (1991:4) claimed that this approach contrasts with the proposing of hypothetical models of processes and structures thought responsible for phenomena. The point is similarly made by Harré, Clarke and De Carlo (1985:44), who in promotion of ethogenics, stated:

The pattern we have discovered using an analytical model is real, though it is a limited selection from all possible available patterns. But the behaviour of the explanatory mechanism which is created by use of the source model is imaginary.

This form of theorising is in contrast to the proposing of latent variables for the purposes of explanation, as has been the practice of cognitivist science (Harré, 1991:4). Instead, the advocacy is for the use of models as semantic representations, which, in the case of cognitivist science, implies that the supposed thought processes under scrutiny seem to be real by virtue of their invocation in the discourse of cognitive scientists (Harré, 1991:5).

Harré (1991:4-5) claimed the form of theorising he advocated is supported by the philosophy of Wittgenstein. Interestingly, Wittgenstein himself used 'open' theorising. For example, from Wittgenstein (1953/1972), 'language games' do not specify a particular game, 'forms of life' do not specify a particular form, and nor does 'grammar' specify what, which, or whose grammar. Yet these terms provide a framework from which ways of being can be described.

This 'open' style of theorising has led to Harré's approach being described as a 'light social constructionism', in comparison with the darker version of Foucault (Burkitt,

1999). Foucault assumed that interpersonal relationships were based upon relationships of power and authority (e.g., Foucault, 1978). Similarly, while having roots in Harré and Secord (1972), the critical realism of Bhaskar (1989:3) assumed a strong link between institutions, social practices and agency that constrains possibilities for action. In comparison 'open' theorising does not discount the presence of relationships based on power, or the possibility of a constraint on the possibilities for an individual. From a different viewpoint, the ascription of power to persons entails that social forces are sustained by the actions of persons. This means that a more interesting and more detailed analysis can be made of persons working within power structures, as they themselves define them. Further, power may be recognised as a factor, but it is not appropriate to always assume power has a predetermining role in social interaction. With agency comes the potential for relationships of different forms, where the understanding of relationships solely by means of an assumption of power would not always be appropriate.

From the perspective of open theorising, there is no attitude construct serving to explain action. The idea of a variation upon a fixed state is replaced by assumptions based on connectionist ideas. These ideas suggest continual change and adaptation, a particular fleeting momentary pattern of neural firings, whereby an action, such as a statement of attitude is a momentary event. Its production is much like a conditioned response, although because of adaptation and reinforcement the pattern of firings is susceptible to change. As a conditioned response the pattern has been formed in response to the experience of the person and the nature of the situation at hand. Therefore, statements of attitude, like all actions, are always local. Apparent regularities are merely the result of recording a lack of change in a responsive system that is predisposed to adapt. At best only the general stance of the person can be described.

A key question is then whether this type of description is valuable. Moore (2000) concluded that by following Wittgenstein (1953/1972), psychological research would be more interesting, because of the changing nature of the subject. An answer from a different perspective can be found in Greenwood (1989:169-175) who believed traditional pursuits of cognitivist psychology (explanation, prediction and control) could be accommodated by a realist approach. According to Greenwood (1989:169-175),

should inquiry be concerned with the description of an action, the isolation of key reasons for action, or the promotion of change, there is no reason why description of the talk and attributes of a person cannot be analysed for these purposes. As Harré (1998:49) points out, it is no revelation that human behaviour can be modelled without reliance on the existence of cognitive processes, as has been the approach of behaviourism. Nevertheless, following Wittgenstein (1953/1972), the person is a creative, active being who is involved in the skilled use of words and gestures in carrying out his or her own projects. With this view comes the need to interpret thoughts, talk and survey responses as the actions of persons.

3.6 The role of quantitative methods

According to Sayer (1992), realists need to be wary of the inherent reductionism of quantitative methods. Whereas positivists tend to believe they are dealing directly with reality for the confirmation or rejection of their hypotheses, realists believe reality can never be so simply apprehended. As an example of a positivist approach, Babbie (1995:56) quotes Doyle (1881:13) who stated: "It is a capitol mistake to theorise before one has data. Insensibly one begins to twist facts to suit theories, instead of theories to suit facts." The positivist view is that data are 'neutral' and a ready means of checking or developing theoretical propositions. No such luxury is available for the realist. While rejecting the subjectivity of relativism, for the realist, reality is, nevertheless, always theory-laden. Scientific enquiry can, however, be undertaken with due attention to the nature, limits and criteria of claims to know, as promoted by Aronson, Harré and Way (1995). In simple terms, real things can be investigated with due attention to whatever may impinge upon the clarity of this investigation. It is therefore a necessity to give close consideration to method and the inherent bias it brings to apprehending reality.

The PAM implies regularities for action based upon life experience, situation and discursive conventions that are amenable for examination by quantitative methods. Quantitative methods have been particularly useful for testing the laws and rules hypothesised under cognitivism. The view has been that if controls and conditions are sufficiently replicated, it is expected that further supporting results can be found to enhance claims for the projection of results onto a wider untested population. The

efficacy of such projections is dependent upon ever-present differences between closed and open systems. The best that can be done, as Sayer (1992:76) promotes, is to control for conditions that are plausibly regarded as relevant to the study at hand. For the cognitive scientist this would entail reductionism to enhance the determination of rule governed thought processes, or, for investigation via the PAM, it entails the discernment of personal attributes and details of the circumstances of action.

The predominance of discourse-orientated approaches in the 'new paradigm' has encouraged the use of qualitative methods. For example, in the promotion of new methods for psychology, Smith, Harré and van Langenhove (1995) emphasised qualitative methods for the study of discourse and dynamic interactions between individuals. The studies included in Smith, Harré and van Langenhove's (1995) edited publication accordingly sacrificed the breadth of quantitative methods for the depth of qualitative methods to understand the construction of subjectively understood conversations (Harré & Stearns, 1995:1). Nevertheless, Harré and Stearns (1995) promoted the study of the social context in their presentation of studies of discursive conventions (Edwards & Potter, 1995); responsibility (Harré, 1995a); positions taken on a social issue (Carbaugh, 1995); and emotional and discursive norms (Egerton, 1995). Each of these researchers promoted the use of quantitative methods as a means of identifying social norms, semantic regularities or emotional norms in a target population. Egerton (1995), in particular, demonstrated the use of parametric and non-parametric statistical methods to investigate the meaning of emotive statements related to tension in Northern Ireland, through the study of semantic associations.

Examples of quantitative techniques for the study of discursive norms include regression analysis and correlation, as well as cluster analysis and factor analysis (Egerton, 1995). Such methods have been favoured by cognitivist psychology for the study and discernment of cognitive laws or rules associated with cognitive processes. Interestingly, ethogenics, with its search for evidence of rule-following, did not discount the use of quantitative methods. Harré and Secord (1972) did make strong objections to the use of quantitative methods in the discernment of cognitive laws or rules, but they were not averse to the method as a technique for recognising patterns they associated with rule-following. Indeed, Harré and Secord, (1972:233) clearly stated that an

ethogenic researcher looks, amongst other indicators of rule-following, for statistics and significance measures. In addition, Harré, Clark and De Carlo (1985:113) considered the use of statistical techniques essential for the generalisation of "...the rules of action particular to the kind of situation and kind of person involved". In their view, a necessary step in ethogenics was the gathering of empirical evidence, by building on qualitative inquiry using traditional quantitative methods.

Sayer (1992:200) has pointed out that the use of quantitative methods does not necessarily entail, though has been associated with, the belief that complex actions can be treated as reducible to some simple combination of simple behaviours. Nevertheless, Sayer (1992:76) asserted that mathematical modelling and testing in social science can be undertaken with an awareness of the social relations and structures on which objects represented as variables depend. In other words, the process of defining and testing variables must be done with an awareness of context and the meaning of actions.

The process of enquiry, no matter how extensive, is always subject to limitations. As Aronson, Harré and Way (1995:92) have pointed out, models are never intended to fully replicate the object of scrutiny. Testing, or inductively determining, simple relationships through quantification of key variables of a social system should raise arguments against the construction of artificially closed systems. Inevitably *ceteris paribus* is invoked, and inevitably problems associated with the projection of the results of closed system experiments onto open systems arise. Accordingly, the positivist use of closed systems as equivalents to open systems to explain or predict events in social systems warrants censure. This does not, however, mean that the method cannot be used with qualification of its limitations.

A shortcoming of quantitative methods is that, in reducing information to a generalized form, the information becomes indefinite or non-specific. It is not the actions of one person that are studied, but the actions of the sample on average. Nevertheless, a way of conceptualising quantitative results is to consider them relevant to a hypothetical typical individual (Manicas, 1997). Statistically the typical individual can be related to the performance of a particular action, whereas this may not necessarily be the case for a particular individual. The level of participation in household recycling, for example,

is a statistic that may not apply to all or any households. In addition, the determination of factors associated with participation in household recycling may not apply to an individual household. This is because the results do not apply to the actions of all households, though they do apply to a typical household, or a typical individual.

3.7 Chapter summary

This chapter introduced the PAM and has provided necessary considerations to structure further the powers and capacities, attributes and actions of persons towards its application. An open theoretical approach has been introduced to warrant the modelling of persons and their actions. The PAM is presented as an approach that is amenable for testing using contemporary quantitative methods. This choice of method may augment qualitative methods, but is not intended to supplant the depth and breadth of qualitative methods. Regularities amenable for statistical analysis extend from persons and the situation in which a person acts or tells a person something about himself or herself. It is possible that these responses may be exaggerated or ingenuous. In keeping with the assumption of agency, it is presumed that respondents utilise the questionnaire as a means of telling the researcher a story about themselves and their views on topics presented to them.

Having formally stated and explained the PAM, the following chapters demonstrate and extend the new model by means of the critical reinterpretation of cognitivist theories in social psychology.

Chapter Four

The theory of planned behaviour

4.1 Introduction

This chapter is a review of the theory of planned behaviour (TPB). The review is undertaken to explain the TPB and to raise issues related to the efficacy of the TPB. The latter is done for the purpose of providing background for an alternative interpretation based on the PAM. The review begins with a discussion of the attitude concept, as it has been used in contemporary attitude-behaviour research. The review concentrates on the TPB, which within contemporary social psychology is arguably regarded as the most successful conceptual model of the attitude-behaviour relationship.

Criticism of the TPB is initially drawn from within social psychology and economics. Questions are then raised about the sufficiency of the model, the presumed level of rational thinking undertaken by respondents and the normative stance of the model. The causal structure of the TPB is then questioned using criteria developed from recent research on causal thinking, underpinned by Hume's (1740/1975) rules for establishing causal relations. Two works that specifically address the TPB from the 'new paradigm' are then introduced to assist in explaining how TPB data can be interpreted as being the product of agency.

4.2 Attitude-behaviour research

Within social psychology, a good deal of research has been undertaken towards understanding the relationship between attitudes and behaviour. Such research has concentrated on determining an individual's motivations for his or her behaviour, when presented with a free choice over performance of a behaviour. This choice is held to be primarily determined by an individual's attitude.

Attitudes have historically been considered a predetermining factor in human behaviour. For example, Allport (1935:806) stated that "Attitudes determine for each individual

what he will see and hear, what he will think and do". Such observations of the role of attitudes set the scene for subsequent attitude research. The predominant view that developed subsequently considered attitudes to be functional for the individual because they are assumed to guide perceptions, cognitive processes and behaviour (Farr, 1996).

More recently, attitude research has been shaped by the predominant approach of cognitivism. A key assumption of this approach in social psychology is that internal thought processes are given expression in a person's behaviour and responses (Farr, 1996). Modern definitions of attitude incorporate the cognitivist approach and generally assume that an attitude is an internal disposition toward someone or something that incorporates an evaluative process (Ajzen, 1989). An attitude is also considered to be an evaluative reaction that is revealed through thoughts, feelings and behaviour (Eagly & Chiakén, 1993). These three components (cognition, affect and behaviour) are thought to be closely related, because a change in one can be interpreted as influencing the others and as having an effect on the overall attitude. The three components are held to represent different forms of attitude, though strong interrelationships between these components have been used to justify their consideration as parts of a single structure (Ajzen, 1989). Such a structure is a type of hypothetical construct that is inaccessible to direct observation, with its nature established through determination of a person's evaluations regarding someone or something.

The cognitivist view of attitudes has been a central concept in the contemporary study of the links between attitudes and behaviour. Attitudes are held to be a major determinant of an individual's behaviour and of his or her thoughts and perceptions of the world. The importance of attitudes as a means of predicting and understanding behaviour has, however, been challenged. Early research by LaPiere (1934) questioned the usefulness of attitudes for predicting behaviour. A critique by Festinger (1964) observed that little support had been provided for the common hypothesis that a change in attitude would produce a corresponding change in behaviour. Subsequently, Wicker (1969) found, in a review of a number of studies, that only a weak relationship existed between attitudes and behaviour. In response to these criticisms, various researchers have focused on re-establishing attitudes as an important determinant of behaviour.

Against this background of criticism, the theory of reasoned action (TRA; Ajzen & Fishbein, 1980) and the more recent TPB (Ajzen, 1991), can be considered the most successful developments in the study of the attitude-behaviour relationship, because of their apparent ability to predict and explain human behaviour. Improvements in prediction have been largely due to the inclusion of a measure of intention as a mediator between attitude and behaviour. In addition, the measurement of attitudes that apply specifically to the performance of a particular behaviour, and the inclusion of a subjective assessment of the importance of the views of other people, have enhanced the explanatory power of these models.

4.3 The theory of planned behaviour

Both the TRA and the TPB postulate that behaviour is predicted by intention to perform the behaviour. Intention represents a person's motivation in the sense of his or her conscious plan or decision to exert effort to enact a behaviour. According to Fishbein and Ajzen's (1975) principle of compatibility, intention and behaviour are strongly related when measured at the same level of specificity in terms of action, target, context and time frame, with a stronger relationship found with a shorter time between measurement of intention and behaviour. The TRA holds that intentions are influenced by attitude towards the behaviour and subjective norm (SN). The TPB extends upon the TRA by adding perceived behavioural control (PBC) as a further co-determinant of intention. As shown in Figure 4.1 (on the following page), these constructs are themselves held to be formed from requisite sets of beliefs. While the TPB provides a complete explanation of intention, the model can nevertheless be regarded as a linked series of theoretical constructs, which are wholly explained by requisite belief sets.

Whereas the TRA may not perform well in explaining behaviours that require skills, resources or opportunities not freely available to the person, the more recent TPB is designed to measure perceptions of such factors (Ajzen, 1991:181). These perceptions include personal abilities or difficulties associated with performing the behaviour. As the title of the theory suggests, the TPB gives emphasis to the activity of planning, because the motivation to perform a behaviour is supplemented with a consideration of the means necessary for its performance.

The relationship between the determinants in the formation of intention is a linear function of attitude toward the behaviour, SN and PBC, which can be expressed algebraically as:

Equation 1:
$$B \cong BI = w_1 AB + w_2 SN + w_3 PBC$$

In which B is the behaviour, BI is behavioural intention, AB is the attitude toward the behaviour, SN is the subjective norm and PBC is perceived behavioural control, w_1 , w_2 and w_3 are weights indicating the relative importance of AB, SN and PBC.

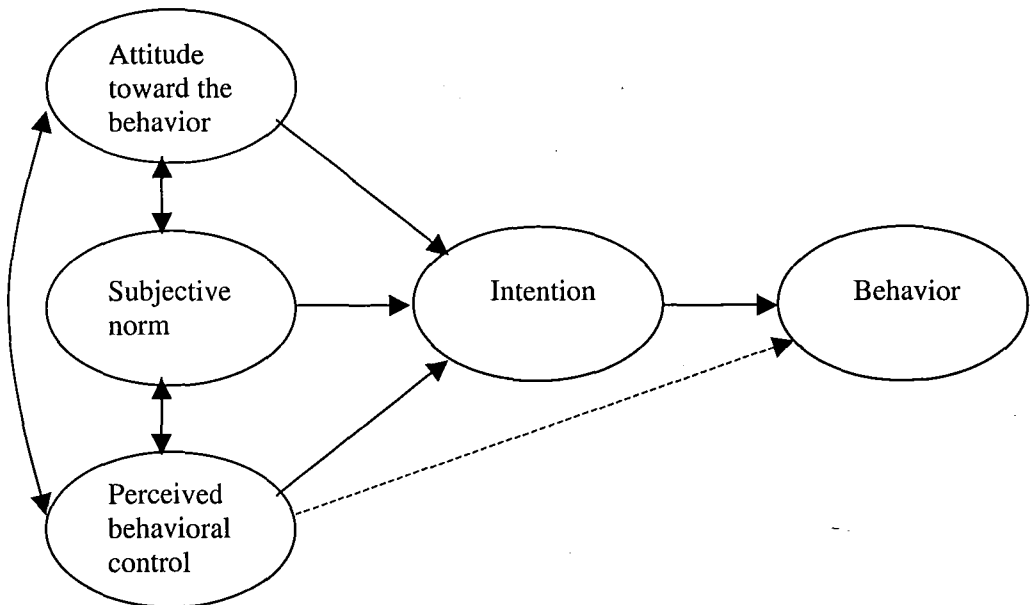


Figure 4.1. The Theory of Planned Behaviour (Ajzen, 1991:182)

In addition to the relationships shown in Equation 1, Ajzen's (1991) model also holds that PBC influences behaviour primarily through its effect on intention, and is also expected, in some instances, to have a direct effect on behaviour. Ajzen (1991) hypothesised that PBC would affect the relationship between intention and behaviour when PBC incorporated with accuracy the actual resources and opportunities necessary for the behaviour. In this circumstance, PBC would be related to conditions that directly

affect behaviour, as well as measuring the influence of these conditions on intention to perform the behaviour. Reviews (Ajzen, 1991; Conner & Armitage, 1998) have found support for this relationship, by finding cases where PBC was significantly related to behaviour after accounting for intention.

Intention

Ajzen (2002) defines intention as simply, "...the cognitive representation of a person's readiness to perform a given behavior, and it is considered to be the immediate antecedent of behavior". Ajzen (1991:181) also explains "...they are an indication of how hard people are willing to try, of how much of an effort they are planning to exert...". Ajzen and Fishbein (1980) explain that intention involves a degree of deliberation, thus excluding consideration of habitual, spontaneous or impulsive behaviours.

The deliberation assumed by the TPB implies the activity of planning. As Eagly and Chiakien (1993:189) identify, "...people must engage in planning as they negotiate the problems of obtaining resources, cooperation and skills". Yet the TPB suggests both planning and desire so that planning can be understood as 'given the opportunity I would act in this way' or as a desire, it can be understood as 'given the opportunity I would like to act in this way'. This is similarly highlighted by Smith (2000) who draws upon James (1910) as a general view of the context in which the TPB operates. James (1910), in describing the link between desire and action, stated that:

If with the desire a sense of attainment is not possible, we simply wish; but if we believe the end is in our power, we will that the desired feeling, having, or doing shall be real; and real it presently becomes, either immediately upon the willing or after certain preliminaries have been fulfilled (James, 1910:415).

In light of this statement, Smith (2000) asserts the TPB can be considered as measuring a continuum between wishing and willing. In this context, PBC determines whether a positive desire is either a wish, a desirable state that cannot be attained, or a will formed in reflection of the knowledge that the desired behaviour can be carried out. This arrangement places tight boundaries around what an intention is, by defining it as a part

of a formal plan that would seem to simply require the expected, or planned for, opportunity for it to be put into action. According to Ajzen (1991:181-182), the necessary prerequisites are “the will to perform the behaviour” and “such non-motivational factors as availability of requisite opportunities and resources”. Given these factors, there is effectively no difference, apart from the actual performance of the behaviour, between intention and behaviour.

Attitude toward the behaviour

Ajzen and Fishbein (1980:55-56) define attitude toward the behaviour as the sum of the salient beliefs associated with the outcomes of the performance of a behaviour. They describe salient beliefs as beliefs that are of importance to the individual, with regard to him or her performing the behaviour. To form attitude towards a behaviour, it is assumed an evaluation is made of how good or bad each consequence will be. This evaluation is then simulated by the multiplication of an expected value, which is an estimation of the likelihood of the consequence occurring. Attitude toward a behaviour is then derived from the sum of the value of all the important consequences of performing the behaviour, subject to their likelihood of occurrence. Attitude toward the behaviour can be represented algebraically as:

Equation 2:

$$AB = \sum_{i=1}^n b_i e_i$$

Attitude towards the behaviour (AB) is therefore formed from a sum of the value of salient beliefs about the consequences of performing the behaviour (b) multiplied by their perceived likelihood (e).

Subjective norm

Ajzen and Fishbein (1980:57) explain that SN is an assessment of perceived social pressures to perform or not perform a particular behaviour. SN is held to be a function of salient beliefs concerning the opinion of important others regarding the individual performing a behaviour. These beliefs, termed normative beliefs, are taken to be formed from beliefs about what other people, of importance to the individual, think of the

individual performing the behaviour. SN is calculated by measuring how favourable or unfavourable important others are of the individual performing the behaviour, multiplied by the individual's motivation to comply with the views of these important others. Motivation to comply encompasses perceived pressure to adhere to another person's opinion, due to the nature of their opinion and pressure to conform to the opinion of the person, due to their perceived status. SN can be represented algebraically as:

Equation 3:

$$SN = \sum_{i=1}^n nb_i mc_i$$

SN is therefore formed from the sum of all normative beliefs about how favourable or unfavourable important others are of the individual performing the behaviour (nb) multiplied by the motivation to comply (mc).

Perceived behavioural control

PBC represents an individual's perception of the extent to which performance of the behaviour is easy or difficult. Ajzen (1991:183) explains that PBC represents perceived ability, in a measure of the degree of control a person considers he or she has over his or her performance of the behaviour. The need for skills, resources and the co-operation of others is assumed to be recognised by the individual and the perception of his or her ability to meet these needs is held to affect the individual's intention. PBC thus represents a person's perception of how easy or difficult it is to perform the behaviour multiplied by the perception of the degree of power he or she has over the performance of the behaviour. PBC can be represented algebraically as:

Equation 4:

$$PBC = \sum_{i=1}^n c_i p_i$$

PBC is therefore shown to be formed from the sum of the perceived ease or difficulty encapsulated by all control beliefs (c), when they are multiplied by the perceived power (p) that each control belief has over performance of the behaviour given the personal abilities of the individual.

Mediating capacity of the TPB

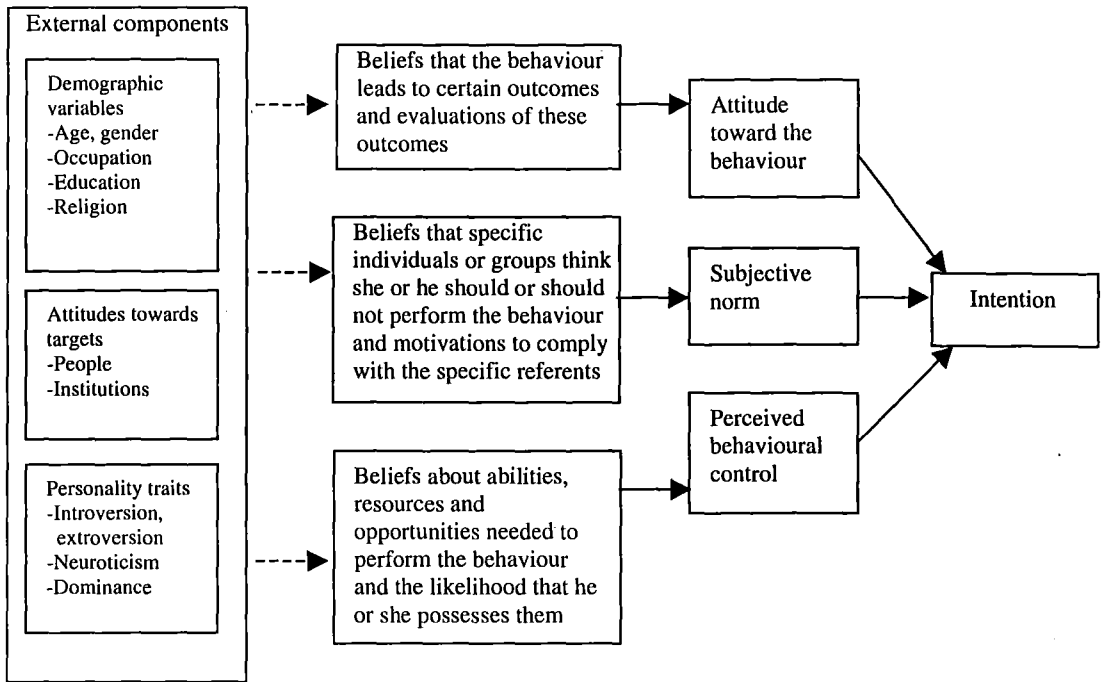
The TPB is held to be a complete theory of non-impulsive behaviour in that other influences on behaviour are argued to impact on intentions and subsequent behaviour through the components of the TPB. In this regard the theory is perhaps best considered as providing a description of the relations between proximal determinants (attitude, SN, PBC and their requisite beliefs) and intention, but not of the processes whereby other factors influence these determinants (Eagly & Chiakien, 1993:173). As Ajzen and Fishbein (1980) assert, their model is designed to be applied to a variety of behaviours, unhindered by the need to consider specific independent variables that may only pertain to the performance of a particular behaviour. Nevertheless, Eagly and Chiakien (1993) proposed that the influence of factors defined as external to the model can be shown as having a causal effect upon TPB components (as shown in Figure 4.2 on the following page).

Application of the TPB

Application of the TRA is restricted to behaviours that are undertaken voluntarily, because these are presumably only dependent on whether or not a person intends to perform them. The more recent TPB, through its inclusion of PBC, is designed to be applied to a wider range of behaviours, because perceived impediments, and consequently control over behavioural performance, are taken into account (Ajzen, 1991). Both theories also deal with behaviours whose performance is deemed to be dependent upon forethought, as is implied by their use of the terms 'reasoned' and 'planned' in their titles. In this way, following Smith (2000), the TRA and TPB can be defined as models of action, where something is done for a purpose, as opposed to models of behaviour, meaning that which is done possibly without forethought.

In application of the TPB, an assessment is made of the degree to which attitude, SN and PBC explain variations in intention, with the assessment usually undertaken by

regression of the three determinants onto a measure of intention. Explanation of the three determinants is commonly shown by correlation between a determinant and the summation of requisite beliefs.



Possible relations between external components and beliefs ---->

Stable theoretical relations linking beliefs to behaviour —>

Figure 4.2: Representation of the Theory of Planned Behaviour (adapted from Eagly & Chiaken, 1993:172)

The TRA and the TPB are generally tested using a quantitative survey. The directives of Ajzen (2002) regarding questionnaire design are non-committal over the method for administering a TPB questionnaire. Quantitative surveys can be administered in a number of ways. Three common methods are interviews, telephone surveys and the postal questionnaire (Babbie, 2001). While there are examples of survey by interview (e.g., Bredahl, 2001) and telephone (e.g., Terry, Hogg & McKimmie, 2000), TPB studies have tended to rely on the postal questionnaire as the standard means of survey.

The TRA and the TPB have been applied to the study of a wide range of behaviours. Ajzen and Fishbein (1980) included drug and alcohol use, voting, contraceptive use, breast-feeding and consumer behaviour, as examples of behaviours that were well predicted through use of the model. A comprehensive review of applications of the TRA by Sheppard, Hartwick and Warshaw (1988) found that, in their examination of 87 cases, the model produced an average correlation of .66 between beliefs and intention and an average correlation of .53 between intention and behaviour. The review included studies of blood donation, exercise, leisure activities, food consumption and criminal acts. Reviews of the TPB have found similar results (Ajzen 1991; Randall & Wolff, 1994; Conner & Armitage, 1998; Armitage & Conner, 2001). Most recently Armitage and Conner (2001) found an average correlation of .63 for attitude, SN and PBC with intention and an average correlation of .47 between intention and behaviour.

4.4 The value of 'rational' models

In psychology, while there has been a tendency to focus on how people make decisions based on probabilities, such as weighing up advantages and disadvantages, decision strategies based on heuristics have also been the focus for research (Banyard & Hayes, 1994). In economics, expected utility models of decision-making have historically assisted in the development of theories of decision-making. More recently, however, ideas of the 'rational' person have been questioned by assumptions that individuals may expend less effort in the making of everyday decisions (Simon et al., 1986).

The TPB can be considered an idealistic model of 'rational' thinking through consideration of the primary role of expectancy-value equations in the model. As shown in the equations for the model (Equations 2, 3 and 4), expectancy-value formulations are central to the TPB, because they are assumed wholly to form the three immediate determinants of intention (Sparks & Guthrie, 1998:1393). The equation is similar to expected utility models, or more specifically to subjective expected utility (SEU) models of economics.

SEU models are well known in economics. They provide a means of formally stating what it would mean for a person to act in a consistent rational manner (Simon et al.,

1986). The models assume that what is desired is to maximise the achievement of some goal, under specified constraints, with the assumption that all alternatives and consequences are known. As Simon et al. (1986) describe:

Central to the body of prescriptive knowledge about decision-making has been the theory of subjective expected utility (SEU), a sophisticated mathematical model of choice that lies at the foundation of most contemporary economics, theoretical statistics, and operations research. SEU theory defines the conditions of perfect utility-maximizing rationality in a world of certainty or in a world in which the probability distributions of all relevant variables can be provided by the decision makers. (In spirit, it might be compared with a theory of ideal gases or of frictionless bodies sliding down inclined planes in a vacuum.) (Simon et al., 1986:163).

Similarly, Sparks and Guthrie (1998), in review of the TPB, make the observation that "...it is now widely believed that the subjective utility model (SEU) underpinning such models is not descriptively accurate of how people actually go about making decisions." Schoemaker (1982) and Baron (1988) are used to support their observation.

In reviewing SEU models, Schoemaker (1982) described how these models underpin prescriptive models that are used to assist in formal decision-making, such as multi-attribute utility (MAU) models. MAU models set out a procedure whereby optimal criterion-based decisions are derived by structuring available information. The MAU model can be likened to SEU models used to describe everyday decision-making, because both set out a similar process for optimal decision-making (Schoemaker, 1982).

In terms of classifications by Baron (1988:17) of decision models being prescriptive, normative or descriptive, the MAU model is prescriptive, because it is designed to state how optimal decisions ought to be made. In some contrast, when incorporated in models such as the TPB, SEU models are presented as descriptive, because the role of the model is to describe how a person makes a decision. There is, however, a growing consensus amongst economists that SEU models cannot be defended as descriptive

models of personal decision-making (Edwards, 1989:225). Conner and Sparks (1995:152) recognise that this has implications for the interpretation of the TPB.

In application, the task of the TPB is to figure out the kind of thinking that would under ideal conditions bring about the achievement of a personal goal. Therefore, rather than being a prescriptive model, or a descriptive model, the TPB is arguably more appropriately categorised as a normative model, because its formal description sets out a particular standard, pattern or type in its explanation of intention. If taken prescriptively, the TPB would be a model of optimal thinking with the likely imperative of helping people become better thinkers by encouraging the avoidance of deviations from a prescribed process. If taken normatively, the TPB is a measure of deviations from the model and, as such, is not designed to describe how people actually think because, in practice, measurement is made of the degree of conformity with, or deviation from, a model of how people are presumed to think. From this perspective, the TPB only describes actual cognition by proxy, through comparison with a model of optimal decision-making, and consequently can only indirectly describe everyday decision-making. This has led to the judgement in economics that such models are "...not well suited as an explanatory theory of individual behaviour" (Frey, 1986:545).

4.5 Extent of rational thinking

Whether utility maximisation is a valid assumption for everyday decision-making has been an issue of debate. Simon (1957), for example, proposed that some decisions were best understood in terms of 'satisficing', which assumes that people seek a satisfactory outcome, rather than striving for an optimal outcome. In addition, researchers, such as Kahneman, Slovic and Tversky (1982), have encouraged the study of heuristics and biases as evidence of what would appear to be a sub-optimal decision-making process. These approaches question the applicability of SEU models, and consequently the TPB, for understanding everyday decision-making and raise issues about the amount of effort expended in the rationalisation of everyday decisions.

An issue arising from considering the TPB is whether people actually engage in the seemingly elaborate decision-making processes that the TPB proposes. Earl (1986), for

example, while framing consumer decision-making as inherently complex, asserts that people deal with this complexity using processes much simpler than those assumed by the TPB. In which case, as Eagly and Chiaken (1993:173) have pointed out, it is questionable whether the TPB is an accurate measure of the amount of thoughtful consideration that is given to the performance of a behaviour.

In defence, Ajzen and Fishbein (1980) already assumed that people have a limited capacity to consider and process information. In their words: "Although a person may hold a large number of beliefs about any given object, it appears that he can attend to only a relatively small number of beliefs - perhaps five to nine - at any given moment" (Ajzen & Fishbein, 1980:63). In practice the number varies, with Ajzen's (2002) detailed recommendations for questionnaire design providing no guide as to the number of beliefs, apart from indicating that they should be the most salient for the population to be surveyed. Given that the number of beliefs varies depending upon the target behaviour, it is understandable that no definitive recommendations are made. Ajzen (2002), however, stresses the need to reduce the number of salient beliefs in the interests of identifying those most amenable to manipulation towards modifying behaviour. Nevertheless, in the formal explanation and empirical tests of the TPB (Ajzen, 1991), the issue of the extent of rational thinking in personal decisions is not specifically addressed. As Sparks and Guthrie (1998:1394) suggest, TRA/TPB researchers have been less concerned with whether they are accurately describing psychological processes, than they have been with the predictive accuracy of TPB data.

4.6 Arguments for additional explanatory variables

Many arguments, backed by empirical research, have been made for the addition of further explanatory variables to the TPB. Past behaviour, personal morals and self-identity have a history of having been promoted as additional variables and challenge the generalised way in which the TPB has been applied (Eagly & Chiaken 1993; Conner & Armitage, 1998). Ajzen (1991) himself, in promoting the TPB as an extension to the TRA, suggested that the theory is amenable to the addition of further predictor variables in the statement:

The theory of planned behavior is, in principle, open to the inclusion of additional predictors if it can be shown that they capture a significant portion of the variance in intention or behavior after the theory's current variables had been taken into account. The theory in fact expanded the original theory of reasoned action by adding the concept of perceived behavioral control (Ajzen, 1991:199).

The impact of past behaviour or habit on subsequent behaviour has received considerable attention. Eagly and Chiakien (1993) review this literature, which argues that past behaviour provides clearer indications of subsequent behaviour than TRA/TPB determinants. In a more recent review, Conner and Armitage (1998) also found a good deal of support for accounting for past behaviour in the TPB. Ajzen (1991), however, discounts the importance of past behaviour as an immediate co-determinant of intention, by assuming past behaviour is mediated by the components of the TPB. Some interesting possibilities have nevertheless been proposed. For example, Sutton (1998) proposed, having recently performed a behaviour; the experiences of it are likely to be drawn upon for consideration of another performance of the behaviour. Sutton (1998) also suggested that with repeated behaviour there seems to be little point in undertaking an elaborate decision process, as is assumed by the TPB, when a person can simply draw upon his or her experience. This suggests that past behaviour could be a useful addition to, or replacement of, the TPB for recently performed or repeated behaviours.

Other research suggests that for some behaviours a separate measure of personal morals, the subjective assessment of right and wrong, is warranted. For example, Schwartz and Tessler (1972) in a study of organ donation found that personal normative beliefs had a stronger effect on intentions than social normative beliefs. Zukerman and Reis (1978), similarly found an independent effect for personal morals, in the study of blood donation, when combined with attitudes and social norms. Gorsuch and Ortberg (1983) present further evidence in a study that included consideration of whether people would return a tax refund overpayment, or work on a Sunday rather than attend church. Their view was that personal morals did not incorporate utilitarian factors and that to obey a personal moral was to respect it as something important in itself. More recently, however, Ajzen himself (Beck & Ajzen, 1991) found an independent effect for

perceived moral obligation, which incorporates beliefs about right and wrong. These studies suggest the incorporation of personally held notions of right and wrong, as a separate variable in determining intention, is a consideration for behaviours that are likely to challenge them.

In review of interactions between personal morals and the TPB, Conner and Armitage (1998) found, after having accounted for the effects of other TPB components, that personal morals were significant predictors of intention in nine TPB studies. In addition, personal morals were found to be closely related to attitude, SN and PBC, suggesting further that personal morals may have an important role to play in the TPB.

Eagly and Chiakien (1993) also review a number of tests for the effects of self-identity on behaviour in comparison with the components of the TRA. Self-identity has also been proposed as an addition to the TPB. Self-identity is generally interpreted as a collection of self-referential propositions. It is assumed to be the product of social interaction and the cause of subsequent behaviour (Biddle et al., 1987). Empirical work on food choice, for example, has found a significant effect, independent of TPB components, of self-identity on intention, alongside TPB components. While sceptical of the addition of self-identity, Sparks and Shepherd (1992) nevertheless found support for a measure of a 'green consumer' as an addition to the TPB. Subsequently measures of degrees of health consciousness have been found to be significant independent variables for food choice for a number of TPB studies (Sparks & Guthrie, 1998). Sparks, Shepherd and Frewer (1995) also tested self-identity in a variation of the TPB and found that self-identity made a small independent contribution to explaining differences in expectations to consume genetically modified food. In addition, Sparks and Guthrie (1998) note that self-identity has also been found to be a useful addition to the TPB in studies of exercise behaviour and household recycling.

These various arguments for extensions to the TPB suggest that, in at least some circumstances, the TPB may not necessarily be adequate in explaining intention. In addition, the mediating capacity of the proximal determinants can be questioned, because, in some circumstances, independent effects on intention, other than those of the TPB variables, have been identified.

4.7 Definition of constructs

In general, TPB researchers do not engage in conceptual discussion of the meanings of the terms and constructs employed in their modelling. Though Ajzen (1989) has made assertions regarding the nature of the attitude construct (see section 3.2), these general comments provide a basis for the modelling venture as a whole and do not provide for detailed consideration of TPB constructs. When an intention, for example, is confirmed as a determinant of behaviour and is shown by the model to be formed from the proposed determinant variables, its status as a precursor to behaviour would appear to have been justified. Examinations of constructs do, however, occur, though these are generally prompted when a construct appears to be operating differently in different circumstances. Examples of these differences are the consideration of PBC as a form of self-efficacy (Manstead & van Eekelen, 1998) and calls for the refinement of intentions to implementation intentions (Orbell, Hodgkins & Sheeren, 1997). In addition, the introduction of PBC to the TRA has given rise to debate about its meaning. The theory itself, for example, specifies that PBC can at the same time be a measure of beliefs about personal control, perceptions of actual behaviour, or an unspecified combination of the two (Eagly & Chiaken, 1993:187-188).

4.8 Causality and the TPB

A further area of concern that is left unexamined in the literature is that of the causal relationships underpinning the TRA and TPB. The models are theoretical, in that they hypothesise an interrelated series of linked propositions about decision processes that cannot be observed directly. In other words, in dealing with the 'black box' of human thought processes, only stimulus and response can be observed. Reviews of published research reveal that the TPB has been consistent in terms of good model statistics supporting the relationships proposed by the model (e.g., Armitage & Conner, 2001). This observation does not, however, unequivocally reveal the nature of relationships between the hypothesised components of the TPB, or imply causality.

Armitage and Conner (2001) report strong predictive validity of the TPB in terms of the amount of variance explained. Nevertheless, these researchers also note that support for

the causal aspects of the TPB is weak and in need of further experimental demonstration. Such calls are not new. Liska (1984) criticised the causal structure of the TRA, while providing a revision of the model to account for interactive and feedback effects. In response to Liska (1984), Eagly and Chiaken (1993:186) have pointed out that the TRA is a simplistic representation of the links between beliefs, intention and behaviour, that does not necessarily deny the influence of such effects. Nevertheless, Eagly and Chiaken (1993:187) note that part of the co-variation between components of the TRA is incorrectly interpreted as providing support for the causal flow in the model.

Differences can be noted between the arguments of Liska (1984) and Eagly and Chiaken (1993). They are, nevertheless, in agreement in their assumption that there is a causal relationship between psychological constructs hypothesised by the TRA and the TPB, and behaviour. Prior to making any judgement about causation in the TPB, it would, however, be prudent to establish grounds for this assumption of causality. Indeed, this should be an imperative, especially in light of the acknowledgment by Conner and Armitage (1998) that support for the claim is weak, while giving little direction to where such support can be found. It is an interesting point in itself that the models have been applied hundreds of times, and have given rise to a good deal of theoretical debate, when causality is interpreted from data gathered at one point in time. While one may take a Popperian approach and consider the interpretation to be adequate, given that no other more suitable interpretation has been posed, establishing the degree of support for attributions of causality would be useful for assessing the efficacy of the TPB.

Leaving aside philosophical issues associated with the attribution of causation to mental states (e.g., MacDonald & MacDonald, 1995a), there are currently three general approaches used to establish claims of causal relationships in social psychology. Humean causality remains prominent. In addition, a recent probabilistic approach has extended upon Humean causality, by assuming judgements of causality are sensitive to degrees of covariation between supposed causes and effects (e.g., Cheng, 1997). There is also Harré and Madden's (1975) causal powers theory, which proposes that a cause can be attributed by discerning the nature of an object's properties that act upon another object. The causal powers theory contrasts with Humean causality in that the theory

involves defining causal roles conceptually, whereas Humean causality relies on empirical associations (Fugelsang & Thompson, 2000). Because the TPB supposes constructs that are wholly explained causally, its claims of causal relationships clearly can be attributed as being of the Humean kind. It is then arguably fairer to draw criteria from Humean causality for assessment of the theory, rather than making an assessment of the TPB using the concept based theory of Harré and Madden (1975).

In *A Treatise of Human Nature*, Hume (1740/1978:173 - part 1, section 15) provided “Rules by which to judge causes and effects”. These rules for judgements of cause and effect included; contiguity in time and place; that the cause precede the effect; that there be a necessary connection between a cause and effect; and constant conjunction should be observed between objects judged as causes and effects. For the purposes of evaluating the proposed causal relationships of the TPB, Hume’s rules are transposed into the following criteria, which have been adapted from Goldvarg and Johnston-Laird’s (2001) recent assessment of causal reasoning.

Rule 1. Given that A and B are present, A should precede B in time

Rule 2. Both A and B should be observed and documented

Rule 3. A and B have a necessary connection

Goldvarg and Johnston-Laird (2001) claim these criteria underpin technical assessments of causality based on estimations of probability. For example, smoking (A) is claimed to cause lung cancer (B), so that in general rule 1 is satisfied because smoking (A) is known to precede lung cancer (B). In addition, rule 2 can be confirmed, though regarding rule 3, not all smokers will develop lung cancer and also not all lung cancer patients smoked, though there is a probability (in comparison with non-smokers) that they would have. In general, therefore, the rules support the assertion that smoking causes lung cancer.

Using the rules as criteria for assessment of the TPB reveals poor support for the assumed causal relationships. Regarding rule 1, for example, beliefs (A) are claimed to cause attitude (B), though beliefs (A) cannot be confirmed as preceding attitude (B) in time, because they are measured at one point in time, such as when a person completes a

questionnaire. A follow-up survey could be used to track changes in responses over time, which may reveal that beliefs and attitudes change. The problem, however, remains that these changes do not reveal whether a change in beliefs caused a change in attitudes, because only correspondence or parallelism can be shown. As Eagly and Chiakien (1993:186) note, studies of attitudes and behaviour over time provide evidence that merely suggests reciprocal effects. In review, Conner and Armitige (1998:1432) similarly comment that the TPB is well supported, but qualify this comment by adding "...the evidence supporting the causal aspects is considerably weaker and in need of further experimental demonstration." It appears that despite decades of empirical work, there is clearly little support for the presumption that TPB components are temporally ordered.

The TPB also fares poorly in relation to rule 2. This rule relates to the problem of inferring a cause from an unseen or hidden thing. Causes can be interpreted by their effects, through assigning causal properties to beliefs, desires and reasons. Nevertheless, as Macdonald and Macdonald (1995b:87) have stated: "Beliefs may be in the head causes of behaviour, but one cannot discover what their contents are by poking around inside the head". In the example of smoking causing lung cancer, the smoke can be seen to be inhaled into the lungs and the cancerous lung can be made plain by dissection. For the TPB, events between cause and effect are hidden and can only be inferred from external indicators, such as through speech or other behaviours. While it is impossible to see the point of impact, it would nevertheless be useful to observe the influences that lead to beliefs (A) and evidence of the resulting attitude (B). This evidence has, however, been replaced by an assumption that certain information will lead to a change in beliefs (A) and a subsequent change in attitude (B), which have correspondence with outward expressions of the attitude, be it in talk, the completion of a questionnaire, or in behaviour. There are indications that this assumption is appropriate through the provision of information designed to alter salient beliefs, which has produced a corresponding change in attitude. This procedure has been used in the design of programmes or projects designed to change behaviour, as has been promoted by Andreasen (1995). These, however, do not provide evidence of the internal pathways by which it is assumed that the effect of an intervention leads to a change in behaviour. TPB studies do not show that an intervention designed to alter a belief actually alters the

belief and then in turn alters the attitude, which in turn (along with SN and PBC) alters intention and results in a change in behaviour. At best, all that is shown is that an intervention leads to a change in all the measures in this proposed series, and it is only an assumption that interprets them as causal.

With regard to rule 3, that there should be a necessary connection between A and B, the TPB fares reasonably well. Though the connection is not strictly applied in this evaluation, the TRA and the TPB endure partly because the models consistently provide statistical evidence of correspondence between their measurements. In general across appropriate topic areas, it is probable that given belief (A), attitude (B) will be present and probable that given attitude (B), belief (A) will also be present. Also in keeping with rule 3, it is also improbable that without belief (A), attitude (B) will be present, and improbable that without attitude (B), belief (A) will be present.

When evaluated in terms of the rules set as general criteria for assessing the causal claims of the TPB, it is evident that the model can only be judged as meeting the criteria of establishing necessary connections. This by itself is insufficient for ascribing causality, because parallelism is not in itself support for cause and effect. Temporal order has not been established, and while cognitive processes are unable to be directly observed, it would seem that even attention to observations of stimulation and responses are lacking.

It is intriguing that the TPB is a widely accepted explanation of behaviour, given that basic rules for ascribing causal relations cannot be met. It would seem that researchers are influenced by a further principle proposed by Goldvarg and Johnston-Laird (2001) called:

The principle of circumstantial interpretation: Causal interpretation depends on how people conceive the circumstances of states, that is, on the particular states that they consider to be possible, whether real, hypothetical or counterfactual (Goldvarg & Johnston-Laird, 2001:567).

In which case, for all the care and attention taken in empirical studies, support for the theory is simply dependent upon a belief in the existence of sub-personal constructs and their power to guide thought and action.

4.9 The logical connection argument

Greve (2001) draws principally upon Smedslund (1984) to argue that the components of the TPB are logically connected. Smedslund (1984) argued that many empirically supported hypotheses in psychology could be explained as common-sense, because they tested what was necessarily true by virtue of the meanings of their constituent terms. For example, with respect to the TPB it can be argued that to say that a planned behaviour was the result of planning cannot be refuted. This line of critique is similar to that of Wallach and Wallach (2001a) (see section 2.5), though their response to Smedslund was to call for a reconsideration, rather than the abandonment, of conventional empirical research (Wallach & Wallach, 1999).

Greve (2001) uses the logical connection argument to refer to TPB components as being constitutive of action, rather than being causal explanations of action. A logical connection can be likened to Kimble's (1989) example of explaining schizophrenia by reference to its symptoms (see section 2.5). However, because a symptom of a medical condition can merely be a guide for diagnosis, a more concise example would be a person's arm being a constitutive element in his or her waving goodbye. The implication of this alternative view for the TPB is that if the theory is a set of logical connections, then the components are constitutive elements rather than causal determinants of intention. In which case, the causal assumptions of the theory cannot be readily supported and the theory is more appropriately classified as circular.

In assessing the TPB, Greve (2001) considers the relationship between intention and planned behaviour, while emphasising that the term 'behaviour' is more correctly 'action', due to it being intentional. Intention, rather than being a predictor of behaviour, is then interpreted as a component of action. This is because to be defined as an action the action must have been intentional, and because it was intentional, it follows that it was presumably done for a reason. An important feature of action, according to the

approach taken by Greve (2001), is that action and intention logically contain personal reasons that may not necessarily be readily observed.

According to Greve (2001), action incorporates intention and personal reasons as necessary components, regardless of the presence of other conditional factors, such as opportunity and necessary resources. Therefore, should the TPB operate on this plane, the theory would be circular, because by definition, personal reasons and intention are components of action. What the TPB proposes is, however, a quite different arrangement by assuming a stepwise interaction of the components of action. Smith (2000) describes this move as wrenching intention from a description of a stance understood at the point of action, to a set of hypothesised psychological constructs with requisite pre-emptive properties. This should not be a problem, given that a person can pre-emptively state their intention. The inference is, however, that because such statements can be made then an intention, given requisite factors such as opportunity and necessary resources, always necessarily causes an action.

A key problem highlighted by Greve (2001) is that the proposed intention-action relationship cannot be readily refuted. Common-sense reasons, such as that the respondent changed his or her mind or did not recognise necessary conditions, can be used to explain intention-action discrepancies. In addition, because intentional action must, by definition, be intended, it follows that even a person's claims that they did not intend to do it can be questioned. On this point Greve (2001) argues that the TPB is circular, which is supported because the invocation of common-sense reasons means that the intention-action relationship cannot be falsified. Following this assertion is the claim that the intention-action relationship can only be subjected to a pseudo-empirical test, because it is impossible to refute the hypothesis that an intention results in requisite action. In addition, a similar assertion is also made for the remaining hypothesised relationships of the TPB, with the claim that contradictory results can be attributed to measurement error.

The assertion that the TPB is pseudo-empirical has merit, though the flaw of the assertion is a reliance upon the willingness of researchers to invoke known, but untested, reasons to explain discrepancies between empirical tests and hypothesised

relationships. The fact that researchers can and may invoke untested reasons to offset the rejection of a hypothesis, does not necessarily warrant the rejection of the whole enterprise. Yet, surely these qualifiers miss the point that when building a theory of hypothesised constructs one must be careful in selecting the raw materials. The problem for the TPB is that the theory has its foundations in action, where its constructs are logical connections to the extent that even with the move to pre-emptive intentions, testing of the theory becomes muddled up in common-sense explanations. There is, nevertheless, a solution to the problem by subjecting common-sense to empirical tests, thus bringing them into the fold of science. However, such tests merely serve to confirm Greve's definition of action, that it is intended and done for personal reasons, with additional support for the assertion that people generally act as they intend. The problem remains that without further support for the assumed causal relations of the TPB, the theory rests on a common-sense view that beliefs cause intentions. Interestingly, in introducing their theoretical approach Ajzen and Fishbein (1980:6) similarly state: "So far we have said little that does not conform to common sense, but even at this simple level our analysis raises some interesting questions". The questions they refer to relate to the use of statistical methods to show relative importance of proposed determinants of intention. This explanatory value is promoted prior to defining the concepts of the model as psychological constructs. Nevertheless, Greve's (2001) questions about the testable scientific basis for claims made by the TPB raises issues about the theory as a psychological model and question its value for the control or manipulation of intention and action.

4.10 An Ethogenic interpretation

Smith (2000) provided an alternative interpretation of the results of a TPB analysis by conceding that high levels of correspondence between measures of TPB components warrant an explanation. Upon this observation a transition is made to an ethogenic explanation of the data by emphasising that ethogenics recognises agency, whereas the TPB assumes a causal explanation. Smith (2000) drew support for this transition from Anscombe (1963), who in lengthy consideration of intentionality argued that agents are generally conscious of what they are doing and can choose to express various reasons for their behaviour. Anscombe (1963) does assume that agents act for personal reasons,

which can be likened to the assumptions of the TPB, because an agent can perform an action to achieve a personal goal. However, a key difference between the two is shown by regarding reasons as arguments that are either for, or against, doing something (Vollmer, 2001). Unlike the causal determination of action assumed by the TPB, in this context arguments never force a person to do anything. An argument can indicate what should be done for the attainment of a goal, or can indicate what is the rational action. It is nevertheless up to the person to do, or refrain from doing, what the argument indicates to be the right choice of action.

Whereas in the TPB correspondence is interpreted as evidence of steps undertaken to ensure personal utility is maximised, ethogenics presumes that actions and public statements of agents are guided by adherence to social standards. This adherence would presumably involve a propensity to appear to be acting in a rational manner. Acting consistently with one's views and values would then give the appearance of utility maximisation. In keeping with the ethogenic view, Smith (2000) interprets correspondence in TPB data as evidence of agents acting in keeping with the rule-role model of ethogenics (explained in section 2.4). To support the ethogenic interpretation, Smith (1999) has proposed that a person's responses to a TPB questionnaire can be shown, by their presentation to third parties, to exhibit an imperative to appear intelligible. The test proposed presenting responses to a TPB questionnaire on a three-dimensional surface plot to show more clearly relationships between measures of expected value and attitude. In this way, by showing the surface plot to members of a community, the members presumably could readily distinguish instances where people were acting intelligibly or unintelligibly. This reinterpretation of TPB data does not involve transformation of the data, but merely presents the data in a way that is amenable for a layperson's inspection. The test would, nevertheless, serve to show that, rather than simply exhibiting utility maximising behaviour, the data can be interpreted as revealing a propensity to adhere to social rules for behaviour. It is demonstrated that TPB questionnaires and data can be used to test for adherence to, or departure from, the social norms and values of a community. In other words, it is shown that TPB data can support the rule-role model of ethogenics.

4.11 A new paradigm view of the TPB

In this review questions have been raised about the efficacy of the TPB and direction has been provided for an alternative interpretation of the data. Both Greve (2001) and Smith (2000) criticised the TPB with a mind to dragging the TPB into the 'new paradigm'. Smith (1999:694), in particular, makes much of this by clearly stating that: "The research into intention and agency would benefit from a move in the direction of the critical paradigm". In light of the criticisms presented in this chapter it can be argued that, while support for the TPB has been questioned from a number of perspectives, it has been shown that the value of the model rests in understanding the way people think and talk about making decisions.

The TPB fared poorly when using criteria to establish causal relationships. In addition, for Greve (2001), the definition of terms predetermined their function, which precludes the postulation of a causal configuration. Smith (2000) also questioned causality through an ethogenic interpretation, which brings with it the ascription of powers and capacities to persons and the denial of a causal interpretation of the Humean kind. Nevertheless, despite these criticisms, no one of either paradigm questions that people do have reasons, can decide what to do and can generally be expected to do what they intend to do. Cognitive approaches do not entirely deny this, but they do assume there is a level of explanation behind talk and action. With this explanation comes the assumption that an explanation of behaviour based on reasons involves assigning a causal role to beliefs, desires or other psychological states (Macdonald & Macdonald, 1995b:86). In this regard, TPB survey responses are interpreted as providing a window on private assessments (Eagly & Chiaren, 1993), with the implication that outward talk or action is related to, but does not necessarily constitute, cognition. By removing these assumptions what remains are common-sense reasons and intentions, which should make reinterpretation of the data as evidence of agency a reasonably straightforward exercise.

In this way, the task of reinterpreting the TPB need not be described as involving the dragging of the model across the paradigmatic divide. This is because, while criticism reveals poor support for a causal interpretation, what remains to support the model is an

everyday interpretation of what people say and do. The model does not need to be dragged anywhere, its hypotheses are already seated in the 'new paradigm' where persons have their reasons for acting and can be assumed to act in their own interests.

The error in designing the TPB was to take an everyday understanding of human behaviour and try to explain it by means of an unseen determining structure. What remains is, however, more than the test of an everyday adage. Confirming that a stitch in time saves nine, for example, is simplistic compared to the richness found in TPB data. Degrees of intention, relationships with arguments either for, or against, performing a behaviour and extensions to the model to include personal characteristics or other variables all beg for explanation. Just as the TPB provides answers to relationships apparent in the data, so too a new way of thinking can provide everyday answers and by means of theory further insights into the actions of persons may be gained.

4.12 Chapter summary

This chapter has provided a detailed review of the TPB. The TPB has been shown to be well regarded by its proponents for its apparent ability to predict and explain behaviour. Criticism within social psychology and economics was also noted with concern over the extent of assumed rational thinking, the normative stance of the TPB and the sufficiency of the model in capturing important effects on intention. In addition, weakness was shown in the reasoning for claims of causal relationships. Issues of circularity and problems for falsifying the TPB were also presented and a recent ethogenic reinterpretation was described. Finally, the main points of the chapter were summarised for the purpose of framing the PAM interpretation of the TPB, which is explained in the following chapter.

Chapter Five

Reinterpretation of the theory of planned behaviour

5.1 Introduction

This chapter gives direction to reinterpretation of the TPB by means of the PAM. To support this reinterpretation two issues are first raised that question the TPB. An examination of the procedure for elucidation of the beliefs shows that TRA/TPB data is best interpreted as the opinion of agents, rather than evidence of psychological processes. In addition, analysis of time series data supports the interpretation of TPB data as evidence of a person's position on his or her performance of a target action. Assisted by this evidence, TPB data is treated as the result of respondents telling the researcher something about themselves, and it is shown that TPB data can serve to indicate the strength of a position a person takes on the performance of a target behaviour.

5.2 Belief elucidation

Belief elucidation is the procedure whereby pilot work is used as a means of forming a set of beliefs to be included in a TRA/TPB type questionnaire. The accuracy of the elucidation procedure is important, because ideally survey respondents should be presented with belief questions that correspond with their own beliefs. If respondents are assessing beliefs not personally held, then they are merely providing an opinion of items presented to them. In consequence, the data results from a process of reasoning, but does not provide a straightforward map of 'psychological' processes as the TRA/TPB presume. Thus, support for the TRA/TPB is dependent upon the degree to which the set of beliefs gathered by pilot work are the beliefs of respondents who are presented with the TRA/TPB questionnaire.

There is no prescribed method for belief elucidation. Ajzen and Fishbein (1980:63) recommend a person be asked "using a free response format". Ajzen (2002:7) has directed that 'pilot work' is required to elucidate beliefs and provides instruction for the

design of a set of open questions. In practice most researchers follow the design of Ajzen and Fishbein (1980), which is largely reiterated in Ajzen (2002).

The recommended procedure for the development of a TRA/TPB questionnaire is to provide respondents in pilot work with a description of the behaviour and a series of questions designed to ascertain commonly held beliefs. To ascertain attitudinal beliefs respondents are asked to provide advantages and disadvantages of performing the target behaviour. Following the recommendations of Ajzen and Fishbein (1980:70) salient beliefs are derived from the gathering of advantages and disadvantages. This procedure, which is compared to content analysis (Ajzen & Fishbein, 1980:68), involves forming the advantages and disadvantages into logical groups with reference to a common belief. In demonstration of the procedure, Ajzen and Fishbein (1980:69) provide a table comprising 18 advantages and disadvantages of using birth control pills derived from a pilot study comprised of 100 respondents. The frequency of occurrence for each of the 18 advantages and disadvantages when summed totals 255. The average number of advantages and disadvantages per respondent is then 2.55. In the next step the advantages and disadvantages are consolidated into belief statements. Reduction is then recommended to more common items by retaining beliefs derived from either 10 per cent or 20 per cent of the sample, by choosing the minimum number of beliefs necessary to account for 75 per cent of the advantages and disadvantages. While retaining the most common responses, this procedure reduces the average number of beliefs provided by each pilot study respondent to less than 2.55, whereas nine or more are recommended for testing (Ajzen & Fishbein, 1980:70-71). This means that more beliefs are presented in the finalised TPB questionnaire, than the average person can reasonably be expected to volunteer.

All else being equal, it can only be expected that, on average, each individual respondent presented with a questionnaire developed from the recommended pilot study would have only volunteered approximately 25 per cent of the beliefs presented to them. Although not altogether impossible, it is extremely improbable that the beliefs derived from pilot work will match the beliefs of individuals presented with the final questionnaire. Yet it would appear that advantages and disadvantages are being tested as if they were the personal assessments of each of the survey respondents. Under the

axioms of the TPB such results are interpreted as personally held beliefs, as if each belief had been volunteered by each respondent, and then questionably the results are held to support the assumption of a causal schematic of a stepwise personal decision-making process.

To consider another relevant TPB pilot study, the study by Bredahl (2001) utilised a comprehensive qualitative study (Bredahl, 1999) for the development of beliefs. The qualitative study ($n = 400$) employed a laddering technique to structure European shopper preferences for yoghurt and beer. The procedure involved respondent ranking of the products based on a variety of attributes. Respondents were then asked to explain their rankings with the explanations subsequently coded and analysed to form aggregate ladders of explanation for the product rankings. Of interest regarding the number of outcome beliefs per person, Bredahl (1999) reported the average number of ladders of explanation per respondent to have been between 2.2 and 2.6 beliefs, depending upon the nationality of the respondent. An average not dissimilar to the average (2.55) from Ajzen and Fishbein's (1980) study of the use of birth control pills.

The study by Bredahl (1999) was a more detailed analysis than is commonly undertaken in a TPB pilot study. Bredahl (2001) included nine outcomes to explain, respectively, attitude towards purchasing genetically modified yoghurt and attitude towards purchasing genetically modified beer. In light of the averages provided by Bredahl (1999), less than three beliefs could be expected to have been provided by each respondent and these three were not the same three for each respondent. Like the Ajzen and Fishbein example, respondents to the subsequent TPB survey cannot then be readily assumed to be relating their personal decision-making processes.

The examples of belief elucidation indicate that, all else being equal, it can be expected that on average each individual respondent presented with a final TPB questionnaire would have only volunteered approximately 25 per cent of the beliefs presented to them. This suggests that the remainder are assessed by respondents much like in an opinion poll, because they provided an opinion of what was presented to them rather than stating their own personal beliefs. Although not altogether impossible, it is extremely improbable that the beliefs derived from pilot work will match the beliefs of those

answering the final questionnaire. Yet it would appear that a small number of personal advantages and disadvantages are being tested as if they were a set of personal assessments of the survey respondents.

While beliefs are likely to be plausible and held personally by some members of the population, the analysis suggests strongly that the assumption that beliefs form, or are directly linked to, attitude is not tested when applying the TPB or the TRA. This issue is not entirely unknown, as van der Plight and de Vries (1998:1342) have stated: "Both the TRA and the TPB assume that salient beliefs may well differ from individual to individual and from population to population. Unfortunately, neither theory incorporates this aspect at the operational level." However, while the problem has been noted, the implications for interpreting TPB data have been largely overlooked.

It is evident that respondents have little problem in providing evaluations of the belief statements presented to them in a questionnaire. However, respondents are not revealing their personal decision-making processes in the manner assumed by the TPB. The examination suggests that respondents are instead, and more plausibly, providing an assessment of items presented to them in a questionnaire. Given this alternative possibility, statistical analysis that reveals correspondence between beliefs and attitude cannot be taken as evidence of beliefs causally determining attitude. The more plausible hypothesis is that the respondent already has a position and accordingly assesses beliefs in light of this position. Rather than being the cause, these assessments reveal the results of a person's disposition. Rather than being the cause, beliefs are most likely post hoc assessments made by respondents in light of a position taken on the target behaviour.

5.3 Ambiguity and the TPB

This section presents examination of whether respondents who are more ambiguous are more likely to change their responses over time than are other respondents. The hypothesis that ambiguity impacts upon temporal stability extends from a conditional rather than causal interpretation of TPB items. For example, a positive intention, by definition, should requisitely comprise a positive attitude. If otherwise, the intention can be judged 'incorrect' in light of the ambiguous response and consequently should be

found more likely to change over time than an intention with requisitely corresponding TPB components. As shall be explained, this hypothesis is contrary to the axioms and causal schema prescribed by the TPB.

Data from two surveys of farmer and grower intentions, attitudes and beliefs regarding their using gene technology, purchasing genetically modified food and use of organic methods is used to test the hypothesis. These data were gathered as part of a series of TPB type studies which, while suitable for testing the hypotheses posed in this work, were not originally designed for this task. These data are nevertheless amenable for these tests, because they measured responses to a number of TPB survey questions made by the same respondents in 2000 and again in 2002. The initial survey was conducted by Cook, Fairweather and Campbell (2000) from May to August, 2000 ($n = 656$). The 2002 re-survey was conducted in September and October 2002 and the comparison over time with a standard TPB analysis was presented by Cook and Fairweather (2003). For the 2002 resurvey, two hundred questionnaires were posted to farmers and growers randomly selected from the 656 respondents to the 2000 study. The re-survey received an effective response rate of 63 per cent ($n = 115$). The following is an explanation of the questions and response scales.

Of no consequence for this analysis of ambiguity, SN and PBC measures were not re-surveyed because of low beta scores in regression analysis in the 2000 study. Intention and attitude for three behaviours and a set of eight beliefs for one of the behaviours were measured again in 2002.

Intention to use gene technology was measured by asking: *Which one of the following statements best represents your intention to either use or not use gene technology on your farm within the next ten years?* Respondents could answer by choosing one of a range of seven statements anchored by: *I have a very strong intention to use gene technology* and *I have a very strong intention not to use gene technology*. The mid-point of the scale was anchored by: *I have no intention to either use gene technology or not use gene technology*. Intention to purchase genetically modified food and intention to use organic methods was similarly measured using the respective referents of *purchase genetically modified food* and *use organic methods*.

Three attitude measures were assessed by asking: *How favourable or unfavourable is your general attitude towards the following three items?* Attitude to using gene technology, purchasing genetically modified food and using organic methods were then each measured on seven-point scales anchored by *extremely favourable* and *extremely unfavourable*. The mid-point of the scale was anchored by *neither favourable nor unfavourable*.

The eight beliefs about the outcomes of using gene technology from the 2000 study were assessed. These were, better quality food, new risks to public health, enhanced economic growth for New Zealand, consumer acceptance of foods produced using gene technology, adverse effects on future generations, damage to ecological systems, increased food production, and personal risk. Each belief was measured using two questions, one question assessed the importance of the consequence and one question assessed the likelihood of its occurrence. Likelihood was measured on a seven-point scale anchored by *extremely likely* and *extremely unlikely*. The mid-point of this scale was anchored by *neither likely nor unlikely*. Desirability was measured on a seven-point scale anchored by *extremely desirable* and *extremely undesirable*. The mid-point of this scale was anchored by *neither desirable nor undesirable*. Assessing both likelihood and desirability of the consequences of using gene technology meant that there were sixteen questions about consequences of the use of gene technology.

5.3.1 Results

In this section descriptive results are provided first with significance measures shown for tests of changes over time for each measure. The further examination of changes over time and correspondence between items are provided to demonstrate how the results are interpreted in a TPB study and to show that the study could be taken to be a typical TPB study in relation to reviews provided of the TPB. These results are then followed by the new test for the hypothesis that respondents who are more ambiguous are more likely to change their responses over time than other respondents are.

Descriptive results

Descriptive results are provided in Table 5.1. In terms of differences between 2000 and 2002, for the items shown in this table, there was no evidence of significant differences between 2000 and 2002 (paired sample t-test, $p > 0.05$).

Table 5.1: Intentions and attitudes, 2000 and 2002

Item		2000	2002
Intention to use gene technology	Mean	-0.61	-0.56
	Std dev	1.43	1.63
	n	113	112
Intention to purchase GM food	Mean	-0.74	-0.67
	Std dev	1.43	1.53
	n	115	112
Intention to use organic methods	Mean	0.43	0.40
	Std dev	1.20	1.23
	n	115	112
Attitude towards using gene technology	Mean	-0.53	-0.31
	Std dev	1.93	1.85
	n	114	108
Attitude towards purchasing GM food	Mean	-1.00	-0.82
	Std dev	1.60	1.64
	n	112	107
Attitude towards using organic methods	Mean	0.62	0.59
	Std dev	1.57	1.64
	n	114	109

Note: Range = -3 to 3 for all items.

Table 5.2 (on the following page) shows the descriptive results for desirability and likelihood of beliefs. Overall, similar mean scores for 2000 were found for 2002. Nevertheless, five differences were significant (paired sample t-test, $p < 0.05$).

Table 5.2: Likelihood and desirability for eight consequences, 2000 and 2002

		Desirability		Likelihood	
		2000	2002	2000	2002
Better quality food	Mean	0.57	0.77	0.09	0.11
	Std dev	1.71	1.65	1.9	1.65
	n	108	110	112	110
New risks to public health	Mean	-1.71	-1.78	0.51	-0.78*
	Std dev	1.45	1.35	1.77	1.35
	n	108	112	112	110
Enhanced economic growth	Mean	0.82	1.03	-0.02	0.46*
	Std dev	1.58	1.51	1.62	1.66
	n	108	109	111	114
Consumer acceptance	Mean	-0.04	0.12	-0.48	-0.26
	Std dev	1.73	1.64	1.46	1.4
	n	107	109	111	114
Adverse effects for future generations	Mean	-1.70	-1.97	0.38	0.09
	Std dev	1.52	1.23	1.71	1.77
	n	107	111	112	113
Damage to ecological systems	Mean	-1.79	-2.07	0.62	0.14*
	Std dev	1.42	1.18	1.69	1.83
	n	106	111	113	114
Increased food production	Mean	0.54	0.96*	1.16	1.22*
	Std dev	1.57	1.5	1.41	1.25
	n	107	111	112	114
Personal risk	Mean	-1.83	-2.00	0.11	-0.17
	Std dev	1.56	1.2	1.82	1.73
	n	107	111	112	114

Note: 1. Desirability and likelihood range = -3 to 3.

2. *Paired sample t-test found a significant difference ($p < 0.05$).

The summation of beliefs (see equation 2, section 4.3) was performed as prescribed by Ajzen (1991). The summation for 2002 ($\bar{x} = 12.3$, range = -27 to 63, sd = 18.29, $n = 108$), like other measures related to gene technology, was slightly more positive than the belief summation for 2000 ($\bar{x} = 2.7$, range = -46 to 72, sd = 20.46, $n = 105$). A paired samples t-test indicated a significant difference existed between the two years ($p < 0.001$). There was evidence of moderate internal consistency for the eight beliefs in 2000 (Cronbach's alpha = .70) and 2002 (Cronbach's alpha = .76).

Changes between 2000 and 2002

To investigate changes in responses between 2000 and 2002, correlation results are provided in Table 5.3 and Table 5.4. The results provided in both tables show variation in responses.

Table 5.3: Correlation for intentions and attitudes, 2000 and 2002

	n	r
Intention to use gene technology	108	.59
Intention to purchase GM food	110	.53
Intention to use organic methods	109	.31
Attitude towards using gene technology	107	.45
Attitude towards purchasing GM food	106	.47
Attitude towards using organic methods	107	.32
Sum of beliefs	108	.44

Table 5.4: Correlation for consequences, 2000 and 2002

	Desirability		Likelihood	
	n	r	n	r
Better quality food	104	.46	111	.57
New risks to public health	106	.20	111	.49
Enhanced economic growth	103	.63	110	.59
Consumer acceptance	102	.43	110	.36
Adverse effects for future generations	102	.12*	111	.52
Damage to ecological systems	103	.05*	112	.43
Increased food production	104	.41	111	.43
Personal risk	104	.02*	111	.33

Note: * a low r-value may reflect a low standard deviation.

Change in responses over time is not uncommon. Although not the same comparison as intention-intention, three meta-analytic reviews provide details of intention-behaviour correspondence with similar mean r-values to this study (intention to use gene technology $r = .59$; intention to purchase genetically modified food $r = .53$; intention to use organic methods $r = .31$). Sheppard, Hartwick and Warshaw (1988) found a mean r-value of .53 from 87 studies, Randall and Wolff (1994) found a mean r-value of .45 from 98 studies and most recently Armitage and Conner (2001) reported a mean r-value of .47 from 48 studies. Of particular relevance, Randall and Wolff (1994) reported a mean r-value of .40 for 14 studies with a time period of one or more years between measurement of intention and behaviour.

Correspondence between items

Correspondence between items is presented to show evidence of relationships hypothesised by the TPB. In 2000 there was correspondence between the sum of beliefs

and attitude ($r = .56$, $P < 0.001$, $n = 103$), and attitude and intention to use gene technology ($r = .70$, $p < 0.001$, $n = 111$). There was similar correspondence for 2002, with a significant association between the sum of beliefs and attitude ($r = .64$, $p < 0.001$, $n = 102$), and attitude and intention to use gene technology ($r = .70$, $p < 0.001$, $n = 106$). Attitude to purchasing genetically modified food and intention to purchase genetically modified food were correspondent in 2000 ($r = .62$, $p < 0.001$, $n = 112$) and in 2002 ($r = .75$, $p < 0.001$, $n = 105$). In addition, attitudes towards using organic methods were correspondent with intentions to use organic methods in 2000 ($r = .58$, $p < 0.001$, $n = 111$) and in 2002 ($r = .45$, $p < 0.001$, $n = 105$). All of the correlation results are comparable to the mean intention-attitude correlation ($r = .34$) and attitude-sum of beliefs correlation ($r = .49$) from meta-analysis (Armitage & Conner, 2001). In summary, these results are in keeping with other tests of the TPB and furthermore can be interpreted as an example of a study that provides good support for the TPB.

Ambiguous responses

The results to this point have presented standard tests of TPB hypotheses, which provide good support for the TPB in comparison to meta-analysis. This part of the results presents results for tests for the hypothesised relationship between ambiguity and temporal stability. The hypotheses are not covered by the axioms of the TPB and the tests are novel because literature pertaining to the TPB makes no reference to such tests.

Variables comprising degrees of ambiguity were constructed representing the degree of difference between response to one item and another item measured in the same time period. This scale of ambiguity was anchored by unambiguous (0) and ambiguous (6). A response between two items in one time period, such as attitude and intention in 2000, is interpreted as unambiguous when the same response is provided for each measure. Degrees of ambiguity are derived from the amount of difference between two responses for an individual. For example, to consider an individual's scores, an extremely unfavourable attitude (coded as 1) when subtracted from a very strong positive intention (coded as 7) would result in a score of six on the ambiguity scale. Using the same method, a zero score would be interpreted as unambiguous given there was no difference between two measures.

Temporal stability, i.e., consistency over time, was calculated using a similar method as was used to calculate degrees of ambiguity. The stability scale was anchored by stable (0) and unstable (6), and measured the difference between responses to the same items measured in 2000 and 2002. For example, to consider an individual's scores, an extremely unfavourable attitude in 2000 (coded as 1) when subtracted from a neutral attitude (coded as 4), would result in a score of three on the stability scale. Where there was no difference between response to an item in 2000 and 2002 the score would then be zero, which is interpreted as stable.

To include the sum of belief measures in this analysis, the sum of beliefs was re-coded to a range of one to seven by seven equal divisions of their respective ranges. In addition, absolute values of the differences were used, because only the degree of consistency was sought, and no rationale is offered regarding negative or positive differences between items.

Using the new variables representing ambiguity and temporal stability the hypothesis of a relationship between these new variables is tested by correlation between ambiguity and temporal stability.

The descriptive results for these new variables are provided in Table 5.5 and Table 5.6 (on the following page). As can be seen in Table 5.5, in 2000 the highest level of ambiguity was between attitude towards gene technology and the sum of beliefs regarding gene technology. In other words, respondents tended to provide different responses to belief and attitude measures when compared to other measures of ambiguity. The lowest level of ambiguity was between attitude towards purchasing genetically modified food and intentions to purchase genetically modified food, because, in general, responses to these questions were more similar than the other comparisons.

The descriptive results for temporal stability are provided in Table 5.6. As can be seen in the table, in general, attitude towards using gene technology were least stable, because they had changed more than the other measures over the 2-year period. In contrast, intentions to use organic methods had changed less than any other measure.

Table 5.5: Ambiguity, descriptive results

	n	Mean	Std. Dev.
Intention-attitude towards gene technology	111	0.85	1.13
Attitude-sum of beliefs	100	1.40	1.07
Intention-attitude towards GM food	112	0.79	1.18
Intention-attitude towards organic methods	111	0.87	1.00

Table 5.6: Temporal stability, descriptive results

	n	Mean	Std. Dev.
Intention to use gene technology	108	0.95	1.11
Attitude towards gene technology	106	1.34	1.47
Sum of beliefs	100	0.93	1.02
Intention to purchase GM food	110	0.94	1.02
Attitude towards GM food	106	1.13	1.30
Intention to use organic methods	109	0.91	1.08
Attitude towards organic methods	107	1.17	1.42

Table 5.7 shows tests for the hypothesised relationship. The table shows that with regard to the items related to the use of gene technology, five of the six tests found a positive correlation between measures of ambiguity and temporal stability. There were r-values indicating moderate to good reliability ($p < 0.05$ or better). The strongest correlation was for ambiguity between intention and attitude in 2000 with the temporal stability of attitude.

Table 5.7: Ambiguity for gene technology (2000) by temporal stability.

			Ambiguity	
			Intention-attitude, 2000	Attitude-sum of beliefs, 2000
Temporal stability	Intention	r	.21*	.26**
		n	108	102
	Attitude	r	.36***	.28**
		n	104	97
	Sum of beliefs	r	n.s.	.32**
		n		93

Note: * = $p < 0.05$; ** = $p < 0.01$; *** = $p < 0.001$

The hypothesised relationship was also supported for measures related to preferences for genetically modified food. The level of ambiguity between intention and attitude

was positively correlated with the stability of attitude ($r = .32$, $n = 109$, $p < 0.01$). In addition, a marginal correlation was found for ambiguity between intention and attitude by stability of intention over time ($r = .16$, $n = 109$, $p < 0.09$).

The same tests undertaken on measures related to preferences for organic production methods found the measure of ambiguity between intention and attitude to be positively correlated with the stability of attitude ($r = .40$, $n = 109$, $p < 0.001$). The remaining correlation between ambiguity between intention and attitude and stability of intention was non-significant.

The hypothesis that ambiguity would be negatively related to consistency over time was clearly supported in six of ten tests, with a further test showing marginal significance.

5.3.2 Discussion of results

The results show that the model of farmer and grower intentions functioned as would be expected for a TRA/TPB study. Change in intention over time and relationships between components were in keeping with results from meta-analytic reviews. In keeping with the TRA/TPB a likely conclusion would be that a positive or negative change in any of the consequences assessed by farmers and growers would have effected a corresponding change in attitude and a corresponding change in intention. This conclusion is reinforced, because despite changes in intentions and attitudes over time, there was good support for the hypothesised relationships in 2000, and in 2002.

Examination of ambiguity and its relationship with temporal stability was prompted by the assumption that a person who is consistent in their position would answer consistently to various questions with regard to him or her performing the target action. Those more certain of their position, as evident by their lack of ambiguity, have been shown to be more likely than were other respondents to retain their position over time. The evidence shows how TRA/TPB components constitute intention and fits neatly with Greve's (2001) proposal that TRA/TPB components are constitutive of action. The statement of intent, in this view, operates much the same as in the TPB, in that a person who makes a clear formal statement of how they will act, can be generally expected to

act in this way. The key difference with the TPB is that other statements interpreted as evidence of determinants of intention are no longer assumed to represent causal relationships.

This evidence of the hypothesised relationship supports the view that there is a tendency for respondents who are ambiguous at time one to change their responses over time. To frame this interpretation against a contemporary interpretation, ambiguity or lack of consistency between items is generally interpreted as evidence of inaccurate measurement due to an inability to measure affective or behaviourally based factors. As Eagly and Chiaren (1998:278) have stated, "...an attitude and its associated cognitions could easily be inconsistent even though the attitude is genuine, because the attitude is based primarily on affective or behavioural input whose evaluative implications are different from those carried by beliefs held about the attitude object". In this way, causal integrity is maintained in the face of a poor explanation of its 'associated cognitions'. Inconsistency, in this interpretation, merely means that an explanation of an attitude or intention cannot be readily provided. Therefore, intention is assumed to stand as counterpart to behaviour regardless of apparent ambiguity in its determinants. The evidence presented in this chapter clearly suggests otherwise.

Importantly, in the context of the aims of this dissertation, the finding that levels of ambiguity have an effect on consistency over time is only meaningful when causal assumptions are disregarded. This means that a reinterpretation of TPB data can be more seriously entertained. The rationale is simply that in answering a questionnaire a person, when unsure of his or her position, is inclined to be ambiguous in his or her responses. If unsure of his or her position and ambiguous in responses, a person is assumed to be more likely to change their mind.

Interestingly, the findings and their interpretation are not entirely isolated in terms of how ambiguous responses have been interpreted. Eagly and Chiaren (1998) relate the contemporary view that low inter-consistency merely means that the attitude was unable to be adequately measured. In defence, they criticise Rosenberg (1968) who argued that poor inter-consistency was evidence of a poorly formed attitude. In the words of Eagly and Chiaren (1998:277), Rosenberg's (1968) interpretation was that: "Persons who are

inconsistent in this sense are uncertain about how to respond to attitude and belief questionnaires and so respond in an inconsistent top-of-the-head manner". However, Rosenberg's (1968) 'attitude' differed in structure and function from the more recent version. The well-known three-component model of attitude (Rosenberg & Hovland, 1960) held that cognition, affect and behaviour were distinguishable and represented different forms of attitude. Ajzen (1989), however, has argued the three components are parts of a single structure. In keeping with this later argument, affective or behavioural components can be assumed to stand in for the 'missing' cognitive components. Rosenberg (1968), building on the three-component model, could not readily assume this function, whereas Ajzen (1989) must argue for reconsideration of the original specifications of the three-component model to support what would otherwise be a shortcoming of the TPB.

The results add weight to the assertion that a poorly formed position and a well-formed position with regard to the performance of a target behaviour will produce respectively low and high degrees of ambiguity in TPB data. This ambiguous responding is shown to affect the functions of intention and attitude in that the single bipolar measures of these items fail to mediate or represent the impact of degrees of ambiguity with regard to stability over time. The presumption of causal relations is challenged because the investigation of ambiguity suggests evidence of a common effect, rather than being evidence of inter-related causally linked items. The position taken by Ajzen (1989) against Rosenberg and Hovland (1960) may well have been an attempt to avoid this challenge. Nevertheless, evidence of the effects of ambiguity raises seriously the possibility that what the TPB takes to be evidence of a causal process is more appropriately evidence of regularities generated by a position taken on the topic presented to respondents.

5.4 Reinterpretation and some direction for application

The argument in this chapter has been that regularities underpinning the TPB are best interpreted as the result of people telling the researcher something about themselves as persons. A person's intention, attitude, report of the views of others, or statement about control can be understood as statements made by persons in relation to his or her

position on the performance of the target behaviour presented in a questionnaire. Examination of the recommended elucidation procedure has shown it appropriate to interpret responses as a person's opinion. The manner of responding being the assessment of questions by a person who responds in keeping with their position on his or her performance of a target behaviour. It has also been shown that poor and well-formed positions can be identified to the extent that predictions can be made of the stability of a person's stated attitude or intention.

The TPB interprets questionnaire responses as key points in personal decisions. Questionnaire responses are, however, the result of an action; that is, the action of answering questions in a questionnaire. A person makes questionnaire responses for the purpose at hand. Therefore, answers to questions can be taken to represent a position taken on the subject matter presented in the questionnaire. A position can be defined as a point of view regarding the subject matter that is taken with a mind to the surrounding circumstances. In this case, a position can be described as an advantageous place or location taken up by a person, such as getting into a position to win a game. In this way, a position is more in keeping with agency, because it involves more than the orientation or disposition commonly associated with use of the term attitude. A position is a reactive stance taken by a person.

While in this new interpretation the TPB is not assumed to mirror an attitude-like disposition, the TPB nevertheless provides evidence of a person's position as related through the medium of the questionnaire. The person is understood as knowingly or otherwise conforming to the contemporary common-sense use of the term intention, while relating their views and viewpoint on the subject matter. A person's stated intention can, as Smith (2000) has described, be interpreted as a promissory note. It is a statement of a person's intention regarding the performance or non-performance of an action. Its proposed determinants in the TPB (attitude, SN and PBC) can, as Greve (2001) directed, be taken to be constituents or conditional components of intention. In this case, in keeping with correct use of the terminology, a person with a positive intention must report a positive attitude, else it is uncertain that he or she will act as he or she intends. Similarly, a person can, when asked, report their abilities to overcome possible facilitating or inhibiting factors (PBC), else he or she reports he or she intends

to do something he or she knowingly cannot. In addition, though not strictly a conditional factor, report of an imperative to conform to the views of important others should requisitely be reflected in the stated intention. Following from this interpretation, TPB responses can be judged according to a standard for correctness. With this judgement comes the possibility that statements of intention that do not have the necessary corresponding statements of attitude, SN and PBC are incorrect, which raises the possibility that the stated intention will fail to correspond with subsequent action. Therefore, when qualified by degree of ambiguity, respondents can generally be expected to behave as they intend and can when prompted express an attitude and answer belief questions in light of their position on the performance of the target behaviour. Similarly, respondents presumably unsure of their position can be more appropriately treated as undecided. Such an apparently useful means of improving the correspondence between intention and behaviour is presently neither recognised nor utilised in TPB research.

5.5 Chapter summary

This chapter has provided support for the PAM by means of examination of the belief elucidation procedures and investigation of the relationship between ambiguity and changes in responses over time for the TPB. Examination of elucidation procedures questioned whether the interpretation of beliefs assessed by respondents as steps in personal decisions is justified. In contrast, it was shown that presumed personal beliefs are most likely post hoc assessments made by respondents in light of a position on the target behaviour of the TPB questionnaire. Investigation of the impact of ambiguity showed that respondents who provided ambiguous responses are more likely to change their responses over time than those with less ambiguity. These results were subsequently discussed in terms of the validity of ascribing causal relationships to TPB data. Extending upon the results it was argued that ambiguity was apparent, because the completion of a questionnaire was influenced by a person's disposition. The disposition being the position a person takes when answering a questionnaire regarding their performance of particular target behaviour.

The evidence and argument presented in this chapter largely concludes the examination and reinterpretation of the TPB. The following chapters test the PAM more broadly through reinterpretation of other prominent models and studies in social psychology.

Chapter Six

Reinterpretation of the elaboration likelihood model

6.1 Introduction

The purpose of this chapter is to introduce a model of a person taking a position on a social issue. This position model is compared with the well-known ELM of persuasion and attitude change and is presented as a means of reinterpreting data gathered to support the ELM. The position model is initially developed from the results of the reinterpretation of the TPB from the previous chapter. In particular, criteria for position strength are drawn from the investigation of tendency to agree, ambiguity and its relationship with temporal stability. The model is developed by drawing upon the general axioms of the PAM, with relevant points also drawn from positioning theory (Harré & van Langenhove, 1991). Attention is given to the person, and the explanation of the actions of persons, using quantitative methodology.

The chapter begins by first showing the significance of the popular ELM in terms of the recent history of research on persuasion and attitude change. The ELM is then reviewed and criticism of the model is also presented. The position model is then developed initially from the reinterpretation of the TPB of the previous chapter. The model is extended in the manner of positioning theory, by using 'position' as an analogy for the explanation of the interpretation of regularities associated with the positions taken by persons. Limitations of the model are noted, in terms of shortcomings in dealing with the dynamics of positioning, and suggestions are provided with regard to empirical testing of the model. Having provided detail of the ELM and provided an outline of the position model, the ELM is then subjected to further assessment by means of comparison with the position model.

6.2 Background to the ELM

Although attitude and attitude change had been given earlier consideration (e.g., Allport, 1935), persuasion research had its roots in the use of propaganda in World War

Two. Hovland, who led research at Yale University, had been involved in the design of mass media communication in the US army. Hovland and associates investigated variables they associated with persuasion, including credibility of source, personal differences and message order effects (Petty & Wegner, 1998). As independent variables, such factors were classified into classes of source, message, recipient and context, and were held to influence attitude that was conceptualised in terms of the Hovland and Rosenberg (1960) three-component model of attitude. Although proposing a causal model and suggesting classification of key variables, Kruglanski and Thompson (1999) point out that the model advanced little on the suggestion of Laswell (1948:37) to consider "Who says what to whom with what effect?" It is perhaps the simple and encompassing classification system that has ensured the model's longevity. In other words, the generality of the model is such that all conceivable influences are subsumed in simple classification and causal arrangement.

More interesting than the Yale model has been the attention since given to the cognitive processes thought to underlie persuasion. Of relevance to understanding persuasion were the studies of cognitive consistency, including balance theory (Heider, 1958), congruity theory (Osgood & Tannenbaum, 1955) and cognitive dissonance theory (Festinger, 1957). These theories presumed an inherent motivation to maintain a state of equilibrium with regard to a person's beliefs or attitudes, with cognitive dissonance theory extending the presumed rule to include behaviour. Cognitive dissonance theory emphasised an internal tension thought to be the result of an individual behaving inconsistently with their beliefs and attitudes. Leahey (1994:277) describes consistency theories as being amongst the earliest theories of cognitivist psychology because, unlike behaviourism, cognition was presumed responsible for behaviour. Whereas in the 1950s the Yale group encouraged interest in extrinsic factors, in the 1960s consistency theories promoted interest in phenomena presumed to arise within cognitive processes.

In the early 1970s the 'crisis' of psychology had an effect on persuasion research with a plethora of conflicting findings. Ajzen (1992) points out that the utility of measuring attitude was eroded by evidence of weak relations between attitude and behaviour (e.g., Wicker, 1969). In response, persuasion research reverted to measuring behaviour and

media influence (Jowett & O'Donnell, 1986). Research was disparate because of the lack of a unifying theory (Petty & Wegner, 1998).

A major development in the 1980s was the establishment of frameworks that accounted for many of the conflicting findings. The frameworks were developed from the idea that attitudes differed depending upon how they were made (Petty & Wegner, 1998). It was recognised that attitude change came about through a variety of processes that resulted in attitudes having a variety of characteristics that rendered them capable of a diversity of consequences (Petty, Unnava & Strathman, 1991). For example, research by Fazio and his colleagues (summarised by Fazio, 1986) found that attitudes differ in strength and functionality depending on how they are formed. In particular, prior experience and repeated elaborations of that experience were identified as producing attitudes that are more readily brought to mind and also more consistent over time.

Also proposed at this time were the ELM (Petty & Cacioppo, 1981; Petty & Cacioppo, 1986) and the heuristic-systematic model (HSM; Chiaren, 1980; 1987). The HSM deserves mention because of similarities with the ELM. Both frameworks proposed that higher amounts of mental effort are involved in the change of some attitudes, whereas other attitude changes were thought to involve comparatively little mental effort. In terms of differences, Petty and Wegner (1998) argued that the HSM assumes greater cognitive effort in comprehending a persuasive message (i.e., assessment for heuristic comparison), whereas the ELM assumes more effort is expended in thinking about (or elaborating upon) the message. Nevertheless, Petty and Wegner (1998:325) make the interesting point that because of their similarities, both the ELM and HSM can generally be used to explain the same empirical results.

6.3 The elaboration likelihood model

The ELM (Petty & Cacioppo, 1981; Petty & Cacioppo, 1986) is concerned with attitude change in terms of the effects of persuasive communication and the strength of attitude that results from this process. It is a model that portrays and links together empirically supported studies of attitude change and persuasion. The ELM then functions by

comparing relevant behaviour to an idealised process with aligned behaviour interpreted as supporting the model.

Central to the ELM is a continuum representing the degree to which a person is motivated to thoughtfully consider, or elaborate upon, the merits of a particular attitude object. A key assumption is that a person who is motivated to assess the merits of their attitude is likely to scrutinise relevant information thoughtfully. Such a person is presumed to have an attitude bolstered by rational thinking. In addition, when the arguments used in a message are important to the person, attitudinal change is expected to be greater than if the message is of less personal relevance. Further, if a person is interested in an issue, and has the ability to comprehend the persuasive message, then the message is assumed to be processed by what the model terms the ‘central route’ for attitude change. In contrast, a person low on the scale for potential elaboration is held to undergo attitude change through less careful consideration. This person is presumed not to be motivated by the arguments of the message, or is presumed not to have the capacity to process the message. Under these circumstances, it is presumed that the message will only have an effect through the ‘peripheral route’ to attitude change.

The central and peripheral routes are distinguished by factors related to differences in attitude (Petty & Wegner 1998:327). According to Petty (1995:208) “... the end result of the information processing involved in the central route is typically an attitude that is well thought out and bolstered by supporting information on dimensions seen as central to the merits of the position advocated”. In contrast, Petty (1995:208) describes attitude change via the peripheral route as occurring “...without much thinking about information central to the merits of the attitude issue”. This route results in an attitude that lacks the qualities associated with the central route, as it is comparatively more susceptible to change.

Figure 6.1 (on the following page) shows the process of attitude change specified by the ELM. Following the progress of a persuasive message, the figure shows that a communication is introduced with the intention of altering the individual’s attitude towards a target object. In the next step, motivation to process is shown to incorporate a number of prerequisites for attitude change. In the context of the ELM, motivation

relates to the willingness to exert effort in assessment of the merits and attributes associated with the persuasive message. Variables associated with the degree of effort expended include personal relevance, personal responsibility, number of sources, degree of difference with the person's attitude and need for cognition. Need for cognition relates to the assumption that some people desire to engage in elaborate thinking more than others do.

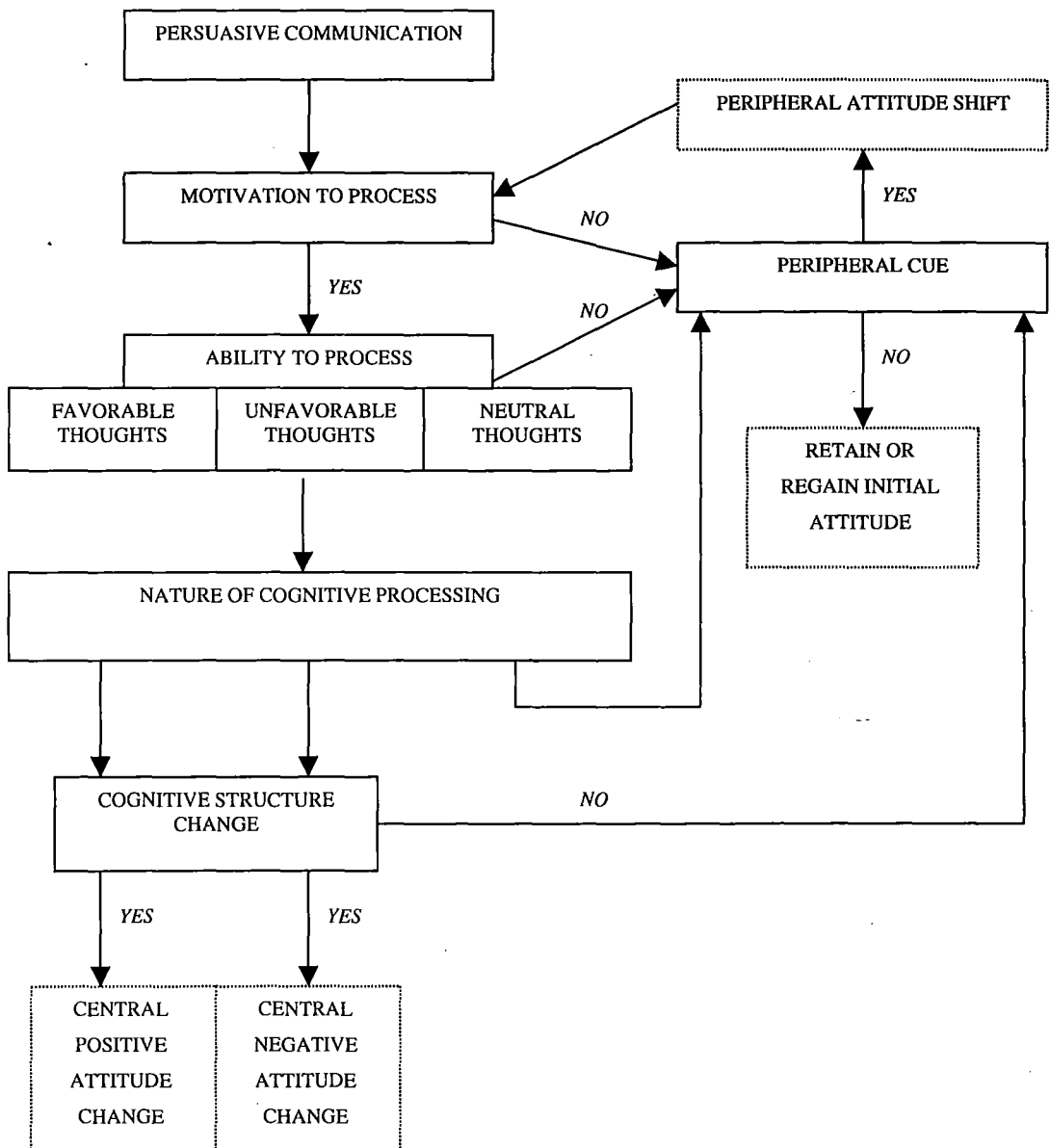


Figure 6.1: The elaboration likelihood model of attitude change (Adapted from Petty & Cacioppo, 1986:264)

Following the motivational aspects, ability to process is shown as a class of further conditional factors for central route processing. Factors encompassed by ability include, no distractions by other stimuli, message repetition to aid understanding and interpretation, medium of message delivery, message complexity and degree of personal experience with the message topic. Should the message endure the motivation and ability stages, the impact of the nature of cognitive processing is then considered. At this point the positive or negative nature of the message relative to the attitude of the message recipient is considered. Quality of argument and prospect of positive or negative consequences are also held to influence processing of the message. Also at this point, messages that are vague or believed to contain weak arguments are assumed to be excluded from serious consideration via the central route.

Under the central route of the ELM a persuasive message is held to generate requisitely favourable or unfavourable thoughts. Message importance is assumed to prompt thoughtful consideration, whereas messages that are judged neither important nor interesting are considered more likely to be processed via the peripheral route. Message processing by the peripheral route is assumed to occur in a comparatively shorter time. Compared with processing via the central route, attitude change resulting from the peripheral route is expected to be less enduring, less accessible and less resilient when exposed to counter messages.

A further explanation of the ELM has been provided through presentation of its postulates. Seven postulates and their supporting arguments were first presented by Petty and Cacioppo (1986) and have been expanded upon by Petty and Wegner (1999). Following the more recent presentation (Petty & Wegner, 1999), the 'correctness postulate' is explained as an assumed propensity to hold a correct opinion with reference to their subjective assessment. The views of other people are noted as a primary source for the checking of correctness. The possibility of reliance on a trustworthy expert source is also noted, as well as the rejection of the views of others in preference to a personal evaluation of evidence. In summation, Petty and Wegner (1999:44) state that "Whatever the strategy used, however, the ELM assumes that the default goal is to come to a judgement that is subjectively correct". It is therefore assumed that a commonly held imperative is to reach an optimal personal decision.

Petty and Wegner (1999:45) then explain the ‘elaboration continuum postulate’, which they link to the correctness postulate by pointing out that the best way for a person to assure correctness is to carefully examine all relevant information. As noted in Figure 6.1, factors associated with ability and motivation are presented as reasons why careful examination or high elaboration may not occur. To correct what they believe to be confusion about elaboration, Petty and Wegner (1999) dismiss the view that elaboration is merely learning. Instead, Petty and Wegner (1999:46) assert that the ELM assumes “people add something of their own” and “scrutinize all available information” and are described as “judging the true merits”. Elaboration is therefore assumed to be an effortful scrutiny of the persuasive message.

Postulate three holds that attributes of the message associated with elaboration can have multiple roles, by affecting the extent or direction of elaboration when functioning as either an argument or a peripheral cue. The ascription of multiple roles for variables stems from the assumption that attitude does not change only by the high degree of elaboration of central route processing. For example, an expert source can act as a peripheral cue through their perceived status, and their arguments can also be a matter for careful scrutiny. Petty and Wegner (1999:48) explain that, in their view, the difference between cue and scrutiny of argument is dependent upon how the message is processed in terms of the message recipient’s place on the elaboration continuum.

Postulate four claims that ability or motivation does not bias the processing of a persuasive message. In other words, how hard a person is willing to think, or be able to think, about an argument does not in itself introduce a favourable or unfavourable orientation. In further consideration of ability and motivation, postulate five holds that the extent to which these factors are involved in message consideration can be influenced by a biased disposition. For example, a strong positive attitude can mean that more time and effort will be given to consideration of message arguments.

The trade-off postulate (postulate six) specifies that movement along the elaboration continuum involves the relative variation in effect of high elaboration and peripheral cue in consideration of a message. Petty and Wegner (1999:59) note that at points along

the continuum, high elaboration and reliance on cues can co-occur, but it is assumed that their relative impact on decision-making will be indexed by the point on the continuum.

The attitude strength postulate (postulate seven) relates to attitudes resulting from high elaboration. The ELM holds that these attitudes have greater temporal persistence, greater prediction of behaviour and greater resistance to persuasion. As well as resulting from more scrutiny, strong arguments are held to be of greater strength when more arguments have been considered (Petty & Wegner, 1999:61). High elaboration is also associated with other factors associated with attitude strength, including attitude accessibility and confidence in terms of willingness to act on the attitude.

Variables and relationships proposed by the ELM have been examined towards substantiation of the model. As noted in describing the model, each aspect of the motivation process is a separate hypothesis drawn from prior research (Petty & Cacioppo, 1981:263). Petty & Cacioppo (1981) explain that empirical work supports relationships between the level of personal involvement, perceived expertise of the message source, quality of argument and attitude change resulting from central route processing. In addition, the mere number of arguments contained in a message has been shown empirically to be a peripheral cue, though only when it is presumed that the central route is not initiated. The effect of the central route has been demonstrated by the resilience of an attitude change based upon the acceptance of multiple arguments and their repeated articulation. In contrast, attitude change based upon a simple prompt, has been found to be more easily modified by subsequent persuasive messages.

6.4 Criticism of the elaboration likelihood model

Despite its popularity there have been many criticisms of the ELM and the model continues to be a topic of debate. Critical attention has been given to the many distinct hypotheses and their causal arrangement (Hamilton, Hunter & Boster, 1993; Motgeau & Stiff, 1993), as well as conceptualisation of the continuum that underpins the model (Kruglanski & Thompson, 1999). In addition, the ELM has been framed as more descriptive than analytic, because it has been regarded primarily as a description of the

processes involved in attitude change by means of a persuasive message. For example, Eagly and Chiaken (1993:321) pointed out that the ELM fails to explain why certain arguments are weak, why some variables act as peripheral cues, or why others prompt thoughtful consideration. In other words, the ELM has been criticised for simply describing what occurs and noting the circumstances under which these events occur.

Eagly and Chiaken (1993) take issue with the lack of explanation for the relationships posed by the model ELM. In their words:

These inferences are descriptive ... because the model does not specify on an a priori basis why exposure to many (vs. few) arguments ought to motivate or enable objective processing, why prior knowledge ought to motivate or enable biased processing, or why source variables ought to motivate objective processing when the elaboration likelihood is moderate (Eagly & Chiaken, 1993:321).

In relation to the criticism of the model being descriptive, Eagly and Chiaken (1993:322) also point out that the model fails to explore or explain psychological processes assumed to underlie the model. They agree that the patterns proposed by the model are supported by empirical evidence, but assert the ELM is questionable as a model of psychological processes. Mongeau and Stiff (1993) draw a similar conclusion from their difficulty in formulating a causal model to explore with accuracy the claims of the ELM. They note that the problem they faced stemmed from a lack of clarity, because a number of different causal models could be drawn. Mongeau and Stiff (1993) assert the problem arises from a lack of articulation of hypothesised processes, which makes the ELM difficult to test and falsify. The frustration of Mongeau and Stiff (1993:71) is shown in their conclusion where they state: "A model that is not falsifiable has limited theoretical utility."

Part of the problem highlighted by Mongeau and Stiff (1993) it is that it is not always entirely clear which of the hypotheses encapsulated by the ELM applies to each particular event identified by the model. Perloff (1993:130) notes that this problem arises from the ascription of multiple functions to variables. As noted in the previous section, the ascription of multiple roles to variables in the ELM is presented as a

positive feature of the model. The reasoning for this line of argument is that in the ELM attitude change is held to be affected by persuasive messages serving as persuasive arguments or peripheral cues depending upon the degree of elaboration undertaken by the message recipient (Petty & Wegner, 1999). Although an apparently reasonable rationale, the falsification of the hypothesis that a persuasive argument will be elaborated upon under central route conditions is confounded, because of the possibility that attitude can change by other means. The concern noted by Perloff (1993) is that falsification of particular effects of persuasive messages is made difficult by the presence of ready arguments for the results being interpreted as evidence for an alternative hypothesis. This circumstance entails the argument that an attitude change must have been the result of persuasion *per se*, even when the particular form of persuasion cannot be specified. The circumstance also entails the argument that a lack of evidence of attitude change by means of persuasion does not necessarily mean that persuasion *per se* did not occur, but merely means that the particular form of persuasion (e.g., persuasive cue) failed in the particular test.

A further similar criticism is that testing for argument strength in the ELM is the testing of a hypothesis that cannot be falsified (O'Keefe, 1990). In the ELM, the strength of argument is defined by its effect on the target person's attitude, with a strong argument prompting a high degree of thoughtful and favourable elaboration. O'Keefe (1990) points out that in the case of a manipulation of argument strength that fails to result in the expected attitude change, the conclusion would be that there was a problem with the manipulation rather than the basis for the expectation being challenged. Under these circumstances, the presumption that strong arguments are particularly persuasive under conditions of high elaboration cannot be clearly challenged. O'Keefe (1990:110) concluded that:

...this is not a discovery; it is not an empirical result or finding, it is not something that research 'shows' to be true, it is not something that can be described otherwise. The strength of the relationship is true by definition, given the definition of argument strength used in ELM research.

What O'Keefe (1990) is making plain is that the ELM is testing something that is self-evident. It is a test of whether strong arguments are more effective than weak arguments, when the recipient is inclined to give thoughtful attention to strong arguments. It is not unlike saying that people with big feet tend to wear big shoes. Such explanations are not explanations at all, because they fail to expand upon what is already known.

Eagly and Chiiken (1993:324) also criticise the measure of strength of argument, because of the reliance by the ELM on the general plausibility or believability of the message argument, without specification of a particular aspect or quality of the argument. Interestingly, their recommendation towards resolution of this problem is to utilise the expectancy-value measurement from the TRA/TPB. Eagly and Chiiken (1993:324) suggest the interpretation of likelihood of occurrence as strength of argument and importance or desirability as valence of argument. In review, Eagly and Chiiken (1993:325) claim that ELM studies manipulate the nature of the consequences without manipulating the likelihood of these consequences occurring. They conclude that the ELM only describes the effects of valence; implying strong or weak persuasive messages are defined by the number of favourable or unfavourable thoughts they invoke. Therefore, extending upon the argument of Eagly and Chiiken (1993), assuming the expected value captures more of the possible impacts of a persuasive message, the suggestion is that the ELM measure of strength is partial and inaccurate.

Kruglanski and Thompson (1999) claim that many of the problems of the ELM could be avoided by reconfiguring the ELM. They assert that in the ELM persuasion is used as a covering term for a variety of types and conditions peripheral to the investigation of persuasion. In contrast, they argue that persuasion is the primary phenomenon. In their words, "The critical distinction between cues/and or heuristics on the one hand and message arguments on the other refers to informational contents relevant to a conclusion, rather than to a principled difference in the persuasion process as such" (Kruglanski & Thompson, 1999:88). Persuasion by various means and under various conditions is argued to involve mere variations of the phenomenon. Motivation and ability are "relevant processing variables" (Kruglanski & Thompson, 1999:88), or in other words, they are conditional on the occurrence of thoughtful persuasion. Variables

associated with the persuasive message are argued to be variations on the persuasive message, rather than being different things (i.e., message argument or persuasive cue). This raises the possibility that each variation on the persuasive message could be controlled for, thus revealing whether or not each has a relative impact on persuasion.

Kruglanski and Thompson (1999:89) liken personal decision-making to "... a motivated process of hypothesis testing and inference dependent on individuals' cognitive capacity and affected by cognitive availability and accessibility of pertinent information". While proposing a model of persuasion amenable to empirical testing Kruglanski and Thompson (1999), nevertheless, in a manner similar to their criticism of the ELM, fail to specify the actual cognitive processes involved in attitude change. They discuss the "formation of subjective knowledge" and describe that, "Such knowledge may consist of judgements, opinions, or attitudes individuals may acquire or alter in various circumstances" (Kruglanski & Thompson, 1999:89). Of interest in relation to the model developed in the next section, Kruglanski and Thompson (1999) do not attempt to characterise assumed cognitive processes, but imply the development of a personal power or capacity in their description of "subjective knowledge".

In summary, much of the criticism of the ELM appears to stem from critical consideration of the model as a causal explanation of persuasion. This suggests that, if taken to be descriptive, many of the problems attributed to the ELM would disappear. As a descriptive model, issues regarding causal flow and the confounding of explanation of independent relationships are nullified. In addition, the issue of circularity, as was clearly identified by O'Keefe (1990), would cease to be a problem. This is because a descriptive model may point to, but does not necessarily entail, the attribution of cause and effect. What a property entails by necessity can be tested and lack of correspondence would then challenge claims of the property. For example, with reference to the objection of O'Keefe (1990), testing for evidence of strength by means of a relationship with a variable that is a constitutive element of strength is foolhardy as a test of a causal relationship. The test would merely determine whether the strength variable is a necessary component of persuasion.

In reply to criticism of the ELM, Petty and Wegner (1999) state that the phenomena they are attempting to explain are complex. In consequence, their comprehensive explanation of the model includes many qualifiers, such as "...a number of other ways..." (Petty & Wegner, 1999:44), "...not the only factors that influence" (Petty & Wegner, 1999:45) and "...suggests that any one variable can have an impact on attitude change by more than one mechanism" (Petty & Wegner, 1999:48). Further, Petty and Wegner (1999:48) also explain that, "the ELM holds that no single process or mechanism is sufficient to account for the complexity of judgement phenomena". In addition, Petty and Wegner (1999) draw upon recent empirical work to present refinements for parts of the ELM. Nevertheless, explaining that the modelling exercise is confounded by complexity and pointing to some of this complexity does not offset the criticisms of circularity and inability to falsify. Their answer to these criticisms has merely been to explain why they cannot be avoided.

Yet despite criticism of the ELM, many critics are still favourably disposed towards the model. Eagly and Chiakien (1993:345), for example, praise the model for its ability to integrate a large number of situational and individual variables. Nevertheless, this praise is qualified by the comment that the ELM fails to provide an explanation for the relationships it associates with persuasion and attitude change. O'Keefe (1990:112), despite misgivings about hypothesis testing, also praises the ELM for identifying a large number of variables involved in attitude change. In addition, despite criticism of the conceptual aspects of the ELM, Kruglanski and Thompson (1999) argue essentially for a reconsideration of the arrangement of the variables proposed by the model.

It is evident that the ELM is regarded as a useful framework for consideration of the kinds of things that can be involved in the persuasive change of attitude, with direction given to the associated conditions and circumstances where some things would be important and others would not. The view of persuasion and attitude change is then useful, because it matches aspects of message with the conditions under which they are persuasive. The main limitation of the ELM is that it fails to explain convincingly the reason, cause or purpose for having a disposition to engage in consideration of persuasive messages of various forms. Recalling Laswell's (1948:37) significant question "Who says what to whom with what effect?", the ELM provides an answer,

but importantly it fails to explain why. In the next section a model based upon the idea of a person taking a position is developed as an explanation that accounts for the phenomena associated with persuasion and attitude change. In other words the question 'why?' is dealt with first.

6.5 The PAM, positioning and persuasion

In this section a model is developed towards providing an explanation of the reactions of persons to persuasive messages. The model is tentative in the hypothesis testing sense, in that empirical testing can be utilised to confirm or reject the ontological plausibility of the model. The model is also tentative in the sense of its novelty; this is because, as well as gaining support or rejection by empirical means, its supporting arguments must also withstand peer review. Nevertheless, as well as drawing upon the axioms of the PAM, some surety is given by building the model upon empirical work related to reinterpretation of the TPB (chapter 5) and relevant aspects of positioning theory (Harré & van Langenhove, 1991; see section 2.9).

Unlike the approach taken to develop a new interpretation of the TPB by means of examination of methodology, the position model is developed separately with a subsequent reinterpretation of the ELM undertaken in the next section. The aim of this section is to explain the construction of a model designed to explain the actions of persons, in relation to their receiving a persuasive message.

The reinterpretation of TPB data made a number of points that are of relevance to the consideration of persuasion and attitude change. Investigation of the elucidation procedure (section 5.2) showed that respondents were in some instances agreeing with arguments they themselves would have put forward, as well as tending to agree with arguments that were not necessarily their own. These latter arguments can be considered a reaction to a persuasive message, because the message would have been new to the respondents. Second, investigation of ambiguity (section 5.3) showed clearly that consistency in the answering of questions, whether or not they were personally familiar, was associated with stability of the stated position over time. This investigation

indicates that those with less ambiguity in their responses are more resilient to persuasion.

Drawing on the findings of chapter five, it can be concluded that people interpret and assess new arguments about an issue in light of, and in keeping with, their personal position. In addition, those with a strong position will be more resilient to a persuasive message. A strong position is defined in terms of three criteria; (i) responses are consistent across various questions related to the target topic, (ii) responses are consistent over time and (iii) new arguments are assessed in light of the position. In this context, a weak position lacks the qualities of a strong position, with the criteria for a strong position not being met. The criteria of a weak position are; (i) inconsistent responses to various questions related to the target topic, (ii) responses that are erratic over time and (iii) new arguments are assessed in an ad hoc, unpredictable manner.

To consider the treatment of a persuasive message, first it is assumed that the optimal outcome of the intervening persuasive message would be a strong position, in that it should be consistent, enduring and resilient. Towards this objective, it can be envisaged that a persuasive message must be of sufficient force to first, initiate a reconsideration of the present position and second, to initiate the formation of the intended position of a strong nature.

The desirable outcome from a persuasive message should therefore be a position that is strongly held and consequently difficult to change. Considering the resilient nature of non-aligned positions of strength, the easiest positions to change are those that are either neutral or weakly held. Such weak positions, however, lack the quality of strength and must then be encouraged to make a commitment. Alternatively, turning those who already show a strength of resolve may take more effort, but would be worthwhile if their resolve is similarly applied to the new position. Further means of targeting may also be fruitful at this point, such as through the isolation of demographic information, preferences and prior practices associated with either the orientation of the position or its strength. This means that, for example, the persuasive message could be usefully shaped to appeal to those of particular gender, income, or type of employment, given

these factors are found to be relevant to those who are either for, against or indifferent to the objective of the persuasion.

Up to this point the approach has been to characterise or describe and then segment for the purpose of targeting those most amenable to persuasion, where the target result would be a new position of strength. Particular attention has been given to the nature of the target for the persuasive message. A further point to note is that for the purposes of ready conceptualisation, weak and strong positions have been described in categorical terms whereas their measurement is a ratio dimension with weak and strong end points. In addition, refined statistical methods need further exploration. Such refinement should be fruitful and is a matter for further empirical enquiry, as would be the identification of possible threshold effects sufficient to warrant categorisation of the scale. At this stage it is merely for ease of explanation that the somewhat arbitrary, though not illogical, weak-strong categorisations are proposed.

To develop the conceptual background for a reinterpretation of the ELM, the use of the term 'position' and the empirical establishment of strength appears a straightforward alternative. The term 'position', while perhaps bringing with it connotations of the everyday use of the term, is nevertheless explicitly quantitatively anchored. Yet the empirical relationships and their formation into a scale that describes an effect apparent in the data cannot easily be dismissed. However, to build upon the relationships and more fully 'flesh out' a model requires the more detailed explanation of the use of 'position' as a term for explaining what people do in relation to persuasive messages. This move follows positioning theory (Harré & van Langenhove, 1991), though qualification is required, because in positioning theory the term 'positioning' describes a rich and dynamic process, whereas the term used here is 'position', which is a more static concept.

Harré and van Langenhove (1991) emphasise the ways in which positions arise and develop and change in conversations. Positions are also held to be dynamic in the sense that they jointly arise in a negotiated sense from the flow and turn of the conversation. In this manner, positioning is taken to be the product of the elements brought to a conversation by the participants. A further dynamic aspect is that, aside from

positioning during a conversation, a person can also talk to him or herself and undertake a private conversation regarding the merits or development of a position (Harré & van Langenhove, 1991). This means that each person has the potential to hold a diversity of positions (Davis & Harré, 1999), with the ability to reflect upon these various positions and the potential to produce different positions to suit different occasions (Howie & Peters, 1996). Each time a position is thought of, or voiced in conversation, there is potential for private or public debate and reform. There is then an ever-present potential for the subject to change, in terms of the way the subject is regarded or a position is taken on the subject.

Compared to the multiple forms of dynamics noted above, the development of positioning from relationships in data is constrained. Indeed, according to Harré (2003) “The inspiration for the development of positioning theory came from longstanding dissatisfaction with the essentially static conception of the psychological bases of social interactions...” By using a quantitative approach, dynamic aspects of positioning are muted, but this does not mean that regularities in data always lead to conceptualisation of static processes as being the primary explanatory source. Conceptualising a person as the generator of social behaviour, or action, means that regularities in data associated with his or her actions can be readily interpreted as being brought about because of conformity with social customs and conventions. In addition, this agency also means that the person can also bring their own experience to a position, as well as their own perspective. Following Davis and Harré (1999:37), agency implies choice in that the person has the capacity to reflect upon positions taken, can reinterpret their personal experiences, and take up new positions as they become apparent. In this sense persons are not the positions they take; the positions of workmate, mother and wife can be attributed either separately or simultaneously, privately or publicly to oneself or to others. Positions are then effectively places occupied by persons. In consequence, positions are ephemeral in comparison with the capacities of persons for positioning.

In keeping with methodological considerations of the role of quantitative methods (section 3.6), the regularities associated with positioning are taken to be part of a more complex system. In addition, by statistical analysis proto-typical persons can be identified in relation to the taking of strong and weak positions. Taking a position

involves the practice (or grammar) of positioning, in that the phenomena contain elements that are associated with the common practice known as the positioning of oneself, or the taking of a position. The concept of 'position' can then be further refined by emphasising the way the term can be used to explain the stance taken by the player of a game. This constraint on use of the term position, as analogous to a position in a game, can be argued to be more correspondent with the static measure of position than the dynamics of positioning in conversation. This is because the study is not of a dynamic interaction, but of a fixed prepared position held by a person at a particular point in time.

The taking of a strong position, and the resolve associated with this move, is like the taking of a firm stance or position so as to win a game. In a game, or formal debate, arguments associated with a position become resources in that they are the means of parrying opposing arguments and can also interlink to form a wall of defence. Using the notion of a game as an analogy; a single argument against an established position is unlikely to be sufficient to affect change. However, it may, in a smaller way, question arguments in support of the position and be recognised as a valid argument. In terms of the stance of considering an opposing persuasive argument, it is taken as a threat to be fought off, avoided or disempowered. Should these offensive tactics fail and the persuasive argument prove to be valid, its effect would nevertheless be minimal in the face of multiple arguments in defence of the position.

A weak position, in the context of a game analogy, entails a lack of resources or organisation of resources to deal with persuasive arguments. In a weak position supporting arguments are few and are not necessarily organised for defence of the position. Under these conditions the validity of persuasive arguments is unlikely to be challenged. The persuasive argument is more likely to be accepted and a lack of opposing arguments means its strength, in comparison with prior arguments, would result in a greater impact on the person's position.

Having set out, in a rudimentary way, some ideas for the use of position as analogy, it is interesting at this point to note works that explain the ELM in the same terms. The interesting point of this consideration is that, even though researchers of persuasion may

use the term without thoughtful regard for its explanatory function, their usage suggests tacit support for use of the term as a concept for explaining the actions it encompasses.

With reference to some of the researchers cited in this chapter, Hamilton, Hunter and Boster (1993:52) plainly make use of the term in their description of consideration of a persuasive message as involving consideration of "...the difference between a receiver's position on an issue and the position taken by a source." In addition, Petty and Wegner (1999:44), in keeping the position as a game analogy, describe, with reference to consideration of a persuasive message, that "...this person's goal will be to defend the attitude from attack." Furthermore, Petty and Cacioppo (1981:267) use the phrase "...associate the advocated position..." quite freely in describing what they regarded as a rudimentary form of attitude change encapsulated by the ELM. Though with reference to high elaboration conditions, Petty and Wegner (1999:45) also use the phrase "evaluate the merits of the position advocated". Similarly, Petty (1995:208) describes an attitude resulting from high elaboration as "bolstered by supporting information on dimensions seen as central to the merits of the position advocated". These examples demonstrate further the appropriateness of the term as a description of interactions between persons and persuasive messages.

To extend upon the association with 'position in a game', the analogy draws attention to the stance of the person. Such a stance is associated with the exertion of effort to prepare for, and deal with, a persuasive argument. This means that to change a person's position, a persuasive argument must, with an equivalent or superior level of sophistication, either counter existing arguments that bolster the position, or introduce a novel persuasive argument to attempt to circumvent existing defences. The strength of the persuasive argument must then be of sufficient force, in comparison to existing arguments, to initiate a change in position. The prospect of multiple defences means a multifaceted persuasive argument would more likely endure detailed scrutiny and have greater effect on an existing position. Effective messages should therefore be sophisticated, novel and multifaceted.

Persuasive messages aimed at persons occupying weak positions require none of the three qualities required to alter strong positions. The lack of resolve and coordinated

effort on the part of the recipient means it is not as necessary to have a sophisticated, novel or multifaceted persuasive argument. Whereas modification of a weak position would appear to be accomplished with comparative ease, given that the attention of the intended recipient is gained, the additional imperative of creating a strong position is a more difficult prospect. Persuasive messages operating under these conditions should be designed so as to encourage commitment to a target position, where previously there was no commitment for or against the issue. In this respect, it is necessary that a persuasive message inspire interest sufficient for the formation and subsequent consolidation of a stance or position.

In this general analysis the use of position as an analogy fits well with the actions of persons as apparent in data regarding reactions to persuasive messages. In particular, the use of the concept of position as the taking of a stance while playing a game appears particularly useful for providing an explanation of the actions of persons in terms of having weak and strong positions. Given the identification of strength of position, the data also afford prediction of the effectiveness of persuasive interventions on individuals and groups drawn from the data. As well as providing for explanation and prediction, direction has been given to the finer-grained analysis of proposed components of a position by derivation and development of a mathematical formula for the strength of position. Accuracy of prediction and explanation are therefore set to improve with empirical work.

A point in favour of the new model is the lack of distance between the concept of position and the data. A further point to note is that although the common relationship between concept and data is metaphorical, the relationship in this case is by analogy. A metaphor refers to the sometimes uncommon association of a term to a thing, which encompasses the practice of modelling of what a thing is like. The term 'analogy' is used because a degree of correspondence is argued between position and what is occurring from the perspective of the actors who may be involved. It is reasonable to assume that, if asked, the actors would agree they have taken a stance or position.

The position model attempts to describe a propensity of persons and incorporates a concept that people could themselves use in the situation of generating the relevant data.

Agency is therefore a key assumption, because people are assumed to be conforming to the public and private practice of taking a position. The analogy is a descriptive definition with regularities in the data being a component of the definition. The definition then holds, because persons, for the most part, appear to knowingly or can otherwise conform to the common ways of positioning themselves and defend these positions in relation to counter persuasive messages. Positioning is used as the covering concept for explaining their actions. This implies a degree of circularity, though because causality is not assumed, circularity is not an issue. For example, the stability of a strong position over time and a cohesive strategy of defence are assumed to be covariant and each is a necessary condition for the classification of a strong position. In consequence, as necessary components the characteristics do not *cause* the strong position, but are instead deemed necessary for the ascription of a strong position. If put forward as a causal explanation, the issue of circularity would be a serious criticism. However, because the concern is with confirmation or rejection of a definition through the alignment of its constituent parts, circularity is not an issue.

6.6 Comparison with the elaboration likelihood model

The outline provided of position as a model analogous to a person's consideration of a persuasive message can be further explained by comparison with the ELM. An initial general consideration is to what extent the position model and the ELM have a similar basis. The ELM aims to track the process of consideration of a persuasive message, in terms of the attributes of the message as perceived by the person, when the person is characterised in terms of the nature of their cognitive processing. In comparison, the aim of the position model is similar, but there are fundamental differences. The ELM as a cognitive model is designed to deal with presumed inherent rules associated with cognition. In contrast, the position model assumes the data to be the result of actions taken by virtue of the agentive ability of persons to summarise personal and social factors and take a position. The position model is then, by default, a descriptive model, because it can only describe events and factors associated with the implementation of an agentic ability. The ELM is presented as, and argued to be, an explanatory model and consequently attempts to treat its data as representative of presumed cognitive processes. Nevertheless, a criticism of the ELM (presented in section 6.4) is that it fails

in this respect, because, rather than attempting to discern and model such processes, the ELM merely describes factors, such as the apparent need to balance attitudes and beliefs, as being cognitive propensities. If the critics of the ELM are correct, then the ELM and the position model are similar, in that they are both descriptive models. This means that, from the perspective of cognitive science, both are less useful than explanatory models, because they fail to identify the immediate causes of a phenomenon. It also means that in an evaluation of the ELM, it is unnecessary to examine claims for evidence of causal relationships presumed to support unseen cognitive processes, because the ELM merely assumes such processes and does not immediately point to them.

In the case of the ELM, reinterpretation need not involve the questioning of claims regarding cognitive processes for the purpose of reinterpretation. Instead, a reinterpretation is made by comparison and contrast with the position model. If both can be found to deal with the same phenomena in a similar way, then it can be concluded that the ELM deals with agency in the same way as the position model. Or, in other words, the evaluation is of the degree to which the ELM can be said to be measuring the actions of agents in the process of conforming to the practice of taking a position.

This comparison can be undertaken by following the ELM postulates (Petty & Wegner, 1999). A key postulate is that people are assumed to be motivated to hold opinions that are correct from a subjective perspective. The initial stance is described as one taken by a personal view of evidence, which can involve assessing the views of others, consideration of the trustworthiness of evidence and the number of advocates or opponents. Regardless of the means the "...ELM assumes that the default goal is to come to a judgement that is subjectively correct" (Petty & Wegner, 1999:44). By extension it is then claimed that this motivation to be correct explains the defence of the existing attitude against a counter argument. As Petty and Wegner (1999:44) explain, the "... goal will be to defend the attitude from attack, because defending the attitude may be the best way of maintaining the subjective sense of correctness." The subjective sense of correctness and associated motives are described in the ELM as if they were a propensity or cognitive state. Petty and Wegner (1999:44), nevertheless, try to avoid describing it as such by stating that "The ELM assumes that at least at the conscious

level, people want to hold opinions (and come to judgements) that are correct.” The propensity is given but not explained, yet the apparent propensity is a primary postulate, without which the model would fail to function.

A dilemma faced by the ELM with regard to the correctness postulate is that the model is based upon a causal schema. This entails that assumed base tendencies become causes, where they cannot be otherwise explained. In keeping with the causal schema, Petty and Wegner (1999) rightly recognise their failure to provide further causal explanation and rightly allude to possible causes elsewhere. In contrast, the position model with its conditional schematic offers an explanation of apparent tendencies, such as temporal stability, by showing them to be a factor in defining the nature of a position. The position model, like the PAM, incorporates the ideas of Vygotsky (1978) on the development of a person (see section 2.10). A principle is that the development of a person involves learning the undertaking of an action, as well as the meaning or significance of the action from interaction with others. According to Vygotsky (1978:57) a number of factors including the “...formation of concepts...originate as actual relationships between individuals”. A child, for example, upon throwing a spoon learns from the parent that the behaviour is unacceptable or ‘bad’. ‘Bad’ and the behaviour are therefore linked by association and, importantly, ‘bad’ and the behaviour initially co-occur. When internalised, ultimately the child can master the ability to plan to do bad things, such as throwing a spoon. Being bad, and even the feeling of being bad, is learnt whether the child throws a spoon or simply thinks bad thoughts. The concept, including feeling and thinking, can become separate from the original learning experience, but it remains the personal use of a concept that has been learnt. The concept is functional in both the private and public sense, because of the mastery of a learned way of thinking and way of using words.

In this light the causal explanation proposed by the ELM is misleading. Just like the child learning the meaning of ‘bad’, the use of the concept and the appropriate normative conditions for its use are learnt together. Rather than defending an attitude from attack in an effort to maintain a subjective sense of correctness, the feeling of correctness, or a need to be right and to defend, are intertwined. The action of defence is

not caused by the need for subjective correctness, nor is it an expression of it. They are parts integral to the taking of a position that are covered by the concept of position.

Central to the ELM is the elaboration continuum. Petty and Wegner (1999) incorporate the continuum in the ELM by considering engagement in elaboration as being driven by the need for subjective correctness. Subjective correctness is now described as if it was a psychological state whose impact on elaboration varies with individual and situational factors (Petty & Wegner, 1999:44). These factors include those incorporated by motivation and ability (e.g., personal relevance and knowledge; see Figure 6.1). In addition, other factors, such as mood and pleasure derived from thinking, are held to enhance or inhibit the state of subjective correctness held to drive elaboration (Petty & Wegner, 1999:45). Just as in the above consideration of subjective correctness, each can be subsumed as parts of the concept of position by considering them as necessary, or at least understandable, aspects of the taking of a position. With reference to the position model, a person with a strong position, for example, is expected to engage in defence of their position when the persuasive argument is personally relevant. They logically only consider arguments they are capable of considering. In addition, it would not be unreasonable for a person who enjoys a 'good argument', to expend time and effort in elaborating and arguing. From the perspective of the position model, the ELM rightly identifies many factors associated with the taking of a position, but unnecessarily imposes relationships between these factors. The factors are constituents when subsumed under the concept of position.

With regard to the multiple role postulate, the degree of specification provided in development of the position model places a limit on the ability to fully comment on this postulate. It can be said that meaningful and thoughtful consideration would be more likely to occur with a strong position, and less effortful consideration would likely be associated with a weak position. Given that less thought is associated with the effect, or effectiveness, of persuasive cues, then the association between weak positions and persuasive cues is expected. By extension, it is possible that persons with weak or strong positions would accept the same persuasive argument in different ways. This ELM postulate appears to be reasonable for the position model.

The postulate that certain variables will have an effect on the objectivity of argument scrutiny is similarly uncontroversial. Under the position model a person has the ability or motivation to act in keeping with their position and it can be assumed that this does not in itself bias consideration of a persuasive message. Similarly, the postulate that the degree of effort given to scrutinising a message will vary depending upon the relative orientation of the message to the position of the recipient would appear to hold for both models. The stance of defence against opposing arguments and acceptance of supporting arguments are different actions and each may well result in variations in time and effort. In addition, the trade-off postulate would also appear to be acceptable to the position model. The relative variation in high elaboration and peripheral cue against strength of position would seem reasonable, where a strong position equates to high elaboration on the ELM continuum. The movement towards a weak position would then logically involve less elaboration and an increased effect of peripheral cues.

The seventh and final postulate is that attitudes derived through high elaboration have more temporal persistence, are predictive of behaviour and have greater resistance to persuasion than other attitudes. These factors can be readily likened to the empirical measures used to define strong and weak positions in the position model. Despite the similarity, there are two immediate points of difference. First, in the ELM attitude precedes the quality of temporal stability incorporated in the position model. In other words, in the ELM it is because the attitude is strong that the quality of temporal stability occurs. This raises the issue of causal arrangements being attributed to constitutive elements. The ELM arrangement can be questioned when a strong attitude fails to show the qualities of temporal persistence, predictability and resistance to persuasion. If the answer is a reconsideration of the initial attribution of strength of attitude, then the qualities can be interpreted as acting as criteria for the definition of strength. The causal arrangements proposed by the ELM are then constituent parts of the broader concept of taking a position. The stepwise arrangement posed by the ELM can be readily subsumed under the position model.

The second point arising from the seventh postulate concerns the similarities between the terms 'attitude' and 'position'. However, as argued in the development of the position model, a position is associated with agency, because, for example, a person can

be said to take and defend a position. In contrast, an attitude is readily associated with a state of mind in causal models of cognition. This implies that an attitude is something a person has which can be modelled without the necessity to refer to agency. Nevertheless, position and attitude intersect, because both can be used to explain the same data. Position and attitude, however, differ because they invoke, and are entwined with, quite different ideas about what the data mean.

In summary, comparing the ELM and the position model produces similarities where causal relationships were not assumed. When compared with the position model, criticism of the ELM centred on questioning the necessity to extrapolate causal relationships, where it could be argued the presumed causal elements were constitutive elements. In support of this argument the developmental psychology of Vygotsky was introduced showing that meaning and practice are learnt simultaneously. Arguing, defending or being stubborn, for example, have come to be known as practices associated with a strong position. They are descriptions of the kinds of strategies people have been known to use, in the common practice taking a strong position. One thing does not cause the other, because they are the actions of a person conforming to what they may well admit is the taking of a position. Therefore, by removing the ELM assumptions of causality, it would seem straightforward to reinterpret the ELM as operating in keeping with the position model.

A further point to consider is whether the models are sufficiently different, or is the position model merely another name for the ELM. Millar and Pedersen (1999:150) point out that a major impediment to advancement of social psychology has been the practice of inventing new names for old concepts. For example, they pointed out that the tendency to exaggerate has had 15 distinct labels and can be traced back to 1620, with no evidence of advancement or clear recognition of earlier work. In re-conceptualising the ELM the question then is, does the position model merely rename the ELM? It is the same data and the same phenomena that are accounted for by both models, but it is the interpretation of this data that is the crucial difference. In the position model correspondence is taken to be evidence of constituent elements of positioning, whereas in the ELM the causal frame is applied turning correspondence into cause and effect. With reference to contemporary psychological research, Harré

(2002a:152) makes the same point and also refers to the tendency for psychologists to adopt the causal frame.

A psychological problem is usually identified by the use of the concepts drawn from taxonomies of meanings and rules, from our ordinary vernacular. Subsequent research programmes tend to be couched in terms of causal concepts. However, there are no mental causes and effects...they are an illusion produced by using causal *concepts*...

Rather than adopting a causal frame for the purposes of explanation, the position model is grounded in description and the agentic frame. The position model attempts to describe the way ordinary people make sense of what they themselves and other people are doing when taking a position. The ELM has been questioned by charges involving circularity and assertions that some aspects of the model cannot be falsified. In addition, it has been argued by comparison with the position model that attributing cause and effect to constitutive elements of the concept of position is inappropriate. Upon these arguments the ELM is best considered as a descriptive model, whereby the items it measures are subsumed under the axioms of the position model.

6.7 Chapter summary

This chapter has provided further support for the PAM by developing the position model for the purpose of explaining the actions of persons in relation to persuasive messages. In social psychology persuasion is predominantly the purview of the ELM, which is recognised as important in unifying previously disparate persuasion research. In review of the ELM it was noted there were critics of claims for causal relations. It was also noted that these critics, nevertheless, praised the ELM for capturing important variables associated with persuasion and attitude change. This praise is essentially for the ability of the ELM to describe. Without reference to the ELM, an alternative, termed the position model, was developed as a sub-model of the PAM. The position model was differentiated from positioning theory, because its subject matter is the person rather than the dynamics of positioning as found in conversation. Consideration of the ELM postulates by means of the position model resulted in the questioning of the

causal interpretation of the ELM. When ELM data were taken to be descriptive, it appeared to be readily interpreted in the position model as the actions of persons taking a position. This interpretation was then presented as more than a mere play on words. The ELM fails to adequately seat itself in the causal framework it assumes, whereas the position model brings with it a non-causal explanation for the actions of persons.

Having demonstrated the efficacy of the PAM and the position model, the next chapter is designed to extend these models through the reinterpretation of studies of people acting in particular situations.

Chapter Seven

Persons, positions and situations

7.1 Introduction

This chapter gives direction to the interpretation of persons adapting to situations and addresses the proposition of the PAM that an action is performed with reference to a particular circumstance or situation. The analysis is supported by the conceptualisation of a person taking a position and extends upon the characterisation of positioning as a means of understanding human action, which was advanced in the previous chapters. The analysis is developed by consideration of landmark studies in social psychology associated with conformity, as well as more recent interpretations of these studies. LaPiere (1934), Asch (1951) and Milgram (1963) suggested that conformity with a particular situation was a feature of a person's actions. LaPiere (1934) showed that a person's behaviour, in a particular situation, failed to correspond with self-reports of how the person would have behaved. Asch (1951) showed that despite clear evidence that the majority of a group were mistaken in a simple judgement task, there was a strong tendency for an individual to conform. In addition, Milgram (1963) demonstrated the extent to which people obey the directives of a person in a position of authority. The three studies are reviewed and recent interpretations are provided before their consideration as examples of a person taking a position is pursued.

The relationship between the position a person takes and a particular situation was described in chapter two and aspects of this perspective on positioning were developed further in reinterpretation of the TPB and the ELM. Unlike these earlier chapters, this chapter gives more emphasis to the connectionist model of brain function and links it to the taking of a position. A prominent line of reasoning from chapter two was that the brain, rather than being a storage device, was orientated towards the functioning of a person in terms of his or her interaction with the world. The particular situation is adapted to and is also a learning point for further adaptation. In keeping with this view, the discrepancy between what a person says and does may well be due to him or her having changed his or her 'mind'. This is because the mind is always in a process of

learning and each new situation is judged on its particular merits. As James (1890/1948:154) has observed with reference to the ideas of a person, "...no state once gone can recur and be identical with what was before". The connectionist model similarly suggests that people are understandably inconsistent, because in each new situation they have different 'ideas', which engender different action possibilities. However, the person by means of his or her powers and capacities is assumed to survey the situation and draw upon familiar modes of behaviour, so that he or she adapts and conforms to the demands of the new situation. In this context, the idea of a permanent or semi-permanent state or disposition is inappropriate. The actions of a person can be understood as being governed by what a person has learned and how they understand the situation at hand.

The chapter begins by describing the LaPiere (1934) study, which is a well-known example of the discrepancy between a measure of attitude and actual behaviour. Criticism of the study is provided and brief comment on reviews of the attitude-behaviour relationship and a cognitivist understanding of this relationship is also provided. The Asch (1951) conformity experiment and the Milgram (1963) obedience experiment are then described and examples of contemporary interpretations are provided. Criticism is then made of standard cognitive explanations of the findings of the three studies. Attention is given to the semi-permanent attitude construct and, despite a good deal of empirical grounding from different research programmes, it is noted that conceptualisation of the attitude construct is nevertheless equivocal. Of interest, recent interpretations are contrasted with the interpretation of the original authors revealing that the more recent cognitivist perspective fails to advance on the original descriptive interpretations.

A positioning explanation of the studies is then presented through the argument that positioning is an acquired ability or achievement involved in the production of a recognisable mode of behaviour. A final point developed from the discussion of the LaPiere study is that cognitivists bring a particular perspective to the interpretation of attitude-behaviour studies. LaPiere's original interpretation is overlooked, but is itself no less viable and, interestingly, is shown to be compatible with a connectionist interpretation.

7.2 The LaPiere study

From the perspective of the cognitivist, the LaPiere (1934) study is important because it challenged the logic that a person's attitude would directly influence his or her behaviour. At the time of the LaPiere (1934) study, it was common to assume that the measurement of attitude using a questionnaire would be an accurate reflection of future behaviour. LaPiere challenged this common assumption, by arguing that a questionnaire response was a response to a symbolic situation that would not necessarily accurately predict the respondent's actual behaviour. LaPiere subsequently argued that researchers were wrong to assume direct correspondence between responses to questionnaires and actual behaviour, and set out to support his argument by conducting a social experiment.

Prior to the formal study, LaPiere had spent some time travelling in the US with a Chinese student and his wife. LaPiere (1934) related that he had been apprehensive about travelling with the foreigners, because it was well known that there was prejudice and discrimination towards people of Asian decent. He was understandably surprised when a hotel he regarded as being particularly bigoted towards Asians politely accommodated them. To further satisfy his curiosity, LaPiere telephoned the hotel two months later and asked if they would accommodate "an important Chinese gentleman" (LaPiere, 1934:232). The hotel refused to accommodate the Chinese gentleman, which inspired the more extensive formal study.

To investigate the difference between what people say, or indicate in a questionnaire, and what they actually do, LaPiere essentially replicated his experience of the hotel accommodating his Asian companions and subsequently refusing their booking. Between 1930 and 1933 LaPiere travelled with various Chinese friends and took records of how they were treated when seeking services, such as accommodation or entry to a restaurant. The reactions of staff were recorded and the Chinese friends were not made aware of the study, to avoid unduly altering their behaviour. In the second phase of the study, approximately six months after the visit, each establishment was sent a questionnaire containing the key question "Will you accept members of the Chinese race as guests in your establishment?" (LaPiere, 1934:235). The results showed a stark contrast between the service given the Chinese and the acceptance of a booking. Over

90 per cent refused the request for a booking, whereas only one rejection of actual service was received from visiting the establishments.

LaPiere (1934) interpreted the findings in terms of the lack of validity of questionnaires as a means of determining actual behaviour. In his words: "...it is impossible to make direct comparisons between the reactions secured through questionnaires and from actual experience" (LaPiere, 1934:234). Despite the apparent poor utility of questionnaires for predicting behaviour, LaPiere (1934) nevertheless concluded that questionnaires were useful for measuring symbolic attitudes about issues discussed symbolically. Yet he also concluded that the time-consuming, subjective observation of behaviour would be more rewarding than a quantitative survey. In his words: "...it would seem far more worthwhile to make a shrewd guess regarding that which is essential than to accurately measure that which is likely to prove quite irrelevant" (LaPiere, 1934:237).

The LaPiere study was important because it showed inconsistency between a stated attitude and actual behaviour when there was an expectation of correspondence. Nevertheless, the validity of the study has been questioned. As summarised by Hock (1995), the 'yes' or 'no' measure of attitude is particularly restrictive and the image of 'Chinese' in the minds of the survey respondents may not equate with the actual people requesting service. In addition, approximately half of the places visited did not respond to the survey questionnaire, and it was possible that the questionnaire respondent was not the person who had met the Chinese visitors. In more detail, a review by Dockey and Bedien (1989) listed the major issues pertaining to the study that threaten internal and external validity. These issues included the use of single-item measures, selection bias, the possibility of bias from the meeting of the Chinese couple prior to the questionnaire and the issue of experimenter bias. However, Dockey and Bedien (1989:15) considered the study powerful because LaPiere had "...directly recorded and observed interactions that were part of his subjects' real lives." Issues raised about validity were considered to be of less relevance, because of the apparent value of the behavioural observation. In which case, as Dockey and Bedien (1989) concluded, statistical and methodological rigor is superfluous and criticisms of method are of minor

importance, because they have failed to offer a plausible alternative explanation of the results.

Despite the qualitative tone of LaPiere's findings, other researchers have subsequently questioned support for the attitude-behaviour relationship from quantitative evidence. Eagly and Chiaken (1993:155) have provided a summary of these critical reviews and noted that in the 1950s and 1960s there were a number of observations by sociologists and psychologists of weak or low attitude-behaviour correlations. One of these was the well-known review of empirical research undertaken by Wicker (1969). Wicker (1969) reviewed 31 empirical studies that had measured consistency between survey responses and behaviour. The studies covered a number of different topics including race relations, job satisfaction and job performance. While a few of the studies found a low to moderate correlation ($r = .3$), the average for all the studies was low ($r = .15$). This was interpreted as providing poor evidence for a link between the attitude measure and subsequent behaviour. Based upon these findings, Wicker (1969) concluded that attitudes were unrelated, or at best only slightly related, to behaviours. Eagly and Chiaken (1993:155) noted that this review received a good deal of attention, because of its claim that there was little evidence that "...people possess stable, underlying attitudes that influence overt behaviors." Eagly and Chiaken (1993:156) did, however, point out that a more recent review by Schuman and Johnson (1976) restored some faith in the attitude-behaviour hypothesis. This later review incorporated a broader range of studies, including the prediction of voting for a candidate in a national election. In addition, Eagly and Chiaken (1993:156) suggested that Wicker's review received an undue level of interest, because of the popularity of critical studies during the 'crisis' of psychology.

Against the backdrop of argument over effect sizes and their significance as evidence in support of the attitude-behaviour relationship, Fishbein and Ajzen (1975) set out to promote the TRA. Because of questions about the utility of attitudes for the prediction of behaviour, a primary imperative was to address the problem of attitude-behaviour discrepancies. Fishbein and Ajzen (1975) made various recommendations to address this problem of discrepancy. These included the use of intention as a mediating variable between attitude and behaviour, reliance on variables other than attitude to conjointly

explain intention and a prescription towards ensuring substantial equivalence between the measurement of attitude and behaviour. The prescription for equivalence involved action, target, context and time criterion. In other words, it was recommended that the measurement of attitude should encapsulate, as accurately as possible, factors associated with the performance of the target behaviour. This involved the specification of a particular place and time, and the performance of a particular single target action. With reference to the LaPiere study, for example, the accommodation of a well-presented Chinese couple may not necessarily be correspondent with the general enquiry for accommodation of "members of the Chinese race".

The response to problems of attitude-behaviour discrepancies by Fishbein and Ajzen (1975) and evidence of good support for the TRA (e.g., Sheppard, Hartwick, & Warshaw, 1988), would seem to have re-established the utility of attitude-behaviour studies. Yet at no point in their research is the hypothesis of a relationship between attitudes and behaviour seriously questioned, or any alternative interpretation seriously considered. It is assumed that the discrepancy is principally a problem of measurement, to be solved by practical means. The Fishbein and Ajzen (1975) recommendations are related to method and involve the replacement of general attitude measures by the measurement of an attitude specific to a particular target behaviour. This suggests that, given that an attitude has been previously formed, a person selects the appropriate attitude, as it pertains to a specific thing, issue or circumstance. As Eagly and Chiakien (1993:174) have stated in comment on the TRA: "...when confronted by questionnaires probing the terms of the model, people are fully capable of retrieving the specific beliefs that underlay their attitudes and subjective norms." In addition, in an actual situation it is assumed that "People retrieve an intention, or an attitude toward a behaviour and perhaps a norm, which then produces an intention in that situation" (Eagly & Chiakien, 1993:174). This suggests that decisions made for the situation at hand involve the retrieval of previously formed attitudes and intentions, as they are relevant to the situation. The Fishbein and Ajzen (1975) solution to the attitude-behaviour discrepancy problem involves the retrieval from memory of the appropriate attitude, yet this process is accepted as true without adequate proof, because the presumed processes are, in principle, only apparent by their effects.

The idea of attitudes being retrieved can be seen more clearly in another attitude-behaviour model which Eagly and Chiaren (1993, 1998) recommend incorporating into the TRA. The attitude-behaviour model by Fazio and associates (summarised by Fazio, 1986) involves the examination of the speed of retrieval from memory of previously formulated attitudes. Central to Fazio's (1986) model is the view that a person is considered to learn about an attitude object, so that when the attitude object is again encountered, or brought to mind, a reaction is believed to arise as a conditioned response.

Importantly, Fazio (1986) considered that an attitude must be readily accessible from memory for it to be a substantial determinant of behaviour. The ease with which attitudes are accessed on exposure to an attitude object was considered to be a main determinant of their power and functionality. An attitude that is more easily accessed from memory is also considered to be more likely to guide a person's thoughts and actions (Fazio, 1989). Fazio (1989) reports that attitudes do vary in strength, in terms of availability and stability, depending upon how they are acquired. People who repeatedly expressed their attitudes regarding a behaviour, or had prior experience of the behaviour, accessed their attitudes more quickly. In addition, their attitudes were found to be more correspondent with their actual behaviour and to be more stable over time.

Other studies conducted by Fazio, Powell and Herr (1983) have also found that attitude accessibility was enhanced by prior experience. In addition, these researchers also observed that when subjects were required to make repeated evaluations of their attitudes the subjects' attitudes became more accessible. Other studies have also found that the strength of attitude and behaviour correlations could be enhanced by having subjects repeatedly express their attitudes (eg. Fazio, Chen, McDonel, & Sherman, 1982; Powell & Fazio, 1984). People who had their attitudes reinforced in this way responded more quickly to inquiries of their attitudes and also tended to behave more consistently with their attitudes. Fazio (1986) also asserted that attitudes that are more easily accessed could be activated automatically upon encountering the attitude object. Automatic activation is presumed not to involve any conscious thought or intentional evaluation of the attitude object.

The work of Fazio and associates and the TRA assumptions make plain the basis for explanations of the behaviour of individuals in relation to attitude objects. Volitional behaviour is assumed to be determined by what is previously learnt and stored in composite form as a relatively stable predisposition. As Eagly and Chiakien (1998:269) explain: "These observable responses consist of evaluative responding that occurs in conjunction with the stimuli that denote the evaluated entity." It is assumed that when faced with a situation, the predisposition is retrieved and applied with adjustment to the particular circumstances for the task at hand.

7.3 The Asch experiment

The Asch (1951) experiment set out to test the degree to which an individual would conform to the behaviour of a group. The Asch (1951) experiment is noteworthy, because it showed that, in a particular circumstance, conformity with a group was much more prevalent than had been expected. In the Asch (1951) experiment, conformity meant the degree to which a person adheres to the behavioural patterns of a particular group, to which the person is ascribed as being a member. The experiment was based upon a simple visual comparison exercise involving a group of confederates who all agreed to report an incorrect interpretation of the simple comparison task. The test for conformity was a test of whether the test subject would agree with the obvious errant answer from the group. The procedure involved the group members being shown three lines of different lengths and the group was also shown another line, with the task being to match this line with one of the three in terms of length. Each person provided his or her answer in turn, with the test subject answering last. In the benchmark test, after answering correctly for two comparisons, the confederates then all provided an obviously incorrect answer. In a series of experiments, the result was that approximately 75 per cent of the test subjects provided the same wrong answer as the others in the group.

The results from the Asch (1951) experiment showed an unexpectedly high degree of group conformity. Nevertheless, the test results did not lead Asch (1951) to conclude that visual perception or personal judgement had been affected by group participation. In post-experiment interviews most of the subjects claimed to have expressed

acceptance publicly to avoid the experience of non-conformity, although a few subjects reported that they had conformed because they had questioned their own personal judgement. Conformity was judged to have occurred in response to social influence, resulting in test subjects providing responses while being knowingly insincere or while questioning their own judgement.

In the Asch experiment, it was apparent that subjects often found dissent difficult. Another reason for conformity, however, may have been that there was no prospect of censure for conforming. Ross, Bierbrauer and Hoffman (1976) found that the knowledge of differential payments for correct and incorrect judgements markedly affected conformity. It was argued that a payoff provided a plausible reason for disagreement with the group. Ross, Bierbrauer and Hoffman (1976) concluded that they had provided test subjects with a way of rationalising the situation, so that non-conformity would be acceptable. A similar explanation can be found in variations explored by Asch (1951). The presence of a single non-conforming confederate for the line comparison task, markedly reduced the number of conforming subjects. Subjects appear to have required some justification or support for dissent, otherwise there is a stronger tendency to conform. In the Asch experiment, conformity was actually an 'expression' of compliance, because the person could privately think otherwise.

The elegance of the Asch (1951) experiment was the testing of a straightforward hypothesis of conformity in a simple experiment. Indeed, the Asch experiment can be regarded as an improvement on a less straightforward experiment by Sherif (1934). This earlier study measured the tendency to agree, based upon the perceived distance that a point of light appears to move in a blackened room. The movement is actually a common illusion of human perception known as the autokinetic effect. In comparison, the Asch experiment was simple, straightforward and probably very boring for the subjects.

Asch (1952) explains that the Asch (1951) experiment was part of a series with the agenda of developing a theory. The interest was in the actions of individuals in group processes and the tests were designed to explore some new ideas. The key assumptions were that there was an independent accessible reality and commonly held capacities for

thinking about and perceiving the world. For Asch, the popular characterisation of the study, which showed that 75 per cent of subjects conformed at least once, was of lesser importance in comparison with the number who failed to conform. In addition, despite 75 per cent of the subjects conforming at least once, the overall proportion was only 32 per cent from the total number of tests.

The study of relations within a group was, for Asch, the study of a form of negotiated activity, whereby individuals come to jointly perceive and comprehend reality. As Levine (1999:360) has stated: "An important aspect of Asch's position regarding the relation between social and cognitive processes is his view that people, through co-operative efforts, arrive at a shared understanding of the world and thereby construct reality". The group perspective was thought to contribute to a solid common grounding when personal experience was aligned with the representation of the group (Asch, 1952:251).

The 1951 experiment was designed to investigate conformity in terms of the extent to which group behaviour influenced the individual. Importantly for Asch, despite some expressions of conformity in the experiment and a few subjects questioning their own reasoning in post-experiment interview, no meaningful change in individual perception or judgement was discerned. Asch (1952) likened this situation to the story of the emperor's new clothes. Despite cheering the emperor and outwardly praising the splendour of his missing attire, privately the people took him to be a fool. There was no meaningful or 'real' agreement with the praise. Like the story of the emperor's new clothes, despite expressions of conformity, it was obvious that group and individual judgement was not aligned and subsequently the group expression was judged to have had no influence on personal judgement.

The ideas of Asch about individual-group relations remain a background for recent studies in the topic area. For example, empathy has been operationalized as a personal construct in the study of empathic accuracy, whereby it is assumed that the degree of empathy with others determines a shared realisation (Ickes, Stinson, Bissonnette & Garcia, 1990; Marangoni, Garcia, Ickes & Teng, 1995; Gesn & Ickes, 1999). Alternatively, Levine, Higgins and Choi (2000) have studied conformity as being

related to an assumed propensity for risk taking or risk avoidance. In their study these propensities were classified as having either a 'promotion focus' involving sensitivity to the presence and absence of positive outcomes, or exclusively in a 'prevention focus', where people were assumed to be sensitive to the absence or presence of negative outcomes. In addition, a study by Camacho, Higgins and Luger (2003) showed that, when placed in a new situation, people attempted to maintain a sense of order in their thoughts and actions. In investigating whether an action feels right or feels wrong, it was demonstrated that the experience of good feelings, described as 'regulatory fit', was experienced when the goal was in keeping with their personal sense of order. When regulatory fit was not achieved a tendency to express guilt was observed. These examples of studies of social cognition show how various aspects of the ideas of Asch have been interpreted and operationalised in a social cognitive approach.

7.4 The Milgram experiment

The experiment conducted by Milgram (1963) was designed to test for a tendency for obedience, when it plainly violated personal morals or ethics for behaviour. The Milgram experiment was controversial, in that it sought to model the way people knowingly inflicted harm on other people because they were told to do so. The experiment involved having the test subject be directed by a person of authority to administer (pseudo-) electric shocks to a protesting actor. The protests of the actor were heard but unseen, so the test subject was led to believe they were administering a series of real electric shocks culminating in a fatally harmful voltage. The person of authority used a scripted series of commands to encourage obedience. For example, upon the third protest of the subject, the person of authority was scripted to state: "It is absolutely essential that you continue" (Milgram, 1964:373). The results showed a high degree of obedience, with all subjects obeying instructions to some degree. Sixty-five per cent followed instructions to the extent of delivering, what the subjects believed to be, fatal shocks. The remainder refused to administer shocks at the most severe level, but most of the subjects obeyed at least to the point of delivering an 'intensive shock'.

Milgram (1963) drew two main findings from the results. First, and with an expression of surprise, it was observed that the moral imperative of avoiding harm to others was

rejected, where the respondents could have refused to inflict harm. Second, notwithstanding the actions of the subjects, it was also observed that there was a good deal of tension exhibited by the respondents either verbally (“Oh God lets stop it”) or otherwise (“...he was reduced to a twittering, stuttering wreck...”).

Milgram (1963) conceded a number of important qualifications of the results. First, nine points that related to the setting and design of the experiment are listed that may have assisted subject compliance. Second, the apparent tension for the subjects is noted as possibly being due to the subjects having no ready logic for either stopping the experiment or continuing to comply. It was also noted that a good deal of pressure was imposed on the subjects, because the conflict came on rapidly with little time for a person to consider their options. Milgram (1963:378) speculated in his conclusion: “...the conflict stems from the oppositions: first, the disposition not to harm other people, and second, the tendency to obey those whom we perceive to be legitimate authorities”. The findings are of interest, because the tendency to obey and inflict harm was more evident than the presumed imperative to avoid harming others.

The Milgram experiment immersed subjects in controversy by placing personal morals and ethics and the imperative to obey in exclusive opposition. Nevertheless, the Milgram experiment could not be simple or straightforward because, as stated in the introduction (Milgram, 1963:213), the experiment was meant to be a simulation of German soldiers following Nazi imperatives to inflict inhumane treatment. As Milgram (1963:213) described, “A procedure was devised which seems useful as a tool for studying obedience”. It was nevertheless obedience of a particular form, and a circumstance of some complexity. Yet as Elms (1995) has described, the preparation for Milgram’s experiment was meticulous to the point where the experiment had its own reality for the subjects as well as the experimenters.

Milgram did not immediately offer a theoretical explanation of the results of his obedience experiment. Elms (1995) has described Milgram as an expert in the design and execution of an experiment who had difficulty in developing a theory of obedience. Milgram’s theoretical contribution (Milgram, 1974) centred on the idea that in his experiments a person “entrusts the broader tasks of setting goals and assessing morality

to the experimental authority he is serving" (Milgram, 1974:7). This active displacement of responsibility means that the person: "divests himself of responsibility by attributing all initiative to the experimenter, a legitimate authority" (Milgram, 1974:8). In more general terms, the active displacement of responsibility is such that the "...individual no longer views himself as responsible for his own actions but defines himself as an instrument for carrying out the wishes of others" (Milgram, 1974:134). Milgram had offered an agency-based explanation of obedience that was not unlike the war crime defendants' claims of obeying orders despite personal concerns. Elms (1995) also pointed out that Milgram (1974) refrained from discussing the possibility of cognitive processes involved in obedience, because, despite collecting personal data about subjects in obedience experiments, he questioned how these data related to presumed cognitive processes (Milgram, 1974:205). It seemed enough for Milgram to provide an explanation adequate for the data, without speculation about internal states and thought processes.

Milgram (1974) refrained from a detailed analysis at the cognitive level. Other researchers have, nevertheless, investigated interactions between situational variables and personal constructs in obedience settings. Elms (1995) identified that most cognitive studies have emphasised the way in which subjects have processed information about the situation in a manner that justifies his or her obedience or failure to conform. For example, Bushman, (1984) found that obedience to an order to provide parking meter money to a stranger on a public street was influenced by whether the order was made by a formally or informally dressed person. In addition, Milgram (1974) himself provided a situational variable by varying the closeness or proximity of the authority figure. As well as showing distance in the room to be a factor, the relaying of instructions by telephone reduced markedly the obedience of the subject.

One researcher who has incorporated a cognitive approach in the study of obedience is Blass. Blass (1991) found that people who refused to comply completely in an obedience study attributed their resistance to themselves rather than situational factors. In addition, these subjects tended to report that they were in control of their lives, rather than their being subject to events that may have affected their behaviour. This sense of personal control was also found to be important in a review of other relevant research

(Blass, 1992) and an inclination for 'social responsibility' has also been identified as an influence (Blass, 1996a). Blass (1991) discussed the sense of control as being a trait that is more likely to be activated in response to an overbearing authority figure. It is presumed to be activated in defiance of strong commands because these are presumed to be a threat to personal control. The desire for personal control then invokes and culminates in the manifestation of greater resistance (Blass, 1991:404). In further investigation of cognition, Blass (1996b) also found evidence that greater responsibility is attributed to the authority figure when the outcome was more severe. When taken together, the Blass studies indicate that a need for personal control must be activated and be of sufficient power for the person to take control of the situation. The studies also suggest that in cases that could involve personal implications, there is a tendency to abdicate responsibility.

7.5 Cognitive explanations

The three studies of social behaviour discussed in sections 7.2, 7.3 and 7.4 documented differences between what was expected to happen, in terms of individual behaviour, and what had actually occurred. LaPiere showed a difference between an institutions' policies and the actions of employees, Asch found an unexpected degree of conformity with false group judgements and Milgram identified a degree of unexpected obedience to authority. Explanations of these empirical findings by their respective designers have been based upon a description of what subjects did in the circumstances presented to them. LaPiere interpreted the findings as a difference between a symbolic and an actual behaviour. Asch was more ambitious in theorising, with the idea that group and individual views interacted to create a consensus. This meant that should all agree, then what was agreed upon should then be meaningful for all concerned. Milgram's explanation of the results of his obedience experiment was straightforward; he suggested that the subjects offset blame and guilt by thinking that the person in charge is responsible.

In light of the experimenters' straightforward interpretations of their results, what is often portrayed as incredulous and novel also affords a logical and simple explanation. It may well have been that the LaPiere study was influenced by a policy of a hotel or

restaurant that was apparently not implemented. The Asch study may well have simply described the trivial matter of agreeing with others, when there was no incentive to do otherwise. In addition, the Milgram study can also be considered unremarkable, because subjects for the experiment were simply subjects instructed to operate a device under orders and who were then encouraged to complete the task. When taken in this light, the person who apparently behaves contrary to social norms is not exceptional, rather he or she is merely operating in an unusual situation. It is not necessarily that people are inconsistent or prone to do seemingly unusual things; it is instead a misunderstanding or a misrepresentation of the person and situation that leads to this misjudgement.

A cognitive explanation is an explanation that involves postulating the thought processes, or patterns of thought processes, that provide an explanation of the behaviour of an individual in a given situation. In this light, the LaPiere study shows discrepancy between a stated predisposition and actual behaviour. The remedy, promoted by Fishbein and Ajzen (1975), involves aligning the survey question with the behaviour, or ensuring correspondence between the asking of the question and the behaviour in terms of corresponding measurement scales. As noted (section 4.3), in description of the TRA and subsequent TPB, these models can be judged as successful when statistical measures are interpreted as supporting the causal flow posed by these models. This does not, however, mean that attitude-behaviour discrepancies will be prevented. In addition, and importantly, the Fishbein and Ajzen (1975) criterion for reducing the possibility of discrepancies merely raises the issue of accuracy, in terms of the match between a stated attitude and subsequent behaviour. As Billig (1987:182) has noted: "This strategy does not place the attitude in the centre of controversy, but focuses on the nature, or essence of the action". The assumption that an attitude is pre-emptive to action is preserved, because it is not challenged. The design invokes, but does not involve, a cognitive explanation. Indeed, the base assumption regarding the nature of the predisposition is shielded from challenge, because the circumstances of questionnaire responding and behaviour are always different. This means that should the hypothesised attitude-behaviour correspondence fail to be supported, it is always possible to point to the differences in circumstance as errant intervening variables. The nature of cognitive processes is assumed and importantly their nature can be assumed otherwise, because the nature of cognitive processes cannot be confirmed or denied. This suggests that the

idea of the brain as a device for assimilating information from a new situation with stored information produces a particular explanation of behaviour. As Eagly and Chiaken (1998:269) describe: "The idea that an attitude is a psychological tendency treats attitude as a state that is internal to the person and lasts for a shorter or longer duration." Unfortunately, because attitudes are hidden or inferred, the idea of attitude as a semi-permanent directive is shielded from the possibility of outright confirmation or rejection. The response to LaPiere (1934), and the interest in inconsistency generated by Wicker (1969), has been towards the repair of methodological weaknesses. In this way, alternative ideas about personal decision processes have been avoided.

It is no revelation that the difference between what a person says they are going to do and subsequently does, is improved by asking questions that more accurately represent the target behaviour. A cognitive explanation, while providing a conceptualisation that bridges the action of answering the questionnaire and the actual behaviour, does not in itself improve explanation of the discrepancy. Of interest, Dockery and Bedeian (1989) have pointed out that this was not the causal arrangement that LaPiere (1934) had set out to test. LaPiere subscribed to an interpretation of attitude which held that the attitude was imbued with behaviour, to the extent that the 'true' attitude was only revealed by the behaviour. In consequence, LaPiere (1934) described a survey measure of attitude as the measure of a symbolic attitude, because it lacked the necessary behaviour and was not the 'true' attitude. As LaPiere (1934:236) reported: "Only a verbal reaction to an entirely symbolic situation can be secured by questionnaire", which appears to have led LaPiere to be relatively unconcerned about differences between questionnaire response and actual behaviour. Interestingly, LaPiere described attitudes as "integrated habit sets" that would "...become operative under specific circumstances and lead to a particular pattern of behaviour" (LaPiere, 1934:236). It is certainly possible to interpret this statement in terms of an attitude being a cognitive state, where certain information activates a particular response from the individual. LaPiere, however, considered that without the actual behaviour, such an attitude could only be measured symbolically, because the attitude as a cognitive state could only be observed as part of the behaviour with which it was associated. Unlike more recent conceptualisations, the idea of cognitive states transcending time and space was yet to be seriously considered.

The social cognitive interpretations of the Asch and Milgram experiments can also be judged to be no more rewarding than the original interpretations. The recent interpretations of Asch's work contain patterns of thought with labels such as 'empathic accuracy', 'good feelings' or 'goodness of fit' and 'risk'. Yet despite finding evidence to support these proposed constructs, the constructs appear to be little more than an extension of Asch's original ideas that already had empirical support. Identifying finer grained aspects of previously supported ideas has merit, but the invocation of a cognitive state as the cause is purely hypothetical and as such cannot in itself provide a fuller or further explanation. Asch (1952:559) himself was not opposed to taking into account "the properties of attitudes as they exist in the individual". Asch (1952:559) also stated that "... we are in need of a theory of attitudes and techniques should grow out of the needs for description and theoretical clarification". Of further interest, Asch (1952:559) suggested, perhaps like the cognitive conceptualisation of attitude, that an "...attitude is a mode of operation changing with conditions, ...". However, this was not a premonition of the semi-permanent attitude promoted by cognitivism, because the statement was followed by an objection to the common practice of attempting to measure an attitude as a semi-permanent thing. As Asch (1952:559) suggested: "Perhaps we ought to take the bull by the horns and insist that an interview should approximate a genuine conversation, in which one person explores a problem with another; perhaps the interviewer's optimal role is not that of a camera or a ballot box". Clearly Asch (1952) realised that the way a person adapted to a situation could not be encapsulated by an attitude, when the attitude was conceptualised as a semi-permanent 'thing' or state. It appears that for Asch, the further study of the interactions between people and situations should recognise a propensity to adapt, rather than the characterisation of a thing brought to the situation. Unfortunately, as is evident by the more recent extensions of Asch's work, cognitivism offers little more than the testing and refinement of Asch's descriptive work, while shifting the cause to supposed enduring patterns of thought.

Much like the cognitivist treatment of the work of Asch, the interpretation of Milgram's obedience studies by Blass (1991, 1992, 1996a, 1996b) are similar to Milgram's (1974) agency-based explanation of obedience. It appears that in working towards a cognitive explanation, Blass quantified and tested what had previously been described. Elms

(1995:29) points out that the agency based explanation offered by Milgram (1974) had not impressed readers in the field. However, despite an apparent preference for a cognitive interpretation, it appears that the cognitive interpretation fails to provide further explanation. Milgram (1974) explained obedience as an agent rationalising a situation and justifying their actions by attributing blame to the person in charge. The same data explained in terms of cognitive processes, merely places the cause in a pattern of thought that is presumed to be initiated by the situation. In addition, because a variety of explanations can be put forward, it may seem that the cognitivist approach of hypothesising 'inner' states of various forms is a means of generating novel explanations. This variety within the cognitivist approach may usefully prompt creative theorising, but in terms of the possibilities for theorising it is within a limited range afforded by the cognitivist approach. Patterns discovered in data are inevitably a limited selection of possible patterns (Harré, Clarke & De Carlo, 1985:44).

Studies of conformity and obedience, not unlike expectations of attitude-behaviour consistency in the LaPiere study, highlight the apparent gulf between expectations of an individual's behaviour and their actual behaviour in social situations. The experiments conducted by LaPiere (1934), Asch (1951) and Milgram (1963) have been interpreted as challenging the idea that a predisposition has a role in actual behaviour. Of relevance, Ross and Nisbett (1991) have made much of these studies in their emphasis on the power of the situation over personal dispositions. In their words: "How could people be so wrong in their fundamental construal of the causes of behaviour? How could they prefer to base explanations and predictions on trait ascriptions of little or no predictive power to the task at hand..." (Ross & Nisbett, 1991:139). Ross and Nisbett (1991) have regarded the emphasis given to studying predispositions as inappropriate, in the face of the evidence they present that the social situation in which people find themselves has more bearing on their actions. This does not directly challenge presumptions about the nature of personal decision-making, but is an attempt to frame the exercise as misguided in the face of the strength of determining factors associated with the situation. The LaPiere (1934), Asch (1951) and Milgram (1963) experiments laid the ground for the making of this challenge.

7.6 A PAM interpretation

Up to this point a description of three well-known experiments has been provided, as well as the interpretations of the experimenters and subsequent cognitivist interpretations. It has also been pointed out that cognitivist interpretations fail to expand upon the essentially descriptive interpretations of the designers of the experiments. Despite the apparent sophistication of social cognitive interpretations, they state the obvious and provide little more than explanations based on description.

It has also been suggested that the results of the experiments initially appear to be unusual, but become understandable when the position of the person in the experiments is more fully appreciated. The Chinese person is booked in the hotel like any other person, perhaps because the employee had no imperative to treat Chinese any differently for this particular action. The person agrees with others, because there is no incentive to do otherwise. Also, given the opportunity to abdicate responsibility with little time to think and a degree of harassment, the bad deed is done, but not without an expression of tension and regret.

Having questioned the usual interpretation of the experiments and suggested that they are less than sensational, the studies can be reconceptualised using a PAM explanation. Useful criteria for this task can be drawn from the discussion by Zimbardo, Maslach and Haney (2000) of lessons to be learnt from their Stanford prison experiment. The Stanford prison experiment was perhaps a more unusual and certainly a more complex obedience experiment than the Milgram (1963) experiment. Indeed, the Stanford prison experiment could be investigated in this chapter in similar manner to the Milgram experiment, but is instead treated as an example for the purposes of this discussion of obedience. The Stanford prison experiment involved forcefully detaining student subjects in a prison-like setting and having other students act as prison guards. During the experiment the prisoners were treated harshly and the guards appeared to become cruel and belligerent. The explanation of the experiment put forward by Zimbardo, Maslach and Haney (2000) drew upon Ross and Nisbett's (1991) idea that a situation is often a powerful influence to the extent that behaviour cannot be predicted in advance by examining personal dispositions. In keeping with this idea, it was assumed that a

novel setting reinforced further the power of the situation for producing novel behaviour. Zimbardo, Maslach and Haney (2000) surmised that in a novel situation, a social role becomes somewhat indeterminate and new rules for guiding the behaviour can therefore lack a moral, ethical or normative standard for proper action. Nevertheless, from the observations of Zimbardo, Maslach and Haney (2000), it was apparent in the Stanford prison experiment that the subjects formed their own social roles and rules for conduct, which had credibility for the participants.

The interpretation by Zimbardo, Maslach and Haney (2000) of the Stanford prison experiment has implications for a new interpretation of the Asch and Milgram experiments. First, consideration of the prison experiment from the perspective of positioning theory (Harré & van Langenhove, 1991) brings out some interesting points. Positioning theory explains positions as emerging from interaction. Participants are taken to be changing positions in the continual discovery of an emergent mode of acceptable behaviour for a particular situation. Recalling the review provided in chapter two (section 2.9), in positioning theory it is the interaction that is important, rather than the role of the person in taking a position, which was emphasised in the previous chapter. What makes the Zimbardo, Maslach and Haney (2000) interpretation of the Stanford prison experiment interesting is that, while the subjects were given the roles of guard or prisoner, beyond this there were apparently no recognisable positions for the subjects to take up. Positioning, nevertheless, did occur with the novel result of extreme behaviour from the participants. To Harré and van Langenhove (1991) and their followers, this would appear to vindicate the assumption that positions arise from interaction. It appears that the subjects failed to find a ready template to guide behaviour, yet the subjects managed to find modes of behaviour. The lack of personal resources, in the form of common ways of behaving, for making a position was not a problem, because modes of practice emerged. But it is not simply resources entailing morals, ethics and norms that are required for joint positioning. As Wittgenstein (1953/1972) emphasised, the learning of a practice or skill is important, because it enables the selection of a 'tool' and the understanding of a game. To engage in positioning the person has to have learned the skill or 'customary practice' of positioning. The Stanford prison experiment was a demonstration of the common skill

of positioning being applied in a situation where no clear position was presented by the circumstances.

To consider the Asch and Milgram experiments using a positioning explanation, it should first be noted that these experiments have attracted attention, because the behaviour of subjects appeared to be incredulous to those not familiar with the experiments. Milgram (1963:218) thought this so important that he framed the results using a survey of fourteen senior psychology students. The students were provided with a description of the experiment and were given the task of estimating the results. The estimates were from zero to three per cent for delivery of the maximum shock, which was a clear underestimation of the actual results. The reason for the error in expectations of the Milgram experiment appears to be an inability to conceptualise the situation, or more accurately, to conceptualise how the person is necessarily equipped with common practices and abilities that would operate in such a circumstance.

The position model involves the use of an acquired capacity to act in a seemingly habitual or customary manner. An interpretation of the apparently abhorrent behaviour in the Stanford prison experiment was that the subjects could not readily identify pointers sufficient to guide or indicate an appropriate mode of behaviour. In the Asch experiment, the procedure was so simple, in that the subjects may have believed their actions to be inconsequential so there was no need to create controversy by disagreeing. It is possible that some of the subjects simply followed the leader. Similarly, with regard to the Asch and Milgram experiments, Wegner and Bargh (1998:447) describe a form of 'automatic behaviour' suggesting there was little time for subjects to reflect about their actions or the consequences. Under the circumstances of the Asch and Milgram experiments, Wegner and Bargh (1998:448) claimed that variations in behaviour are attributable to the difference between automatic behaviour and the desire to have personal control. Under automatic behaviour they assert people behave "just plain blockheaded", whereas they point out that if people had more time to consider their actions then they would tend to refrain from conforming or obeying. Wegner and Bargh (1998) believe that cognitive processes give the individual a sense of being in control and assert that there is actually no agent involved in human behaviour. Theirs is an attempt to explain away the problem of freewill, in favour of a mechanistic

understanding of human behaviour. This interpretation contrasts with Ryle (1949) who pointed out that mechanistic explanations of cognition fail to explain adequately intentional action. This failure was characterised in his analogy of a ghost in the machine. Similar arguments occur in the presentation of Searle's (1980) Chinese room scenario and Rychlak's (1995) argument that a computer needs a programmer (see section 2.5). An alternative to the mechanistic model is the view that behind the position model the necessary capacities for the taking of a position are learnt. Taking a position is a capacity learnt in the process of achieving personhood. As a capacity, it is most plainly a conditioned practice. Though this practice does not determine what is to be done, it crucially facilitates such activities by providing the skills for how to do it.

In the Stanford prison experiment the subjects, imbued with the conditioned practice of positioning, were unable to clearly perceive guides as to how to behave. In the Asch experiment, it transpired that the standard for behaviour in the immediate situation of the experiment was, for many of the subjects, to simply agree. The capacity in this case involved ascertaining the appropriate response, which for some of the subjects was to agree and think otherwise. For others it was to disagree openly, and for a few it was to question his or her own thinking and agree. There is nothing remarkable here, when one attempts to conceive of the situation as the participants are likely to have done. More difficult is the interpretation of the Milgram experiment, because of the apparent gulf between the expectations of what the subjects should have done and what actually happened. Yet the design of the experiment can assist here. Milgram explicitly designed the experiment so that under pressure to obey the subjects either objected or complied. The positions were as the subjects found them. On the one hand, the subject could, with some difficulty due to the presence of an authority figure, withdraw from the experiment. On the other hand, the subject could comply and interestingly also express a good deal of stress and anguish in the process. Drawing upon the analogy used by Asch (1952), in this case it was agreed the king had no clothes, but unlike the Asch experiment the practice prescribed by social convention included a public rather than private expression of stress, emotion and remorse. The Milgram experiment was also unremarkable given that the subjects were no more than ordinary people instructed to operate what they were told was a mostly harmless device, while pressured to follow instructions. When taken in this light, the person who positions themselves contrary to

expectations is not exceptional; rather he or she is merely taking a position in terms of their interpretation of an unusual situation. This suggests the problem is with the interpretation and it is the expectation of the observer of the experiment that fails to account for the perspective of the subject. In this context, it is not that people are prone to do unusual things; it is an error of interpretation. A person has the capacity to adapt, take a new viewpoint on an issue or on their personal prior experience, which means their perspective on a situation can change. This capacity for personal or private adaptation and change is not necessarily readily apparent, because of a cultural imperative to present oneself as being consistent. The outward impression of innate consistency arises from an assumption of personally managed consistency. When conceptualised as having a semi-permanent form the impression of innate consistency can appear to take the form of the contemporary attitude construct. This 'attitude' is attributed with stability, given that there is no imperative for its revision, such as by exposure to some new information about the thing or issue with which it is concerned. This assumption is questioned when factors, such as public statements and behaviour, that can reasonably be attributed to the attitude, fail to correspond.

An alternative model is advanced by the idea of people positioning themselves. The act of taking a position occurs relative to the social and physical aspects of the situation at hand, because these factors are interpreted by a person at a particular point in time. Preceding each situation a person is understood as having acquired the capacity for positioning, which can be taken as a necessary condition for the attribution of personhood. This means it is assumed that the capacities associated with the taking of a position, such as to contemplate the future and reflect upon the past and take another viewpoint, are also properties of, and criteria for defining, personhood. The capacity for positioning is then a necessary function and can also be taken to be pervasive, in the sense that it is integral to, and unavoidable in, socialisation. Using the consistency and obedience examples, in the Stanford prison experiment positioning occurred regardless of the lack of immediate markers for appropriate behaviour. It can be argued that a position was emergent or created, rather than being found or discovered. Following the same line of reasoning, in the Milgram and Asch experiments it can be construed that the subjects took up positions that were predefined by their engagement in the experiment. The person and the situation clearly indicated two position categories in

each of the experiments, rather than an array of varied responses. Positioning is pervasive; indeed, such is the breadth of the concept that even those attempting to avoid a position are positioning themselves.

The breadth of the concept of positioning, and the importance of the concept for the functioning of a person, is further emphasised by consideration of the role of cognitive processes in supporting personhood and positioning. In so doing, the cognitivist model of information processing is challenged in favour of recent ideas stemming from connectionist understanding of brain function (as described in detail in section 2.11). The cognitivist model is characterised by an input - cognitive state - output model, whereby the function of the state is discerned by the observation of input and output. Researchers following the cognitivist model often seek to discern, or at least assume there is, a state that can ideally be defined in mathematical terms. The state is taken to be largely invariant and it is assumed that the definition of the state provides an explanation of behaviour at various times and in various circumstances. The connectionist alternative assumes output is a conditioned response that varies with circumstance. Conditioning is ongoing, because further adaptation of neural processes occurs with each activation of the process. This suggests that a largely invariant state is an illusion that is generated by a particular way of construing persons and their actions. A summary of the Stanford prison experiment and the Asch and Milgram experiments suggests that the capacity of positioning is a practice common to all circumstances. In the experiments a person performed a function, that of positioning, which involved the exercise of a capacity and the production of a mode of behaviour for the circumstances. The capacity of taking a position appears to be invariant, because it is merely the undertaking of a customary practice for each particular circumstance. A person achieves personhood through a learning process involving the acquisition of a capacity. In addition, the person learns customary ways of exercising this capacity, which become apparent in both customary and novel circumstances. Regularities in data can therefore be attributed to the action being customary in relation to what is common, acceptable or possible, as well as the use of a capacity of the person to integrate these factors into an action.

While it would appear to be a complex task of summarising and integrating information, positioning need not be complex. Essentially it is an acquired skill that in most cases, such as operating in a customary manner in everyday circumstances, may not be readily discerned as operating at all. At times, however, people may be forced into an unusual position in which they must adopt an undesired position. It has been noted that subjects in the Milgram experiment had little time to think, because they were pressured to conform to experimenter demands. This could mean that the capacity to reflect on the situation and their actions was limited.

Wegner and Bargh (1998) have suggested that the difference between those who obeyed and those who objected in the Milgram experiment corresponded with their ideas about either operating under a condition of automatic control or operating under conscious control. In like manner, it is often easier to behave in one's usual mode rather than expending effort in surveying the options towards an optimal outcome. It is also reasonable to assume that time and pressure constrains the capacity to reflect and consider how one is being positioned. This constraint could then cause the person to react in a particular way in a particular circumstance. It is also reasonable to assume that the person takes particular positions out of habit. This does not, however, mean that the act of taking a position involves a complex cognitive function that operates subliminally when used habitually. Positioning is simply an ability or task that a person learns to do, it can be knowingly utilised or be used like a conditioned response. In which case, in keeping with Harré's (1998) standard model of selves (see section 3.2), variables associated with a person's life history, their interpretation of the situation and their mode of behaviour can be shown to be interrelated. Importantly, it is the powers and capacities of the person that brings together personal experience and the situation. The taking of a position is nothing more than a task that a person has been trained to do.

Connectionist understanding of brain function has implications for the interpretation of studies of conformity and obedience and also has implications for the interpretation of attitude-behaviour discrepancies. To consider further the LaPiere study, it would appear that LaPiere's interpretation and conclusions have more credibility when connectionist ideas are considered. LaPiere considered that the predisposition he termed 'attitude' was transient in time and space. In fact, to refer to this 'attitude' as being a predisposition

would be incorrect, because it is not assumed that something as rigid as this preceded and determined behaviour. Instead, LaPiere's notion of attitude was a personal reaction that was integrated with the performance of an action. LaPiere did not believe there was a semi-permanent state bridging questionnaire responses and behaviour. Despite recent attention given to LaPiere's study, he did not actually set out to test attitude-behaviour correspondence, nor did he actually comment upon it.

Taking the connectionist model into account, with hindsight LaPiere's interpretation of his study was quite correct. LaPiere (1934:237) conceptualised what he termed a "social attitude" as "...partially integrated habit sets which will become operative under specific circumstances and lead to a particular pattern of adjustment...". Like the point made in interpretation of the Asch and Milgram experiments, the person brought with them some common modes of behaviour, which in keeping with LaPiere's description, would be adapted to the situation at hand. Modes of behaviour can be likened to LaPiere's "habit sets" but should not be confused with the permanent or semi-permanent constructs of cognitivism. In such law-based explanations the law does not change, but output varies with changes in input. A connectionist understanding of brain function, however, favours the interpretation of occasioned, adaptive responding. The assumption of adaptation, while not made plain by LaPiere, can be understood as the use of the acquired skills involved in the taking of a position.

LaPiere (1934:237) recommended the study of what he termed 'attitude' "...from the study of humans behaving in actual situations.", and added further that: "They must not be imputed on the basis of questionnaire data". Clearly LaPiere thought that the action of answering a questionnaire was different from the social action to which it referred. LaPiere made the differentiation plain by referring to a questionnaire as taking the measurement of a symbolic attitude. Against his criticism of the survey method, LaPiere advocated the study of actual behaviour. Presumably, such research would investigate what he termed "partially integrated habit sets" and "patterns of adjustment" to particular circumstances. Indeed, the Asch and Milgram experiments provide powerful examples of the benefits of behavioural experiments over the survey method, because of the distance between expectations of what would occur and actual behaviour. In addition, as has been shown in this chapter, the results can readily be framed in terms of

people attempting to discern and utilise positions to guide their behaviour, while exercising their abilities to discern and take up a social position.

7.7 Chapter overview

This chapter has provided support for the PAM by developing the idea of persons taking positions as a means of understanding human action. By considering three well known studies in social psychology, a number of points have been made that were either critical of cognitivist interpretations or favoured positioning as an explanation for human action. An important point was that empirical work fails to adequately test the cognitivist conceptualisations of cognitive processes. This means that there is no barrier to alternative conceptualisations that also explain adequately the same empirical findings. Importantly, the connectionist understanding of brain function does not readily support ideas of fixed or semi-permanent constructs proposed by the cognitivist viewpoint. The taking of a position is in keeping with connectionist interpretations of brain function. The taking of a position involves the use of an acquired skill, which serves the person by enabling appropriate actions to be taken for the circumstance. The skill is not complex; it is simply the performance of a social action. Positioning is essentially adapting appropriate modes of behaviour for a particular situation. Such positioning can, therefore, be undertaken knowingly or derive from habit. The person can be aware of what they are doing and may thoughtfully decide to do otherwise. Under pressured circumstances, such as the Milgram experiment, immediate positions are likely to be taken with only limited reflection on the consequences. In the circumstance of the Asch experiment there was little pressure to consider or develop an alternative position. In the Stanford prison experiment positions and modes of behaviour appear to have been made for the circumstance. All of these examples show adaptation to the social circumstances as the participants found them. In hindsight, the positions taken can appear to be contrary to social norms, but such a judgement is from the perspective of the reader and may well be because of a failure to adequately account for the particular circumstances. Importantly, it is apparent that a responsive position is always taken and it can involve reflection on ones' life experience, or alternatively the capacity may be exercised in a habit like manner. Of no less importance, the reactive nature of positioning means that no two actions are necessarily the same. The capacity

for taking a view of one's life experience, changing normative standards, and differences between one circumstance and another means there is always the ever-present possibility of variety in the positions that can be taken.

This chapter completes the task of reinterpreting cognitivist theories as a means of developing the PAM and the position model. Further discussion and overall conclusions are provided in the next chapter.

Chapter Eight

Discussion and conclusion

8.1 Introduction

This chapter begins by providing an overview of the main arguments and findings in the order in which they have been presented. The main arguments and findings are then drawn upon to provide a description of persons as the primary generators of their actions. The methods employed in development of the arguments and findings are then evaluated. Direction is then given to extension of this work using the methods employed in this dissertation, as well as recommendations for undertaking applied research. Implications for theory are then presented by suggesting consideration of the respective merits of this work from the perspectives of ethogenics, cognitivism and social constructionist psychology. In summary, the chapter is reviewed and concluding comments are provided of the work as a whole and the contribution it offers to social psychology.

8.2 Overview of the main arguments and findings

The overall aim of this dissertation was to develop an understanding of the intentional actions of persons, whereby the person was assumed to be the principal unit for analysis. It was noted that predominant cognitivist and social constructionist psychology each respectively disregards the importance of the person in explanations of human action. Ethogenics was noted as one approach that was in keeping with the overall aim, but it was also noted that ethogenics has largely been overtaken by social constructionist psychology. It was then explained that the delineation of persons by social constructionist psychology is currently recognised as an intractable problem. This problem arises because embodiment and materialism cannot be readily supported within a social constructionist perspective. While there is no satisfactory solution, Harré, for one, has consistently attempted to incorporate the person while giving primacy to discourse. This juxtaposition necessarily suggests ambiguity, but provides a useful resource of ideas and argument for a reworking of ethogenics. Principal

The literature review provided a context for the overall analysis and discussion by drawing upon a body of literature relevant to the particular theoretical approach that was developed. At the outset it was clearly identified that the person-centred ethogenic approach had given way to the study of discourse. While much had occurred since the work done on ethogenics in the 1970s, it was argued that recent developments need not have resulted in the shift to discourse. Indeed, having identified the gap between ethogenics and the more recent brand of discursive psychology put forward by Harré and Gillett (1994), a main task of the literature review was to re-establish a person-centred approach. The case for this approach was promoted by expanding upon Harré and Secord's (1972) arguments against cognitivist psychology. These arguments served to promote a person-centred approach by revealing shortcomings of cognitivist social psychology at a philosophical level.

To this end, a number of arguments were put forward against the cognitivist approach. It was shown that modern cognitivist psychology was largely the result of the augmentation of older ideas. Humean causality fails to explain adequately its presumption of causes and effects, and logical positivism has a similar failing. Upon these foundations, cognitivism incorrectly emphasises empirical evidence as the key criteria for assessing the efficacy of theory. This means that the possibilities for theorizing are limited by the need for an immediate fit with empirical evidence. Framed by Humean causality the most obvious explanation is often taken to be the most plausible thus limiting the potential for more creative theorising. Such Newtonian thinking has largely been abandoned in other sciences, because of the restrictions it places on theorising. In physics, for example, Einstein's relativity and Bohr's contribution to enabling nuclear fusion could not have been achieved using the Newtonian method.

A further related problem of the cognitivist approach is that description is given precedence, with causal explanations merely linking observed events. This means that the evidence supporting hypothesised causal processes, adds little to what can be described, is difficult to refute and often involves a circular explanation. Such explanations are of little value, because they fail to enlarge upon what is already known.

Further problems in the form of overconfidence and inaccuracy were also noted, as they extended from the assumption that closed systems are representative of open systems. It was also pointed out that information-processing models fail to account adequately for a person's ability to make their own decisions.

The literature review continued by offering defence of the realist position in philosophy of science. While ultimately it was concluded that there were no absolute grounds for claims of an accessible objective reality, a number of supporting arguments were provided. In particular, it was noted that common criticism of realism is epistemological, because questions are raised about claims of the knowledge of a reality, whereas such questions are not about the actual existence of a reality. Such criticism is inadequate and ineffective, because it attacks the claim of a reality without questioning the existence of a reality. While there is no objective knowledge of reality, it is nonsensical to make claims against an objective reality, when such claims must first presuppose its existence. The discussion of realism also prompted further the consideration of persons as an aspect of that reality, along with the argument that discourse is generated by persons by means of their abilities to perform and understand discursive acts.

Humean causality and unresolved issues of Kantian philosophy that underpinned ethogenics were then addressed by introducing the philosophy of Wittgenstein. Wittgenstein's arguments were subsequently shown to provide grounds for understanding people as active users of a normatively moderated language. A further transformation of ethogenics was then suggested by the replacement of its rule-role model with a model of a person taking a position. This idea was developed from a revision of positioning theory, through the suggestion of a shift in emphasis from the study of discourse to an emphasis on the role that persons have in enabling such conversations.

Showing persons to be skilled in the production of intentional action provided further explanation of the importance of persons. Drawing principally upon the developmental psychology of Vygotsky, it was explained that one's abilities to function as a person result from socialisation and subsequently the acquisition of these abilities enables

meaningful discursive interaction. Further support for this view was then gained by drawing upon recent understanding of brain function. Understanding the brain as functioning in a connectionist manner was shown to have implications for the function of the brain in relation to a person's interaction with the world. Connectionist ideas were taken to suggest that the brain serves the person by producing responses appropriate to the situation at hand. Such ideas show persons have, to a greater or lesser extent, the skills necessary to address the requirements of the situation at hand.

In summary, the literature review performed a number of functions. At the outset, it was identified that while a person-centred approach had been developed in the ethogenics of the 1970s, this had been left aside in favour of a discursive psychology. This shift in emphasis towards the examination of discourse is understandable in terms of the general emphasis given to language and discourse in the 'new paradigm'. However, it is interesting to note that some of the support for the person-centred approach developed in this dissertation has been made by drawing upon recent discourse orientated work. In particular, this dissertation has given emphasis to the work of Harré, in some cases by reworking recent material on discourse and in others by drawing upon earlier work that gave emphasis to persons. The literature review therefore served to identify a gap in the literature and proceeded to develop a new person-centred approach to understanding social behaviour.

A further function of the literature review was to make room for new ideas against the backdrop of the predominant cognitivist approach in psychology and social psychology. In a similar manner to that of Harré and Secord's (1972) development of ethogenics, the practical and philosophical underpinnings of cognitivism were questioned, while developing the alternative person-centred approach. Subsequently, these points of criticism also served as a resource for the subsequent task of interrogation and reinterpretation of cognitivist approaches and models in the subsequent analytical chapters. The critical aspects of the literature review therefore served to prompt consideration of alternative ideas, while providing resources for further criticism of cognitivist work.

While developed in the literature review, the person action model (PAM) was introduced in a separate chapter. The PAM assumptions and propositions were detailed and the model was extended from the arguments developed in the literature review. Briefly, the PAM holds that regularities in data extend from the actions of persons and are held to arise from the use of learned skills and abilities. A point of note was the emphasis given to testing the PAM using quantitative methods. Such methods are not common in the 'new paradigm' work of social constructionist and discursive psychologists. Despite fundamental differences between the PAM and the cognitivist approach, it was shown that both can readily interpret quantitative data. Attention was also given to issues of veracity and the meaning of responses. In addition, the nature of theorizing with regard to the PAM was explained. The chapter therefore served to formally state the model and dealt with a number of issues of relevance to application of the model.

The next chapter was the first of four chapters involving the reinterpretation of cognitivist-based research in social psychology. The purpose of these chapters was to interrogate the cognitivist approach further and by reinterpretation to sequentially develop the PAM. The overall aim was to show the PAM to be a valid replacement for cognitivist approaches.

The first of the reinterpretations began with a description of the theory of planned behaviour (TPB). The TPB was introduced as a well-supported cognitive model of attitudes. Notwithstanding this status, a number of researchers have questioned the TPB regarding its assumption of complex decision-making and ability to incorporate all relevant variables in these decisions. It was noted that the TPB compares respondent decision-making to an idealised decision-making process and that other models of greater or lesser complexity have been proposed in the literature. In addition, it was shown that the definitions of the constructs proposed by the TPB were not clearly stated and in some cases the proposed constructs were explained as operating differently in different applications. It was then shown that when judged against Humean criteria for ascribing causal relations, which the TPB can be shown to rely upon, the TPB failed to meet fully these criteria. It was suggested that the causal ordering of TPB components was reliant upon a common mode of conceptualisation, rather than causality being an

empirically informed arrangement. The argument that TPB components are logically rather than causally connected was then discussed. In summary, this argument holds that TPB components are correlated primarily because they are necessary components in the definition of action (Greve, 2001). The explanation and prediction of action by extrapolation of necessary components using causal assumptions raises seriously issues of circularity and the ability to falsify. An interpretation by Smith (1999; 2000) using the 1970s ethogenic rule-role model was then summarised. Using the ethogenic model, TPB data was interpreted as the sorts of things people might say about a particular action. In summary, the chapter presented the strengths of the TPB, as well as criticism from a variety of perspectives.

The examination of the TPB continued in chapter five which was designed to provide an original contribution to criticism of the TPB, while developing further the PAM. An examination of the procedure for questionnaire development took issue with the interpretation of beliefs as steps in personal decisions. In contrast, it was shown that statements of beliefs are most likely post hoc assessments made by respondents in light of a position on the target behaviour of the TPB questionnaire. Investigation of the internal correspondence or degrees of ambiguity in TPB data showed that respondents exhibiting less ambiguity are less likely to change their responses over time than those with comparatively more ambiguity. These results questioned further the validity of ascribing causal relationships. In addition, based on empirical evidence it was argued that degrees of ambiguity reflected the nature of a general disposition. The disposition being the position a person takes when answering a questionnaire regarding their performance of a target behaviour. In summary, this chapter questioned further the TPB and added support for the PAM by showing that TPB responses are likely to be post hoc assessments made by respondents in light of a position taken on the target behaviour.

On the basis of the examination of the TPB, the elaboration likelihood model (ELM) was then analysed in a similar manner. The purpose was to develop a position model as a sub-model of the PAM for the purpose of explaining the actions of persons in relation to persuasive messages. To begin with, the ELM was criticised along similar lines to those pursued in relation to the TPB, with a detailed description of the model and a summary of current criticisms. These criticisms revealed that despite standard

interpretations of the ELM, the model is best considered a descriptive model because of issues of circularity and falsification. The position model was then developed by drawing upon the literature review and findings of the previous chapter related to positioning. The ELM was then questioned further, through an examination of its postulates. It was noted that the language of positioning was already in use in ELM related literature. In addition, argument was presented to differentiate the position model from positioning theory. By means of the position model the phenomena associated with attitude change and persuasion were interpreted descriptively as the actions of persons taking a position. The chapter served the purpose of developing the PAM and provided new direction to explaining the actions of persons.

To more fully extend the PAM, three well-known experiments of relevance to social psychology were then described, criticised and reinterpreted. More specifically, the purpose was to develop further the position model as a means of understanding human action, through consideration of experiments that dealt with specific aspects of human behaviour. The historic studies by LaPiere (1934), Asch (1951) and Milgram (1963) were reviewed along with examples of recent interpretations of these studies and points of criticism of these interpretations. A point of interest was that while the studies are often taken to be unusual, it was shown that they could be explained more straightforwardly using the position model. An important conclusion from examination of the three studies was that recent cognitivist interpretations failed to expand upon the original descriptive interpretations. This meant that there is no barrier to proposing alternative conceptualisations that also explain adequately the same empirical findings. At this point the opportunity was taken to discuss the implications of connectionist models of brain function, as they relate to the taking of a position. Connectionist ideas were shown to integrate well with the position model. In addition, emphasis was also given to the acquired abilities involved in the action of taking a position. It was also concluded that positioning can involve the taking of a recognised position, or can involve the creation of a new set of norms for behaviour.

8.3 Persons as the primary generators of action

In summary, persons can be understood as the primary generators of their actions. A part of this understanding is that the person's brain is also aligned to the skilled production of intentional action. Such action involves the use of acquired skills and these skills are employed to create a response for the purpose at hand. In the face of evidence that the brain is a massive processor as opposed to being a storage device, learning is a process involving the training of neural processes, whereby stimuli prompt an action without reference to an internal object or 'thing'. The production of a response, such as the statement of a belief, for example, does not involve the retrieval of belief from memory. The belief statement is instead the end product of a creative process. The belief can then be said to be occasioned, because the conditioned process necessary for its production does not actually contain a replica of the belief. When the training of brains is considered in terms of the training of neural processes, the production of belief statements or other human actions are readily amenable to further training. It is assumed that the practice of expressing a belief in a social context is learnt, which involves the tasks of drawing upon personal experience and reviewing the nature of the situation at hand to produce a socially and personally appropriate response. Responsive adaptation is therefore an expectation, given variations in the day-to-day experience of life.

The developmental psychology of Vygotsky incorporates a process of social conditioning whereby the child learns an initial schema for action involving the acquisition of personal skills for adaptation, such as the ability to reflect and take a different viewpoint. The philosophy of Wittgenstein complements this proposal by providing a view of the trained person as the user of language and interpreter of meaning, who is actively involved in the production of normatively moderated actions. Whereas Vygotsky provided an explanation of the acquisition of the skills for functioning as a person, Wittgenstein drew attention to the use of these skills in everyday behaviour. It was envisaged that the person was adaptive and able to make their own plans, so as to carry out their own projects, while being responsive and reactive to the world.

Moving to consider the more detailed interpretation of action, an action in the context that has been developed is understood as a momentary event produced by a person with reference to the situation at hand. The action is understood as being made for that moment. Only the means for its production can be taken to be enduring and these means are essentially the skills and abilities of the person. The action may be similarly performed at a later time, given that the circumstances of the action are the same and no modification of the process for production of the action has occurred. Given additional stimulation the process will change, the person will adapt and the action will requisitely be modified.

Given that a person has the abilities to understand a situation and reflect upon their personal experience, understanding a particular action would seem to require access to either the pathways trained by prior experience in a person's brain or, as a proxy, the events that conditioned them. Given no access to neurological processes, it could be possible and useful to examine key elements of life experience as a crude means of understanding conditioning processes. Similarly, factors that can reasonably be associated with affecting subsequent action could also be identified. In this way the habitual criminal, for example, could be understood in terms of their impoverished background and could be expected to offend again without the help of a reform programme. Such a process can be warranted under the PAM, but the example of the criminal deals with a passive person and fails to expose or capitalise on the understanding of a person as an active being.

The promoted alternative involves utilising the 'taking of a position' as an analogous model for the purpose of framing and understanding the actions of a person. The position model brings structure and richness to the study of persons and their actions by emphasising the role and power of persons, within the tenets prescribed by the positioning concept. Indeed, positioning is already well known as a general term for explaining the intentional actions and relative stances taken by persons. While a broad concept, its elements can nevertheless be sequentially identified and accounted for. At this level, the position model can provide detail sufficient to both target persons amenable to change and prescribe an effective means of promoting change. When used to identify strategies for promoting change, the position model suggests that change

occurs in a climate of debate with negotiation being a primary means of intervention and empathy being the means of understanding subject positions.

Empathy means attempting to understand with the knowledge that one cannot fully know the position of the subject. Empathy also entails the assumption that the researcher also has a position that colours their understanding of the position of the subject. The PAM therefore prompts reflexivity, which means that the target can change with reflection on one's own viewpoint, and the model also recognises that complete understanding of a phenomenon is impossible. Reflexivity is not hidden in the PAM, but is part and parcel of the PAM, much like the way indeterminacy is part of everyday life. The person operates from a position arrived at via life experience. This position can be appreciated, but can never be known fully by another. The knowledge of another can only be partial and one's own viewpoint inevitably intervenes.

A further positive aspect of the PAM is that, unlike studies that attempt to project results from an isolated study more widely, the explanation is linked to the immediate context, because action is taken to be occasioned. Persons are, nevertheless, understood as an enduring key factor in the translation and transformation of meaning and perform these functions by means of acquired skills. These skills are necessary requirements to be a person, so are assumed to be commonly held and to transcend performances of action. Unlike the discursive analysis of a conversation, the focus is on the speaker and the skills he or she brings to a conversation.

In this context, conversations are sustained by the intentional actions of persons and can therefore be regarded as meaningful. Such meaning is denied by discursive and social constructionist psychology where meaning is merely a functional aspect of ways of speaking. Giving prominence to the person assumes or recognises that persons are necessarily caught up in sustaining and maintaining social processes, while they are themselves a product of these processes. Nevertheless, the role of the person is expanded upon when personal experience and the skills and attributes necessary to be a person and engage in conversation are recognised. Such factors are arguably necessary, not only for the maintenance of the conversation, but also for the ever changing and adaptive views and viewpoints that make the human story possible.

8.4 Evaluation of method

The PAM was developed from a review of the literature and was subsequently given significance by means of the critical reinterpretation of selected prominent theories and studies in social psychology. The method served to show that the PAM avoided a number of fundamental problems associated with the contemporary study of social psychological phenomenon. These problems included the difficulty of ascribing causal relationships, the circularity of explanations, the inability to falsify hypotheses and theoretical propositions, and the failure to expand or improve upon purely descriptive accounts. The solution offered by the PAM relies upon a reconceptualisation of human action. The method therefore served to reveal that the new approach overcomes a number of serious intractable problems, by providing a new perspective and framework for understanding and explaining human action.

As part of the planned approach, the TPB and the ELM were selected for attention because of their respective prominence in different, but related, topic areas. The studies by LaPiere, Asch and Milgram are not in themselves representative of major areas of cognitive social psychology, but were selected so as to develop further particular aspects of the PAM. While the approach could be criticised as selective and partial, if anything, the selection was based on the prominence of these models and the extent of research and theory-building that they have generated. That is, they were selected primarily because of their 'established' status as well-founded models and areas of research, rather than because of any privileged susceptibility to reinterpretation they might be thought to possess.

A further point of criticism may concern a presumed lack of generalisability of the reinterpretations, because the criticisms were developed with respect to particular cognitivist theories. Cognitivist theories vary, for example, in the degree of reliance on causal assumptions. For example, the TPB was shown to rely strongly on causal assumptions, whereas such assumptions have a less prominent role in the ELM. Nevertheless, cognitivism involves the conceptualisation of cognition as being causally related to behaviour. This means that assumptions about the nature of these supposed processes can be questioned for the discipline as a whole, as well as for particular

theories of a cognitivist style. In addition, the charge of circularity, falsification and failure to expand upon descriptive explanations has already been convincingly argued to be endemic to cognitivism (e.g., Wallach & Wallach, 2001a). In this context, the critical reinterpretations have usefully served to give further confirmation to what has already been surmised, and it is suggested that, therefore, the criticisms that were made are in fact generalisable to other cognitivist theories.

8.5 Directions for further research

The planned approach functioned well in developing models that give primacy to persons. Consequently, further research along similar lines for the purpose of exploring the potential of positing persons as the principal unit for analysis would be of considerable research interest. A point to note is that the position model was presented as a sub-model of the PAM so as not to obviate the possibility of the development of other useful analogies that could serve to assist in explaining the actions of persons. More specifically, given that the position model reworked the discourse orientated positioning theory, it would seem that similar treatment could be usefully applied to the treatment of other concepts. As an example, the discursive psychology promoted by Edwards and Potter (1992) describes expressions of attitude as being rhetorical in relation to the immediate conversation. This means that a rhetorical attitude is amenable to reinterpretation as something that is purposefully said by a person. The study of the use of expressions of attitude would appear to be another area for investigation for explaining further the intentional actions of persons.

The analysis suggests a number of avenues for applied research as well as a particular overall style of investigation. Consideration of the conformity and obedience studies suggested that the taking of a position was influenced by (i) immediate pressure to conform or to obey; (ii) pressure to take a committed position; (iii) time constraints on the consideration of other alternative positions; and (iv) the availability of recognisable positions, given that a position can be generated for the occasion. Such factors can be considered to be context effects and the usual approach of cognitivist researchers has been either to avoid or account for such effects. Given the alternative of a person exercising their personal abilities to take a position, the person is understood to react to

'context effects', because the taking of a position is occasioned. A person can be understood as generally acting in an habitual or customary manner. When faced with a novel situation a person may well ask him or herself 'What should I do?'. Such a prompt would seem to invoke the practice of drawing upon life experience and the taking of a viewpoint on oneself and a viewpoint on the situation at hand. It is this process that is integral to the taking of a position, which should prompt the researcher to identify with, and attempt to understand, the subject's viewpoint and experience.

The reinterpretation also suggested a number of procedures for studying persons and their actions. In general, the reasons given for an action can be quantified and interpreted as the kinds of things people say in relation to their performing or not performing the action. More specifically, clear statements of commitment can be used as proxy measures of action. The interpretation of correspondence assumes that a statement of intention is an expression of personal commitment, which invokes a moral bind that may or may not, for various reasons, lead to action. Focusing on commitment, it would be useful to refine expectations of action by discerning the strength of commitment, or to take into account the veracity of the statement of commitment. In terms of indicating strength of position, the study undertaken in the reinterpretation of TPB data of the relationship between ambiguity and stability over time suggests strongly that an intention backed by a cohesive position should be more correspondent with action than a single measure of intention. The encouraging empirical results that supported this analysis suggest further development and refinement of these relationships would be particularly worthwhile in discerning the resolve of a person and would usefully contribute further to refining expectations of action.

In the reinterpretation of the ELM, the idea of a person taking a position explained well the actions of persons in developing, promoting and defending their views. This means that empirical work that has informed the ELM could usefully be co-opted to the study of positions and positioning. In particular, the position model suggests understanding the taking of a position as involving an argument, or a deliberative process, involving negotiation and the discussion of supporting and opposing arguments. In this context, all actions and arguments that constitute a position can be debated within the somewhat indeterminate boundaries of rights, duties and obligations. Ultimately, the studying of

positions and positioning involves the gathering of information towards identification with, and the understanding of, positions and positioning. Such information would include the positions that are available, the attributes associated with people who normally take those positions, the arguments associated with these positions and the strength of these positions in terms of their resistance to persuasion.

Overall, a style of research is suggested that gives emphasis to 'empathising' with the subject as a means of understanding the positions they would take. This involves forming an understanding of the cultural background from which a person acts, as well as their particular viewpoints on particular situations. In this context, words and actions are personal resources for acting in keeping with a position taken on a social issue. This means that recommendations to change a person's actions should centre on changing a person's position. Direction has been given to discerning the nature and strength of the position taken, which has also indicated that change would occur by a process of inviting change by appealing to the person through argument and negotiation. Interestingly, this supports a democratic decision-making process, rather than a technical expertise-based one.

8.6 Implications for theory

The PAM has a family resemblance to ethogenics and some of the more recent works of Harré. The PAM is nevertheless distinguishable from these works and was developed for the purpose of adding weight to the study of persons, as one would normally encounter them in everyday life. A surprising result from the initial discussion of the study of persons in the introduction was that such a quest is likely to be a lonely activity. Ethogenics was once popular, but has largely been overtaken by the language orientated social constructionists and, similarly, Harré, its principal proponent, has himself moved in this direction. A further complication for comparing the PAM with other prospective family members is that the PAM itself leans away from ethogenics towards social constructionism. Concern with the use of language, prompted in part by consideration of the work of Vygotsky and Wittgenstein, was not part of the original ethogenic plan.

Nevertheless, the interest of the ethogenic researcher could possibly be drawn to the position model as an alternative to the rule-role model. Indeed, the position model sits closer to the rule-role model than the discourse orientated positioning theory. In this regard, the position model offers the ethogenic researcher the opportunity of a more detailed view of the actions of persons. This replacement of one model with another would not necessarily entail a shift in the ethogenic researcher's presumptions about persons.

The other close relation is the more recent social constructionist psychology of Harré and his associates. These researchers are likely to be very interested in the way some of their work has been turned to support the PAM. These social constructionist psychologists are nevertheless likely to have difficulty in reconciling themselves to the realist grounding of the PAM. As was noted in the introduction, Harré and his associates have not denied entirely the role of the person, but give greater emphasis to persons as social constructions. At present there is no clear way of reconciling the person as social construction and the person as an embodied being. For the purposes of this project it has been assumed that the person is a functional person, who could not be defined as such without demonstrating that they can perform certain tasks. Such a person is conditioned and trained into the local way of being a person and while his or her life experience is not readily accessible, the use of acquired skills within normative constraints has been shown to be amenable for study. For social constructionist psychology this work offers a different perspective by showing the person as a 'thing' or regularity within a socially constructed world.

This work has been particularly critical of cognitivist psychology and has argued that cognitivist work in general has poor foundations. The critical evidence and argument that has been presented suggests a reconsideration of what the data of many social psychological experiments actually reveal. The proposition that regularities represent the actions of agents has been shown to be a ready alternative interpretation that avoids problems inherent in the cognitivist approach. Despite these imperatives, cognitivism remains dominant and has shown itself to be resilient despite crisis and criticism. Nevertheless, if cognitivist research was to shift towards social constructionist psychology the PAM offers familiar methods. Indeed, as the reinterpretation of the

ELM suggested, the skills and practices of the cognitivist researcher can readily be turned to the application of the new model. Although there are fundamental differences in terms of what the data mean, the reinterpretation demands a conceptual revision without a radical change in method and practice. Immediate gains would be the avoidance or repair of problems associated with cognitivism. Immediate losses would involve the admission that behaviour cannot be controlled. Persons can be understood as normatively trained generators of action who operate within normative boundaries, but the actions of persons are all that can realistically be observed. The process can be understood, but the empirical evidence depends upon the skilled production of an action. Prediction is therefore relegated to expectation, given some idea of life experience, prior behaviour and the demands of the situation. Expectations of ultimately being able to control behaviour are therefore curtailed with the realisation that one can only gain an empathic understanding of the position from which the person acts. This does not mean that good work cannot be done towards understanding action, but it clearly means that the practice of isolating key determinant variables for directly modifying behaviour is inefficient. The recognition of agency means the person must be convinced, rather than forced or manipulated to undertake an alternative course of action or embrace a new point of view.

Cognitivists have the tools and skills for the investigation of patterns in data that can similarly be employed in a PAM investigation. To utilize the PAM, however, cognitivists must recognize problems inherent in their approach and take up a new interpretation of what the data mean. Such a shift in thinking would be challenging, but it can be argued that the fit of the PAM with everyday life is likely to make the new model appealing. By encouraging reflexivity and advocating an empathic style of understanding, the PAM suggests the consideration of one's own position, as well as oneself as functioning as a person. Such private validity cannot be readily found in the 'individual' of cognitivism or the 'person' that is simply a word with meaning as is currently assumed in social constructionist theory.

8.7 Chapter summary and conclusion

This final chapter began with an outline of the main arguments and findings of this dissertation. The development and application of the PAM and the position model have been described. It has also been shown that the work has extended from existing arguments and ideas, through to recommendations for doing practical work in understanding persons and their actions in social situations. The reinterpretation of cognitivist interpretations was shown to serve the functions of questioning the cognitivist approach, while serving to frame the PAM as a valid alternative by sequentially responding to the problems of cognitivism. Recommendations for further work using the PAM have included further critical reinterpretation of applications of the cognitive approach. In addition, further consolidation of the PAM is expected through the undertaking of applied work to investigate persons and their role in shaping social issues. Contribution to theory was then considered in terms of the acceptability of the PAM to ethogenics, social constructionist psychology and cognitivism.

The PAM has elements in common with each of these approaches, but because of its distinct position between ethogenics and social constructionist psychology and it having a common method with cognitivism, the PAM is likely to be neither subsumed nor wholly accepted by these three disparate approaches. Cognitivists are likely to find the ideas and arguments very challenging, ethogenicists may consider using the position model and social constructionist psychologists might consider the PAM a desirable end that they cannot plainly accommodate.

To conclude, the PAM was developed in the style of ethogenics while being selectively resourced by useful arguments from social constructionist psychology. At the outset, the aim to develop a person-centred psychology was framed against the present inability of social constructionist psychology to conceptualise adequately the person as a credible being. This work has argued for a reality where persons are skilled interpreters of meaning and skilled users of language with these activities enabled or resourced by discourse. Conceptualisation of this reality has been encouraged through the critical reinterpretation of cognitivist theories and interpretations of the actions of persons. The PAM and the position model have been shown to be supported by hypothesis testing

and, more crucially, to address serious problems regarding the cognitivist positing of an unseen realm of states, dispositions and drives. The new descriptive understanding of intentional action that has been developed is presented as useful, by giving direction to the design of an efficient strategy to effectively negotiate with the agentic individual. The work thus extends from conceptualisation to application and invites judgement, not only on the soundness of theory, but also on the clarity found in application and the utility of the explanation. In light of the beginnings of a workable social psychology of persons offered in this work, it would seem that the reality we person's experience is a logical premise as well as a logical conclusion.

References:

- Ajzen, I. (1989). Attitude structure and behaviour. In A. R., Pratkanis, S. J. Breckler & A. G. Greenwald (Eds.), *Attitude structure and function* (pp. 241-275). New Jersey: Lawrence Erlbaum Associates.
- Ajzen, I. (1991). The theory of planned behaviour. *Organisational Behaviour and Human Decision Processes*, 50, 179-211.
- Ajzen, I. (1992). Persuasive communication theory in social psychology: A historical perspective. In M. J. Manfredo (Ed.), *Influencing human behaviour: Theory and applications in recreation, tourism, and natural resources management* (pp. 1-29). USA: Sagamore Publishing.
- Ajzen, I. (2002). Constructing a TPB questionnaire. www.unix.oit.umass.edu/~ajzen (14 Aug. 2002).
- Ajzen, I. & Fishbein, M. (1980). *Understanding attitudes and predicting social behaviour*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Allport, G. W. (1935). Attitudes. In C. Murchison (Ed.), *A handbook of social psychology* (pp. 798-844). Worcester, MA: Clark University Press.
- Andreasen, A. R. (1995). *Marketing social change: Changing behaviour to promote health, social development and the environment*. San Francisco: Jossey-Bass Publishers.
- Anscombe, G. E. M. (1963). *Intention*. (2nd Ed.). Oxford: Blackwell.
- Armitage, C. J. & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British Journal of Social Psychology*, 40, 471-499.
- Aronson, J. L., Harré, R. & Way, E. C. (1995). *Realism rescued: How scientific progress is possible*. London: Open Court.
- Asch, S. E. (1951). Opinions and social pressure. *Scientific American*, 193, 31-35.
- Asch, S. E. (1952). *Social psychology*. New York: Prentice-Hall.
- Babbie, E. (1995). *The practice of social research* (7th Ed.). Belmont, CA: Wadsworth Thomson Learning.
- Babbie, E. (2001). *The practice of social research* (9th Ed.). Belmont, CA: Wadsworth Thomson Learning.
- Banyard, P. & Hayes, N. (1994). *Psychology: Theory and application*. London: Chapman and Hall.

- Baron, J. (1988). *Thinking and deciding*. Cambridge: Cambridge University Press.
- Beck, L. & Ajzen, I. (1991). Predicting dishonest actions using the theory of planned behaviour. *Journal of Research in Personality*, 25, 285-301.
- Bhaskar, R. (1975). *A realist theory of science*. Leeds: Leeds Books.
- Bhaskar, R. (1989). *The possibility of naturalism: A philosophical critique of contemporary human sciences* (2nd Ed.). London: Harvester Wheatsheaf.
- Biddle, B. J., Bank, B. J. & Slavings, R. R. L. (1987). Norms, preferences, identities and retention decisions. *Social Psychology Quarterly*, 50, 4, 322-337.
- Billig, M. (1987). *Arguing and thinking: A rhetorical approach to social psychology*. New York: Cambridge University Press.
- Blass, T. (1991). Understanding behavior in the Milgram obedience experiment: The role of personality, situations, and their interactions. *Journal of Personality and Social Psychology*, 60, 398-413.
- Blass, T. (1992). The social psychology of Stanley Milgram. *Advances in Experimental Social Psychology*, 25, 277-328.
- Blass, T. (1996a). Attribution of responsibility and trust in the Milgram obedience experiment. *Journal of Applied Social Psychology*, 26, 17, 1529-1535.
- Blass, T. (1996b). The Milgram obedience experiment: Support for a cognitive view of defensive attribution. *Journal of Social Psychology*, 136, 3, 407-410.
- Bredahl, L. (1999). Consumers' cognitions with regard to genetically modified foods: Results of a qualitative study in four countries. *Appetite*, 34, 3, 343-360.
- Bredahl, L. (2001). Determinants of consumer attitudes and purchase intentions with regard to genetically modified foods: Results of a cross-national survey. *Journal of Consumer Policy*, 24, 23-61.
- Brenner, M. (1982). Actors' powers. In M. von Cranach & R. Harré (Eds.), *The analysis of action* (pp. 213-231). Cambridge: Cambridge University Press.
- Burkitt, I. (1999). Between the light and the dark: Power and material contexts of social relations. In D. J. Nightingale & J. Cromby (Eds.), *Social constructionist psychology: A critical analysis of theory* (pp. 69-82). Philadelphia: Open University Press.
- Burkitt, I. (2001). Multiple and singular selves (review of Rom Harré's *The Singular Self: An Introduction to the Psychology of Personhood*). *Theory and Psychology*, 11, 3, 445-447.

- Bushman, B. J. (1984). Perceived symbols of authority and their influence on compliance. *Journal of Applied Social Psychology*, 14, 501-508.
- Camacho, C. J., Higgins, E. T., & Luger, L. (2003). Moral value transfer from regulatory fit: What feels right is right and what feels wrong is wrong. *Journal of Personality and Social Psychology*, 84, 3, 498-510.
- Carbaugh, D. (1995). Decision-making. In R. Harré & P. Stearns (Eds.), *Discursive psychology in practice* (pp. 137-164). London: Sage.
- Chiaken, S. (1980). Heuristic versus systematic information processing and the use of source versus message cues in persuasion. *Journal of Personality and Social Psychology*, 39, 752-766.
- Chiaken, S. (1987). The heuristic model of persuasion. In M. P. Zanna, J. M. Olsen, & C. P. Herman (Eds.), *Social influence: The Ontario symposium* (Vol 5, pp. 3-39) Hillsdale, NJ: Erlbaum.
- Cheng, P. W. (1997). From covariation to causation: A causal power theory. *Psychological Review*, 104, 2, 367-405.
- Conner, M. & Armitage, C. J. (1998). Extending the theory of planned behaviour: A review and avenues for further research. *Journal of Applied Social Psychology*, 28, 15, 1429-1464.
- Conner, M. & Sparks, P. (1995). The theory of planned behaviour and health behaviours. In M. Conner & P. Norman (Eds.), *Predicting health behaviour* (pp. 121-163). Buckingham: Open Court Press.
- Cook, A. J., Fairweather, J. R. & Campbell, H. R. (2000). *New Zealand farmer and grower intentions to use genetic engineering technology and organic production methods*. Research Report No. 243, Agribusiness and Economics Research Unit, Lincoln University.
- Cook, A. J. & Fairweather, J. R. (2003). *Change in New Zealand farmer and grower attitudes towards gene technology: Results from a follow up survey*. Research Report No 258, Agribusiness and Economics Research Unit, Lincoln University.
- Costall, A. (1995). Socializing affordances. *Theory and Psychology*, 5, 4, 467-482.
- Crick, F. (1994). *The astonishing hypothesis: The scientific search for the soul*. New York: Touchstone.
- Cromby, J. & Nightingale, D. J. (1999). What's wrong with social constructionism? In D. J. Nightingale & J. Cromby (Eds.), *Social constructionist psychology: A critical analysis of theory* (pp. 1-21). Philadelphia: Open University Press.

- Cromby, J. & Standen, P. (1999). Taking ourselves seriously. In D. J. Nightingale & J. Cromby (Eds.), *Social constructionist psychology: A critical analysis of theory* (pp. 141-157). Philadelphia: Open University Press.
- Davis, B. & Harré, R. (1990). Positioning the discursive production of selves. *Journal for the Theory of Social Behaviour*, 20, 43-63.
- Davis, B. & Harré, R. (1999). Positioning and personhood. In R. Harré, & L. van Langenhove (Eds.), *Positioning theory* (pp.32-53). Oxford: Blackwell.
- DeCarvalho, R. J. (1991). *The founders of humanistic psychology*. New York: Praeger.
- de Jong, H. L. (1995). Ecological psychology and naturalism. Heider, Gibson and Marr. *Theory and Psychology*, 5, 2, 251-269.
- Dennett, D. C. (1978). *Brain storms: Philosophical essays on mind and philosophy*. Montgomery, Vt: Bradford Books.
- Dennett, D. C. (1982). Mechanism and responsibility. In C. Watson (Ed.), *Free will* (pp. 150-173). Oxford: Oxford University Press.
- Dennett, D. C. (1996). *Kinds of minds: Toward an understanding of consciousness*. New York: Basic books.
- Dennett, D. C. (1998). *Brainchildren: Essays on designing minds*. Massachusetts: The MIT press.
- Dockey, T. M. & Bedien, A. G. (1989). "Attitudes vs actions": LaPiere's (1934) classic study revisited. *Social Behavior and Personality*, 17, 1, 9-16.
- Eagly, A. H. & Chiaken, S. (1993). *The psychology of attitudes*. Fort Worth: Harcourt Brace Jovanovich.
- Eagly, A. H. & Chiaken, S. (1998). Attitude structure and function. In D. T. Gilbert, S. T. Fiske & G Lindzey (Eds), *The handbook of social psychology* (4th Ed.) (pp. 269 -323). New York: McGraw-Hill.
- Earl, P. (1986). *Lifestyle economics: Consumer behaviour in a turbulent world*. Sussex, England: Wheatsheaf Books.
- Egerton, M. (1995). Emotions and discursive norms. In R. Harré & P. Stearns (Eds.), *Discursive psychology in practice* (pp. 184-193). London: Sage.
- Edwards, W. (1989). Toward the demise of economic man and economic woman: Bottom lines from Santa Cruz. In W. Edwards (Ed.), *Utility theories: Measurements and applications* (pp. 253-271). Massachusetts: Kluwer.
- Edwards, D. & Potter, J. (1992). *Discursive psychology*. London: Sage.

- Edwards, D. Aschmore, M. & Potter, J. (1995). Death and furniture: The rhetoric, politics and theology of bottom-line arguments against relativism. *History of the Human Sciences*, 8, 2, 25-49.
- Elms, A. C. (1995). Obedience in retrospect. *Journal of Social Issues*, 51, 21-31.
- Farr, R. M. (1996). *The roots of modern social psychology*. Oxford: Blackwell.
- Fazio, R. H. (1986). How do attitudes guide behaviour? In R.M. Sorrento & E. T. Higgins (Eds.), *The handbook of motivation and cognition: Foundations of social behaviour* (pp. 204-243). New York: The Guilford Press.
- Fazio, R. H. (1989). On the power and functionality of attitudes: The role of attitude accessibility. In A. R. Pratkanis, S. J. Breckler & A. G. Greenwald (Eds.), *Attitude structure and function* (pp. 153-181). Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Fazio, R. H., Chen, J., McDonel, E. C. & Sherman, S. J. (1982). Attitude accessibility, attitude behaviour consistency, and the strength of object-evaluation consistency. *Journal of Experimental Social Psychology*, 18, 339-357.
- Fazio, R. H., Powell, M. C. & Herr, P. M. (1983). Toward a processing model of the attitude behaviour relation: Accessing ones attitude upon mere observation of the attitude object. *Journal of Personality and Social Psychology*, 44, 723-735.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Evanston, IL: Row, Peterson.
- Festinger, L. (1964). Behavioural support for opinion change. *Public Opinion Quarterly*, 28, 404-417.
- Fishbein, M. & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, Mass.: Addison-Wesley.
- Fisher, H. (1999). Postmodern agency: You can show it; not own it. *Theory and Psychology*, 9, 1, 103-112.
- Fletcher, G. J. O. (1996). Realism versus relativism in psychology. *The American Journal of Psychology*, 109, 3, 409-415.
- Foucault, M. (1978). *The history of sexuality* (translated by R. Hurley). New York: Vintage Books.
- Frey, B. S. (1986). Economists favour the price system: Who else does? *Kyklos*, 39, 537-563.
- Fugelsang, J. A. & Thompson, V. A. (2000). Strategy selection in causal reasoning: When beliefs and covariation collide. *Canadian Journal of Experimental Psychology*, 54, 1, 15-32.

- Gesn, P. R. & Ickes, W. (1999). The development of meaning contexts for empathic accuracy: Channel and sequence effects. *Journal of Personality and Social Psychology*, 77, 4, 746-761.
- Gibson, J. J. (1979). *The ecological approach to visual perception*. Boston: Houghton Mifflin.
- Goffman, E. (1959). *The presentation of self in everyday life*. New York: Allen Lane.
- Gorsuch, R. L. & Ortberg, J. (1983). Moral obligation and attitudes: Their relation to behavioural intentions. *Journal of Personality and Social Psychology*, 44, 5, 1025-1028.
- Goldvarg, E. & Johnson-Laird, P. N. (2001). Naïve causality: A mental modal theory of causal meaning and reasoning. *Cognitive Science*, 25, 565-610.
- Greve, W. (2001). Traps and gaps in action explanation: Theoretical problems of a psychology of human action. *Psychological Review*, 108, 2, 435-451.
- Greenwald, A. G. (1975). On the inconclusiveness of "crucial" cognitive tests of dissonance versus self-perception theories. *Journal of Experimental Social Psychology*, 11, 490-499.
- Greenwood, J. D. (1989). *Explanation and experiment in social psychological science: Realism and the social constitution of action*. New York: Springer-Verlag.
- Greenwood, J. D. (1992). Realism, empiricism and social constructionism: Psychological theory and social dimensions of mind and action. *Theory and Psychology*, 2, 2, 131-151.
- Hamilton, M. A., Hunter, J. E. & Boster, F. J. (1993). The elaboration likelihood model as a theory of model formation: A mathematical analysis. *Communication Theory*, 3, 1, 50-64.
- Harré, R. (1971). Joynson's dilemma. *Bulletin of the British Psychology Society*, 24, 115-119.
- Harré, R. (1981). Philosophical aspects of the micro-macro problem. In K. Knorr-Cetina & A.V. Cicourel. (Eds.), *Advances in social theory and methodology: toward an integration of micro- and macro-sociologies* (pp. 139-161). Boston: Routledge & Kegan Paul.
- Harré, R. (1983). *Personal being: A theory for individual psychology*. Oxford: Blackwell.
- Harré, R. (1986). *Varieties of realism*. Oxford: Blackwell.
- Harré, R. (1991). *Physical being: A theory for corporeal psychology*. Oxford: Blackwell.

- Harré, R. (1992). What is real in psychology: A plea for persons. *Theory and Psychology*, 2, 2, 153-158.
- Harré, R. (1995a). Agentive discourse. In R. Harré & P. Sterns (Eds.), *Discursive psychology in practice* (pp. 120-137). Sage: London.
- Harré, R. (1995b). The necessity of the person as embodied being. *Theory and Psychology*, 5, 3, 369-373.
- Harré, R. (1997). Fitting the body to the mind: Cognitive tasks and somatic tools. *American Behavioural Scientist*, 40, 6, 798-812.
- Harré, R. (1998). *The singular self: An introduction to the psychology of personhood*. London: Sage.
- Harré, R. (2000). Varieties of theorizing and the project of psychology. *Theory and Psychology*, 10, 1, 57-62.
- Harré, R. (2001a). How to change reality: Story v. structure – A debate between Rom Harré and Roy Bhaskar. In J. Lopez & G. Potter (Eds.) *After postmodernism: An introduction to critical realism* (pp. 22- 39). London: The Athlone Press.
- Harré, R. (2001b). Theoretical psychology. www.massey.ac.nz/~alock/virtual (13 Feb. 2001).
- Harré, R. (2002a) *Cognitive science: A philosophical introduction*. London: Sage.
- Harré, R. (2002b). Public sources of the personal mind: Social constructionism in context. *Theory and Psychology*, 12, 611-623.
- Harré R. (2003). The advent of discursive psychology. www.rrp.upr.edu/psic/paips/Harré.htm (23 May 2003).
- Harré, R. & Gillett, G. (1994). *The discursive mind*. Thousand Oaks: Sage.
- Harré, R. & Madden, E. H. (1975). *Causal powers: A theory of natural necessity*. Blackwell: Oxford.
- Harré, R. & Secord, P. F. (1972). *The explanation of social behaviour*. Totowa, N.J.: Littlefield, Adams.
- Harré, R. & Stearns, P. (1995). Introduction: Psychology as discourse analysis. In R. Harré & P. Stearns (Eds.), *Discursive psychology in practice* (pp. 184-193). London: Sage.
- Harré, R. & van Langenhove, L. (1991). Varieties of positioning. *Journal for the Theory of Social Behaviour*, 21, 393-408.

- Harré, R. & van Langenhove, L. (1994). Cultural stereotypes and positioning theory. *Journal for the Theory of Social Behaviour*, 24, 359-373.
- Harré, R., Clarke, D. & De Carlo, N. (1985). *Motives and mechanisms: An introduction to the psychology of action*. London: Methuen.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.
- Hempel, C. G. (1965). *Aspects of scientific explanation and other essays in the philosophy of science*. New York: Free Press.
- Hock, R. R. (1995). *Forty studies that changed psychology: Explorations into the history of psychological research* (2nd Ed). Englewood Cliffs, New Jersey: Prentice Hall.
- Hollway, W. (1984). Gender difference and the production of subjectivity. In J. Heniques, W. Hollway, C. Urwin, L. Venn & V. Walkerdine (Eds.), *Changing the subject: Psychology, social regulation and subjectivity* (pp. 227-264). London: Methuen.
- Howie, D. & Peters, M. (1996). Positioning theory: Vygotsky, Wittgenstein and social constructionist psychology. *Journal for the Theory of Social Behaviour*, 26, 1, 51-64.
- Hume, D. (1740/1978). *A treatise of human nature* (2nd ed). L. A. Selby-Bigge (Ed.), Oxford: Oxford University Press.
- Ickes, W., Stinson, L., Bissonnette, V. & Garcia, S. (1990). Naturalistic social cognition: Empathic accuracy in mixed-sex dyads, *Journal of Personality and Social Psychology*, 59, 4, 730-742.
- James, W. (1890/1948). *Psychology*. Cleveland: World publishing.
- James, W. (1910). *Textbook of psychology*. London: MacMillan.
- Jones, R. A. (1997). The presence of self in the person: Reflexive positioning and personal constructs psychology. *Journal for the Theory of Social Behaviour*, 27, 4, 453-471.
- Jones, R. A. (1999). Direct perception and symbol forming in positioning. *Journal for the Theory of Social Behaviour*, 29, 1, 37-58.
- Jowett, G. S. & O'Donnell, V. (1986). *Propaganda and persuasion*. London: Sage.
- Joynson, R. B. (1970). The breakdown of modern psychology. *Bulletin of the British Psychology Society*, 23, 261-9.

- Kahneman, D., Slovic, P. & Tversky, A. (Eds.) (1982). *Judgement under uncertainty: Heuristics and biases*. New York: Cambridge University Press.
- Kant, I. (1789/1998). *Critique of pure reason* / translated and edited by Paul Guyer and Allen W. Wood. New York: Cambridge University Press.
- Kimble, G. A. (1989). Psychology from the standpoint of the generalist. *American Psychologist*, 44, 491-499.
- Kimble, G. A. (2001). Three endorsements and a question: Commentary on the Wallachs' paper. *Theory and Psychology*, 11, 4, 175-478.
- Koffka, K. (1935). *Principles of Gestalt Psychology*. London: Kegan Paul, Trench, Trubner & Co., Ltd.
- Kruglanski, A. W. & Thompson, E. P. (1999). Persuasion by a single route: A view from the unimodel. *Psychological Inquiry*, 10, 2, 83-89.
- Kuhn, T. S. (1962). *The structure of scientific revolutions*. Chicago: University of Chicago Press.
- LaPiere, R. T. (1934). Attitudes vs actions. *Social Forces*, 13, 230-237.
- Laswell, H. R. (1948). *Power and personality*. New York: W.W. Norton.
- Layder, D. (1990). *The realist image in social science*. New York: St. Martin's Press.
- Leahey, T. H. (1994). *A history of modern psychology*. New Jersey: Prentice Hall.
- Leahey, T. H. (2000). *A history of psychology*. New Jersey: Prentice Hall.
- Lerner, J. & Tetlock, P. (1999). Accounting for the effects of accountability. *Psychological Bulletin*, 125, 255-275.
- Levine, J. M. (1999). Solomon Asch's legacy for group research. *Personality and Social Psychology Review*, 3, 358-364.
- Levine, J. M. Higgins, E. T. & Choi, H. (2000). Development of strategic norms in groups. *Organizational Behavior and Human Decision Processes*, 82, 1, 88-101.
- Liska, A. E. (1984). A critical examination of the causal structure of the Ajzen/Fishbein attitude-behaviour model. *Social Psychology Quarterly*, 47, 1, 61-74.
- Locke, J. (1689/1975). *An essay concerning human understanding*. P. H. Nidditch (Ed.). Oxford: Clarendon Press.
- MacDonald, C. & MacDonald, G. (Eds.) (1995a). *Philosophy of psychology: Debates on psychological explanation* (volume one). Oxford: Blackwell.

- MacDonald, C. & MacDonald, G. (1995b). Introduction: Causal relevance and explanatory exclusion. In C. MacDonald & G. MacDonald (Eds.), *Philosophy of psychology: Debates on psychological explanation* (volume one) (pp. 86-106). Oxford: Blackwell.
- Manicas, P. T. (1997). Explanation, understanding and typical action. *Journal for the Theory of Social Behaviour*, 27, 2, 195-212.
- Manstead, A. S. R. & van Eekelen, S. A. M. (1998). Distinguishing between perceived behavioural control and self-efficacy in the domain of academic achievement intentions and behaviours. *Journal of Applied Social Psychology*, 28, 15, 1375-1392.
- Marangoni, C., Garcia, S., Ickes, W. & Teng, G. (1995). Empathic accuracy in a clinically relevant setting. *Journal of Personality and Social Psychology*, 68, 5, 854-869.
- Milgram, S. (1963). Behavioural study of obedience. *Journal of Abnormal and Social Psychology*, 63, 371-378.
- Milgram, S. (1974). *Obedience to authority*. New York: Harper and Row.
- Millar, N. & Pedersen, W. C. (1999). Assessing process distinctiveness. *Psychological Inquiry*, 10, 2, 150-156.
- Moore, K. (2000). 'Going nowhere' with Wittgenstein: And staying in the everyday. *Theory and Psychology*, 10, 214-238.
- Motgeau, P. A. & Stiff, J. B. (1993). Specifying causal relationships in the elaboration likelihood model. *Communication Theory*, 3, 1, 65-72.
- Nightingale D. J. & Cromby J. (1999a). Preface. In D. J. Nightingale & J. Cromby (Eds.), *Social constructionist psychology: A critical analysis of theory* (pp. xv-xvi). Philadelphia: Open University Press.
- Nightingale D. J. & Cromby J. (1999b). Reconstructing social constructionism. In D. J. Nightingale & J. Cromby (Eds.), *Social constructionist psychology: A critical analysis of theory* (pp. 207-225). Philadelphia: Open University Press.
- O'Keefe, D. J. (1990). *Persuasion: Theory and research*. London: Sage.
- Orbell, S. Hodgkins, S. & Sheeren, P. (1997). Implementation intentions and the theory of planned behavior. *Personality and Social Psychology Bulletin*, 23, 9, 954-969.
- Orne, M (1962). On the social psychology of the psychological experiment: With particular reference to demand characteristics and their implications. *American Psychologist*, 17, 776-783.

- Osgood, C. E. & Tannenbaum, P. H. (1955). The principle of congruity in the prediction of attitude change. *Psychological Review*, 62, 42-55.
- Parker, D., Manstead, A. S. R. & Stradling, S. G. (1995). Extending the Theory of Planned behaviour: The role of the personal norm. *British Journal of Social Psychology*, 34, 127-137.
- Perloff, R. M. (1993). *The dynamics of persuasion*. New Jersey: Lawrence Erlbaum Associates.
- Petty, R. E. (1995). Attitude change. In A. Tesser (Ed.), *Advances in social psychology* (pp. 194-255). New York: McGraw-Hill.
- Petty, R. E. & Cacioppo, J. T. (1981). *Attitudes and persuasion: Classic and contemporary approaches*. Boulder, Colorado: Westview Press.
- Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. New York: Springer-Verlag.
- Petty R. E & Wegner, D. T. (1998). Attitude change: Multiple variables for persuasion variables. In D. T. Gilbert, S T. Fiske & G. Lindzey. (Eds.), *The handbook of social psychology* (4th Ed.) (pp. 323-390) Boston, New York: McGraw-Hill.
- Petty R. E & Wegner, D. T. (1999). The elaboration likelihood model: Current status and controversies. In S. Chiaren & Y. Trope (Eds.), *Dual-process theories in social psychology* (pp. 41-73) New York: Guilford Press.
- Petty, R. E., Unnava, R. H. & Strathman, A. J. (1991). Theories of attitude change. In T. S. Robertson, & K. H. Kassarian (Eds.), *The handbook of consumer behaviour* (pp. 241-280). Englewood cliffs, New Jersey: Prentice Hall.
- Potter, J. (2000). Post-cognitive psychology. *Theory and Psychology*, 10, 31-37.
- Powell, M. C. & Fazio, R. H. (1984). Attitude accessibility as a function of repeated expression. *Personality and Social Psychology Bulletin*, 10, 139-148.
- Quigley, J. (2001). Psychology and grammar: The construction of the autobiographical self. *Theory and Psychology*, 11, 2, 147-170.
- Randall, D. M. & Wolff, J. A. (1994). The time interval in the intention-behaviour relationship: Meta-analysis. *British Journal of Social Psychology*, 33, 4, 405-418.
- Rorty, R. (1991). *Objectivity, relativism, and truth: Philosophical papers* (Vol. 1), Cambridge: Cambridge University Press.
- Rosenberg, M. J. (1968). Hedonism, inauthenticity and other goals towards expansion of consistency theory. In R. P. Abelson, E. Aronson, W. J. McGuire, T. M. Newcomb, M. J. Rosenberg, & P. H. Tannenbaum (Eds.), *Theories of cognitive consistency: A source book* (pp. 73-111). Chicago: Rand McNally.

- Rosenberg, M. J. & Hovland, C. I. (1960). Cognitive, affective and behavioural components of attitudes. In C. I. Hovland & M. J. Rosenberg (Eds.), *Attitude organization and change* (pp. 1-14). New Haven: Yale University Press.
- Ross, L. & Nisbett, R. E. (1991). *The person and the situation: Perspectives of social psychology*. Philadelphia: Temple University Press.
- Ross, L., Bierbrauer, G. & Hoffman, S. (1976). The role of attributional processes in conformity and dissent: Revisiting the Asch situation. *American Psychologist*, 31, 148-157.
- Rychlak, J. F. (1995). A teleological critique of modern cognitivism. *Theory and Psychology*, 5, 4, 511-531.
- Ryle, G. (1949). *The concept of mind*. London: Hutchinson.
- Sayer, A. (1992). *Method in social science: A realist approach* (2nd ed.). London: Routledge.
- Schoemaker P. G. H. (1982). The expected utility model: Its variants, purposes, evidence and limitations. *Journal of Economic Literature*, 20, 529-563.
- Schuman, H. & Johnson, M. P. (1976). Attitudes and behavior. *Annual Review of Sociology*, 2, 161-207.
- Schwartz, S. H. & Tessler, R. C. (1972). A test of a model for reducing measured attitude-behaviour discrepancies. *Journal of Personality and Social Psychology*, 24, 2, 225-236.
- Searle, J. (1980). Minds, brains and programmes. *The Behavioural and Brain Sciences*, 3, 417-424.
- Searle, J. (1995). *The construction of social reality*. Harmondsworth: Penguin.
- Searle, J. (1998). *Mind, language and society: Philosophy in the real world*. New York: Basic Books.
- Shanon, B. (1993). *The representational and presentational: An essay on cognition and the study of the mind*. Cornwall: Harvester Wheatcheaf.
- Sheppard, B. H., Hartwick, J. & Warshaw, P. R. (1988). The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. *Journal of Consumer Research*, 15, 325-343.
- Sherif, M. (1937). An experimental approach to the study of attitudes. *Sociometry*, 1, 90-98.
- Shotter, J. (1993). *The cultural politics of everyday life*. London: Sage.

- Simon, H. A. (1957). *Models of man*. New York: Wiley.
- Simon, H. A. et al., (1986). *Report of the research briefing panel on decision making and problem solving*. Washington: National Academy Press.
- Smedslund, J. (1984). What is necessarily true in psychology. *Annals of Theoretical Psychology*, 2, 241-272.
- Smith, J. L. (1999). An agentic psychology model based on the paradigmatic repositioning of the theory of planned behaviour. *Theory and Psychology* 9, 5, 679-700.
- Smith, J. L. (2000). *The psychology of action*. Basingstoke: Macmillan.
- Smith, J.A., Harré, R. & van Langenhove, L. (1995). *Rethinking methods in psychology*. London: Sage.
- Sparks, P. & Guthrie, C. A. (1998). Self-identity and the theory of planned behaviour: A useful addition or an unhelpful artifice? *Journal of Applied Social Psychology*, 28, 15, 1393-1410.
- Sparks, P. & Shepherd, R. (1992). Self-identity and the theory of planned behaviour: Assessing the role of identification with "Green consumerism". *Social Psychology Quarterly*, 55, 4, 388-399.
- Sparks, P., Shepherd, R. & Frewer, L. J. (1995). Assessing and structuring attitudes toward the use of gene technology in food production: The role of ethical obligation. *Basic and Applied Social Psychology*, 16, 3, 267-285.
- Suppe, F. (1989). *The semantic conception of theories and scientific realism*. Chicago: University of Illinois Press.
- Sutton, S. (1998). Predicting and explaining intentions and behaviour: How well are we doing? *Journal of Applied Social Psychology*, 28, 15, 1317-1338.
- Sweder, R. A. (1991). *Thinking through cultures: Expeditions in cultural psychology*. Chicago: Chicago University Press.
- Terry, D. J. Hogg, M. A. & McKimmie, B. M. (2000). Attitude-behaviour relations: The role of in-group norms and mode of behavioural decision-making. *British Journal of Social Psychology*, 39, 337-361.
- Van der Pligt, J. & De Vries, N. K. (1998). Belief importance in expectancy-value models of attitude. *Journal of Applied Social Psychology*, 28, 15, 1339-1354.
- Van der Pligt, J. & De Vries, N. K. (1998). Predicting behaviour from the past: Repeated decision making or a matter of habit. *Journal of Applied Social Psychology*, 28, 15, 1317-1338.

- Vollmer, F. (2001). The control of everyday behaviour. *Theory and Psychology*, 11, 5, 637-654.
- Vygotsky, L. S. (1978) *Mind in society: The development of higher psychological processes*, M. Cole (Ed.). Cambridge: Harvard University Press.
- Wallach, L. & Wallach, M. A. (1999). Why experimentation is often senseless. *Scandinavian Journal of Psychology*, 40, 103-106.
- Wallach, L. & Wallach, M. A. (2001a). Experiments in Social Psychology: Science or self-deception? *Theory and Psychology*, 11, 4, 451-473.
- Wallach, L. & Wallach, M. A. (2001b). A response on concepts, laws and measurement in social psychology. *Theory and Psychology*, 11, 4, 489-494.
- Weinstein, E. A. & Deutschberger, P. (1964). Tasks, bargains and identities in social interaction. *Social Forces*, 42, 451- 456.
- Wegner, D. M. & Bargh, J. A. (1998). Control and automaticity in social life. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (Vol. 1, 4th Ed., pp. 446-496). Boston: McGraw-Hill.
- Wicker, A. W. (1969). Attitudes versus actions: The relationship of verbal and overt behavioural responses to attitude objects. *Journal of Social Issues*, 25, 41-78.
- Wittgenstein, L. (1953/1972). *Philosophical investigations* (3rd ed.) (translated by G. E. M. Anscombe) Oxford: Blackwell.
- Wittgenstein, L. (1921/1974). *Tractatus logico-philosophicus* (translated by D. F. Pears & B. F. McGuinness) (Revised ed.). London: Routledge and Kegan Paul.
- Zimbardo, P., Maslach, C., & Haney, C. (2000) Reflections on the Stanford Prison Experiment: Genesis, transformations, consequences. In T. Bläss (Ed.) *Obedience to authority: Current perspectives on the Milgram paradigm* (pp. 193-237). London: Lawrence Erlbaum.
- Zukerman, M. & Reis, H. (1978). Comparison of three models for predicting altruistic behaviour. *Journal of Personality and Social Psychology*. 36, 498-510.